WISCONSIN'S MEDICAID & BADGERCARE PLUS HEALTH COVERAGE
CMS § 1115 WAIVER PROVISIONS FOR 2019–2023

Interim Evaluation Report

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Institute for Research on Poverty
UNIVERSITY OF WISCONSIN–MADISON

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ABBREVIATIONS AND GLOSSARY OF TERMS

ACS	American Community Survey
BRFSS	Behavioral Risk Factor Surveillance System
CARES	Wisconsin Medicaid's Eligibility and Enrollment System
CE	Community Engagement: Requirements for Medicaid program beneficiaries to participate in employment, training, education, or other qualifying activities
CLA	Childless Adults: Non-elderly adults without dependent children who are eligible for Wisconsin's BadgerCare program
CMS	U.S. Centers for Medicare and Medicaid Services
DHS	Wisconsin Department of Health Services
DiD	Difference-in-Differences method
DOL	U.S. Department of Labor
ED	Emergency Department
FHS	Wisconsin Family Health Survey
FPL	Federal Poverty Level
FSET	Food Share Employment and Training program: Required activities for non-excluded able-bodied adults who receive nutrition support benefits.
HIPAA	Health Insurance Portability and Accountability Act: Federal law governing privacy of patient and consumer health information
HNA	Health Needs Assessment
HRA	Health Risk Assessment
IRP	University of Wisconsin–Madison Institute for Research on Poverty: independent evaluators for Wisconsin's Medicaid waiver
ITS	Interrupted Time Series method
OUD	Opioid Use Disorder
PHE	Public Health Emergency
RD	Regression Discontinuity method
SAHIE	Small Area Health Insurance Estimates
SID	State Inpatient Databases
SNAP	Supplemental Nutrition Assistance Program, called "FoodShare" in Wisconsin
SUD	Substance Use Disorder
TANF	Temporary Assistance for Needy Families
TPL	Wisconsin Third Party Liability database
UCC	Uncompensated Care
UI	Unemployment Insurance
WHIO	Wisconsin Health Information Organization: Wisconsin's private sector, voluntary all-payer claims database

WAIVER PROVISION IMPLEMENTATION DATES

The Wisconsin Department of Health Services (DHS) has adjusted the implementation dates for all waiver provisions except Provision 1 (Coverage for Non-Elderly Childless Adults up to 100% FPL), which has been in place since April 2014. A summary of these changes and the current status of affected provisions is noted below.

Waiver Provisions' Implementation Status as of June 2022

Waiver Provision	Current Status & History of Changes
Community Engagement	Approval Withdrawn
	Member communication was initiated in November 2019 through February 2020 for a 2/1/20 start date. The provision was then suspended at the onset of the public health emergency in mid-March 2020. CMS withdrew approval for the CE provision on 4/6/21.
Health Assessment Linked to Eligibility and Premiums	Suspended
	The HNA and HRA were added to enrollment process 2/1/20 and suspended at the onset of the public health emergency in mid-March 2020.
Premiums, Lock-Out Periods, and Emergency Department Copayments	Suspended
	Member communication regarding premiums and lock-out periods was initiated in November 2019 through February 2020 for a start date of 2/1/20. The provision was suspended at the onset of the public health emergency in mid-March 2020.
	Effective
	The original implementation date for ED copayments was 2/1/20. DHS announced in December 2019 that all copayments would be suspended 1/1/20–6/30/20. After an announcement (6/26/20) that 7/1/20 was the new start date for ED copayments, DHS later announced that 11/2/20 would instead be the start date. ED copayments collected between 7/1/20–11/1/20 are to be refunded.
Expansion of Coverage for Substance Use Disorder Treatment Services	Effective
	The original implementation date was 2/1/20. DHS announced a delay in the implementation of this provision on 1/24/20. The provision was implemented on 2/1/21.

EXECUTIVE SUMMARY

The University of Wisconsin–Madison Institute for Research on Poverty is conducting an evaluation of the Wisconsin BadgerCare Reform Demonstration Project as proposed by the Wisconsin Department of Health Services (DHS) and approved by the federal Centers for Medicare and Medicaid Services (CMS). The evaluation assesses how the provisions of Wisconsin's Medicaid § 1115 Demonstration Waiver, for the period CY2019–CY2023, affect two Medicaid populations: (1) childless adults (CLAs) with an effective income at or below 100% of the federal poverty level (FPL), and (2) all Medicaid beneficiaries eligible for an expanded coverage of treatment services for substance use disorders (SUDs). This document serves as the required interim evaluation report for the waiver.

Summary of the Demonstration

The evaluation addresses the Demonstration Waiver provisions defined by DHS and approved by CMS for a five-year demonstration period, ending December 31, 2023. Hypotheses and associated research questions focus on the following programmatic changes:

- Provision 1, Coverage for Non-Elderly Childless Adults up to 100% FPL: Extension of a full Medicaid benefit for adults without dependent children ("childless adults") with incomes up to and including 100% FPL.

- Provision 2, Health Assessments Linked to Eligibility and Premiums: Required completion of a health risk assessment as a condition of eligibility for childless adults; opportunity for reduced premiums for childless adults based on the health risks and healthy behaviors reported on health risk and needs assessments.

- Provision 3, Premiums, Lock-Outs, and Emergency Department Copayments: Premiums for childless adults with incomes greater than 50% and up to and including 100% FPL as a condition of enrollment, and a period of non-eligibility for up to six months for childless adults who do not pay the required premium, with on-ramps to reactivate coverage during the non-eligibility period. An $8 copayment for non-emergency use of the emergency department.

- Provision 4, Expansion of Coverage for Substance Use Disorder Treatment Services: Expanded coverage for substance use disorders including a residential treatment benefit and coverage for existing services when they are provided in an institution for mental disease (IMD), specifically including medically supervised withdrawal management, inpatient services, and medication-assisted treatment (MAT).

Provision 1 has been in place continuously since April 1, 2014. The remaining provisions were all originally scheduled to begin February 1, 2020. Since the state's adoption of maintenance of eligibility policy under the COVID-19 public health emergency in April 2020, which prohibited states from implementing any policies more restrictive than those in place on January 1, 2020, the premium-related provisions (including Provision 2 and the premium and lock-out parts of Provision 3) were retroactively suspended. Any premiums paid during the short initial implementation were refunded. Individuals (if any) who did not receive coverage because they did not answer the treatment needs question were to receive benefits starting the first month for which they submitted a request. As the public health emergency is still active, these provisions remain suspended.

The $8 copayment for non-emergency use of the emergency department was announced in December 2019 but delayed due to a need for systems update to ensure compliance with federal rules about cost-sharing and was scheduled to be implemented July 1, 2020. It was then retroactively suspended (with any copayments collected refunded) and then implemented again November 2, 2020. The expansion of coverage for substance use disorder treatment services in Provision 4 was also delayed and later implemented on February 1, 2021.

Summary of Progress

Evaluation Provisions and Questions: Progress-to-Date

Evaluation Question	Progress to Date
PROVISION 1: COVERAGE FOR NON-ELDERLY CHILDLESS ADULTS UP TO 100% FPL	
H1.1. Expansion of benefits to non-elderly childless adults (CLAs) will reduce the state's uninsured rate. H1.2. Expansion of benefits to CLAs will lead to their increased access to medical care. H1.3. Expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals. H1.4. Additional requirements of the current demonstration may increase administrative costs.	This provision has been continuously in place since April 1, 2014. 1.1a-b. Conducted analysis of insurance trends, using ACS and SAHIE data and comparing Wisconsin to other expansion and non-expansion states, with results reported. 1.2a-b. Analyzed Wisconsin trends in access to care and use of services, based on data from BRFSS and Medicaid claims, with preliminary results reported. 1.3a-b. Analyzed Wisconsin trends in hospital uncompensated care based on data from CMS Hospital Cost Reports comparing Wisconsin to other expansion and non-expansion states, with results reported.
PROVISION 2: HEALTH ASSESSMENTS LINKED TO ELIGIBILITY AND PREMIUMS	
H2.1. Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in healthier behaviors. H2.2. The health assessment will increase the number of beneficiaries receiving treatment for substance use disorders H2.3. The requirement to answer the health assessment as a condition of eligibility will discourage some potential beneficiaries from enrolling in Medicaid.	The HNA was suspended due to the COVID-19 PHE; the evaluation has proceeded to develop baseline data, target and comparison groups. 2.1a-c. Obtained and cleaning HNA data for those who voluntarily completed the HNA during the PHE. 2.1d. Analyzed both survey data on self-reported diet and alcohol use as well as claims data on the fraction of members with a diagnosis related to alcohol consumption to compare baseline rates and trends for waiver and comparison populations. Results reported. 2.1e. Refined measures of prescription nicotine cessation use. Analyzed the frequency of outpatient visits that include a diagnosis for nicotine dependence using Medicaid claims and encounter data. Analyzed baseline levels of nicotine use using the Medicaid Beneficiary Survey for target and comparison populations. Results reported. 2.2. Developed measures of substance use services and diagnoses. 2.3. Defined target and potential comparison groups needed to evaluate potential impact of health assessment on enrollment once the HNA is reinstated.

Evaluation Question	Progress to Date
PROVISION 3: PREMIUMS, LOCK-OUTS, AND EMERGENCY DEPARTMENT COPAYMENTS	
H3.1. Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance. H3.2. The imposition of premium requirements for childless adults will reduce enrollment in Medicaid. H3.3. The imposition of premium requirements for childless adults will increase enrollment in commercial insurance following exits from Medicaid. H3.4. The imposition of premium requirements for childless adults will lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums. H3.5. The imposition of a copayment for non-emergent use of the emergency department will lead to more appropriate uses of medical care among childless adults enrolled in Medicaid. H3.6. Hospitals vary in how they implement the required copayment for non-emergency use of the ED.	The premium provision has been suspended during the COVID-19 PHE. The ED copayment was delayed, with initiation on July 1, 2020, followed by a retroactive suspension and re-initiation on November 2, 2020. 3.1a. Prepared count of beneficiaries who would be required to pay premiums (if not for suspension) over time. Ongoing analysis; results reported. 3.1f. Prepared baseline measures of requirement understanding among those who would be required and not required to pay premiums. Ongoing analysis; results reported. 3.2. Ongoing updates to data in preparation for end of suspension. 3.3. WHIO data obtained and being prepared for use at end of suspension. 3.4. Ongoing updates to data in preparation for end of suspension. 3.5a. Prepared descriptive analysis comparing trends in use of emergency department services, emergent and non-emergent visits in parent and childless adult eligibility groups pre-copayment requirement. Results reported. 3.5b. Prepared descriptive analysis of overall emergency department visits in the childless adult eligibility group prior to the imposition of copayments. Results reported. 3.5c-d. Prepared preliminary DiD analyses of claims and encounter data. Results reported. WHIO data obtained. 3.5e. Prepared descriptive analysis of baseline beneficiary survey. Results reported. 3.7. Prepared descriptive and preliminary DiD analyses of hospital-level measures. Results reported.

PROVISION 4: EXPANSION OF COVERAGE FOR SUBSTANCE USE DISORDER TREATMENT SERVICES	
Q4.1. Does the waiver increase the supply of SUD providers for Medicaid enrollees? Q4.2. Does the waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees? Q4.3. Does the waiver change Medicaid enrollees' use of existing covered SUD services? Q4.4. Does the waiver reduce the rate of drug overdose deaths among Medicaid enrollees including opioid-related deaths? Q4.5. What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver?	This provision was implemented on February 1, 2021. 4.1a. Preliminary analysis of change in supply of SUD providers relative to diabetes providers during the first year of residential SUD benefit compared to a pre-period, 2017-2019. Results reported. 4.2a. Completed descriptive analysis of baseline beneficiary awareness of the residential treatment benefit using the CY 2020 Medicaid Beneficiary Survey. Results reported. 4.2b. Analyzed WI Medicaid claims and encounter data to characterize use of the residential treatment benefit in its first year of operation. Results reported. 4.2c. Defined outcome measure to assess initiation and engagement in SUD treatment. 4.3a-4.3c. Analyzed WI Medicaid claims and encounter data to describe outcome trends during the pre-period (2017-2019) and the first year after implementation of the residential treatment benefit. Results reported. 4.2 and 4.3. Obtained the WHIO Wisconsin's All Payer Claims Dataset to construct a within-state comparison group of commercially insured adults for use in DiD analyses. Data cleaning and validation ongoing. 4.4. Prepared data application for the Office of Health Informatics to obtain mortality data. 4.5. Analyzed WI Medicaid claims and encounter data to describe trends in Medicaid expenditures associated with the SUD demonstration waiver. Results reported.

Principal Results and Interpretations

Provision 1: Coverage for Non-Elderly Childless Adults up to 100% FPL

The program goal associated with this provision is focused on improving health outcomes and reducing unnecessary services in the beneficiary population and creating a program that is sustainable and available to those who need it most. The state successfully implemented the coverage expansion to childless adults and has sustained it since 2014.

Medicaid coverage for childless adults increased as expected in 2014 with the implementation of Wisconsin's waiver policy, while coverage for parents/caretaker adults declined. The net result was an overall increase in health insurance coverage rates with the implementation of the ACA along with Wisconsin's waiver policy. The resulting higher Medicaid coverage rates and overall gains in insurance coverage for adults were similar to those that occurred in Medicaid non-expansion states, while gains in insurance coverage were lower than in Medicaid expansion states.

There is not strong evidence, based on data from the Behavioral Risk Factor Surveillance System (BRFSS), of gains in access to care or in use of preventative care for childless adults in Wisconsin relative to either expansion or non-expansion states, although this should not be interpreted as a lack of overall gains to the expansion population in these measures.

The expansion population had significantly higher per-person average health care expenditures than the traditional adult coverage group (parents and caretakers), particularly in the months immediately following expansion. This suggests that they may have had higher health needs and that targeting of the program to childless adults below the poverty line may have been successful at reaching "those who need it most" in the sense of health needs.

Uncompensated hospital-based care fell in Wisconsin in 2014 and 2015 following the changes in eligibility, and then began to trend upward. This pattern of declines in 2014 and 2015 followed by an upward trend is seen in comparison states that also expanded Medicaid. The patterns were different in states that did not expand Medicaid—there were no declines in uncompensated care and instead a steady upward trend. This analysis suggests that Wisconsin's "partial" expansion lowered the burden to hospitals of providing uncompensated care. As uncompensated care can be a burden not only for hospitals but also for those who received the care, this finding also supports the goal of targeting the program towards "those who need it most."

Provision 2: Health Assessments Linked to Eligibility and Premiums

This waiver provision introduces a two-part health risk assessment (HRA) and health needs assessment (HNA) for childless adults (CLA) with the goal of improving beneficiary engagement in their health care choices by increasing awareness of detrimental health behaviors and encouraging healthier choices. Completing the HRA is a condition of eligibility for CLAs and both the HRA and the HNA are linked to potential reductions in premiums for CLAs who are subject to premiums (those with income > 50% FPL). We have focused on establishing baseline outcome trends in order to understand the population and potential comparison groups while the provision is suspended.

Preliminary analyses of baseline data on health behaviors, both from survey data and claims records, indicate that the primary target population for this waiver provision, CLAs with incomes

> 50% FPL, have scope for improving health behaviors. Approximately 26% of this population reports in our baseline survey having one week or fewer in the past month when they exercised on at least two days and 31% report their eating habits as fair or poor. We also observe measurable rates of diagnoses for alcohol use and nicotine use in this population, around 4% and 3% per month respectively, which suggests that these measures can be used to track changes in response to the waiver provision.

Rates of diagnoses for both alcohol use disorder and nicotine dependence have trended similarly over time for both income groups within the CLA population but have diverged more between the CLAs and the parents/caregivers sample since the start of the pandemic in 2020. The implication is that the lower-income CLA group is likely to be a more compelling comparison group for the CLAs with incomes > 50% FPL.

Provision 3: Premiums, Lock-Outs, and Emergency Department Copayments

Some cost-sharing in the form of premiums and copayments is consistent with the waiver goal of providing beneficiaries with coverage that more closely aligns with commercial coverage, which typically features such requirements. Because premiums were suspended during the public health emergency, we are unable to make any conclusions or interpretations regarding understanding the causal effects of premium requirements on enrollment in Medicaid, enrollment in commercial insurance, or on pent-up demand for medical care among beneficiaries disenrolled due to failure to pay.

Data suggest that as the state exits the public health emergency, approximately 51,036 (19.7%) of CLA members could be subject to premiums as of March 2022. Prior to the public health emergency, this would have been 33,773 (21.7%) of CLA members. The actual number and fraction will depend on how many members will still be eligible as redeterminations progress during the unwinding of the maintenance of eligibility (MOE) policy.

Baseline survey results indicate that respondents with incomes above 50% FPL were more likely to report that they or their family would be charged a premium for Medicaid/BadgerCare (11.8% vs. 4.0%, $p<.01$), so there is some level of awareness of premiums even though they were suspended at the time of the survey. There were no statistically or economically important differences by premium eligibility group in the questions we asked about awareness of health coverage. Surveyed members showed high agreement with understanding their letters, payments, and who is eligible, with the exception of how changes to the Medicaid/BadgerCare program might affect them. We expect that policy awareness will increase once the suspension ends.

In order to understand if the imposition of a copayment for non-emergent use of the emergency department (ED) will lead to more appropriate uses of medical care, the target population of childless adults must have some awareness of the policy. In the baseline survey, the majority of which took place when co-pays were in effect, childless adults were more likely than parents to report that they or their family had paid a copay for Medicaid/BadgerCare services in the last 12 months (37.2% vs. 30.1%, $p<.05$). However, baseline awareness of the ED co-pay policy was somewhat low, with the majority (79.2%) of CLAs reporting they “never need to pay a co-pay,” 11.1% reporting the correct policy (vs. 6.4% of parents), and 9.7% reporting they “always need to pay a co-pay.” While satisfaction measures were universally higher than 90%, awareness measures were lower among childless adults compared to parents, particularly how changes to the program might affect them (72.7% vs. 80.5%, $p<.01$).

Although emergency department visits trended down following the initial implementation of the copayment policy, they did so across the board for all emergency visit types and trended similarly for parents. This may be explained by pandemic trends rather than the policy. No sudden change was evident in November when the copayment requirement was re-initiated. Difference-in-differences models do not suggest an impact of the policy on total emergency visits, non-emergent visits as measured by an algorithm designed to classify emergency visits at the population level using administrative claims data, or primary care.

Following November 2020, the copayment requirement was in effect, but there is no evidence of widespread implementation by hospitals in the form of charging copayments. We identified 24 visits over the 21 months from July 2020 to March 2022 which were billed in the way the state requested visits requiring the co-pay to be billed. These visits took place at 8 different facilities. Thus, very few emergency department visits seem to have been subject to copayments in the claims data.

We cannot determine the explanation for this finding from our data; however, we offer several potential explanations. There may be very few visits that hospitals would define as nonemergent using the prudent layperson standard published in the provider guideline. It is also possible that that there are few billed visits for other reasons; for example, if the copayments cost more to collect than would result in revenue. It is also possible that visits potentially subject to copayments were diverted to other facilities as there is a requirement to inform the beneficiary of the copayment and provide a referral to another facility where a copayment may not be required. In our analysis of visit rates by eligibility group that compared childless adult to parent visits at the hospital level before and after implementation, we found no evidence of a decline in either total ED visits or the ratio of nonemergent to total visits, suggesting visits were not diverted. It also remains possible that parents are not a good comparison group for CLAs for these outcomes. Finally, there may not be consistent implementation of the policy. The pandemic period and its burden on hospitals complicates interpretations of these results as does the delayed implementation that was followed by retroactive suspension and re-implementation.

Provision 4: Expansion of Coverage for Substance Use Disorder Treatment Services

The purpose of the SUD residential treatment provision within the demonstration waiver is to ensure that a broad continuum of care is available to Wisconsin Medicaid beneficiaries with a substance use disorder, helping improve the quality, care, and health outcomes for those Medicaid beneficiaries. The State of Wisconsin identifies this waiver provision as part of a comprehensive statewide strategy to combat substance use disorders and drug overdose.

The use of residential SUD treatment increased abruptly coincident with the introduction of this benefit in February 2021. The unique number of beneficiaries with any claim for residential SUD treatment increased from zero in January 2021 to 300 in February 2021. Within six months, 500 unique beneficiaries on average were receiving this service per month; that rate remained stable through the end of 2021. These findings provide initial evidence of a realized expansion in the continuum of care for treatment of SUDs.

The addition of residential treatment to the continuum of care available for Medicaid beneficiaries with SUDs has the potential to improve SUD health care access and outcomes more generally. We assessed access in terms of SUD provider supply and the use of existing SUD services. We found that the trend in the supply of SUD providers tracked closely to a comparison group of providers plausibly unaffected by this provision, diabetes providers, in the

years preceding the implementation of residential SUD treatment and in the first year that the benefit was in place. These preliminary findings do not provide evidence of an increase in the supply of SUD providers following the implementation of the residential SUD treatment benefit. Future analyses will incorporate additional years post-implementation and adjust for potential changes in the composition of the beneficiary population that may influence provider supply.

Use of existing SUD services may increase as a consequence of the introduction of the residential SUD treatment benefit to the extent that this newly covered service stimulates patient demand and/or referrals for other SUD-related care. The descriptive results presented in this report illustrate a common pattern of SUD care use across service categories from 2017 through 2021. Monthly use increased during the 3-year pre-period, 2017–2019, followed by a decline coincident with the declaration of the public health emergency in 2020. SUD health care use generally remained at pre-pandemic levels during the first year of the new provision's operation. It is premature to draw conclusions regarding the effect of the residential SUD treatment benefit on these other types of SUD care use. In ongoing analyses, we will mitigate the confounding role of the public health emergency by adding a within state comparison group and omitting the year 2020.

Recommendations

The state has successfully implemented the coverage expansion to childless adults and sustained it since 2014. It has resulted in increases in insurance coverage and reductions in uncompensated care consistent with stated goals. We recommend continuation of coverage to the childless adult population.

The implementation of the waiver's premium, copayment, and SUD provisions has experienced delays and changes resulting in multiple required communications to members, retroactive refunds, and changing plans. We recommend continued efforts for clear communication with all parties (including members, managed care organizations, and providers), but especially to members regarding how and when they will be charged, as well as the consequences for nonpayment. Member awareness will be important for achieving the goal of engagement.

There is little evidence that the emergency department copayments are changing member use of the emergency department. We recommend reviewing the second beneficiary survey results, interviews, and administrative data to understand how hospitals vary in their implementation of the ED co-pays and how beneficiaries are experiencing the provision.

There is initial evidence that the introduction of the residential SUD treatment benefit is effective in broadening the continuum of care for the treatment of SUDs. The extent to which demand for treatment has been met is less clear. The residential treatment benefit does not provide coverage for the cost of room and board which may have impeded beneficiary use of the benefit during its first year of operation. However, in 2022, the Wisconsin Department of Health Services made a total of $2.5 million in grants available to more than 50 counties and tribal agencies to support the cost of room and board for Medicaid beneficiaries seeking residential treatment for opioid use disorder. Our evaluation team will monitor the potential effect of these newly available funds on beneficiary use of residential treatment. We recommend that DHS give residential treatment facilities an opportunity to provide feedback regarding the presence or extent of wait lists for services and barriers to accessing treatment that they observe among their patients.

DEMONSTRATION WAIVER AND EVALUATION BACKGROUND

Overview

The University of Wisconsin–Madison Institute for Research on Poverty (IRP) is conducting an evaluation of the Wisconsin BadgerCare Reform Demonstration Project, as proposed by the Wisconsin Department of Health Services (DHS) and approved by the federal Centers for Medicare and Medicaid Services (CMS). The evaluation uses quasi-experimental study designs to assess how the provisions of Wisconsin's Medicaid § 1115 Demonstration Waiver, for the period CY2019–CY2023, affect two Medicaid populations: (1) childless adults (CLAs) with an effective income at or below 100% of the federal poverty level (FPL), and (2) all Medicaid beneficiaries eligible for an expanded coverage of treatment services for substance use disorders (SUDs).

The evaluation addresses the Demonstration Waiver provisions defined by DHS and approved by CMS for a five-year demonstration period ending December 31, 2023. Hypotheses and associated research questions focus on the following programmatic changes:

- Provision 1, Coverage for Non-Elderly Childless Adults up to 100% FPL (CLAs): Extension of a full Medicaid benefit for adults without dependent children ("childless adults") with incomes up to and including 100% FPL.

- Provision 2, Health Assessments Linked to Eligibility and Premiums: Required completion of a health risk assessment as a condition of eligibility for childless adults; opportunity for reduced premiums for childless adults based on the health risks and healthy behaviors reported on health risk and needs assessments.

- Provision 3, Premiums, Lock-Outs, and Emergency Department Copayments: Premiums for childless adults with incomes greater than 50% up to and including 100% FPL as a condition of enrollment, and a period of non-eligibility for up to six months for childless adults who do not pay the required premium, with on-ramps to reactivate coverage during the non-eligibility period. An $8 copayment for non-emergency use of the emergency department.

- Provision 4, Expansion of Coverage for Substance Use Disorder Treatment Services: Expanded coverage for substance use disorders (SUDs), including a residential treatment benefit and coverage for existing services when they are provided in an institution for mental disease (IMD) specifically including medically supervised withdrawal management, inpatient services, and medication-assisted treatment (MAT).

Evaluation Design, Questions and Hypotheses

The evaluation uses rigorous methods to understand how the changes implemented under Wisconsin's Medicaid § 1115 Demonstration Waiver affect its target populations. The evaluation design report was initially submitted to CMS by DHS in December 2019. It has received review by CMS with iterative responses among CMS, DHS, and the UW evaluation team as secular events (e.g., public health emergency, change of federal administration, etc.) have required modifications to the original design. The evaluation design addresses the questions and hypotheses noted below. The current version of the Evaluation Design Report, dated September 15, 2021, may be found in Attachment 1.

Provision 1: Coverage for Non-Elderly Adults up to 100% FPL

H1.1. Expansion of benefits to non-elderly childless adults will reduce the state's uninsured rate.

H1.2. Expansion of benefits to CLAs will lead to their increased access to medical care.

H1.3. Expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals.

H1.4. Additional requirements of the current demonstration may increase administrative costs.

Provision 2: Health Assessments Linked to Eligibility and Premiums

H2.1. Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in healthier behaviors.

H2.2. The health assessment will increase the number of beneficiaries receiving treatment for substance-use disorders.

H2.3. The requirement to answer the health assessment as a condition of eligibility will discourage some potential beneficiaries from enrolling in Medicaid.

Provision 3: Premiums, Lock-Outs, and Emergency Department Copayments

H3.1. Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance.

H3.2. The imposition of premium requirements for childless adults will reduce enrollment in Medicaid.

H3.3. The imposition of premium requirements for childless adults will increase enrollment in commercial insurance following exits from Medicaid.

H3.4. The imposition of premium requirements for childless adults will lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums.

H3.5. The imposition of a copayment for non-emergent use of the emergency department (ED) will lead to more appropriate uses of medical care among childless adults enrolled in Medicaid.

H3.6. Hospitals vary in how they implement the required copayment for non-emergency use of the ED.

*Provision 4: Expansion of Coverage for Substance Use Disorder Treatment Services**

Q4.1. Does the waiver increase the supply of SUD providers for Medicaid enrollees?

Q4.2. Does the waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees?

Q4.3. Does the waiver change Medicaid enrollees' use of existing covered SUD services?

Q4.4. Does the waiver reduce the rate of drug overdose deaths among Medicaid enrollees, including opioid-related deaths?

Q4.5. What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver?

*Consistent with the CMS guidance for evaluation of SUD waivers, the evaluation for the SUD portion is organized around evaluation questions, with specific hypotheses following each question (as shown in the Executive Summary).

Note regarding the COVID-19 pandemic's effect on the waiver evaluation

Since the COVID-19 public health emergency declared on March 18, 2020, the Wisconsin Medicaid program has suspended several of its waiver provisions as described above. We expect that these provisions will remain in suspension during the entire period of the federally-designated public health emergency. In response, the evaluation team adjusted its data collection and analysis plan, previously detailed in the December 2019 version of the Design Report. Generally, these revisions include greater flexibility in modeling time, the exclusion of 2020 from the baseline or pre-period, and dropping selected analytical strategies that had required the assumption of a stable pre-trend in outcomes which is no longer tenable.

The team continues to monitor COVID-19-related secular and programmatic changes that may influence evaluation outcomes (e.g., expanded coverage for telehealth services, maintenance of eligibility, etc.) to inform if or how we need to account for such changes in the evaluation of the waiver provisions or the interpretation of the findings. The findings from these contextual analyses are reported in Attachments 4-6 of this report.

Data Sources

The evaluation of the demonstration waiver will rely on multiple data sources, including secondary data sources such as state and national administrative data, population survey data, and primary data collection through multiple beneficiary surveys. These data elements are described below. The specific sources that will be used to evaluate each provision and the outcomes derived from each source are noted in the relevant sections.

Secondary Data Sources

All Payer Claims Database (WHIO). The Wisconsin Health Information Organization (WHIO) is a private-sector-operated, voluntary, multi-payer claims database. WHIO includes Medicaid along with commercial insurance covering most of Wisconsin's population. It is missing Medicare fee-for-service, self-funded employers whose third-party administrators do not submit claims, and individuals insured by national or border-state companies. The WHIO data have both a claims file and a member enrollment file, which permits us to track unique individuals' enrollment in health insurance regardless of whether members actually incur claims. WHIO does not release identifiable data, so it is not possible to link these data directly to Medicaid administrative data in order to identify the Medicaid sample.

American Community Survey (ACS). The American Community Survey, a nationally representative survey conducted by the U.S. Census Bureau, contains state-level geographic identifiers. The survey asks about sources of health insurance coverage in the previous year,

including Medicaid coverage, private group and non-group insurance, Medicare, and military coverage. The survey is administered annually and is publicly available with only a short lag.

Behavioral Risk Factor Surveillance System (BRFSS). Run by the Centers for Disease Control and Prevention, the BRFSS is a set of state-level surveys that collect data from all 50 states and the District of Columbia on the health and health behaviors of U.S. residents. The survey also collects information on health insurance coverage, though not the source of that coverage, and on employment. The data are available at the state level and with roughly a two-year lag.

CARES. Wisconsin CARES is the state's online eligibility and enrollment portal for public benefits, including Medicaid, TANF, and FoodShare (SNAP). We use data from CARES to attain longitudinal administrative data pertaining to enrollment. Demographic information includes age, sex, educational attainment, county of residence, income, and income sources. CARES data also include reason codes associated with disenrollment and "premium payment files" that contain monthly information on the dollar amount of premium owed, whether it was paid, and the date of payment.

Hospital Cost Reports. These reports are submitted annually to CMS by all acute care and critical access hospitals. Data on uncompensated care (UCC) are reported in Worksheet S-10 of Form CMS-2552-10, which was first used beginning in May 2010. UCC is the sum of two reported items: the cost of charity care provided to uninsured patients (line 23 column 1) and the cost of non-Medicare bad-debt expense (line 29). As needed, we will supplement Hospital Cost Report data with Wisconsin data on hospital uncompensated care available from the Wisconsin Hospital Association.

Marketplace Enrollment. CMS public use files provide data on enrollment at the zip code and county level, by FPL, in ACA Marketplace plans for each annual open enrollment period. These data do not allow matching on the individual level but may be used to demonstrate trends in enrollment at various income levels over time.

National Survey of Substance Abuse Treatment Services (N-SSATS) 7. The Substance Abuse and Mental Health Services Administration (SAMHSA) conducts this annual survey to provide a census of facilities nationwide that provide substance abuse treatment and collect data on their location in each state and characteristics including populations served, available services, and whether the facility accepts Medicaid as a payer.

Other Wisconsin Medicaid Administrative Data. The Wisconsin Medicaid agency will provide the data from the health risk and health needs assessments, including completion rates and substantive response information.

Small Area Health Insurance Estimates (SAHIE). The SAHIE program was created to develop model-based estimates of health insurance coverage for counties and states. SAHIE data can be used to analyze geographic variation in health insurance coverage, as well as disparities in coverage by race/ethnicity, sex, age, and income levels that reflect thresholds for state and federal assistance programs.

Wisconsin Mental Health and Substance Use Needs Assessment. The Wisconsin Division of Care and Treatment Services publishes this report biannually. It provides county-specific indicators of SUD treatment needs and available resources.

Wisconsin Family Health Survey (FHS). The Wisconsin Family Health Survey is an annual statewide random-sample telephone survey of all household residents. This survey includes topics such as health insurance coverage, health status, health problems, and use of health care services. It is currently available from 2012 through 2017 (and we will add additional years as they become available).

Wisconsin Medicaid Claims and Encounter Data. These claims and encounter data are from the State's Medicaid Management Information System (MMIS) claims database. These data files include detailed ICD-10 diagnostic codes. The claims and encounter data contain detailed information on diagnoses, procedure, and billing codes from which we will construct outcomes measures of health care use.

State Inpatient Databases (SID). The SID is part of the Healthcare Cost and Utilization Project (HCUP). The SID includes inpatient and emergency department discharge records from community hospitals in participating states. SID files encompass all patients, regardless of payer. The SID contains a core set of clinical and nonclinical information on all patients, including individuals covered by Medicare, Medicaid, or private insurance, as well as those who are uninsured. We will use Wisconsin data and will also obtain data from the same years for two Midwestern states that expanded Medicaid (Michigan and Minnesota) and three states that did not expand Medicaid (Florida, North Carolina, and Kansas).

Treatment Episode Data Set – Admissions (TEDS-A). The TEDS-A is a national dataset that includes substance abuse treatment admission-level data for facilities that receive state funds or federal block grant funds to provide alcohol and/or drug treatment services. The dataset is structured at the admission level and includes many characteristics of each admission including patient demographics, dates of admission, payer, services received, and the state in which facility is located. This dataset is published approximately two years after the close of the calendar year (e.g., May 2019 for the 2017 dataset).

Unemployment Insurance Wage and Benefits Records (UI). UI wage and benefits records are longitudinal administrative data from the UI earnings reporting system, with individual-level measures of reported quarterly employment, wages, and firm industry code. These data may be matched to Medicaid administrative enrollment data from CARES to identify an individual's employment status regardless of whether they are currently enrolled in Medicaid.

Wisconsin Death Records. The State Registrar in the WI DHS collects vital statistics death data. The source of these data are death certificates filed with the WI DHS. Cause of death is coded according to ICD-10. We will examine resident deaths, specifically all deaths that occurred in Wisconsin within the Wisconsin resident population. Conditional on approval by the WI DHS, we will link death records to Medicaid enrollment date to identify deaths among Medicaid enrollees.

Wisconsin Third Party Liability (TPL) Database. TPL is an individual-level database that contains all enrollees in state health insurance programs who are covered by a private health insurance plan. We can match individuals in TPL using social security numbers. This database may not contain information on whether individuals were covered by health insurance provided by a self-funded employer (whose policies are not subject to state regulation).

U.S. Department of Labor (DOL) Self-Insured Firms List. To assess whether enrollees may have access to health insurance coverage through a self-funded employer, we can connect CARES cases to their employers by linking CARES through SSNs to a database of quarterly earnings records from Wisconsin's UI system. Next, we can use FEINs (obtained from UI) to link

to data from the DOL that comes from the required reporting of self-insured firms to the Internal Revenue Service. The DOL data cover the universe of self-insured employers within the United States. We have previously obtained these data through a Freedom of Information Act request, and we will use the process again for this project. From these data, we can infer coverage from a self-insured firm.

Primary Data Sources

A survey of current and former Medicaid beneficiaries provides the opportunity to examine the respondents' experiences specifically in relation to the waiver provisions, including several domains not well-suited to measurement with administrative data or other state and national data. These domains include perceptions and understanding of various waiver provisions, reported reasons for changes in enrollment status or health care use, reported health status over different enrollment entry and exit spells, and knowledge of and interest in various services (such as SUD treatment).

The evaluation design includes use of a survey at three separate points in the five-year evaluation period, in CY2020, 2022, and 2023–24. The CY2020 survey instrument and a summary of those findings, which established a baseline for the evaluation, are included in Attachments 2 and 3 respectively. We are currently finalizing the questionnaire for the second survey. The focus of this second survey is on waiver implementation and so its domains are focused on issues relevant to those provisions (emergency department copayments and substance use disorder treatment). The final survey is intended to collect endline outcome measures for the evaluation.

The second survey also includes a corresponding qualitative data collection; respondents who complete and return the CY22 mail survey will be considered eligible for an in-person interview if they indicate willingness to be contacted for a follow-up interview. We will select potential interview sample members from both urban and rural regions with an aim toward including diverse perspectives. The interview participants will receive a $50 participation incentive, designed to attract interest in participation. The selection of participants will be finalized once the full universe of interested potential participants is identified. The collection of interview data, using qualitative methods, is not expected to provide a fully representative sample of the state population. Rather, this approach to data collection is designed to answer questions about lived experiences, gathering narrative (rather than numeric) data, and analyzing these data thematically. These qualitative methods help to understand how people experience events, programs, policies, and services, and how and why they may respond in various ways.

Outcome Measures

This demonstration waiver evaluation requires construction of claims-based measures to assess beneficiaries' health service use, and clinician- and facility-provision of health services. The list of outcome measures presented in this report, and the questions and hypotheses to which they apply are noted in **Table DW1** below.

Table DW1: Outcome Measures for Interim Report

Variable	Waiver Provision	Unit of Analysis
Outpatient		
Outpatient visit, all cause	2,4	beneficiary-month
Outpatient visit, in person	4	beneficiary-month
Outpatient visit, telehealth	4	beneficiary-month
Outpatient visit w/SUD Dx	4	beneficiary-month
Outpatient visit w/OUD Dx	4	beneficiary-month
Outpatient visit w/no SUD Dx	4	beneficiary-month
Outpatient visit w/alcohol use Dx	2	beneficiary-month
Any outpatient visits w/SUD Dx	4	provider-month
Any outpatient visits w/Diabetes Dx	4	provider-month
Outpatient visit w/nicotine use Dx	2	beneficiary-month
Emergency Department		
ED Visit	3,4	beneficiary-month
Non-Emergent ED visits (Separate for all billings categories)	3	beneficiary-month
ED visit w/SUD Dx	4	beneficiary-month
ED visit w/OUD Dx	4	beneficiary-month
Copayment required	3	visit
Total ED visits	3	hospital-month
Non-emergent ED visit	3	hospital-month
Emergent ED visit	3	hospital-month
Total ED visits	3	hospital-month-eligibility group
Non-emergent ED visit	3	hospital-month-eligibility group
Emergent ED visit	3	hospital-month-eligibility group
Inpatient		
Inpatient admission	4	beneficiary-month
Inpatient admission w/SUD Dx	4	beneficiary-month
Inpatient admission w/OUD Dx	4	beneficiary-month
Readmission w/in 30 days of a hospital discharge with a Dx of SUD	4	hospital discharge
Residential SUD Treatment Benefit		
Any claim for the benefit	4	beneficiary-month
Any and number of beneficiaries with a claim	4	facility-month
Prescription Medication		
Medication for opioid use disorder	4	beneficiary-month
Medication for substance use disorder (including opioid use disorder, tobacco use disorder, and alcohol use disorder)	4	beneficiary-month
Medicaid Expenditures		
Total expenditures monthly (inpatient, ED, outpatient, Rx)	1,4	beneficiary-month
Total expenditures per service category	4	beneficiary-month
Total expenditures for SUD services	4	beneficiary-month

Notes: SUD refers to substance use disorder. OUD refers to opioid use disorder. Dx refers to diagnosis.

MEDICAID BENEFICIARY SURVEY

Background

The survey component of the evaluation provides the opportunity to examine the respondents' experiences specifically in relation to the waiver provisions, including several domains not well-suited to measurement with administrative data or other state and national data. These domains include perceptions and understanding of various waiver provisions, reported reasons for changes in enrollment status or health care use, reported health status over different enrollment entry and exit spells, and knowledge of and interest in various services (such as substance use disorder treatment). In total, the evaluation will include a baseline (CY 2020), interim (CY2022), and final (CY 2023–24) survey. In this section of the interim report, we summarize the baseline survey methodology and describe the next steps in the design and implementation of the interim and final beneficiary surveys. Results from the baseline survey are presented in the context of specific evaluation questions and hypotheses throughout the report, while the survey instrument and a complete set of descriptive results are included as Attachments 2 and 3 respectively.

Summary of Methodology for Baseline Survey

The 2020–2021 Survey of BadgerCare members was a cross-sectional survey of individuals currently or previously enrolled in the BadgerCare program. The survey was initially set to go into the field in April 2020, but the onset of the COVID-19 pandemic necessitated a postponement of the survey until August 2020. The UW Survey Center supported initial sampling planning and analysis after data collection. NORC at the University of Chicago assisted with instrument design and was responsible for fielding and collating survey data.

The survey covers several topics relevant to the waiver evaluation and, more generally, tracks self-reported health care access and experiences of members. Planned topics included health care coverage, access to care, health status and health behaviors, and awareness of benefits and new waiver provisions. Several questions were added to the survey to specifically address emerging issues in the COVID-19 pandemic, such as receipt of testing, essential worker status, and willingness to receive a vaccine. The survey was fielded in English and Spanish (see details about Spanish language oversample below).

Survey Domains

The 2020–2021 survey instrument (available in Attachment 2) addressed the following domains:

- Health insurance coverage status—past year and current
- Medicaid eligibility and enrollment changes
- Health care needs, access, and use
- Health status and health behaviors
- Access to care and use of services related to COVID-19
- Employment and workforce activities

- Awareness of waiver provisions
- Demographics

Questions were developed using items from previous surveys of Wisconsin Medicaid beneficiaries, from national surveys, and from other state surveys of Medicaid beneficiaries. These include the Behavioral Risk Factor and Surveillance System,[1] the Urban Institute Health Reforming Monitoring Survey,[2] Kaiser Family Foundation Health Tracking Polls,[3] the National Health Interview Survey,[4] the Michigan waiver's survey of Medicaid beneficiaries,[5] and the Oregon Health Insurance Experiment.[6] Questions related to COVID-19 were adapted from existing national surveys such as the Census Pulse[7] and Pew Tracking Survey.[8]

Sampling

The survey used a multi-stage sampling plan developed around the six priority groups shown in **Table MB1**. The first step was to select the list of individuals who could potentially be selected to take the survey (i.e., the sample) from the population of BadgerCare members. The sample was drawn from administrative data based on the specific criteria of age, sex, enrollment, and diagnosis of substance use disorder (for sampling Group C). The sample sizes for each group were designed to provide adequate power to make comparisons across survey groups and to potentially compare with historical data from prior years of the survey.

The sample was drawn in August 2020 using the current enrollment data at that time. To ensure that the data were not lagged, the team worked with the state's technical assistance contractor, Deloitte, to access the most recent data. Deloitte used criteria provided by the UW team to randomly sample a specified number of cases in each group. The exception to the sampling strategy was Group C, which represents people with a prior year diagnosis of a substance use disorder. Group C was selected using enrollment data linked to claims data that included indicators for people with any claims showing an International Classification of Diseases Tenth Revision (ICD-10) diagnosis code of a substance use disorder in the months of May 2019 through April 2020, out of which a random sample of 2,203 individuals was drawn for the sample.

The sample was augmented to include an oversample of Spanish-speaking members. This group was drawn in an identical manner as the other groups, but specifically included

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[1]Behavioral Risk Factor Surveillance System. https://www.cdc.gov/brfss/index.html

[2]Urban Institute HRMS. https://hrms.urban.org/

[3]Kaiser Family Foundation Tracking Poll. https://www.kff.org/polling/

[4]National Health Interview Survey. https://www.cdc.gov/nchs/nhis/index.htm

[5]Healthy Michigan Voices Survey. https://ihpi.umich.edu/featured-work/healthy-michigan-plan-evaluation/healthy-michigan-voices-survey

[6]Oregon Health Insurance Experiment – Documents. https://www.nber.org/programs-projects/projects-and-centers/oregon-health-insurance-experiment/oregon-health-insurance-experiment-documents

[7]Household Pulse Survey. https://www.census.gov/data-tools/demo/hhp/#/

[8]Coronavirus Disease 2019, Pew. https://www.pewresearch.org/topic/coronavirus-disease-covid-19/

individuals who, in their Medicaid enrollment materials, identify Spanish as their preferred first language. These individuals were contacted by telephone by a Spanish-speaking interviewer.

The baseline survey includes a subgroup of individuals who had been enrolled as childless adults during the time frame from August 2019 through March 2020 but disenrolled from that coverage prior to April 2020. The inclusion of this cohort is intended to provide information about 1) the target population's understanding of the pending waiver provisions and 2) the degree to which state notifications to beneficiaries about pending waiver provisions may have affected these former members' continuing enrollment in Medicaid.

Table MB1: Survey Sample Groups

Group	Composition	English Language Sample	Spanish Language Oversample	Total Sample
A	Childless adults randomly sampled from the list of current enrollees at the time of the sample construction with incomes 0–49% FPL	2,135	107	2,242
B	Childless adults randomly sampled from the list of current enrollees at the time of the sample construction with incomes 50–100% FPL	2,300	115	2,415
C	Adults who have a probable substance use disorder (a diagnosis of a substance use disorder or a hospital/ED visit related to a substance use disorder in the prior 12 months based on recent claims)	2,994	150	3,144
D	Childless adults who have been long-term enrolled (>24 months) in the program without a history of employment	2,203	110	2,313
E	Individuals who disenrolled from CLA and were likely to have been subject to the waiver provisions	2,375	119	2,494
F	Parents and caretakers who are not subject to the community engagement requirement, and will serve as a contemporaneous comparison group	2,993	149	3,142
Total Sample		15,000	750	15,750

The initial sample was compiled by the UW team and known duplicate cases were removed. The sample was delivered to NORC in mid-September 2020 and the Spanish language oversample was delivered in early November 2020. A total of 15,750 individuals were selected for the survey, of which 750 comprised the Spanish language oversample.

Fielding

The survey was fielded from October 2020 through February 2021. NORC contacted the 15,000 initial cases (i.e., the full sample minus the Spanish oversample, which was added later) with a mailing notifying them that they had been selected for the study. The initial mailing in October 2020 included a $2 incentive payment. Selected individuals were encouraged to complete the

survey online by clicking a link and entering a unique code. In October 2020, individuals received a paper survey in the mail, which they could also complete and send to NORC in a self-addressed, stamped envelope. Beginning in December 2020, individuals were contacted by NORC interviewers. The Spanish language survey was integrated into data collection at this time. Interviewees who indicated a Spanish language preference were contacted by Spanish-speaking interviewers.

Individuals could be contacted up to six times. Individuals who asked to be called back were eligible to schedule interviews at a time of their choosing. Individuals who were unable to complete the survey at a point in time were re-contacted to complete. Individuals who stated that they did not want to take the survey (i.e., "hard refusals") were removed from the call-back schedule. Beginning in December 2020, interviewees were offered $5 to complete the survey. Given the challenging circumstances under the COVID-19 pandemic at this time (see Box 1), the survey response incentive was increased to $20 from January 14 through February 4, 2021, and finally increased to $30 until the close of data collection on February 25, 2021.

Box 1: A note about response rates

The 18% overall response rate represents a substantial decrease from prior BadgerCare member surveys. For example, the previous 2018 survey obtained a 43% response rate. While the Wisconsin BadgerCare surveys have historically obtained higher response rates than many other large-scale surveys of low-income people, there has been a general trend over time toward lower response rates.

It is difficult to determine the exact factors leading to lower response rates in 2020, but unquestionably the circumstances of COVID-19 had a major impact on response rates. As a point of comparison, the National Health Interview Survey experienced a 16-percentage point decrease in response rates during the early months of the pandemic.

Another Wisconsin-specific factor that could have played a role was the 2020 presidential election; Wisconsinites were receiving a high volume of polling calls in the fall of 2020, which may have contributed to lower willingness to complete surveys overall. Patterns of non-response and the role of incentives to encourage participation will be closely considered as the team refines its sampling approaches for 2022 and 2024.

In summary, survey data collection included the following contacts:

- Contact 1: A mailing was sent to 15,000 current and former BadgerCare recipients following the sampling plan developed by UW. This mailing included a "push to web" with a URL allowing individuals to complete the survey via the internet.

- Contacts 2 and 3: NORC sent a self-administered questionnaire (SAQ) mailing to those respondents who did not yet complete the web survey (1-page cover letter, first class postage-paid return envelope, 16-page survey), then a follow-up second mailing of the SAQ to those respondents who had not yet completed the survey.

- Contact 4: The NORC team contacted potential respondents who did not respond to the web survey invitation or the SAQ. NORC placed up to six calls to each sampled beneficiary in order to maximize response. When NORC encountered disconnected or invalid lines, it used a proprietary database to search for other contact information (e.g., using contact information harvested by credit reporting agencies).

Among all 15,750 cases in the sample, 4,676 (30% of all cases) advance letters or self-administered questionnaires were sent to undeliverable addresses. Among cases that were attempted by phone, 3,782 individuals (24% of cases) either lacked a phone number or had an invalid phone number (e.g., disconnected or wrong number). **Table MB2** shows the data collection timeline.

Table MB2: Survey Data Collection Timeline

Milestone	Start	End	Weeks
Modified contract start date	8/24/20		
Multi-Mode Survey Data Collection			
Develop survey instrument	N/A	8/10/20	
Recruit and hire interviewers	8/10/20	9/21/20	6
Program, test, and deploy survey instrument and case management system	8/10/20	10/2/20	8
IRB submission and approval	8/24/20	9/21/20	4
Train interviewers	9/21/20	9/28/20	1
Survey Data Collection	10/5/20	1/25/21	16
Contact 1: Mail invitation to web survey	10/5/20	N/A	
Contact 2: Mail SAQ	10/19/20		
Contact 3: second mailing of SAQ	10/26/20		
Contact 4: Initiate telephone follow-up calling	12/1/20	1/25/21	8
Survey data delivery	1/26/21	3/22/21	8

Survey Completion

As seen in **Table MB3**, the overall completion rate was 18% and was lowest for group F (parents and caretakers not subject to the community engagement requirement) and highest for group B (childless adults with incomes 50–100% of the federal poverty line). It is important to note that groups A–F represent the sampling populations, but completed cases were subsequently regrouped by our team for the purposes of comparisons in this report (see *Grouping* below). By mode, 810 (41.6%) surveys were completed by self-administered questionnaire, 577 (29.7%) were completed by phone, and 559 were completed by web (28.7%).

Table MB3: Completion Rates Relative to the Sample

Group	Completes	Sample	Complete Percent
A	435	2242	19%
B	513	2415	21%
C	599	3143	19%
D	391	2313	17%
E	414	2494	17%
F	447	3142	14%
Total	**2,799**	**15,749**	**18%**

Data Processing

NORC applied quality control and logic checks to the data prior to delivering the final data set to UW. Data were harmonized across the three modes of the survey (web, mail, and phone). Responses that did not follow the survey skip patterns (particularly for mail surveys) were

recoded so that, for example, if an individual was a “no” for a stem question their responses were removed for follow-up questions that depended on an initial “yes.”

Because the number of individuals eligible to respond to each question differed by question, the UW team defined an eligible denominator for each question that excluded logical skips and individuals who responded “don’t know” or were otherwise a non-response. In limited cases where “don’t know” was considered an informative answer, these individuals were included in the denominator. We note these choices in table notes and track the eligible denominators for each question.

Grouping

For the purposes of this report, which offers broad comparisons across the current BadgerCare population, respondents were grouped into three primary categories that reflect a combination of self-identified enrollment status at the time the survey was completed and eligibility category at the time the sample was drawn. These categories were:

1. Childless adults

2. Parents and caretakers

3. Disenrolled/former members

Group 3 was identified based on individual responses to the survey question “What type of health care coverage do you currently have?” Any individual who responded that their coverage was not Medicaid or BadgerCare (including uninsured people) was assigned to Group 3. Groups 1 and 2 were defined using the sample groups (for example, Group 1 included all currently enrolled people in sample group A. Where additional information was needed, we linked survey respondents to their enrollment records from July–September 2020 and selected their enrollment group during that time.

Weighting

Weights were created with two components. First, the base weights calculated by NORC during the sample selection were applied to the respondents. Second, the weights were raked to match the age, sex, and group distributions of the sampling frames as a post-stratification adjustment. Post-stratification adjustment changes the sampling weights so that the distribution of select demographic characteristics among respondents matches the distribution of those characteristics in the population from which samples were drawn. Post-stratification adjustment, weighted cross-tabulations, and tests for differences were estimated using R (v4.1.0), RStudio (v1.4.1717), and the survey package (v4.1-1).

Next Steps

Interim Data Collection

We will field a small survey of beneficiaries with a qualitative follow-up in late 2022. The survey will be sent to 1,500 randomly sampled, currently enrolled beneficiaries, of whom half (750) will be childless adults and half (750) will be parents/caretakers. The team is working with the UW Survey Center to field the survey. The survey instrument will be 8 pages in length and sent to the listed mailing address of members along with a pre-paid return envelope and a $2 incentive

payment. The survey will only be offered in English. Individuals who do not return the survey will be contacted by telephone interviewers who will attempt to complete the interview by phone.

Using similar questions to the 2020 survey, the 2022 survey will include questions on current and prior insurance coverage, access to care, health care costs, health status and health behaviors, work activities, knowledge of current waiver provisions and state policies, and demographics. Because implementation is one focus of the survey, and the requirement to pay copayments for the emergency department has been implemented, the survey will also ask detailed questions about experiences using the emergency department, beneficiary knowledge of the policies that the state is enforcing, and any potential avoidance of care due to copayments.

We will also conduct a follow-up qualitative study. The qualitative study will recruit people who complete the 2022 survey and indicate that they are willing to be contacted again to participate in a follow-up study. The qualitative study will provide $50 incentive payments and participants will take part in an hour-long, semi-structured interview focusing on recent experiences with care and on issues relevant to provisions of the waiver, including how individuals navigate use of the emergency department and their knowledge and understanding of when it is appropriate to seek emergency care versus other settings of care, and access to care for substance use disorders. Interviews will be transcribed, coded, and systematically analyzed to identify major themes. Approximately twenty individuals will be recruited for the qualitative study, a number of respondents that is likely to achieve thematic saturation (i.e., coverage of all major themes). A report describing the major lessons will be produced based on the interim survey. The survey will be fielded as a joint effort between the UW evaluation team and the UW Survey Center.

Final Survey

The final survey will be fielded between Q3 of 2023 and Q2 of 2024. The design and implementation will mirror the 2020 survey. It will be sent to approximately 15,000 current and former members and will be offered in English and Spanish. The sampling plan will include oversamples of groups that may be of particular relevance to waiver provisions, similar to 2020. For example, we will likely oversample people with a history of diagnosed substance use disorders to study the provisions related to residential drug and alcohol treatment. The survey domains will include health insurance coverage, eligibility and enrollment in Medicaid, health care needs, access and use of care, health status and health behaviors, employment and workforce activities, awareness and exposure to waiver provisions, and demographics. The final set of domains will be determined in consultation with the state and CMS based on the implementation status of waiver provisions that were placed in suspension with the COVID-19 public health emergency.

PROVISION 1: COVERAGE FOR NON-ELDERLY CHILDLESS ADULTS UP TO 100% FPL

Background on Provision

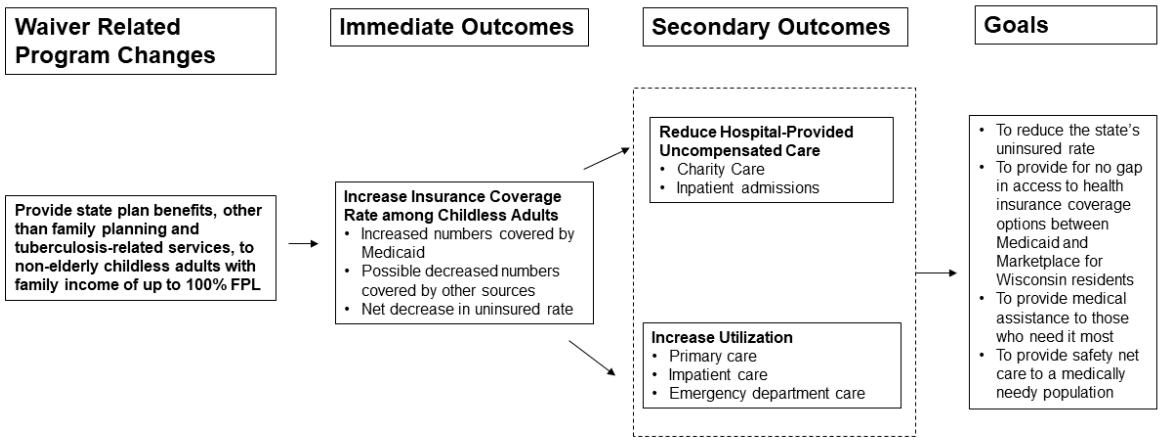
Provision: Provide state plan benefits, other than family planning and tuberculosis-related services, to non-elderly childless adults with family income of up to 100% of the federal poverty level (FPL).

In April 2014, Wisconsin initiated a CMS-approved § 1115 Demonstration Waiver that allowed federal Medicaid matching funds for providing health care coverage for childless adults between the ages of 19 and 64 years old who have incomes at or below 100% FPL. The childless adult (CLA) population receives the standard benefit plan, which is the same benefit plan that covers parents, caregivers, and children. That waiver expired on December 31, 2018, and the new CMS waiver approved through 2023 extends this existing coverage for childless adults.

Medicaid program goal: To improve health outcomes and reduce unnecessary services. As well, by establishing an eligibility income limit at 100% FPL, rather than implementing a full ACA-authorized Medicaid expansion, the State of Wisconsin focused on "creating a program that is sustainable" and "available to those who need it most."

Evaluation Questions and Hypotheses

Figure 1.1: Driver Diagram for Childless Adults Coverage Expansion



Hypothesis 1.1. The expansion of benefits to non-elderly childless adults (CLAs) will reduce the state's uninsured rate.

Primary Research Question 1.1. Did the expansion of benefits to CLAs reduce the state's uninsured rate?

Question 1.1a. What are the trends in Wisconsin's adult uninsured rate and uninsured rate among CLAs?

Question 1.1b. How much did the change in the number of CLAs due to the Medicaid expansion contribute to the overall change in the adult uninsured rate in Wisconsin?

Hypothesis 1.2. The expansion of benefits to CLAs will lead to increased access to medical care among poor CLAs.

Primary Research Question 1.2. How did the CLA expansion affect the use of health care services?

Question 1.2a. Did the expansion of benefits to CLAs increase the use of primary care among poor CLAs in Wisconsin?

Question 1.2b. What are the short- and long-term effects of eligibility and coverage policies on Medicaid health service expenditures?

Hypothesis 1.3. By expanding the safety net, the expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals.

Primary Research Question 1.3. Did the expansion of benefits to CLAs reduce the provision of uncompensated care (charity care plus bad debt) among Wisconsin acute care hospitals?

Question 1.3a. What are the trends in the provision of uncompensated care among Wisconsin hospitals, and did it change along with the expansion of benefits to CLAs?

Question 1.3b. Did hospitals in areas with greater reductions in the number of uninsured CLAs experience differential changes in uncompensated care?

Hypothesis 1.4. Additional requirements of the current demonstration may increase administrative costs.

Primary Research Question 1.4. What are the administrative costs incurred by the state and counties to implement and operate the demonstration?

Question 1.4a. What are the administrative costs incurred by the state to implement and operate the demonstration?

Question 1.4b. How did county income maintenance staff workloads change around implementation of the current demonstration?

Methodology

Evaluation Design

We will use three analytic approaches to address the primary research question for evaluation of Waiver Provision 1, the expansion of Medicaid coverage to childless adults up to 100% FPL. These are interrupted time series (ITS), difference-in-differences (DiD), and panel data models based on geographically contiguous and matched counties.

COVID-related note: Waiver Provision 1 has been underway since 2014. Its evaluation does not rely on post 2020 data for causal inference. The evaluation of this provision can readily exclude the 2020 period and retain the use of ITS methods.

Table 1.1 summarizes the key features of the evaluation design for this provision. For completeness, the Analytic Approach column includes both the analytical strategies as originally designed and the revised approach developed in response to the public health emergency and recommendations from the Centers for Medicare and Medicaid Services.

Table 1.1: Provision 1: Summary of Hypotheses, Questions, Data Sources, and Analytic Approaches for Evaluation of the Expansion of Medicaid Benefits to Childless Adults (CLAs)

Comparison Strategy	Outcome Measures	Data Sources	Analytic Approach	
			Original	Revised
Hypothesis 1.1: The expansion of benefits to CLAs will reduce the state's uninsured rate.				
Primary Research Question 1.1: Did the expansion of benefits to CLAs reduce the state's uninsured rate?				
Question 1.1a: What are the trends in Wisconsin's adult uninsured rate and uninsured rate among CLAs?				
CLAs prior to expansion	No source of insurance coverage	American Community Survey (ACS)	Interrupted time series (ITS)	This analysis will only include data prior to 2020.
	Covered by Medicaid/BadgerCare			
	Covered by private insurance	Family Health Survey (FHS)		
	Other public coverage			
Question 1.1b: How much did the change in the number of CLAs due to the Medicaid expansion contribute to the overall change in the adult uninsured rate in Wisconsin?				
CLAs in other states	No source of insurance coverage	American Community Survey (ACS)	Difference-in-differences (DiD)	This analysis will only include data prior to 2020.
	Covered by Medicaid/BadgerCare			
	Covered by private insurance	Behavioral Risk Factor Surveillance System (BRFSS)		
	Other public coverage			
Adults in counties that neighbor Wisconsin	No source of insurance coverage	Small Area Health Insurance Estimates (SAHIE)	Panel data models based on geographically contiguous and matched border counties	
Hypothesis 1.2. The expansion of benefits to CLAs will lead to increased access to medical care among poor CLAs.				
Primary Research Question 1.2: How did the CLA expansion affect the use of health care services?				
Question 1.2a: Did the CLA expansion increase the use of medical care among low-income CLAs in Wisconsin?				
CLAs in other states	Doctor visits	Behavioral Risk Factor Surveillance System (BRFSS)	Difference-in-differences (DiD)	This analysis will only include data prior to 2020.
	Dentist visits			
	Health care access	Family Health Survey (FHS)		
Adults in other states	Hospital stays	State Inpatient Databases (SID)	Difference-in-differences (DiD)	This analysis will only include data prior to 2020.
	Emergency department visits			
Parents and caregivers in Wisconsin	Self-reported utilization and access to care	Survey of beneficiaries	Difference-in-differences (DiD)	

Comparison Strategy	Outcome Measures	Data Sources	Analytic Approach	
			Original	Revised
Question 1.2b: What are the short- and long-term effects of eligibility and coverage policies on Medicaid health service expenditures?				
CLAs in other states	Total Medicaid-paid inpatient expenditures	State Inpatient Databases (SID)	Difference-in-differences (DiD)	This analysis will only include data prior to 2020.
	Per-person Medicaid-paid inpatient expenditures			
Parents and caregivers in Wisconsin	Total Medicaid-paid health care expenditures	State Medicaid claims	Difference-in-differences (DiD)	This analysis will only include data prior to 2020.
	Per-person Medicaid-paid health care expenditures			
Hypothesis 1.3. By expanding the safety net, the expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals.				
Primary Research Question 1.3: Did the CLA expansion reduce the provision of uncompensated care among Wisconsin acute care hospitals?				
Question 1.3a. What are the trends in the provision of uncompensated care among Wisconsin hospitals and did it change along with the expansion of benefits to CLAs?				
Hospitals prior to CLA expansion	Dollar amount of charity care provision	CMS Hospital Cost Reports	Interrupted time series (ITS)	This analysis will only include data prior to 2020.
	Dollar amount of bad debt			
Question 1.3b. Did hospitals in areas with greater reductions in the number of uninsured CLAs experience differential changes in uncompensated care?				
Hospitals in other states	Dollar amount of charity care provision	CMS Hospital Cost Reports	Difference-in-differences (DiD)	This analysis will only include data prior to 2020.
	Dollar amount of bad debt			
Hospitals in neighboring geographic areas	Dollar amount of charity care provision	CMS Hospital Cost Reports	Panel data models based on geographically contiguous and matched border areas	This analysis will only include data prior to 2020.
	Dollar amount of bad debt			
Hypothesis 1.4. Additional requirements of the demonstration may increase administrative costs.				
Primary Research Question 1.4: What are the administrative costs incurred by the state and counties to implement and operate the demonstration?				
Q1.4a What are the administrative costs incurred by the state to implement and operate the demonstration?				
N/A	Administrative costs associated with demonstration startup	DHS-provided estimates of contract costs, staff-time equivalents, and other costs	Descriptive analysis of administrative costs over time	Unchanged
	Ongoing administrative costs of demonstration operations			
Q1.4b How did county income maintenance staff workloads change around implementation of the current demonstration?				
N/A	County administrative costs	County workload reporting data	Descriptive analysis of administrative costs over time	Unchanged

Target and Comparison Populations

The target populations for the evaluation of Waiver Provision 1 (Coverage for Non-Elderly Childless Adults up to 100% FPL) include (1) CLAs in Wisconsin; (2) adults in Wisconsin; and (3) acute care hospitals in Wisconsin.

Evaluation Period

The evaluation period will include the years 2012 (prior to initial CLA coverage expansion), through 2023, including both a period prior to and a period following the launch of the new waiver in 2020. The Provision 1 analyses will apply to the current demonstration period while including the timeline of the 2014 initial expansion to the CLA population as relevant contextual background. Effects may differ across these time periods, which we will allow for in the analyses.

Data Sources and Outcome Measures

The outcome measures for this evaluation are defined in **Table 1.1**, above. This evaluation will involve multiple data sources. They are noted in **Table 1.2**, along with the hypotheses for which these data will be used. The Data Sources section of the Demonstration Waiver and Evaluation Background component of this report provides a full description of these data sources.

Table 1.2: Provision 1 Data Sources

	Hypotheses
The American Community Survey (ACS): To estimate sources of health insurance coverage in the previous year among CLAs in Wisconsin and in comparison states.	H1.1
Behavioral Risk Factor Surveillance System (BRFSS): To estimate both health insurance coverage and measures of access to health care.	H1.1 H1.2
Small Area Health Insurance Estimates (SAHIE): To estimate health insurance coverage rates at the county level.	H1.1
Wisconsin Family Health Survey (FHS): To estimate Wisconsin rates of health insurance coverage, measures of health status, health problems, and use of health care services.	H1.1 H1.2
State Inpatient Databases (SID): Data on six states from the SID to measure inpatient stays and emergency department visits.	H1.2
Medicaid beneficiary survey: To assess CHA enrollees' experiences with barriers related to cost, availability, and benefit design.	H1.2
Hospital Cost Reports: To measure hospitals' provision of uncompensated care.	H1.3
State and Managed Care Administrative Records: To estimate the staff and other inputs for implementing and operating the demonstration.	H1.4
Interviews with state agency staff and partner organizations: To identify staff effort and administrative costs associated with implementing and operating the demonstration.	H1.4

Analytic Methods

We will address each of the primary research questions as follows:

Question 1.1. Did the CLA expansion reduce the state's uninsured rate? Compare CLAs in Wisconsin both pre- and post-expansion. We will conduct interrupted time series (ITS) analyses

to determine whether the CLA expansion reduced the fraction of CLAs in the state who did not have any source of health insurance. Additional outcomes we will examine include sources of insurance coverage, including Medicaid/BadgerCare, private insurance, and other sources of public coverage (such as Medicare). We can construct these groups using data from the American Community Survey (ACS) and from Wisconsin's Family Health Survey (FHS).

We will also compare CLAs in Wisconsin with CLAs in other states using difference-in-differences models (DiD). In particular, we will use the ACS to compare the change in the fraction of CLAs in Wisconsin without health insurance with changes in similar states that did not expand Medicaid, as well as with the change in states that fully expanded Medicaid. This analysis will also examine changes in sources of coverage (Medicaid/BadgerCare, private, other public).

We will compare adults in counties that border Wisconsin with adults in Wisconsin by geographically matching border counties in Wisconsin to their contiguous border counties in neighboring states and by estimating panel data models and using data from the Census Small Area Health Insurance Estimates (SAHIE) program. These models will enable us to determine the effect of the CLA expansion on the fraction of adults without health insurance. Since all of Wisconsin's neighboring states implemented a full ACA Medicaid expansion with the exception of Iowa, we will be comparing the CLA expansion to a full Medicaid expansion.

Question 1.2. Did the CLA expansion increase the use of medical care among poor CLAs in Wisconsin? We will compare CLAs in Wisconsin with CLAs in other states using DiD and data from the National Health Interview Survey (NHIS) and from BRFSS. Comparing adults in Wisconsin and in other states and using data from the SID, we will estimate DiD models on the number of hospital stays and emergency department visits. We will undertake a similar comparison between parents and caregivers enrolled in Medicaid and CLAs enrolled in Medicaid by taking advantage of the historical data available in the Wisconsin Medicaid beneficiary survey (i.e., data that our team collected in 2014, 2016, and 2018).

Question 1.3. Did the CLA expansion reduce the provision of uncompensated care among Wisconsin acute care hospitals? We will employ ITS, DiD, and panel data models on hospitals in geographically matched areas to determine the impact of the CLA expansion on the provision of charity care and on bad debt by hospitals.

Question 1.4. What are the administrative costs incurred by the state to implement and operate the demonstration? We will perform a descriptive analysis of DHS-provided reports of contract costs, staff-time equivalents, and other administrative costs 1) to establish demonstration policies, typically incurred in the years prior to and including the initial year of the demonstration, 2) operate the ongoing demonstration, and 3) for state agencies partnering with Medicaid to implement and operate the demonstration.

Difference-in-Differences (DiD) Method

The objective in evaluating a treatment's effect on an outcome is to find the difference between the improvement (or degradation) in an outcome in the presence of the treatment to the change in an outcome that would have occurred in the absence of the treatment. In the group of individuals who receive the treatment, this counterfactual change—the amount that an outcome would have improved absent the treatment—is not observed. Therefore, this counterfactual change must be estimated somehow.

A popular method applied to estimate this change is the difference-in-differences (DiD) approach. In this approach, two populations of subjects, treatment and control, are observed at two points in time: at baseline, before the intervention is applied, and at follow-up, after the intervention is applied to the treatment population. The outcome is measured in each population at each time. The average effect of the treatment is estimated by subtracting the change in outcomes in the control group from the change in outcomes in the treatment group. The control group thus provides the counterfactual for the trend that would have occurred in the treatment group in the absence of the intervention.

DiD can be implemented either by literally taking averages and subtracting, as described above, or via regression modeling. The advantages of using a regression framework are that a researcher can incorporate more than one time period before and after intervention into the empirical analysis and can adjust for potential confounders arising from differences in demographic and baseline health characteristics and time trends. For continuous outcomes, a linear regression model takes the form:

$$\text{Outcome}_{it} = \alpha + \beta T_i + \delta \text{post}_t + \lambda T_i \times \text{post}_t + \gamma X_{it} + \varepsilon_{it}$$

where $Outcome_{it}$ is the outcome measure of interest for subject *i* at time *t*; T_i takes the value of 1 if subject *i* is in the treatment group, and 0 otherwise; and post_t equals 1 if time *t* is after the treatment/intervention was applied and equals 0 otherwise. The interaction term, $T_i \times \text{post}_t$, equals 1 for members in the treatment group after the treatment has been applied. X_{it} represents a set of control variables for subject *i* at time *t*, such as demographic and health characteristics. These characteristics are either measured in the baseline period or considered not to be directly influenced by the treatment. The average effect of the treatment/intervention is measured by the estimate of the coefficient λ.

One can readily generalize this regression framework to deal with non-continuous outcome variables such as discrete outcomes, proportions, or percentages. A major advantage of using this DiD regression approach is that it can yield an estimate unbiased by time-invariant differences between treatment and comparison group individuals when covariates are included to control for initial heterogeneity of treatment and comparison groups.

ITS Estimation

It may not be possible to construct valid control groups to estimate each treatment effect because the Medicaid program will implement select waiver provisions for all eligible beneficiaries at the same time and may change implementation practices considering information learned in the process of monitoring, rapid-cycle evaluation, shared learning, and quality/process improvement. These changes in implementation are intended to improve population outcomes and evaluating these changes is an important component of the analysis. Consequently, to the extent that these changes affect an entire state's enrolled population, there will be no control group against which to compare. To account for this, we will also assess changes in outcomes for Wisconsin CLAs using time series models such as the interrupted time series (ITS) model.[9]

[9]See Kontopantelis, E., Doran, T., Springate, D. A., Buchan, I., and Reeves, D. (2015). Regression-Based Quasi-Experimental Approach When Randomisation Is Not an Option: Interrupted Time Series Analysis. *British Medical Journal, 350: h2750*.

Panel Data Methods with Geographically Matched Border Counties

We will implement our panel data models on a geographically matched sample, following the local identification methodology of Dube, Lester, and Reich (2010)[10], and compare outcomes in adjacent counties that share a border with Wisconsin. This local identification strategy relies on contiguous counties being similar in terms of population and market characteristics. We will use the U.S. Census County Adjacency File to identify all counties in states that are adjacent to one or more counties in Wisconsin. To estimate the effect of the CLA expansion on outcomes, we estimate the following fixed-effects regression on a sample of matched counties:

$$y_{c,m,t} = \alpha + \gamma expansion_{c,m,t} + \varphi_m + \phi_c + \tau_t + e_{c,m,t}.$$

where $y_{c,m,t}$ is the outcome in county *c* in the matched-county pair *m* in year *t*, $expansion_{c,m,t}$ is a dummy variable indicating that county *c* in group *m* is in a Wisconsin following the CLA expansion, τ_t is a year fixed effect, φ_m is a matched-county pair fixed effect, and ϕ_c is a county fixed effect. We will allow effects to differ over time.

Methodological Limitations

Because the CLA expansion was implemented at a single time statewide and without randomized controls, the evaluation relies on quasi-experimental methods. The state reduced eligibility for parents from 200% FPL to 100% FPL simultaneous to the childless adult expansion, complicating interpretation of results for outcomes that cannot be limited to childless adult beneficiaries.

Results

Hypothesis 1.1. The expansion of benefits to CLAs will reduce the state's uninsured rate.

Primary research question 1.1. Did the expansion of benefits to CLAs reduce the state's uninsured rate?

Question 1.1a. What are the trends in Wisconsin's adult uninsured rate and uninsured rate among adult CLAs?

Question 1.1b. How much did the change in the number of CLAs due to the Medicaid expansion contribute to the overall change in the adult uninsured rate in Wisconsin?

Data for this analysis are drawn from two sources: the American Community Survey (ACS) and the Census Bureau's Small Area Health Insurance Estimates (SAHIE). Each provide the following insurance measures:

- SAHIE - Percent uninsured: The SAHIE program models health insurance coverage by combining survey data from several sources, including ACS, demographic population estimates, aggregated federal tax returns, participation records for the Supplemental

[10]Dube A, Lester TW, Reich M. 2010. Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties. *The Review of Economics and Statistics*, *92*(4), 945–964.

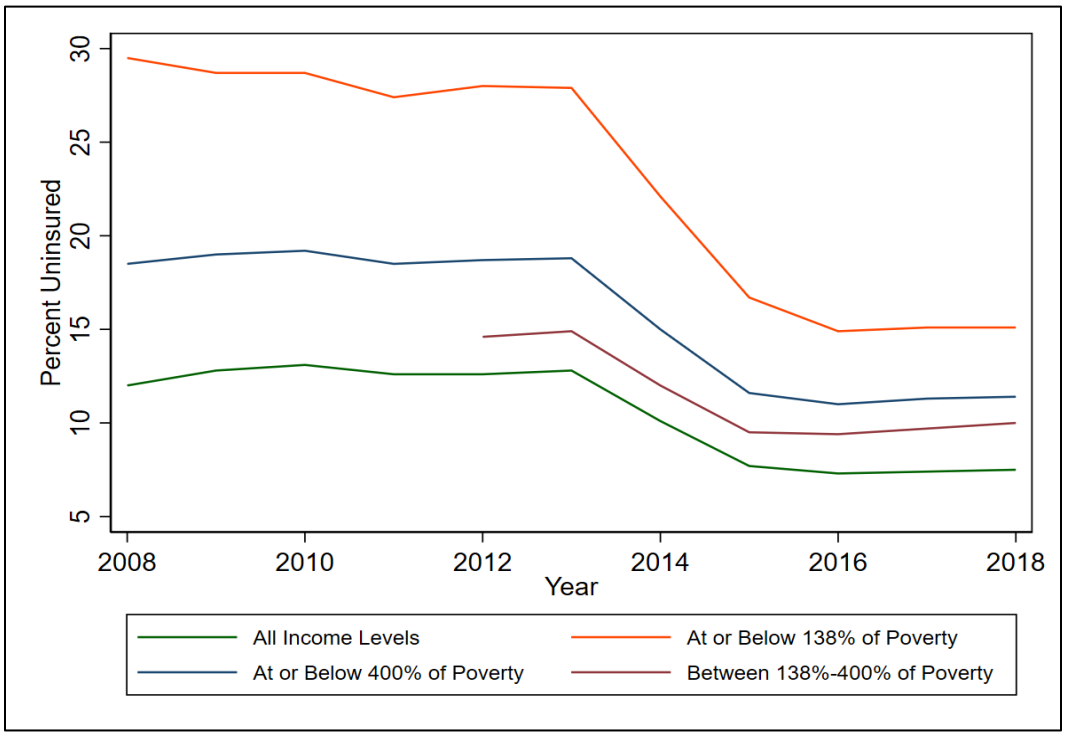
Nutrition Assistance Program (SNAP), County Business Patterns (CBP), Medicaid, Children's Health Insurance Program (CHIP) participation records, and Census 2010.

- ACS - Have insurance: Respondents were asked, "Is this person currently covered by any of the following types of health insurance or health coverage plans?" followed by a yes/no check box for the following types of coverage: insurance through a current or former employer or union (of this person or another family member), insurance purchased directly from an insurance company (by this person or another family member), Medicare, Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability, TRICARE or other military health care, VA, Indian Health Service, and an opportunity to specify another type of insurance. We use the IPUMS USA harmonized definitions of insurance by type which do not include Indian Health Service users as insured and are subject to some additional edits.[11]

Figure 1.2 displays the trends, using the U.S. Census Small Area Health Insurance Estimates (SAHIE) in Wisconsin's adult (ages 18–64) uninsured rate from 2008–2018, by income group. The SAHIE does not allow separate estimates for adults with and without dependent children. Also note that the displayed income groups are not mutually exclusive. Prior to 2014, the average uninsured rate was 12.7%; for those at or below 138% FPL it was 28.4%; for those at or below 400% FPL, it was 18.8%; and for those between 138%–400% FPL it was 14.8%. A drop in the uninsured rate is evident across all income categories. After 2014, the uninsured rate for all income groups had decreased to 8%, a 37% drop; for those at or below 138% FPL it had decreased to 16.8%, a 41% drop; for those at or below 400% FPL, it had decreased to 12.1%, a 36% drop; and for those between 138%–400% FPL it had decreased to 10.1%, a 32% drop. In both absolute and relative terms, the largest drops in uninsurance came in the below 138% FPL group who were most affected by the Medicaid expansion to childless adults.

[11]Ruggles, S., Flood, S., Goeken, R., Grover, J., Meyer, E., Pacas, J., & Sobek, M. (2020). IPUMS USA: Version 10.0 [dataset]. Minneapolis, MN: IPUMS. https://doi.org/10.18128/D010.V10.0; https://usa.ipums.org/usa/acs_healthins.shtml.

Figure 1.2: SAHIE: Trends in Wisconsin's Adult Uninsured Rate



Question 1.1a. What are the trends in Wisconsin's adult uninsured rate and uninsured rate among CLAs? Based on data from the American Community Survey (ACS) from 2009 through 2019, we document the trends in insurance coverage among Wisconsin adults aged 19–64. The ACS is a rolling sample of households surveyed continuously all year by the U.S. Census Bureau. The ACS asks its respondents whether a person is *currently* covered by any of the listed types of health insurance. Thus, the ACS measures health insurance for the Wisconsin population based on whether people are insured at the point in time that they answered the survey during the year of collection. Individuals can report more than one source of health insurance coverage at the time of the survey, so the sum of the sources of coverage will not total 100%.

The ACS has been measuring health insurance on a consistent basis since 2009, which enables an analysis of trends in health insurance coverage and the sources of health insurance coverage prior to and following Wisconsin's 2014 establishment of a Medicaid adult eligibility income limit at 100% FPL. As previously noted, this limit represented an expansion of the eligibility income limit for childless adults, but a contraction in the eligibility income limit from 200% FPL for parents and guardians.

Table 1.3 reports the percent of childless adults and of parents with any source of insurance coverage from 2009 to 2019. In 2013, roughly 85.5% of childless adults in Wisconsin had some source of insurance. In 2014, the first year of the expansion in the income eligibility limit for Medicaid to 100% FPL, this percentage increased 4 percentage points to 89.5% and continued to increase in years thereafter. Between 2013 and 2019, the percentage of childless adults with any source of health insurance coverage increased by 6.3 percentage points. Medicaid coverage also increased among childless adults during this period. From 2009 to 2013, roughly 8% of childless adults received coverage from Medicaid. In 2014, this percentage increased by

more than 2 percentage points, to 9.5%, and continued to increase through 2019 at which time the percent receiving Medicaid coverage was 11.8%. Between 2013 and 2019, the percentage of childless adults with Medicaid coverage increased by 3.9 percentage points. Approximately 60% of the increase in health insurance coverage among childless adults in Wisconsin between 2013 and 2019 can be attributed to increases in Medicaid coverage.

Among parents, health insurance coverage increased modestly over this period and increased by 2 percentage points between 2013 and 2019. The percentage of parents with Medicaid coverage averaged roughly 19.5% between 2009 and 2013, decreased by 1.5 percentage points in 2014, and continued to decline thereafter. Between 2013 and 2019, the percentage of parents with Medicaid coverage *decreased* by 5.5 percentage points. Overall, health insurance coverage increased among parents over this period because both employer-sponsored coverage and individual coverage increased by 5.9 and 1.3 percentage points respectively.

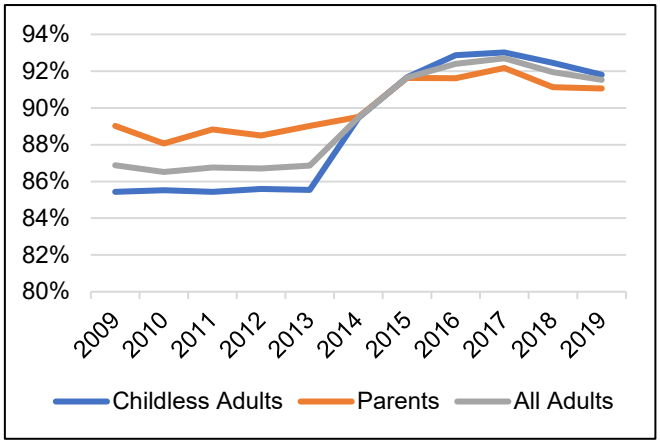
Table 1.3: Rates of Insurance Coverage, Adults Aged 19–64 in Wisconsin, by Type of Insurance

	2009	2013	2014	2019	Change 2013–2019
Childless Adults					
Any coverage	**85.4%**	**85.5%**	**89.5%**	**91.8%**	**6.3%**
Medicaid	7.1%	7.9%	9.5%	11.8%	3.9%
Employer	70.0%	67.4%	68.5%	69.8%	2.4%
Individual	10.3%	11.3%	12.3%	11.9%	0.6%
Other government	6.5%	7.5%	7.8%	6.9%	-0.6%
Parents					
Any coverage	**89.0%**	**89.0%**	**89.5%**	**91.1%**	**2.0%**
Medicaid	18.1%	19.9%	18.3%	14.4%	-5.5%
Employer	67.8%	65.6%	66.1%	71.5%	5.9%
Individual	6.4%	6.1%	8.4%	7.4%	1.3%
Other government	3.1%	4.0%	3.8%	4.0%	0.0%
All Adults					
Any coverage	**86.9%**	**86.9%**	**89.5%**	**91.5%**	**4.7%**
Medicaid	11.5%	12.5%	12.9%	12.7%	0.3%
Employer	69.1%	66.7%	67.6%	70.4%	3.7%
Individual	8.7%	9.3%	10.8%	10.3%	0.9%
Other government	5.2%	6.2%	6.3%	5.8%	-0.4%

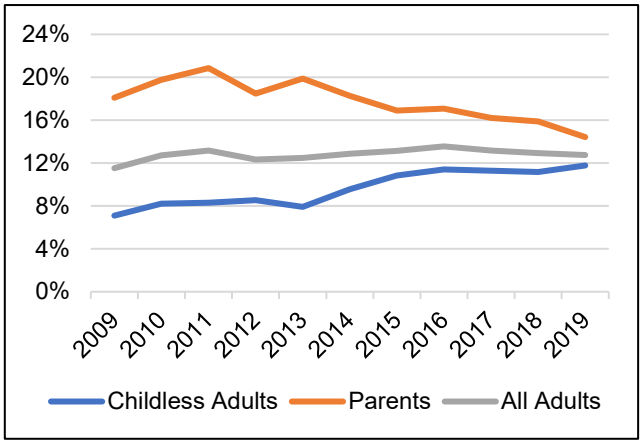
Figure 1.3 displays these trends in any sources of coverage and in Medicaid coverage among parents and childless adults in Wisconsin from 2009 to 2019.

Figure 1.3: Percent of Wisconsin Adults with Insurance Coverage and with Medicaid Coverage

Panel A. Trends in Percent of Wisconsin Adults with Insurance Coverage



Panel B. Trends in Percent of Wisconsin Adults with Medicaid Coverage

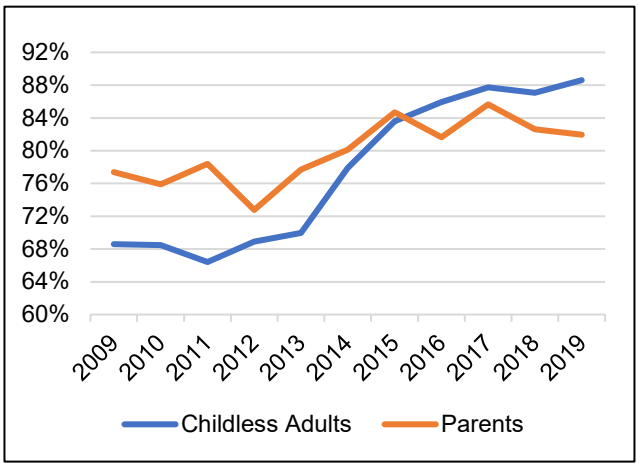


Question 1.1b. How much did the change in the number of CLAs due to the Medicaid expansion contribute to the overall change in the adult uninsured rate in Wisconsin? Using data from the ACS, we calculate trends in health insurance coverage among adults in Wisconsin by income as a percentage of the FPL. In the ACS, health insurance coverage is measured at the point in time when the survey was administered, while income is measured over the 12 months prior to when the survey was administered, so it does not precisely reflect the income used for program eligibility.

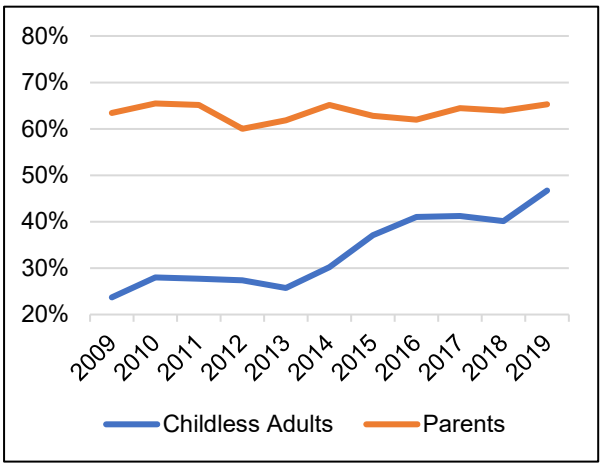
Childless adults with incomes less than the federal poverty level experienced very large increases in insurance coverage over the 2009 to 2019 period as the result of the expansion in Medicaid eligibility. From 2013 to 2019, the percentage of poor childless adults with any source of insurance coverage increased by 18.7 percentage points and the percentage with Medicaid coverage increased by 21 percentage points. In fact, over this time period and among poor childless adults in Wisconsin, Medicaid coverage became the largest source of insurance coverage, with 46.7% receiving Medicaid coverage (and over 50% of those insured) in 2019. Among poor parents, by comparison, the percent with any source of insurance coverage increased by 4.2 percentage points and Medicaid coverage increased by 3.5 percentage points to 65.3%. **Figure 1.4** shows these trends.

Figure 1.4: Percent of Wisconsin Adults with Insurance Coverage and with Medicaid, <100% FPL

Panel A. Trends in Percent of Wisconsin Adults with Insurance Coverage, <100% FPL



Panel B. Trends in Percent of Wisconsin Adults with Medicaid Coverage, <100% FPL



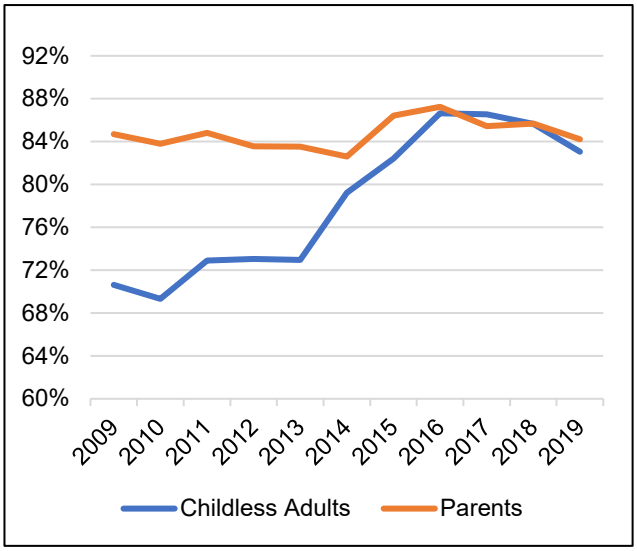
Among Wisconsin childless adults with incomes between 100 and 250% FPL, health insurance coverage increased by 10.1 percentage points between 2013 and 2019, again primarily due to increases in Medicaid coverage, which increased by 8.6 percentage points over this period. Among Wisconsin parents with incomes between 100 and 250% FPL, health insurance coverage did not change between 2013 and 2019, and the percentage with Medicaid coverage decreased by 6.4 percentage points. This decrease was offset by increases in private insurance coverage (both employer-based and individual coverage). These trends are shown in **Figure 1.5**.

Wisconsin childless adults with incomes between 250 and 500% FPL show a relatively small 2.5 percentage point increase in health insurance coverage. This increase was entirely due to expanded Medicaid coverage, which increased by 2.2 percentage points. Wisconsin parents with incomes between 250 and 500% FPL show a decrease in health insurance coverage between 2013 and 2019 of 1.1 percentage points and a decrease in Medicaid coverage of 1.5 percentage points. (**Figure 1.6**).

Small increases occurred in health insurance coverage among both childless adults and parents in Wisconsin with incomes greater than 500% FPL, with coverage among childless adults increasing by 1 percentage point and coverage among parents increasing by 2.4 percentage points. (**Figure 1.7**)

Figure 1.5: Percent of Wisconsin Adults with Insurance Coverage and with Medicaid, 100%–250% FPL

Panel A. Trends in Percent of Wisconsin Adults with Insurance Coverage, 100%–250% FPL



Panel B. Trends in Percent of Wisconsin Adults with Medicaid Coverage, 100%–250% FPL

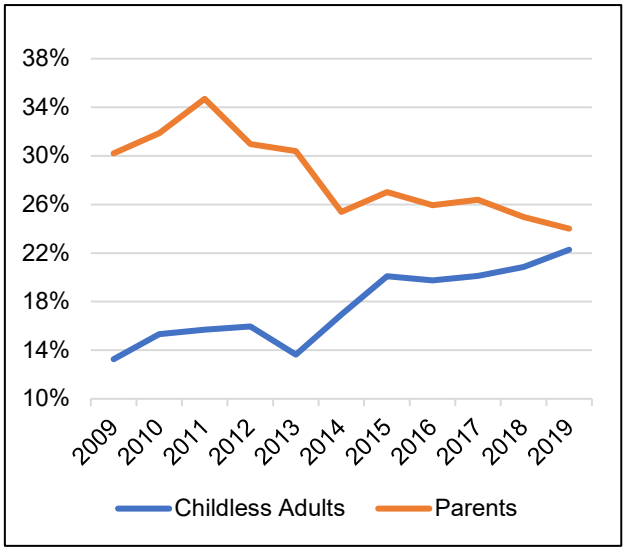
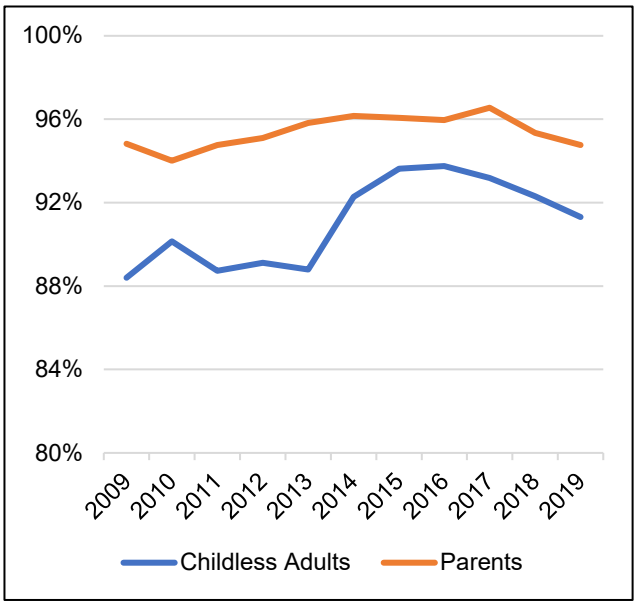


Figure 1.6: Percent of Wisconsin Adults with Insurance Coverage and with Medicaid, 250%–500% FPL

Panel A. Trends in Percent of Wisconsin Adults with Insurance Coverage, 250%–500% FPL



Panel B. Trends in Percent of Wisconsin Adults with Medicaid Coverage, 250%–500% FPL

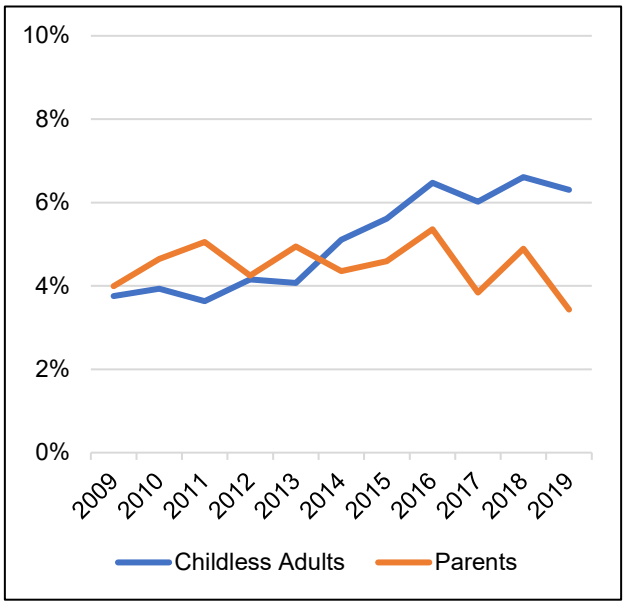
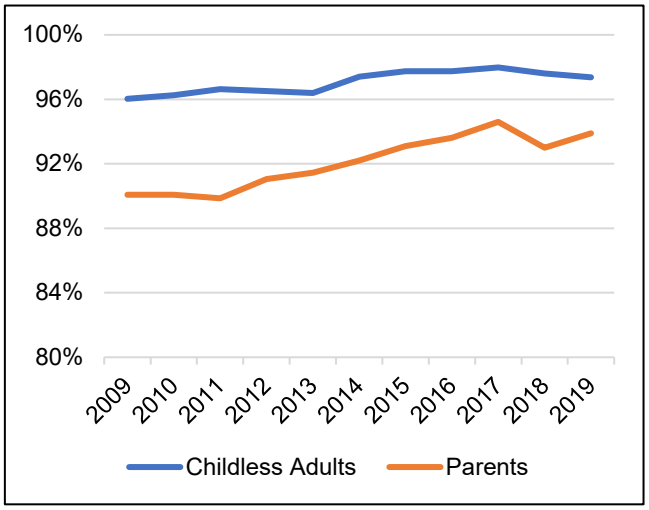
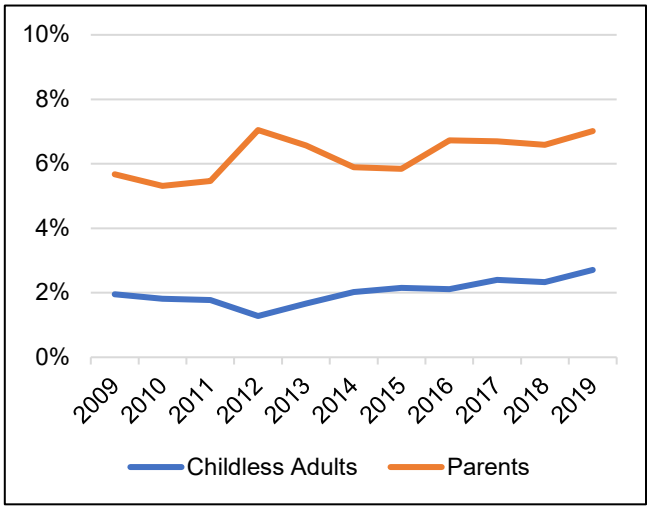


Figure 1.7: Percent of Wisconsin Adults with Insurance Coverage and with Medicaid, >500% FPL

Panel A. Trends in Percent of Wisconsin Adults with Insurance Coverage, >500% FPL



Panel B. Trends in Percent of Wisconsin Adults with Medicaid Coverage, >500% FPL



Interrupted Time Series (ITS) Analysis of Trends in Health Insurance Coverage in Wisconsin

We estimate the change in the trends in health insurance coverage in Wisconsin using ITS with a break in 2014. We estimate these models for all adults aged 19 to 64, for childless adults, and for parents. The results of the models are reported in **Table 1.4**.

Table 1.4: Interrupted Time Series Estimates of Insurance Coverage among Adults in Wisconsin

	All Adults		Childless Adults		Parents	
	Any Coverage	Medicaid	Any Coverage	Medicaid	Any Coverage	Medicaid
Time	0.0001	0.0015	0.0003	0.0020	0.0004	0.0023
	(0.0005)	(0.0018)	(0.0001)	(0.0019)	(0.0014)	(0.0027)
2014	0.0402	0.0029	0.0528	0.0153	0.0189	-0.0200
	(0.0099)	(0.0054)	(0.0105)	(0.0075)	(0.0096)	(0.0098)
Time x 2014	0.0031	-0.0020	0.0038	0.0014	0.0015	-0.0089
	(0.0030)	(0.0019)	(0.0033)	(0.0023)	(0.0030)	(0.0029)
Constant	0.8671	0.1214	0.8545	0.0762	0.8860	0.1895
	(0.0017)	(0.0055)	(0.0003)	(0.0046)	(0.0044)	(0.0079)

Source: Authors' analysis of 1-Year ACS Data from 2009–2019.
Notes: Newey-West standard errors are reported in parentheses.

All adults show a discontinuous increase in the fraction with insurance coverage in 2014, but no statistically significant change in the coverage trend after 2014. Among all adults, there was neither a statistically significant change in the fraction with Medicaid coverage in 2014 nor a significant change in the coverage trend after 2014. (**Figure 1.8**)

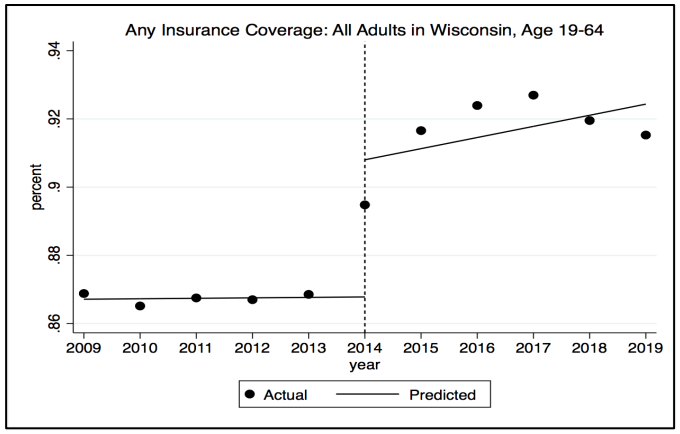
Childless adults show a statistically significant discontinuous increase in both the fraction with insurance coverage and the fraction with Medicaid coverage in 2014, but do not show a statistically significant change in the trends in overall coverage or in Medicaid coverage after 2014. (**Figure 1.9**)

Parents show a discontinuous increase in the fraction with any source of insurance coverage in 2014, but do not show a statistically significant change in the trend after 2014. However, among parents there was both a statistically significant discontinuous decrease in the fraction with Medicaid coverage in 2014 and a statistically significant decrease in the trend in Medicaid coverage after 2014. (**Figure 1.10**)

These results show that the changes in overall coverage rates and in Medicaid coverage rates were evident in the data quickly following the policy changes (including but not restricted to the changes in the income eligibility limits for adults). As the trends in coverage post-2014 were not statistically different from the trends prior to 2014, except for Medicaid coverage among parents, these results suggest that the effects of the policy changes were mostly apparent in the initial year, 2014, and were maintained thereafter.

Figure 1.8: Any Insurance Coverage and Medicaid Coverage: All Adults in Wisconsin, Age 19–64

Panel A.



Panel B.

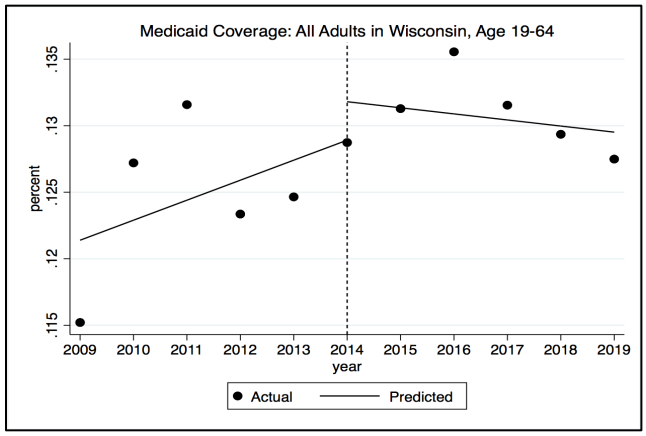
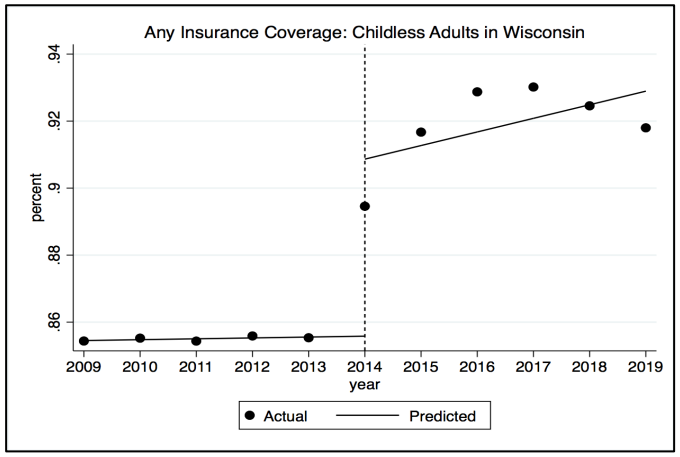


Figure 1.9: Any Insurance Coverage and Medicaid Coverage: Childless Adults

Panel A.



Panel B.

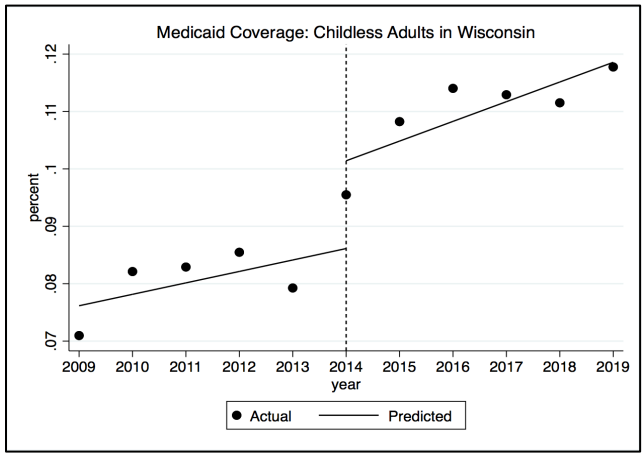
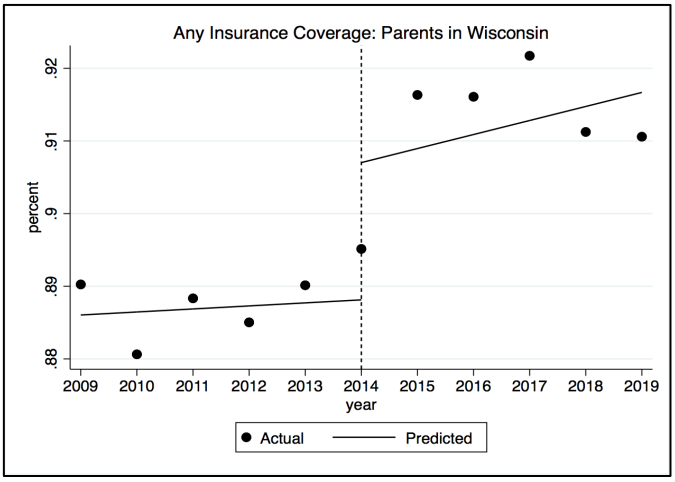
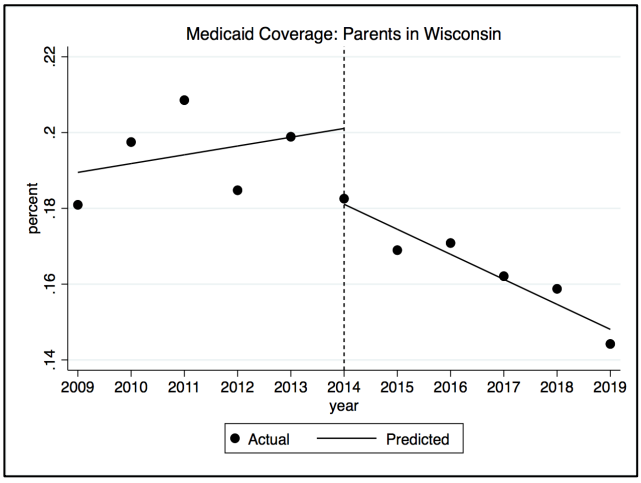


Figure 1.10: Any Insurance Coverage and Medicaid Coverage: Parents in Wisconsin

Panel A.



Panel B.



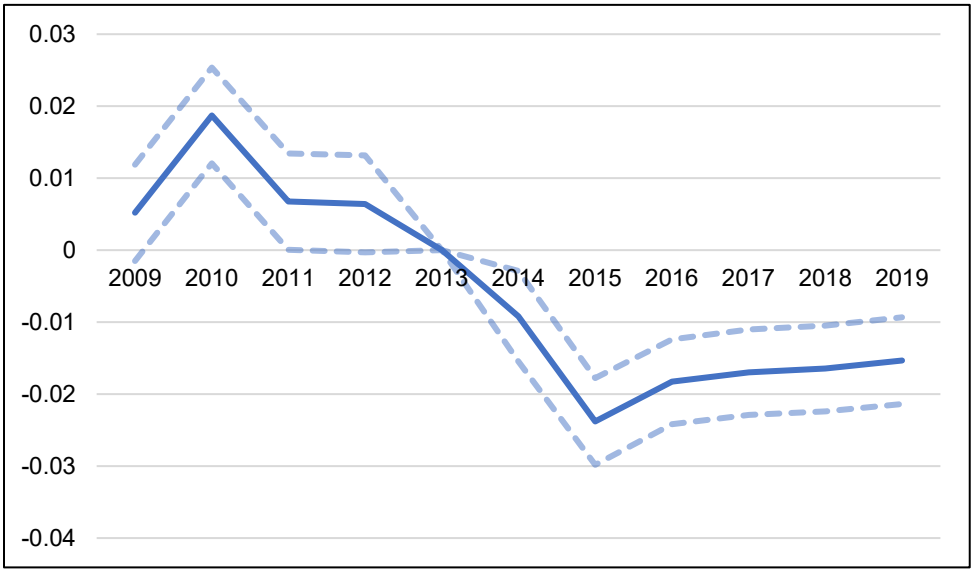
Difference-in-Differences (DiD) Analysis of Trends in Health Insurance Coverage in Wisconsin Relative to Other States

The landscape for insurance coverage changed in 2014 in other states because of the implementation of the Affordable Care Act's insurance provisions, including both the expansion of Medicaid to 138% FPL in states that elected to expand Medicaid, and establishment of health insurance Marketplaces with premium and cost-sharing subsidies available to individuals with family incomes as low as 100% FPL.

In order to better describe the impact of Wisconsin's health insurance income eligibility provision, we compare trends in Wisconsin with two sets of states using a difference-in-differences (DiD) analysis. The first comparison group is a set of states that border Wisconsin and that expanded Medicaid: Minnesota, Michigan, and Illinois. The second comparison group is a set of states that did not expand Medicaid: Texas, Florida, and North Carolina.

The results comparing trends in Wisconsin with those in states that expanded Medicaid are presented in **Figure 1.11** through **Figure 1.16**.Both rates of health insurance coverage and of Medicaid coverage in Wisconsin decreased relative to those rates in Minnesota, Michigan, and Illinois among both parents and childless adults. These relative declines were statistically significant.

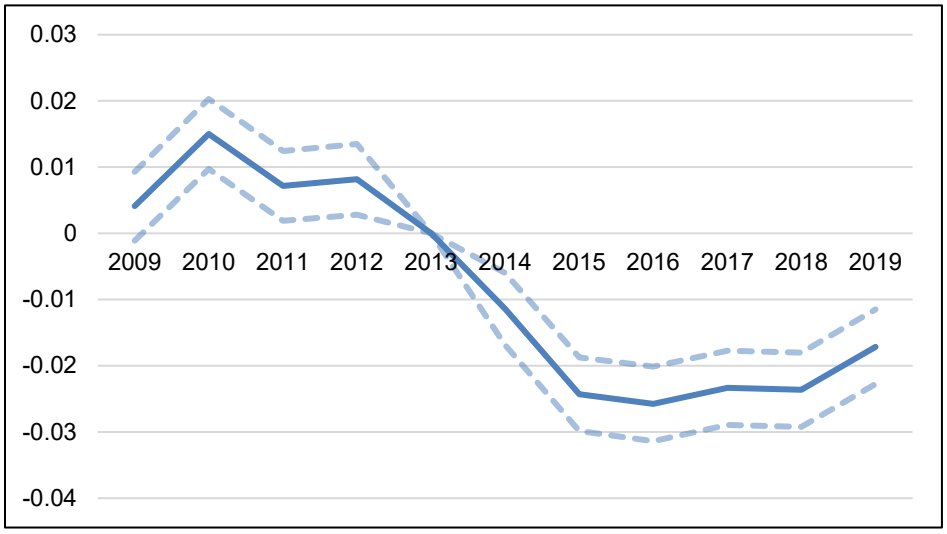
Figure 1.11: Percent of Wisconsin Childless Adults with Insurance Relative to States that Expanded Medicaid



Source: Authors' analysis of 1-Year ACS, 2009–2019.

Notes: Results of a difference-in-differences analysis comparing Wisconsin with Minnesota, Michigan, and Illinois. Dashed lines represent 95% CI. 2013 is the reference year.

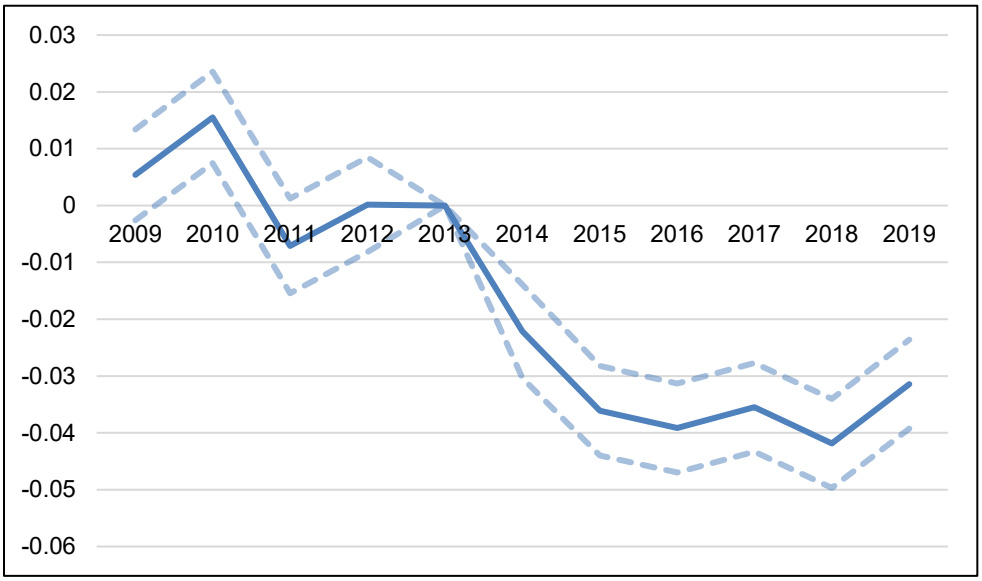
Figure 1.12: Percent of Wisconsin Childless Adults with Medicaid Relative to States that Expanded Medicaid



Source: Authors' analysis of 1-Year ACS, 2009–2019.

Notes: Results of a difference-in-differences analysis comparing Wisconsin with Minnesota, Michigan, and Illinois. Dashed lines represent 95% CI. 2013 is the reference year.

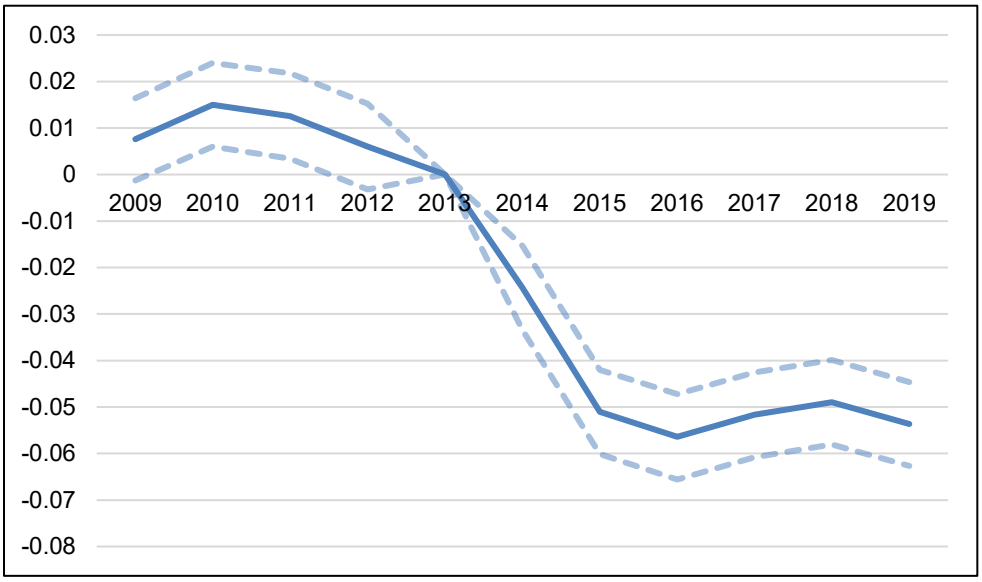
Figure 1.13: Percent of Wisconsin Parents with Insurance Relative to States that Expanded Medicaid



Source: Authors' analysis of 1-Year ACS, 2009–2019.

Notes: Results of a difference-in-differences analysis comparing Wisconsin with Minnesota, Michigan, and Illinois. Dashed lines represent 95% CI. 2013 is the reference year.

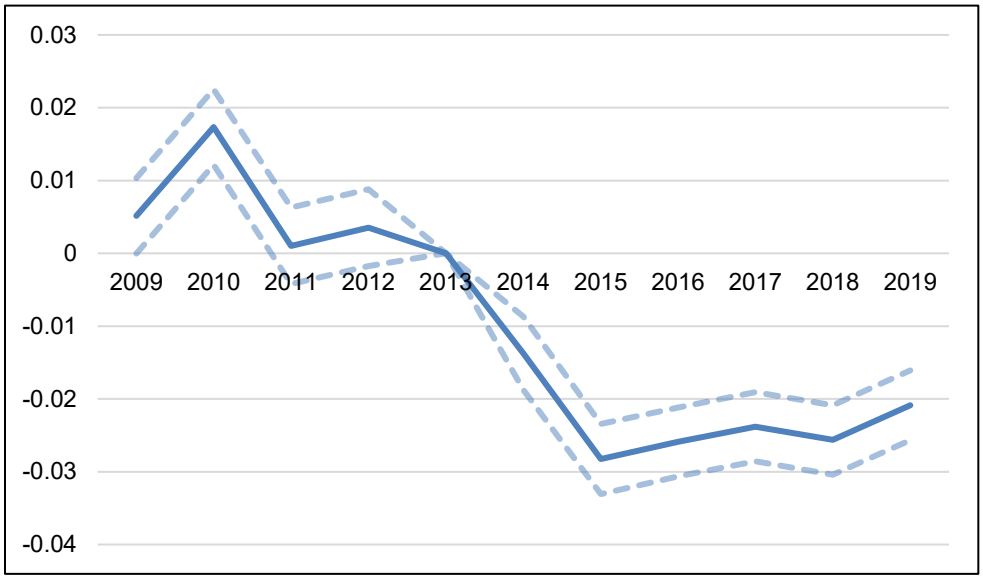
Figure 1.14: Percent of Wisconsin Parents with Medicaid Relative to States that Expanded Medicaid



Source: Authors' analysis of 1-Year ACS, 2009–2019.

Notes: Results of a difference-in-differences analysis comparing Wisconsin with Minnesota, Michigan, and Illinois. Dashed lines represent 95% CI. 2013 is the reference year.

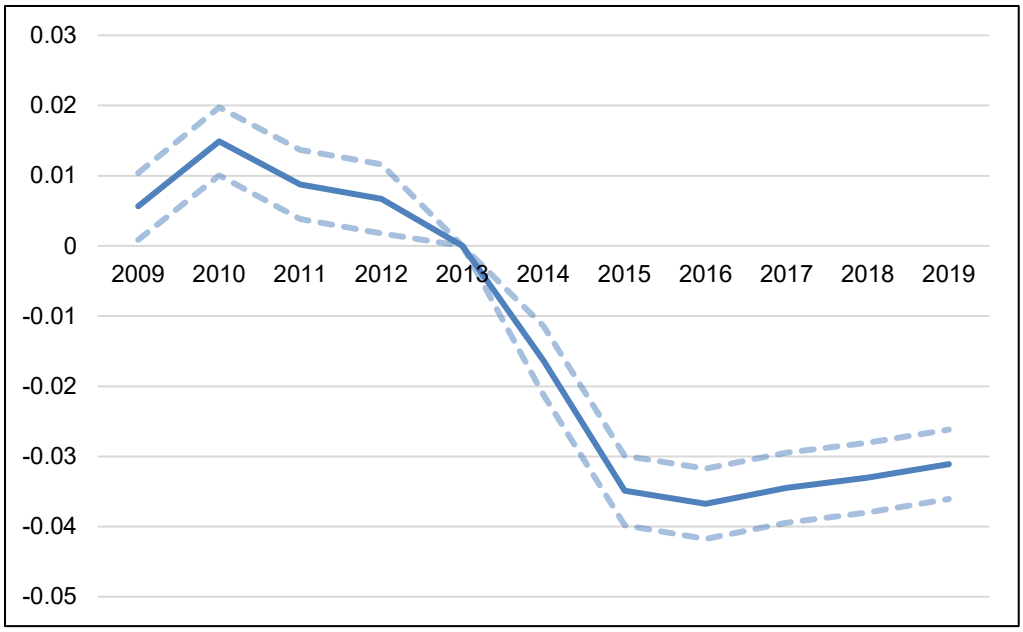
Figure 1.15: Percent of Wisconsin Adults with Insurance Relative to States that Expanded Medicaid



Source: Authors' analysis of 1-Year ACS, 2009–2019.

Notes: Results of a difference-in-differences analysis comparing Wisconsin with Minnesota, Michigan, and Illinois. Dashed lines represent 95% CI. 2013 is the reference year.

Figure 1.16: Percent of Wisconsin Parents with Medicaid Relative to States that Expanded Medicaid

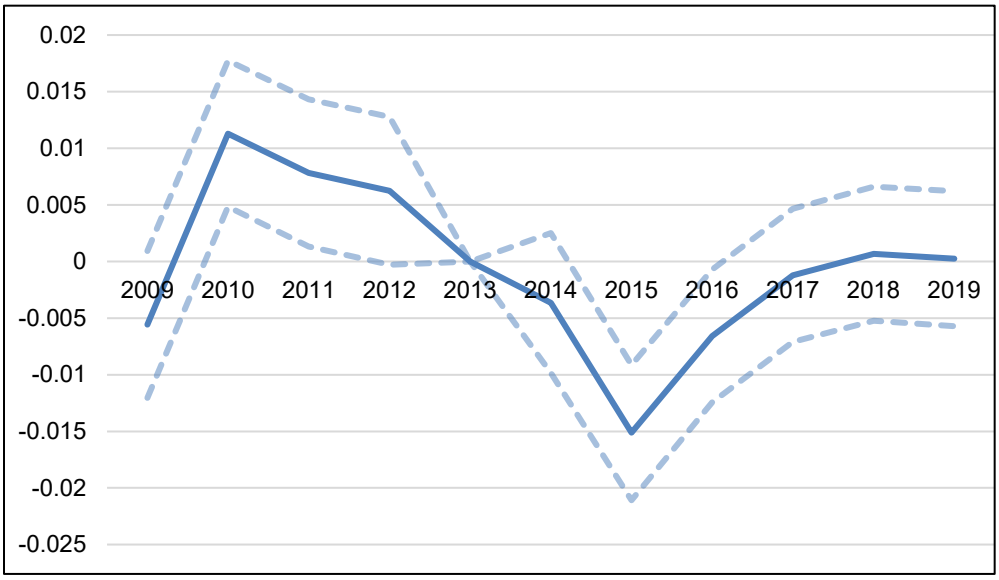


Source: Authors' analysis of 1-Year ACS, 2009–2019.

Notes: Results of a difference-in-differences analysis comparing Wisconsin with Minnesota, Michigan, and Illinois. Dashed lines represent 95% CI. 2013 is the reference year.

The results comparing trends in Wisconsin with those in states that did not expand Medicaid are presented in **Figure 1.17** through **Figure 1.22**. Among childless adults in Wisconsin, rates of health insurance coverage relative to those in Texas, Florida, and North Carolina were roughly unchanged over the 2009 to 2019 period. However, relative rates of Medicaid coverage among childless adults in Wisconsin increased substantially relative to those in the comparison states that did not expand Medicaid and this increase is statistically significant. Among parents in Wisconsin, both relative rates of overall health insurance coverage and relative rates of Medicaid coverage decreased relative to those in comparison states that did not expand Medicaid, and these declines are statistically significant. Among all adults, insurance coverage rates declined in Wisconsin relative to states that did not expand Medicaid while Medicaid coverage rates did not change.

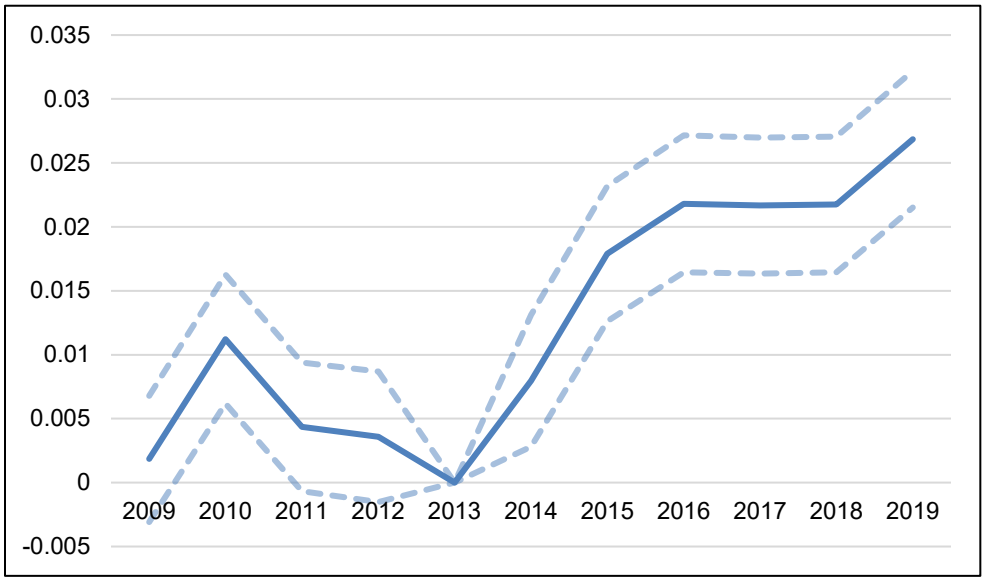
Figure 1.17: Percent of Wisconsin Childless Adults with Insurance Relative to Medicaid Non-Expansion States



Source: Authors' analysis of 1-Year ACS, 2009–2019.

Notes: Results of a difference-in-differences analysis comparing Wisconsin with Texas, Florida, and North Carolina. Dashed lines represent 95% CI. 2013 is the reference year.

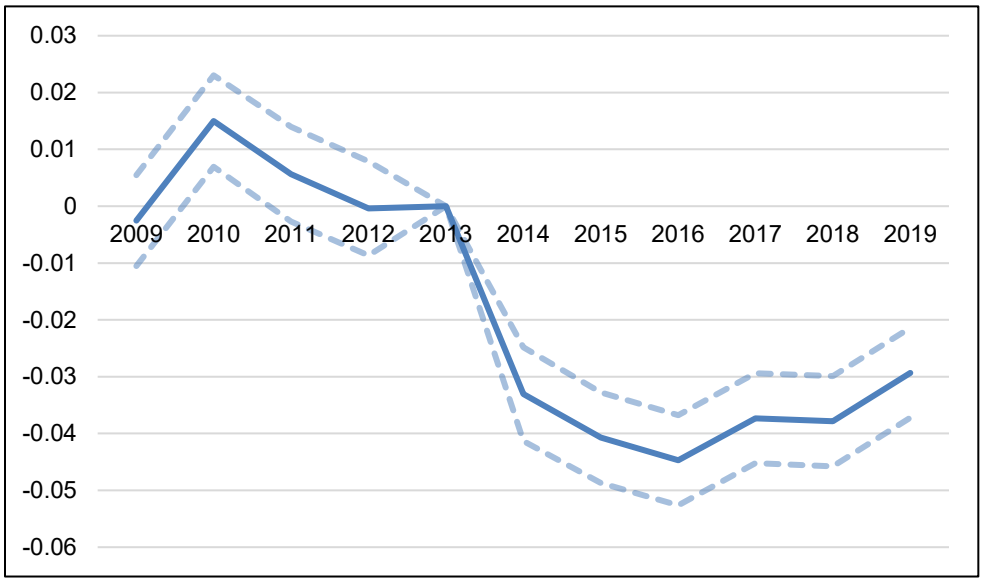
Figure 1.18: Percent of Wisconsin Childless Adults with Medicaid Relative to Medicaid Non-Expansion States



Source: Authors' analysis of 1-Year ACS, 2009–2019.

Notes: Results of a difference-in-differences analysis comparing Wisconsin with Texas, Florida, and North Carolina. Dashed lines represent 95% CI. 2013 is the reference year.

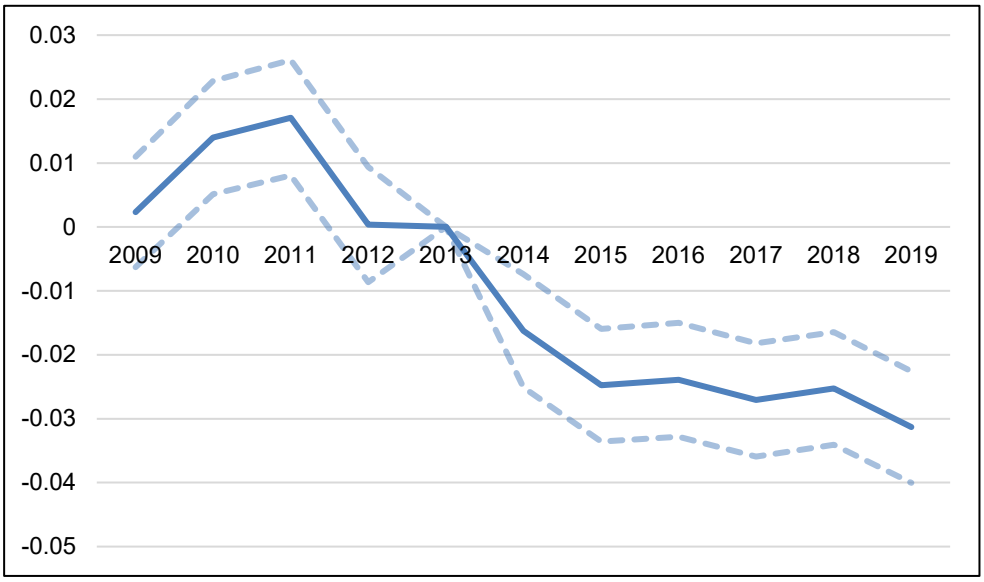
Figure 1.19: Percent of Wisconsin Parents with Insurance Relative to Medicaid Non-Expansion States



Source: Authors' analysis of 1-Year ACS, 2009–2019.

Notes: Results of a difference-in-differences analysis comparing Wisconsin with Texas, Florida, and North Carolina. Dashed lines represent 95% CI. 2013 is the reference year.

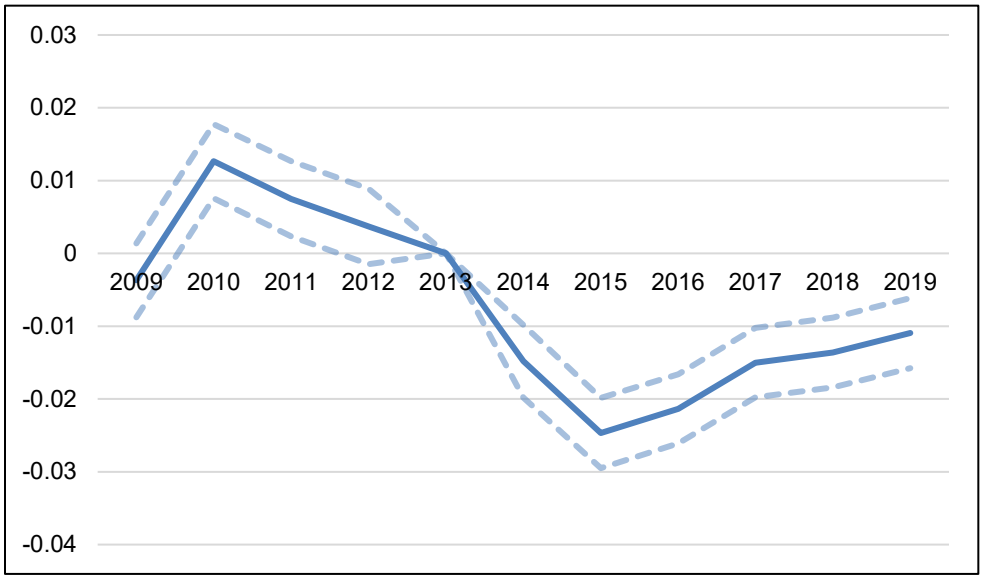
Figure 1.20: Percent of Wisconsin Parents with Medicaid Relative to Medicaid Non-Expansion States



Source: Authors' analysis of 1-Year ACS, 2009–2019.

Notes: Results of a difference-in-differences analysis comparing Wisconsin with Texas, Florida, and North Carolina. Dashed lines represent 95% CI. 2013 is the reference year.

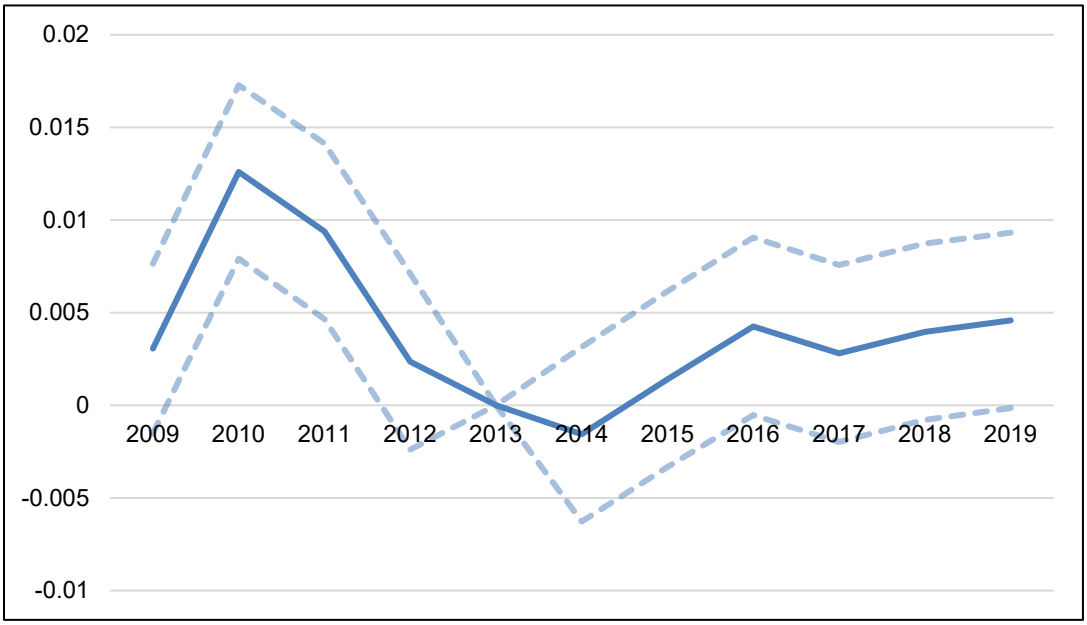
Figure 1.21: Percent of Wisconsin Adults with Insurance Relative to Medicaid Non-Expansion States



Source: Authors' analysis of 1-Year ACS, 2009–2019.

Notes: Results of a difference-in-differences analysis comparing Wisconsin with Texas, Florida, and North Carolina. Dashed lines represent 95% CI. 2013 is the reference year.

Figure 1.22: Percent of Wisconsin Adults with Medicaid Relative to Medicaid Non-Expansion States



Source: Authors' analysis of 1-Year ACS, 2009–2019.

Notes: Results of a difference-in-differences analysis comparing Wisconsin with Texas, Florida, and North Carolina. Dashed lines represent 95% CI. 2013 is the reference year.

Hypothesis 1.2. The expansion of benefits to CLAs will lead to increased access to medical care among poor CLAs.

Primary research question 1.2. How did the CLA expansion affect the use of health care services?

Question 1.2a. Did the CLA expansion increase the use of medical care among low-income CLAs in Wisconsin? Data for this analysis are drawn from the Behavioral Risk Factor Surveillance System (BRFSS), a cross-sectional telephone survey conducted monthly by the Centers for Disease Control and Prevention along with state health departments over landline and cellular telephones. Data are primarily collected for 2012 to 2018. Variables used here were restricted to the group that had information for all consecutive years. Because the BRFSS reports income in eight categories and because these categories do not align with the federal poverty guideline (FPG) thresholds used to determine Medicaid eligibility, this creates a challenge for measuring income as a percent of FPL.

To deal with this issue, we follow a procedure suggested by the State Health Access Data Assistance Center and define income as a percent of FPL for each respondent using the lowest

income level in the category, creating a "lower bound" measure.[12] Thus, the income measures reported here should be considered rough approximates. We examine the following outcomes:

- **Cost a barrier to care**: Individuals were asked, "Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?" This variable was constructed as a binary variable equal to 1 if the individual responded "No" and was coded as 0 if the individual responded "Yes."

- **Have personal doctor**: Individuals were asked, "Do you have one person you think of as your personal doctor or health care provider?" This variable was constructed as a binary variable equal to 1 if the individual responded "Yes" and 0 if they responded "No." "Don't know/not sure" or "Refused" responses were coded as missing.

- **Routine checkup**: Individuals were asked, "About how long has it been since you last visited a doctor for a routine checkup? [A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.]" This variable was constructed as a binary variable equal to 1 if the individual responded "Within past year (anytime less than 12 months ago)" and was coded as 0 if the individual responded "Within past 2 years (1 year but less than 2 years ago)" or "Within past 5 years (2 years but less than 5 years ago)" or "5 or more years ago" or "Never." "Don't know/not sure" or "Refused" responses were coded as missing.

- **HIV test**: Individuals were asked, "Have you ever been tested for HIV? Do not count tests you may have had as part of a blood donation. Include testing fluid from your mouth." "Yes" responses were coded as 1 and "No" responses as 0. "Don't know/not sure" or "Refused" responses were coded as missing.

- **Pneumonia shot**: Individuals were asked, "Have you ever had a pneumonia shot also known as a pneumococcal vaccine?" Those who responded "Yes" were coded as 1, those who responded "No" were coded as 0, and those who responded "Don't know/not sure" or "Refused" were coded as missing.

- **Flu shot**: Individuals were asked, "During the past 12 months, have you had either a flu shot or a flu vaccine that was sprayed in your nose? (A new flu shot came out in 2011 that injects vaccine into the skin with a very small needle. It is called Fluzone Intradermal vaccine. This is also considered a flu shot.)" Those who responded "Yes" were coded as 1, those who responded "No" were coded as 0, and those who responded "Don't know/not sure" or "Refused" were coded as missing.

Difference-in-differences (DiD) comparison of the selected groups of expansion and non-expansion states to Wisconsin are included in **Table 1.5**. Expansion states include Minnesota, Michigan, and Illinois, and non-expansion states include Florida, Missouri, Kansas, Nebraska, South Dakota, North Carolina, Tennessee, and Texas. This analysis is weighted and controls for age, education, employment, marital status, household size, gender, and race.

[12] SHADAC (2019). Four Methods for Calculating Income as a Percent of the Federal Poverty Guideline (FPG) in the Behavioral Risk Factor Surveillance System (BRFSS). https://www.shadac.org/sites/default/files/publications/Calculating_Income_as_PercentFPG_BRFSS.pdf

Overall, results suggest that the gains in Wisconsin in access to care and use of preventive care were lower than in both comparison expansion and non-expansion states. This may be due to a combination of factors: larger gains in coverage in expansion states and, while coverage gains overall were more similar to non-expansion states, Wisconsin's higher overall insurance coverage rate may mean a more limited potential for additional gains in a relative sense.

Table 1.5: Difference-in-Differences Results, BRFSS Access to Care Outcomes

	All Incomes		100–200% FPL		<100% FPL	
	Relative to Expansion States	Relative to Non-Expansion States	Relative to Expansion States	Relative to Non-Expansion States	Relative to Expansion States	Relative to Non-Expansion States
Panel 1: Access to Care						
Cost a barrier to care	0.02	-0.00	0.02	-0.05**	-0.13**	-0.05**
	(0. 01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)
Have personal doctor	-0. 01**	-0.01	0.00	0.01	-0.05	-0.04***
	(0. 00)	(0.01)	(0.02)	(0.00)	(0.02)	(0.01)
Panel 2: Preventive Care						
Routine Checkup	-0. 04**	-0. 02**	-0.11***	-0.07***	-0.15**	-0.08***
	(0. 01)	(0. 01)	(0.00)	(0.01)	(0.03)	(0.01)
HIV test	-0. 03	-0. 03**	-0.03	0.00	-0.15***	-0.10***
	(0. 01)	(0. 01)	(0.02)	(0.01)	(0.01)	(0.02)
Pneumonia shot	-0. 01	-0.01	-0.06***	-0.02***	-0.01	-0.02
	(0. 01)	(0.01)	(0.00)	(0.01)	(0.02)	(0.01)
Flu shot	-0. 04***	-0.04**	-0.03*	-0.02	-0.10**	-0.10***
	(0. 00)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)

Question 1.2b. What are the short- and long-term effects of eligibility and coverage policies on Medicaid health service expenditures? This analysis uses state Medicaid claims to display trends in per-person Medicaid-paid health expenditures from January 2012 through April 2020. We first show average per-person overall expenditures, excluding pharmacy claims. (**Figure 1.23**)

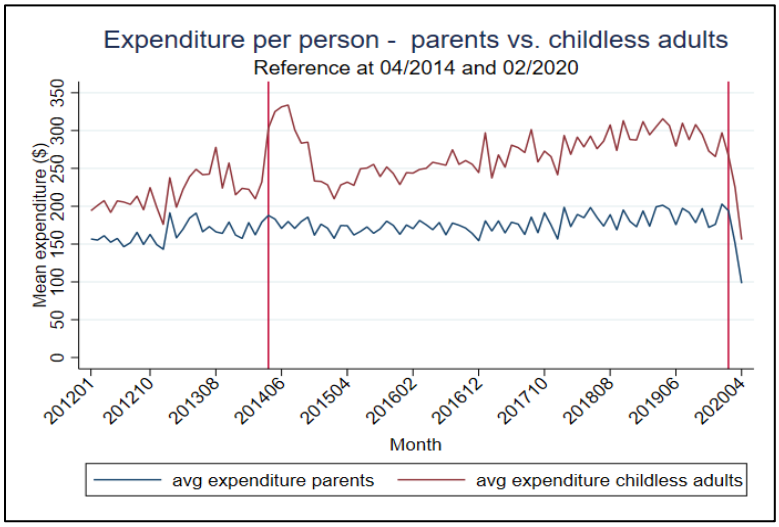
Panel A of the figure displays monthly averages for parents and for childless adults separately, identifying the initial implementation date (April 2014) along with February 2020, when health expenditures began to decline coincident with the COVID-19 pandemic. The average expenditures for childless adults in the post-expansion period ($270) is higher than that of parents ($176). The trend in expenditures is relatively similar in the pre-expansion period but differs in the post-expansion period. In the immediate post-expansion period, childless adults experienced a temporary (10 month) high level of average expenditures and then experienced a slight increasing trend in expenditures throughout the post-expansion period.

Panel B of the figure separates the eligibility groups by income levels. Parents of all income levels generally have lower average expenditures than childless adults, and higher-income groups within the eligibility categories tend to have lower expenditures but relatively similar overall trends.

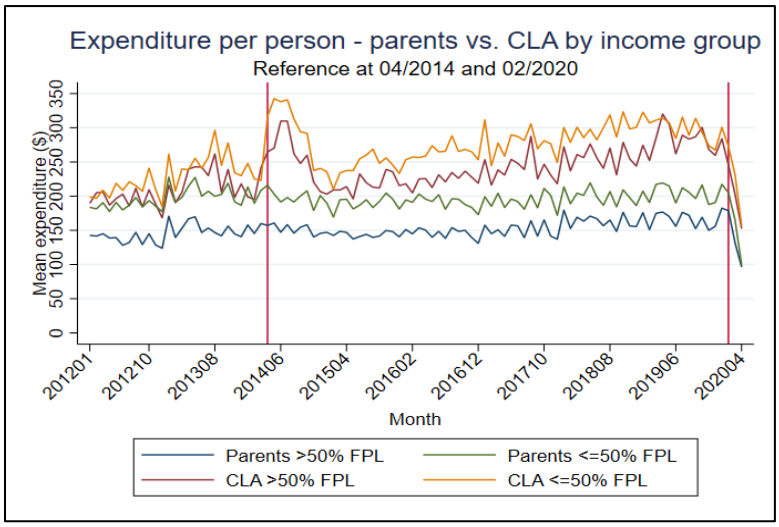
Panel C of the figure separates the eligibility groups by age. Older childless adults have the highest average expenditures, as might be expected, and younger parents have the lowest average expenditures, while the average level of expenditures per person for younger childless adults is similar to that of older parents.

Figure 1.23: Overall Trends in Per-Person Medicaid-Paid Health Care Expenditures

Panel A



Panel B



Panel C

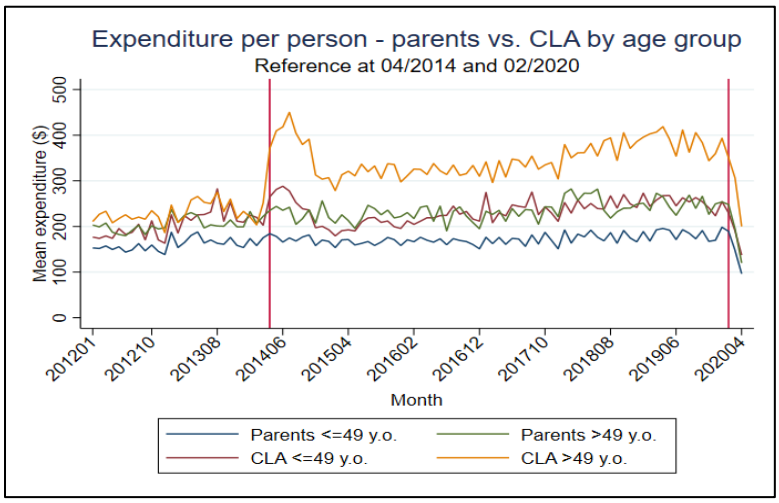
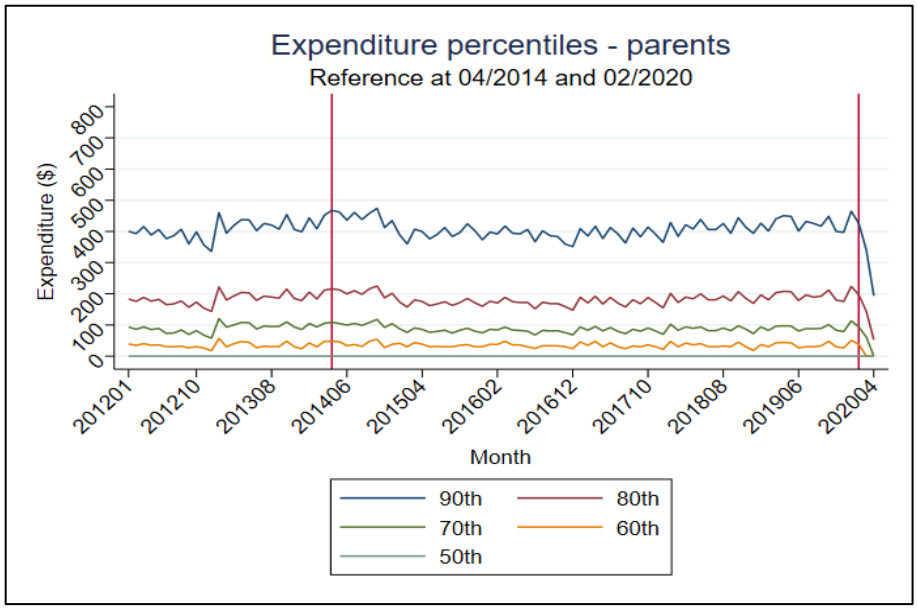


Figure 1.24 provides an overview of the distribution of per-person Medicaid expenditures for parents (Panel A) and childless adults (Panel B). These percentiles are not individual-specific but rather, represent the population enrolled at the time. The figure suggests that the noted upward trend in average expenditures is driven by increases at the top of the expenditure distribution rather than an overall upward shift in expenditures.

Figure 1.24: Trends in Per-Person Medicaid Expenditures, Percentiles

Panel A



Panel B

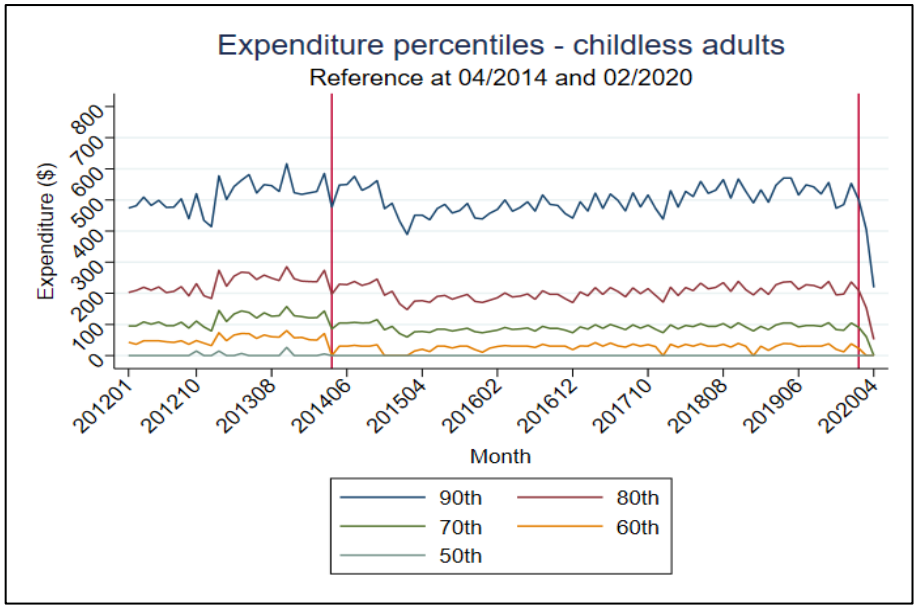
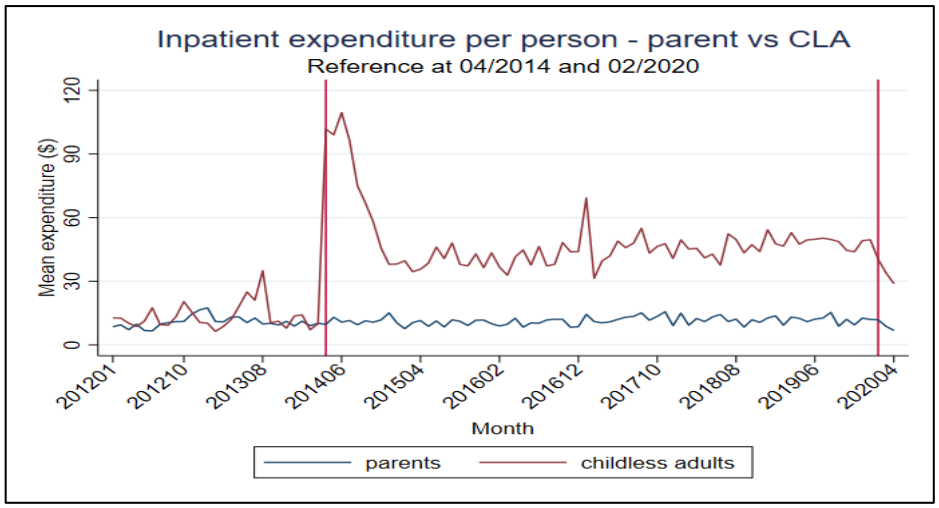


Figure 1.25 focuses on trends in per-person Medicaid-paid inpatient expenditures. Panel A displays monthly averages for parents and for childless adults separately. Average inpatient expenditures for childless adults in the post-expansion period ($48 per month) are substantially higher than for parents ($11 per month). The figure also displays a six-month period of substantially higher inpatient expenditures (approximately twice the average) at the beginning of the childless adult expansion. However, inpatient expenditures do not seem to be driving the upward trend in overall expenditures, as a strong upward trend is not evident there.

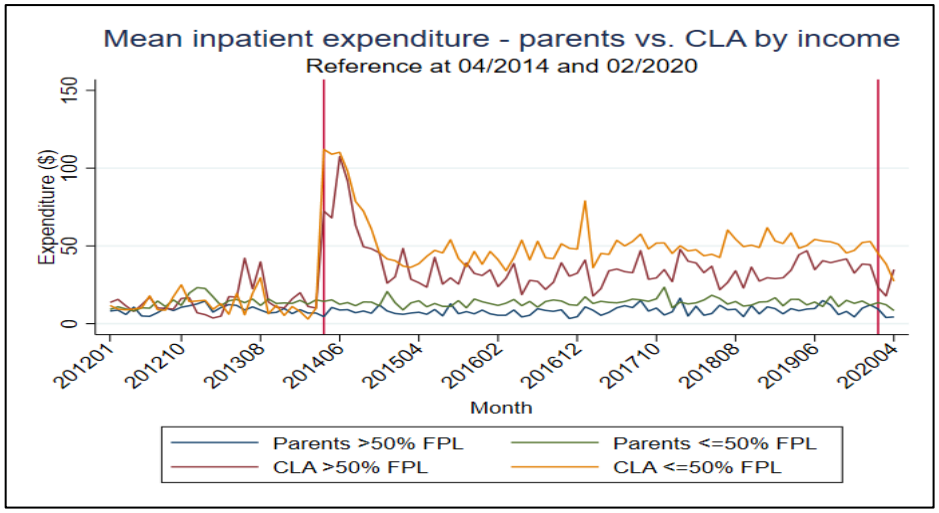
Panel B of the figure separates the eligibility groups by income levels, and Panel C of the figure separates the eligibility groups by age. Average inpatient expenditures are similar for childless adults across income and age groups, although slightly lower for higher income and younger childless adults on average. Older childless adults have the most pronounced increase in inpatient expenditures immediately following the coverage expansion.

Figure 1.25: Trends in Per-Person Medicaid-Paid Inpatient Expenditures

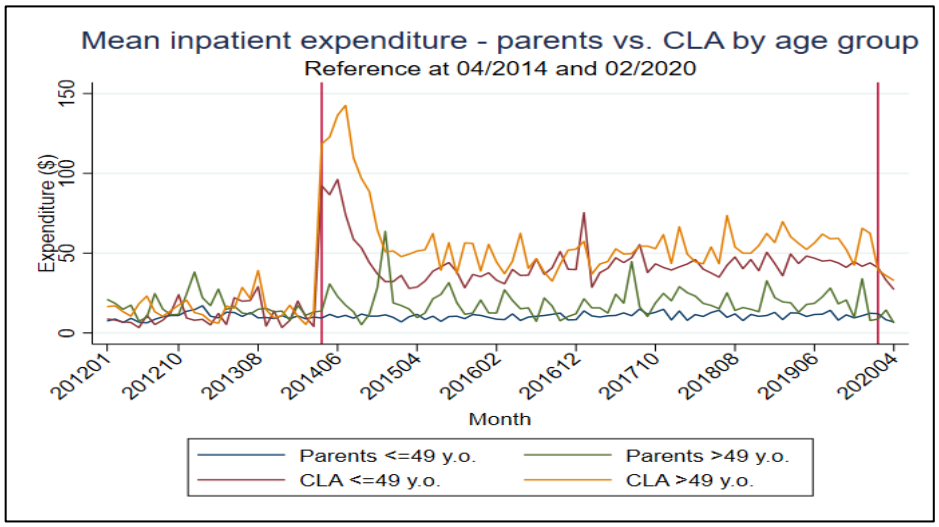
Panel A



Panel B



Panel C



Hypothesis 1.3. By expanding the safety net, the expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals.

Primary Research Question 1.3. Did the expansion of benefits to CLAs reduce the provision of uncompensated care (charity care plus bad debt) among Wisconsin acute care hospitals?

Question 1.3a. What are the trends in the provision of uncompensated care among Wisconsin hospitals and did it change along with the expansion of benefits to CLAs?

Question 1.3b. Did hospitals in areas with greater reductions in the number of uninsured CLAs experience differential changes in uncompensated care?

Data for this analysis are drawn from CMS Hospital Cost Reports. Extracted from these reports, at the hospital level, are measures of charity care and bad debt which we total to uncompensated care (UCC). In particular, these measures are constructed as:

- Charity Care: Charity care (or financial assistance) consists of services for which hospitals neither received, nor expected to receive, payment because they had determined the patient's inability to pay.
- Bad Debt: Bad debt consists of services for which hospitals anticipated but did not receive payment.
- Uncompensated Care: Uncompensated care is the sum of charity care and bad debt. In practice, hospitals have difficulty distinguishing between charity care and bad debt.

First, we report the trends in uncompensated care, charity care, and bad debt in fiscal years 2011 through 2019 for hospitals in Wisconsin (**Figure 1.26**). After peaking in 2012, Wisconsin hospitals reported declines in uncompensated care, charity care, and bad debt in 2013 and 2014. The total amount of uncompensated care provided was relatively constant thereafter. Uncompensated care values are reported in **Table 1.6**.

Figure 1.26: Trends in Uncompensated Care in Wisconsin (Millions of $)

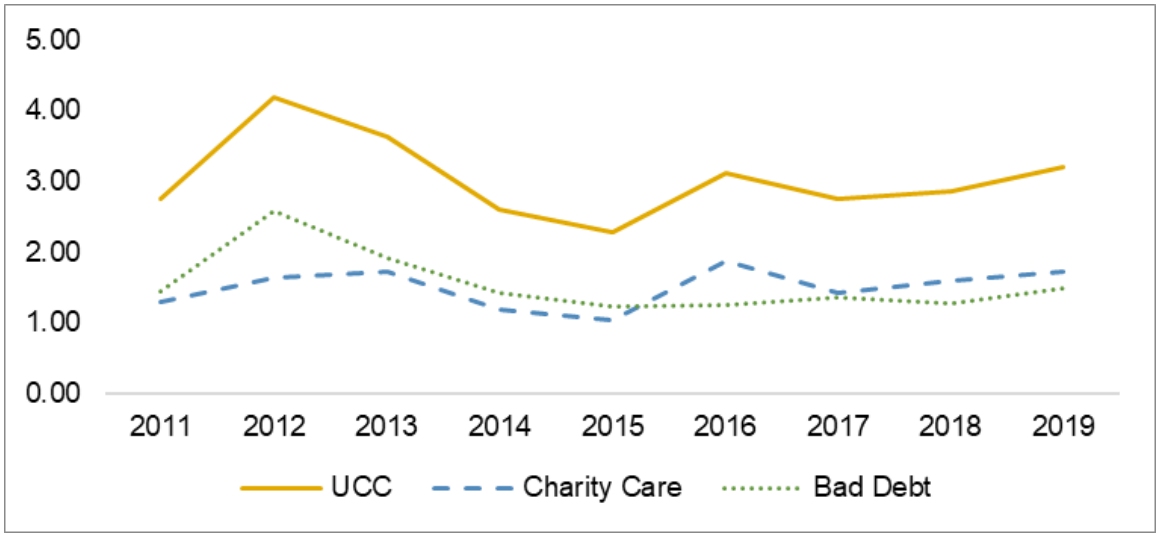


Figure 1.27 displays the trends in uncompensated care, charity care, and bad debt in fiscal years 2011 through 2019 for hospitals in Michigan, Minnesota, and Illinois, which are the Medicaid expansion states we use as comparators for Wisconsin. As with Wisconsin, uncompensated care peaked in 2012 and either declined or was constant thereafter.

Figure 1.27: Trends in Uncompensated Care in Comparison Expansion States (Millions of $)

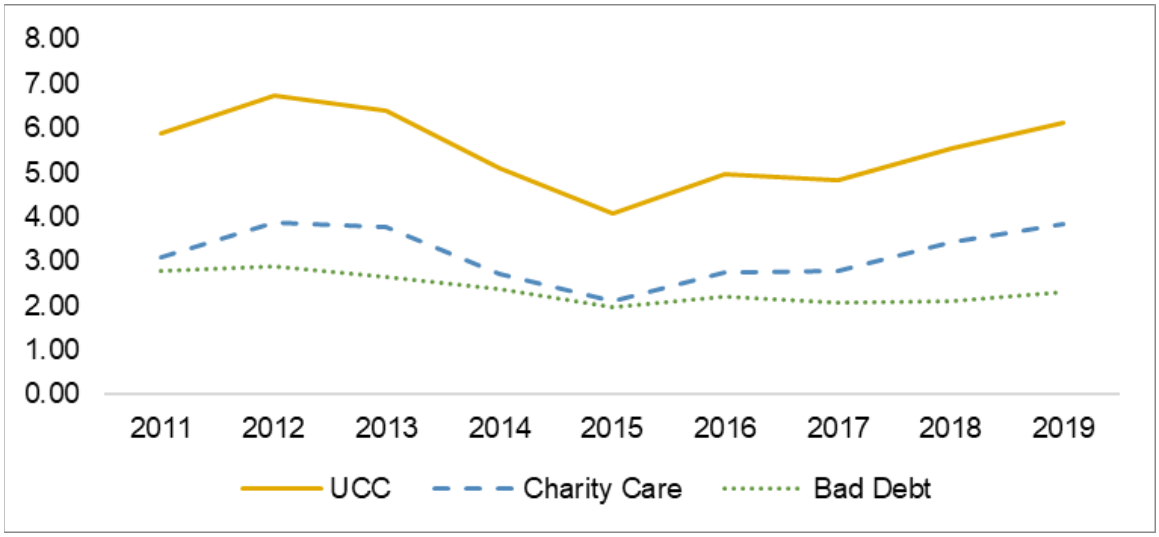


Figure 1.28 displays the trends in uncompensated care, charity care, and bad debt in fiscal years 2011 through 2019 for hospitals in Texas, Florida, and North Carolina, which are the Medicaid non-expansion states we use as comparators for Wisconsin. Unlike for expansion states or Wisconsin, uncompensated care trended upwards for the entire period and at a steeper rate. (Note that the scale in Figure 1.28 is different from those in Figures 1.26 and 1.27.)

Figure 1.28: Trends in Uncompensated Care in Comparison Non-Expansion States (Millions of $)

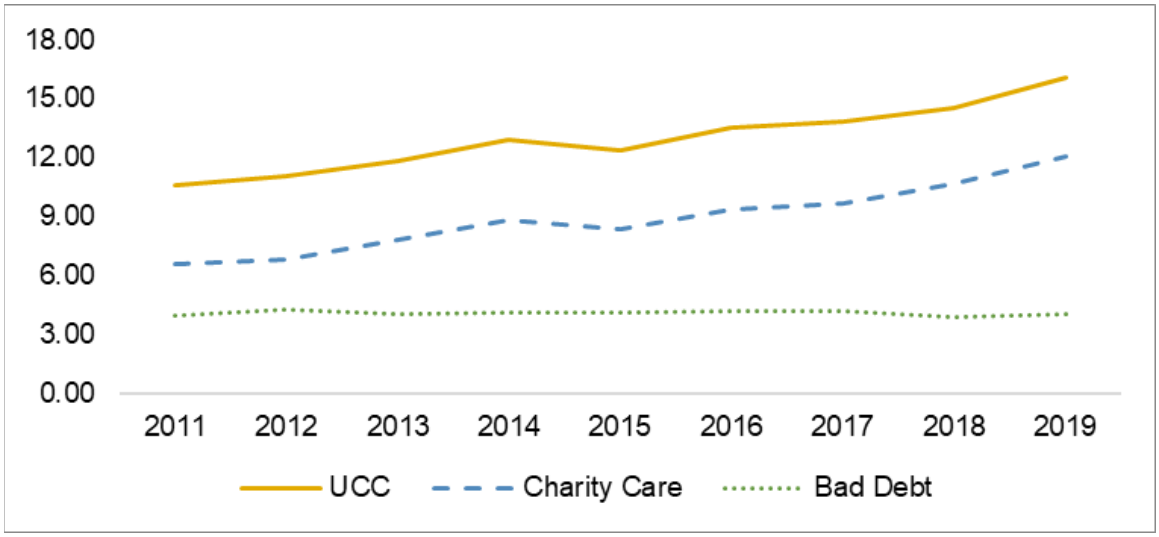


Table 1.6: Provision of Uncompensated Care (UCC) in Wisconsin versus Comparison States, by Type of Care (Millions of $)

	2011	2012	2013	2014	2015	2016	2017	2018	2019
Wisconsin									
UCC	2.75	4.20	3.64	2.60	2.28	3.13	2.76	2.87	3.19
Charity Care	1.30	1.63	1.73	1.18	1.04	1.88	1.41	1.59	1.72
Bad Debt	1.45	2.57	1.91	1.42	1.23	1.25	1.35	1.28	1.48
Expansion States (MI, MN, IL)									
UCC	5.89	6.74	6.40	5.09	4.07	4.95	4.84	5.54	6.13
Charity Care	3.10	3.86	3.76	2.73	2.10	2.76	2.79	3.44	3.83
Bad Debt	2.79	2.88	2.64	2.36	1.97	2.19	2.06	2.10	2.30
Non-Expansion States (TX, FL, NC)									
UCC	10.56	11.04	11.87	12.90	12.40	13.51	13.83	14.54	16.10
Charity Care	6.59	6.82	7.83	8.80	8.32	9.36	9.63	10.66	12.10
Bad Debt	3.97	4.22	4.04	4.10	4.07	4.15	4.20	3.88	4.01

Source: Authors' analysis of CMS Hospital Cost Reports.
Notes: Millions of current-year dollars.

Interrupted Time Series Analysis of Trends in Uncompensated Care

We estimate the change in the trends in uncompensated care in Wisconsin and in comparator states using interrupted time series with a break in 2014. **Table 1.7** displays results of the models.

Table 1.7: Interrupted Time Series Estimates of Uncompensated Care

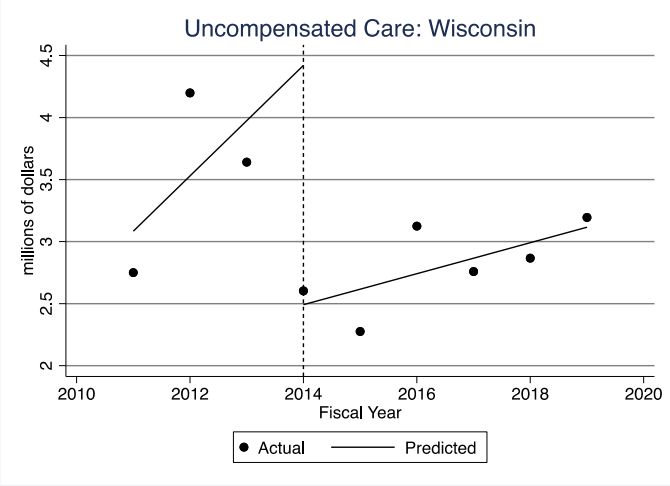
	Wisconsin	MI, MN, IL	TX, FL, NC
Time	0.4453 (0.3172)	0.2567 (0.1881)	0.6534 (0.0554)
Level change (2014)	-1.9283 (0.7674)	-2.4302 (0.7226)	-0.2085 (0.5624)
Slope change (Time x 2014)	-0.3206 (0.3214)	0.0147 (0.2482)	-0.0024 (0.1908)
Constant	3.0845 (0.4846)	6.0855 (0.2873)	10.5015 (0.0847)
P-value for level change in 2014	0.05	0.02	0.72
P-value for slope change in 2014	0.36	0.96	0.99

Source: Authors' analysis of CMS Hospital Cost Reports.
Notes: Newey-West standard errors are reported in parentheses.

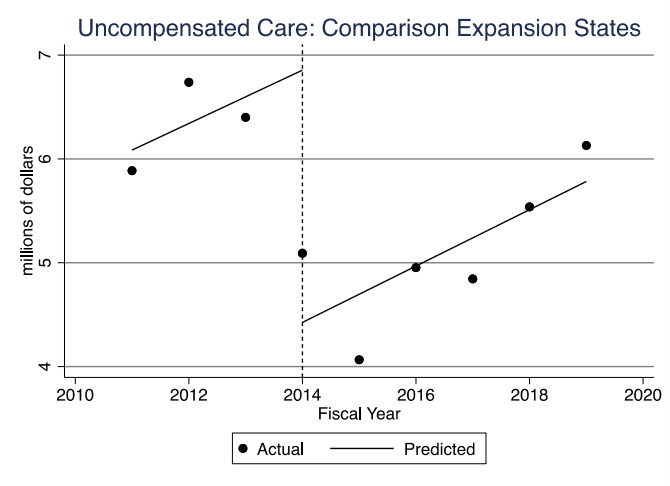
Uncompensated care in both Wisconsin and the Medicaid-expansion comparator states show a sizable discontinuous decrease in 2014; in other words, a drop in level (p-value for intercept break 0.05 and 0.02, respectively). However, we observe no statistically significant change in the trend of uncompensated care after 2014 (p=0.36 and p=0.96, respectively). Among the comparator states that did not expand Medicaid, however, there is neither a statistically significant change in the level of or the trend in uncompensated care in 2014. These results are further demonstrated in **Figure 1.29**.

Figure 1.29: Interrupted Time Series Estimates of Uncompensated Care

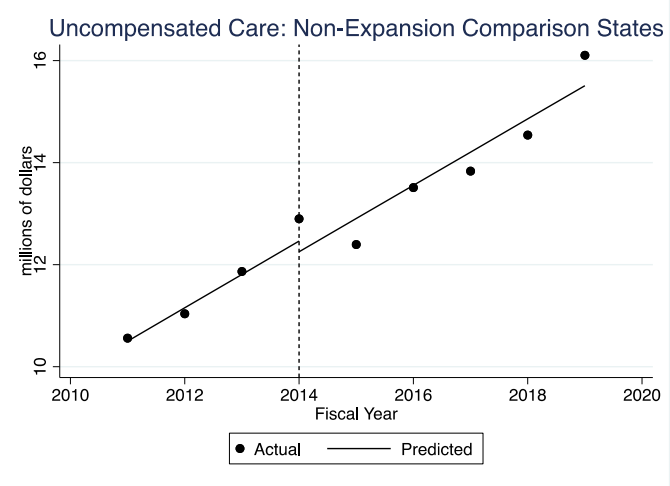
Panel A: Wisconsin



Panel B: Michigan, Minnesota, and Illinois



Panel C: Texas, Florida, and North Carolina



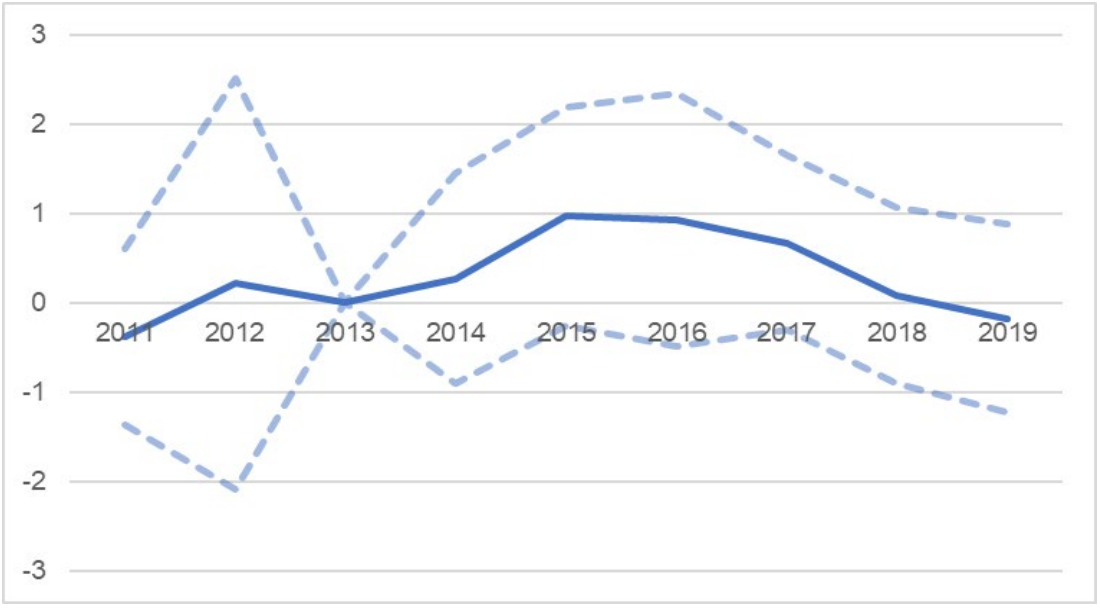
Difference-in-Differences (DiD) Analysis of Trends in Health Insurance Coverage in Wisconsin Relative to Other States

In order to better describe the impact of Wisconsin's health insurance income eligibility provision on uncompensated care, we compare trends in Wisconsin with two sets of states using a difference-in-differences analysis with hospital fixed effects. The first comparison group is a set of states that border Wisconsin and that expanded Medicaid: Minnesota, Michigan, and Illinois. The second comparison group is a set of states that did not expand Medicaid: Texas, Florida, and North Carolina.

The results comparing trends in average levels of uncompensated care among hospitals in Wisconsin with hospitals in states that expanded Medicaid are presented in **Figure 1.11** and **Figure 1.31**. In each figure, the values plotted on the bold line represents the average difference in uncompensated care for each hospital in Wisconsin between a given year and 2013, relative to the same difference among the hospitals in the comparison states. The dashed lines represent the 95% confidence intervals around these estimates.

Average levels of uncompensated care were not statistically different between Wisconsin and Minnesota, Michigan, and Illinois either before or following 2014, demonstrating that patterns were similar among Wisconsin hospitals and hospitals in expansion states. Levels of uncompensated care were similar between hospitals in Wisconsin and Texas, Florida, and North Carolina prior to 2014. However, following 2014, levels of uncompensated care were statistically significantly lower among hospitals in Wisconsin.

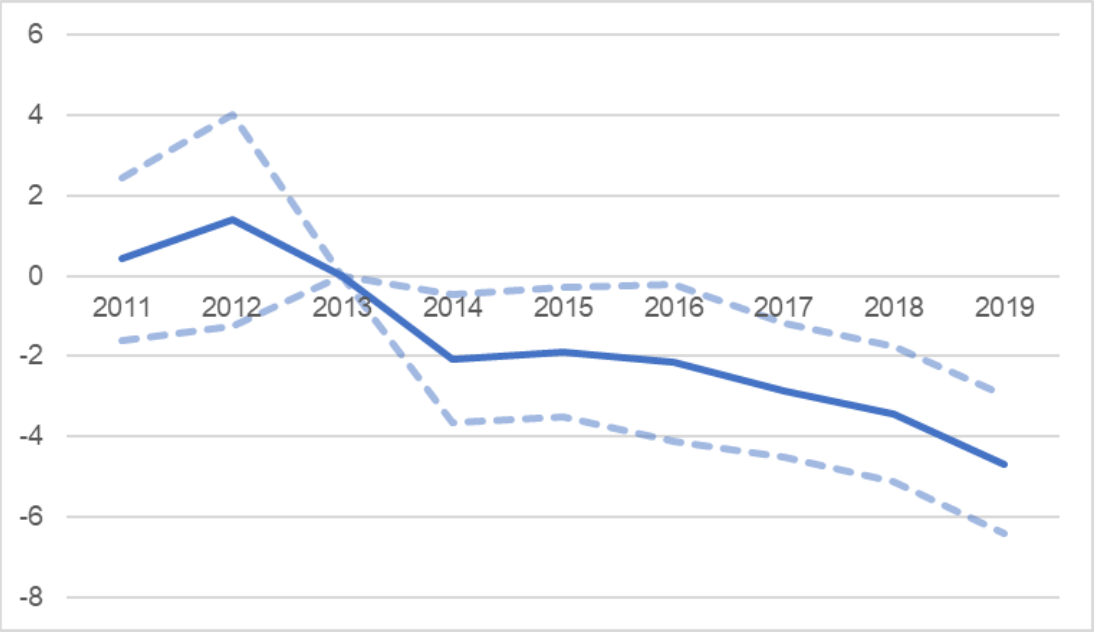
Figure 1.30: Trends in Uncompensated Care in Wisconsin Relative to Comparison Expansion States



Source: Authors' analysis of CMS Hospital Cost Reports.

Notes: Results of a difference-in-differences analysis comparing Wisconsin with Minnesota, Michigan, and Illinois using 2013 as the reference year. Dashed lines represent 95% CI.

Figure 1.31: Trends in Uncompensated Care in Wisconsin Relative to Comparison Non-Expansion States



Source: Authors' analysis of CMS Hospital Cost Reports.

Notes: Results of a differences-in-differences analysis comparing Wisconsin with Minnesota, Michigan, and Illinois. Dashed lines represent 95% CI. 2013 is the reference year.

Hypothesis 1.4. Additional requirements of the current demonstration may increase administrative costs.

Primary Research Question 1.4. What are the administrative costs incurred by the state and counties to implement and operate the demonstration?

Question 1.4a. What are the administrative costs incurred by the state to implement and operate the demonstration?

Question 1.4b. How did county income maintenance staff workloads change around implementation of the current demonstration?

We are still collecting data from the state on administrative costs associated with the demonstration and incurred by the state and by counties. We will begin analyses once data are collected.

Conclusions, Interpretation, and Policy Implications

The program goal associated with this provision is focused on improving health outcomes and reducing unnecessary services in the beneficiary population, and to create a program that is sustainable and available to "those who need it most." The state has successfully implemented the coverage expansion to childless adults and sustained it since 2014. Medicaid coverage for childless adults clearly increased in 2014 with the implementation of the state's waiver policy, as expected, while coverage for parents/caretaker adults declined. The net result was an overall

increase in health insurance coverage rates with the implementation of the ACA along with the state's waiver policy. The resulting higher Medicaid coverage rates and overall gains in insurance coverage for adults were similar to those that occurred in Medicaid non-expansion states, while gains in insurance coverage were lower than in Medicaid expansion states.

There is not strong evidence, based on data from the BRFSS, of gains in access to care or in use of preventative care for childless adults in Wisconsin relative to either expansion or non-expansion states.

The expansion population had significantly higher per-person average health care expenditures than the traditional adult coverage group (parents and caretakers), particularly in the months immediately following expansion. This suggests that they may have had higher health needs and suggests that targeting of the program to childless adults below the poverty line may have been successful at reaching "those who need it most" in the sense of health needs.

Uncompensated care fell in Wisconsin in 2014 and 2015 following the changes in eligibility, and then began to trend upward. This pattern of declines in 2014 and 2015 followed by an upward trend is seen in comparison states that also expanded Medicaid. The patterns were different in states that did not expand Medicaid—there were no declines in uncompensated care and instead a steady upward trend. This analysis suggests that Wisconsin's "partial" expansion lowered the burden to hospitals of providing uncompensated care. As uncompensated care can be a burden not only for hospitals but also for those who received the care, this finding also supports the goal of targeting the program towards "those who need it most."

Overall, the results so far suggest the demonstration waiver has been largely successful in achieving its goals of availability to those who need it most and sustainability. Insurance coverage alone is unlikely to be sufficient to cause improvements to health in the short term; other provisions of the waiver are more targeted towards those goals.

Next Steps

We will continue to obtain, prepare, and analyze the data as scheduled. We anticipate refining the analyses reported here for Hypotheses 1.1, 1.2, and 1.3 and progressing on the evaluation of Hypothesis 1.4.

PROVISION 2: HEALTH ASSESSMENTS LINKED TO ELIGIBILITY AND PREMIUMS

Background on Provision

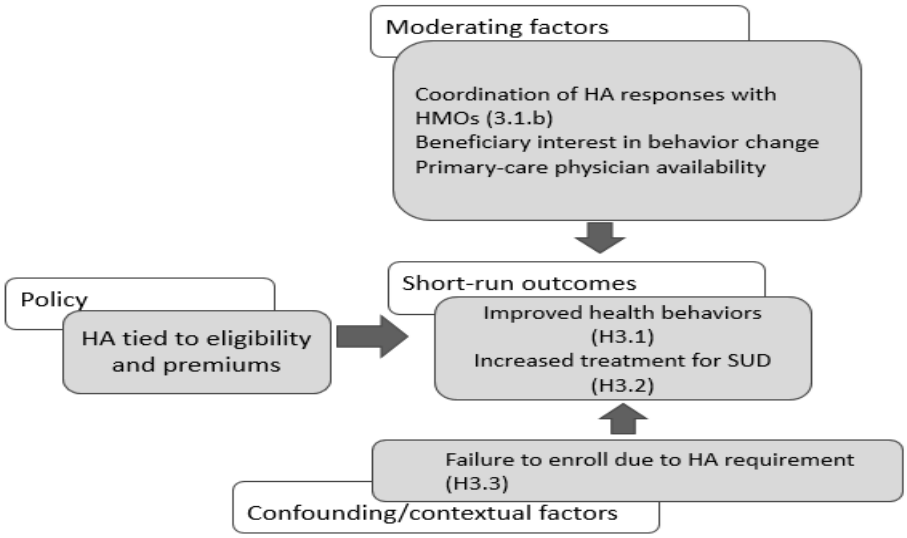
This provision introduces a two-part health risk assessment (HRA) and health needs assessment (HNA) for childless adults (CLA) with the following provisions: 1) require completion of the HRA as a condition of eligibility and linked to potential reduction in premiums for those subject to premiums, and 2) provide a voluntary HNA linked to potential reduction in premiums for those subject to premiums.

Evaluation questions for this provision are focused on the following Medicaid program goal: To improve beneficiaries' engagement in their health care choices by increasing their awareness of behaviors that might be detrimental to their health, while also encouraging them to make healthier choices.

The HRA/HNA is linked to the implementation of premiums under this waiver. Implementation of the premiums occurred on February 1, 2020. They were temporarily suspended due to the public health emergency associated with the COVID-19 pandemic and will be reinstated once the public health emergency ends. The requirement of the HRA for childless adults was temporarily suspended along with the premium suspension and the voluntary HNA does not have any relevance for premium reductions until the premiums are implemented. Consequently, most of the evaluation of this provision is on pause.

While analysis of the consequences of this provision is paused until the actual provision goes into place following the lifting of the public health emergency, we have worked in the interim to establish trends in key outcome measures for the evaluation of this provision.

Figure 2.1: Driver Diagram for Health Risk and Needs Assessment



Evaluation Questions and Hypotheses

The full list of hypotheses that we will examine for this provision of the waiver are noted below.

Hypothesis 2.1. Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in healthier behaviors.

Primary Research Question 2.1. Did CLA beneficiaries reduce risky health behaviors and increase healthy behaviors after the introduction of the health assessment?

Question 2.1.a. What fraction of CLA enrollees completed the second part of the health assessment? How does this compare to the fraction of non-CLA adult enrollees completing it?

Question 2.1.b. What is the distribution of healthy behaviors reported by CLAs completing the health assessment? What fraction of CLAs achieved a premium reduction based on their answers to the health assessment? How did these two patterns trend over time?

Question 2.1.c. How did the number of health behaviors reported by CLAs in the health assessment change from initial enrollment to reenrollment?

Question 2.1.d. Did the fraction of CLAs self-reporting higher alcohol consumption and low physical activity fall after the introduction of the health assessment?

Question 2.1.e. Did the fraction of CLAs receiving prescriptions for nicotine cessation medications (e.g., nicotine replacement therapies, bupropion, and varenicline) increase after the introduction of the health assessment?

Hypothesis 2.2. The health assessment will increase the number of beneficiaries receiving treatment for substance use disorders (SUD).

Primary Research Question 2.2. Did implementation of the health assessment increase use of non-emergency, outpatient treatment for SUDs, and medication-assisted treatment for opioid use disorder in particular?

Hypothesis 2.3. The requirement to answer the health assessment as a condition of eligibility will discourage some potential beneficiaries from enrolling in Medicaid.

Primary Research Question 2.3. Did monthly new enrollments by CLAs in Medicaid fall after the introduction of the health assessment requirement?

Question 2.3a. Did the monthly fraction of incomplete applications increase among childless adult applicants and renewing beneficiaries after introduction of the health assessment as a condition of eligibility?

Methodology

Evaluation Design Summary

We will address the evaluation questions of this waiver provision, the implementation of a health assessment linked to eligibility and premium reductions for CLAs, primarily using difference-in-differences (DiD) analysis and some simple pre-post regression comparisons.

The Design Table (**Table 2.1**) summarizes the key features of the evaluation design. The Analytic Approach column includes both the original approach, and the revised approach that the team developed in response to the public health emergency and the recommendations from the Centers for Medicare and Medicaid Services.

Table 2.1: Provision 2 Summary of Hypotheses, Questions, Data Sources, and Analytic Approaches for Evaluation of HRA/HNA

Comparison Strategy	Outcome Measures	Data Sources	Analytic Approach	
			Original	Revised
Hypothesis 2.1: Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in more healthy behaviors.				
Primary research question 2.1: Did CLA beneficiaries reduce risky health behaviors and increase healthy behaviors after the introduction of the health assessment?				
Question 2.1a: What fraction of CLA enrollees completed the second part of the health assessment? How does this compare to the fraction of non-CLA adult enrollees completing it?				
Not applicable (descriptive)	Completion of health assessment	Wisconsin Medicaid Administrative Data	Descriptive analysis of completion rates	Unchanged
Question 2.1.b: What is the distribution of healthy behaviors reported by CLAs completing the health assessment? What fraction of CLAs achieved a premium reduction based on their answers to the health assessment? How did these two patterns trend over time?				
Not applicable (descriptive)	Number of healthy behaviors reported in the health assessment	Wisconsin Medicaid Administrative Data	Descriptive analysis of numbers of healthy behaviors reported in health assessment	Unchanged
Question 2.1.c: How did the number of health behaviors reported by CLAs in the health assessment change from initial enrollment to reenrollment?				
CLAs in Wisconsin subject to the waiver at initial enrollment are comparison for same enrollee at reenrollment.	Number of healthy behaviors reported in the health assessment	Wisconsin Medicaid Administrative Data	Regression analysis of the change in number of healthy behaviors for re-enrollees relative to initial enrollment.	Unchanged, but the caveats on interpreting these patterns will be even stronger during the COVID-19 pandemic and recession.
Question 2.1.d: Did the fraction of CLAs self-reporting problems with alcohol consumption and low physical activity fall after the introduction of the health assessment?				
CLAs in Wisconsin prior to waiver.	Fraction of CLAs with a claim diagnosis code related to alcohol consumption	Wisconsin Medicaid Enrollment, Claims and Encounter Data	ITS	We no longer plan to do the ITS analysis due to 2020 COVID disruptions. We will instead focus our attention on the DiD analysis listed just below.
Parents/caregivers and CLAs in Wisconsin not subject to premiums under the waiver (i.e., income < 50% FPL).	Fraction of CLAs with a claim diagnosis code related to alcohol consumption	Wisconsin Medicaid Enrollment, Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline.

Comparison Strategy	Outcome Measures	Data Sources	Analytic Approach	
			Original	Revised
Question 2.1.e: Did the fraction of CLAs receiving prescriptions for nicotine cessation medications (e.g., nicotine replacement therapies, bupropion, and varenicline) increase after the introduction of the health assessment?				
CLAs in Wisconsin prior to waiver.	Fraction of CLAs receiving prescription for nicotine replacement therapies	Wisconsin Medicaid Enrollment, Claims and Encounter Data	ITS	We no longer plan to do the ITS analysis due to 2020 COVID disruptions. We will instead focus our attention on the DiD analysis listed just below.
Parents/caregivers and CLAs in Wisconsin not subject to premiums under the waiver (i.e., income < 50% FPL).	Fraction of CLAs receiving prescription for nicotine replacement therapies	Wisconsin Medicaid Enrollment, Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline.
Hypothesis 2.2: The health assessment will increase the number of beneficiaries receiving treatment for substance-use disorders.				
Primary research question 2.2: Did implementation of the health assessment increase use of non-emergency, outpatient treatment for SUDs, and medication-assisted treatment for opioid use disorder in particular?				
CLAs in Wisconsin prior to waiver.	Claims for outpatient substance-use services and prescription medications for substance use disorders (any claim for buprenorphine, naltrexone (oral), injectable naltrexone, buprenorphine/naloxone, or a Healthcare Common Procedure Coding System (HCPCS) code for buprenorphine or buprenorphine/naloxone, methadone administration, or naltrexone).	Wisconsin Medicaid Enrollment, Claims and Encounter Data	ITS	No longer plan to do the ITS analysis due to 2020 COVID disruptions. We will instead focus our attention on the DiD analysis listed just below.

Comparison Strategy	Outcome Measures	Data Sources	Analytic Approach	
			Original	Revised
Parents/ Caregivers.	Claims for outpatient substance-use services and prescription medications for substance use disorders (any claim for buprenorphine, naltrexone (oral), injectable naltrexone, buprenorphine/Naloxone or a HCPCS code for buprenorphine or buprenorphine/naloxone, methadone administration, or naltrexone).	Wisconsin Medicaid Enrollment, Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline.
Hypothesis 2.3: The requirement to answer the health assessment will discourage some potential beneficiaries from enrolling in Medicaid.				
Primary research question 2.3: Did monthly new enrollments by CLAs in Medicaid fall after the introduction of the health assessment requirement?				
CLAs in Wisconsin prior to waiver.	Number of new Medicaid enrollments at the monthly level	CARES	ITS	We will no longer use ITS in this hypothesis and will monitor the enrollment trends through early 2020 to determine whether parallel trends assumption may be reasonable for DiD analysis.
Parents/ Caregivers.	Number of new Medicaid Enrollments at the monthly level	CARES	DiD	
Question 2.3.a: Did the fraction of incomplete applications increase among childless adult applicants and renewing beneficiaries after introduction of the health assessment as a condition of eligibility?				
Wisconsin CLAs prior to waiver.	Ratio of incomplete to total initiated applications at the monthly level	CARES	ITS	Transition this approach to a DiD with parents/caregivers; include models in which the baseline does not include the pandemic period.

Target and Comparison Populations

We will use the following approaches to answer each primary research question:

Question 2.1. Did CLA beneficiaries reduce risky health behaviors and increase healthy behaviors after the introduction of the health assessment? We will use two primary analytic approaches: simple pre-post regression comparisons and DiD. The target population for this part of the demonstration waiver is CLAs. All CLAs are required to complete the first part of the health assessment to gain Medicaid eligibility and, for CLAs with income between 50% and 100% of the federal poverty line (FPL), both parts of the health assessment can result in premium reductions. For the simple pre-post regression, we will compare the group of CLAs subject to this waiver requirement after the waiver is implemented to the same group of CLAs prior to the implementation of the waiver. The analysis in question 2.1.c looks simply at the change in reported number of healthy behaviors for a given CLA beneficiary who is subject to the waiver provision between initial enrollment and reenrollment and can only be analyzed for those who reenroll.

For the DiD comparisons, we will compare the change in outcomes for CLAs with income between 50-100% FPL pre- and post-waiver to the changes in those same outcomes for two groups of Medicaid beneficiaries: (a) individuals who are not subject to the health assessment waiver requirements, parents and caregivers; and b) CLAs with incomes less than 50% FPL, who are required to complete part 1 of the health assessment as a condition of eligibility but are not subject to the waiver's premium requirements and hence do not have a premium differential tied to their health assessment answers.

Primary research question 2.1 will also involve several supplementary descriptive analyses for which there are no comparison populations available (questions 2.1.a – 2.1.b). These analyses will help illuminate the extent to which each group considered above—CLAs below 50% FPL, CLAs between 50%-100% FPL, and parents and caregivers—are engaging with the health assessment.

Question 2.2. Did implementation of the health assessment increase use of non-emergency outpatient treatment for SUDs, and medication-assisted treatment for opioid use disorder in particular? We will use DiD. The target population for this question is the full set of CLAs, including those with incomes below 50% FPL. These lower-income CLAs, while not subject to the premium provisions of the waiver, are required to answer the first part of the health assessment on interest in treatment for substance use disorders as a requirement for eligibility. The comparison sample for this analysis is the parents and caregivers population.

Question 2.3. Did new enrollments by CLAs in Medicaid fall after the introduction of the health assessment requirements? We will use DiD, with the target population as the full set of CLAs, including those with incomes below 50% FPL. These lower income CLAs, while not subject to the premium provisions of the waiver, are required to answer the first part of the health assessment on interest in treatment for SUDs as a requirement for eligibility. As such, they are exposed to the health assessment and any deterrent effect of answering these questions could be expected for this population as well. For the DiD, the comparison sample for this analysis is the parent and caregiver population. We will use enrollment data at the monthly level and examine whether there are reductions in completed application rates in the months immediately following the launch of the health assessment.

Evaluation Period

The evaluation period will include the years 2016 through 2023, which includes a pre-period before the demonstration waiver began and continues through the Demonstration Waiver period. We will include models that exclude the pandemic period from the DiD analysis, to avoid COVID-related disruptions in the baseline, and the implementation period will commence once the provision is re-activated.

Evaluation Measures and Data Sources

The outcome measures for this evaluation are defined in **Table 2.1**. This evaluation will involve multiple data sources. They are noted in **Table 2.2** below, along with the hypotheses for which these data will be used.

Table 2.2: Data Sources

	Hypotheses
Wisconsin Medicaid Administrative Data. Administrative data on health assessment completion and reporting will address Questions 2.1.a-2.1.c. These data will allow us to analyze both the patterns of enrollees engaging with the health assessment and the distributions of healthy behaviors reported. For Question 2.1.b. we will also see administrative data on the completion of health assessments administered by participating HMOs in years prior to this waiver provision.	H2.1
Wisconsin Beneficiary Survey. The survey will include questions designed to assess substance use and use disorder treatment, engaging in other risky behaviors (e.g., tobacco use), and physical activity. The responses to these questions will be used to answer Question 2.1.d.	H2.1
Medicaid claims, and encounter data. These data will track the use of nicotine replacement therapies as one of the key markers of treatment for risky behaviors that might be affected by the health assessment in Question 2.1.e. We will also use these data to investigate where the health assessment is associated with increased use of outpatient services for substance use disorders in Question 2.2.	H2.1 H2.2
CARES enrollment data. These data will track application and enrollment trends, and whether applicants abandon applications at any point during the application process when reaching specific questions pertaining to substance abuse or other health behaviors.	H2.3

Analytic Methods

Question 2.1. Did CLA beneficiaries reduce risky health behaviors and increase healthy behaviors after the introduction of the health assessment? The plan for this analysis includes both simple descriptive analysis of HRA/HNA data and difference-in-differences analysis of outcome measures. Questions 2.1.a-2.1.c will be addressed by analyzing the patterns of answers for those completing the HRA/HNA. These analyses do not have a causal interpretation with a comparison group because the HNA is voluntary for those not subject to premiums under the waiver. For questions 2.1.d and 2.1.e, we will use a difference-in-differences strategy to compare outcome measures between CLAs with incomes > 50% FPL, for whom the HNA has potential premium implications to potential comparison groups of a) CLAs with incomes < 50% FPL and b) parents and caregivers. Neither comparison group has a financial incentive to complete the voluntary HNA.

The logic for the DiD strategy rests on an assumption of “parallel trends” in the outcome measures between the treated population (CLAs with incomes > 50% FPL) and the comparison population. The idea is that the outcome measures would have trended (i.e., changed) similarly over time for both the treated population and the comparison population had it not been for the

policy change (in this case the HRA/HNA provision). The assumption of parallel trends cannot be proved but can be supported by evidence that in the period prior to the policy change (pre-treatment period), the outcome measures were trending similarly between the treated population and the comparison population.

Our analysis for this question will use both survey measures of self-reported health behavior and claims data on diagnoses for alcohol use and nicotine use as well as prescriptions for nicotine-cessation medications. For the survey-based measures we will compare how the rates of self-reported health behaviors change from our baseline survey of Medicaid members (which occurred during the public health emergency prior to the implementation of the premium requirements under the waiver) to our planned follow-up survey. Because we will have only these two survey waves to compare, it will not be possible to evaluate whether the treatment group and comparison groups were trending similarly during the pre-treatment period to help support the parallel trends assumption. For the claims-based measures, however, we can track outcomes over time and will analyze pre-treatment trends between the CLAs with incomes > 50% FPL and the two potential comparison groups to help evaluate the validity of the parallel trends assumption for these DiD comparisons.

Question 2.2. Did implementation of the health assessment increase use of non-emergency, outpatient treatment for SUDs, and medication-assisted treatment for opioid use disorder in particular? For this question we will analyze patterns of claims for outpatient substance-use services and medications for substance use disorders. Similar to question 2.1, we will use DiD design. In this case, the DiD will use only the parents and caregivers (and not the CLAs with incomes below 50% FPL) because the requirement for answering the first part of the health assessment on substance use disorders is the same for all CLAs.

Question 2.3. Did new enrollments by CLAs in Medicaid fall after introduction of the health assessment requirement? To answer this question, we will analyze patterns of Medicaid enrollments at the monthly level using a DiD design. The comparison group—parents and caregiver adults—is the same as question 2.2.

Methodological Limitations

Because the waiver provision will be implemented at a single time statewide and without randomized controls, the evaluation relies on quasi-experimental methods. There are two important limitations specific to the evaluation of the health assessment requirement. First, the health assessment will be available voluntarily to parents and caregiver populations. While there is no requirement that they engage with the health assessment, some may do so. This weakens our ability to use the parents and caregivers as a comparison sample for the difference-in-differences analysis described above for primary research questions 2.1-2.3. The descriptive analysis in questions 2.1.a-2.1.b will help illuminate the extent to which voluntary completion of the health assessment by parents and caregivers is a significant challenge for the evaluation strategy. A key requirement will be that the engagement with the health assessment is significantly higher for the CLAs subject to the waiver provision.

The second limitation is that Wisconsin's Medicaid health maintenance organizations (HMOs) have been conducting their own health assessments with members prior to the implementation of this new waiver. This waiver provision replaces HMO-specific assessments with a newly designed Medicaid-level health assessment. The specific HMO-specific, pre-waiver experience will vary across HMOs, which will require some of the analysis specified above to be conducted separately for different HMOs. Doing those splits will reduce the precision of estimates. The

necessity of analyzing results separately by HMO will be clarified by the analysis in questions 2.1.b.

The pandemic has also created some challenges to assessing the waiver provisions. First, due to the pandemic, it may be difficult to assess whether monthly new enrollments by CLAs in Medicaid fall after the introduction of the health assessment requirement (Q2.3). The parallel trends assumption for enrollment between CLAs and parents/caregivers in a DiD analysis is more questionable in the current environment because policies put into place during the public health emergency, such as the maintenance of eligibility requirements, may be affecting CLAs and parents/caregivers populations differently. In addition, labor market changes that have occurred since the start of the pandemic may also be affecting these two populations differently, leading to differential evolution of need for Medicaid enrollment for these populations. We will analyze enrollment trends for these two groups during 2020 (when the provision was delayed but COVID disruptions were present) to help gauge whether parallel trends may be a reasonable assumption. Based on that analysis, we will determine whether to include analysis of this question in our evaluation. We will be able to investigate question 2.3a that explores whether the fraction of incomplete applications changed for childless adults.

Second, the onset of the pandemic and public health emergency created large disruptions to health care utilization patterns, some of which have persisted over time. These large changes mean that outcome measures have been changing in substantial ways during the pre-treatment period, which creates more challenges for the DiD approach in our analysis. One offsetting factor here, though, is that because the public health emergency has lasted for quite some time since its start in March 2020, we now have a relatively long period of time since the start of the public health emergency prior to the implementation of the waiver provisions. This means that it may be possible to supplement our planned DiD analysis with DiD analysis that uses only data since the start of the pandemic period as the pre-treatment period. As we report below, our initial analysis of outcome-measure trends supports this possibility.

Results

Much of the analysis for this provision involves comparing outcome patterns between CLAs with incomes above 50% FPL (subject to the waiver provisions) to: 1) comparison groups of CLAs with incomes below 50% FPL, and 2) parents and caregivers. (Neither comparison group is subject to the primary waiver provisions).

Table 2.3 presents summary statistics on key demographics for these three populations. The first three columns show the average characteristics for those enrolled as of February 2020, while the second three columns show average monthly characteristics for beneficiaries enrolled at any time from January 2016 through September 2021. We provide both of these comparisons because the statistics for those enrolled as of February 2020 gives a simple snapshot of the population at the time when the waiver provision was initially planned to go into effect, while the second set of results shows the overall patterns of how these characteristics compare for the population throughout the historical data period. There are some substantial differences between these populations. For example, the share female is around 57% for the CLAs with incomes above 50% FPL, compared with 74% for parents and caregivers and 37% for lower-income CLAs. The higher-income CLAs are also somewhat older and have greater share of White individuals than the other categories. These baseline differences, which exist both for the snapshot in February 2020 and over the historical period 2016–2021, suggest that it is important to establish how well key measures trend between these groups since there are likely to be some meaningful level differences in most measures.

Table 2.3: Summary Statistics for CLAs and Comparison Groups

	Enrolled as of February 2020			All Member-Month Records (Jan 2016 to Sep 2021)		
	Parent	CLA_Low	CLA_High	Parent	CLA_Low	CLA_High
N (unique subjects)	125,921	113,387	30,776	9,776,556	8,250,993	2,462,572
Female %	74.4%	37.1%	57.5%	73.6%	37.8%	56.3%
Average age	36.0	40.1	44.4	35.8	40.1	43.7
Age Group						
19-34 (%)	47.4%	41.1%	32.4%	48.2%	41.1%	34.3%
35-44 (%)	36.0%	19.6%	13.0%	35.1%	18.7%	12.9%
>45 (%)	16.6%	39.3%	54.6%	16.7%	40.1%	52.8%
Education						
Less than high school (%)	53.5%	67.5%	67.6%	54.4%	69.2%	69.2%
High school (%)	42.6%	30.4%	29.5%	41.8%	28.8%	28.1%
More than high school (%)	3.9%	2.1%	3.0%	3.9%	2.1%	2.7%
Race						
White	56.6%	53.4%	64.9%	58.3%	55.8%	65.5%
Black	19.8%	24.0%	13.6%	19.5%	23.7%	14.8%
Hispanic	10.3%	7.1%	6.8%	9.9%	6.9%	6.6%
Asian	4.1%	1.8%	3.0%	4.1%	1.9%	2.9%
American Indian	2.3%	2.1%	1.9%	2.3%	2.1%	1.7%
Other	3.2%	4.0%	3.1%	2.9%	3.6%	2.9%
Missing	3.7%	7.6%	6.8%	3.1%	6.1%	5.5%

Hypothesis 2.1. Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in healthier behaviors.

Primary Research Question 2.1. Did CLA beneficiaries reduce risky health behaviors and increase healthy behaviors after the introduction of the health assessment?

Question 2.1.a. What fraction of CLA enrollees completed the second part of the health assessment? How does this compare to the fraction of non-CLA adult enrollees completing it? We have obtained data for a sample of enrollees who have voluntarily completed the assessments and are in the process of cleaning these data for initial exploratory analysis. We will implement the full analysis after the cessation of the public health emergency, when premiums and the mandatory completion of the HRA/HNA are reinstated.

Question 2.1.b. What is the distribution of healthy behaviors reported by CLAs completing the health assessment? What fraction of CLAs achieved a premium reduction based on their answers to the health assessment? How did these two patterns trend over time? We have obtained data for a sample of enrollees who have voluntarily completed the assessments and are in the process of cleaning these data for initial exploratory analysis. We will implement the full analysis after the cessation of the public health emergency, when premiums and the mandatory completion of the HRA/HNA are reinstated.

Question 2.1.c. How did the number of health behaviors reported by CLAs in the health assessment change from initial enrollment to reenrollment? We have obtained data for a sample of enrollees who have voluntarily completed the assessments and are in the process of cleaning

these data for initial exploratory analysis. We will implement the full analysis after the cessation of the public health emergency, when premiums and the mandatory completion of the HRA/HNA are reinstated.

Question 2.1.d. Did the fraction of CLAs self-reporting higher alcohol consumption and low physical activity fall after the introduction of the health assessment? We conducted analyses of baseline data for the provision from two sources: a) the initial survey of Medicaid beneficiaries for this waiver evaluation and b) claims and encounter data.

Survey Data Related to Alcohol Consumption and Physical Activity

Data from the initial survey of Medicaid beneficiaries allows us to establish useful baseline measures for self-reported health behaviors. We plan to then compare how these self-reported measures change for these groups in later survey waves after the introduction of the health assessment provision of the waiver. In some cases, the percentages do not add to 100% because some participants skipped or stated "I do not know."

Survey question on exercise: "Thinking back over the past 4 weeks, in how many weeks did you do physical activity (such as walking, dancing, running, strenuous work or sports) on at least 2 days and were physically active for at least 3 hours during the week?"

Table 2.4: Responses to Survey Question on Frequency of Exercise

Number of Weeks	CLA <= 50% FPL	CLA > 50% FPL	Parent/Caregiver
0	15%	17%	14%
1	9%	9%	11%
2	9%	8%	11%
3	8%	7%	7%
4	48%	48%	47%

The key result from **Table 2.4** is that each of these groups of adult Medicaid members is self-reporting similar levels of exercise frequency. Just under half of each of these groups reports themselves to be regularly exercising at this baseline level. The similarities of these distributions suggest that we can use this measure in our DiD analysis analyzing whether the implementation of the health assessment changed physical activity patterns among CLAs subject to the waiver provision relative to the comparison groups.

Survey question on healthy eating: "How would you rate your overall habits of eating healthy foods?"

Table 2.5: Responses to Survey Question on Frequency of Healthy Eating

Categorization	CLA <= 50% FPL	CLA > 50% FPL	Parent/Caregiver
Excellent or Very good	29%	31%	28%
Good	35%	38%	31%
Fair or Poor	36%	31%	41%

In **Table 2.5** we see that the CLAs with incomes above 50% FPL report somewhat healthier eating habits than either the lower-income CLAs or the parent/caregiver samples. Of the two comparisons, lower-income CLAs have somewhat closer baseline measures of self-reported

healthy eating and will be used as the primary comparison group for tracking changes in this measure over time, after the implementation of the health assessment.

The survey asked three questions related to self-perceptions of problematic alcohol and drug use patterns. In the table below we summarize the share of members self-reporting "yes" to each of these questions indicating an awareness of an issue with alcohol and/or drugs.

Table 2.6: Affirmative Responses to Survey Questions on Problems with Alcohol

Question	CLA <= 50% FPL	CLA > 50% FPL	Parent/Caregiver
In the last year, have you ever drank or used drugs more than you meant to?	16%	10%	14%
Have you felt you wanted or needed to cut down on your drinking or drug use in the last year?	20%	12%	16%
During the past 12 months, did you want treatment or counseling for your alcohol or drug use?	9%	3%	5%

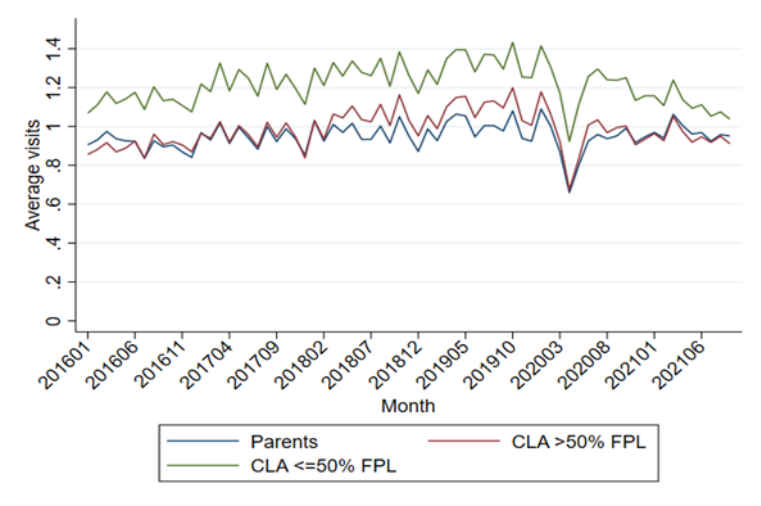
As displayed in **Table 2.6**, we see that on all of these measures that the CLAs with incomes above 50% FPL reported lower levels of problems with alcohol and drug use relative to both comparison groups. Of the two comparison groups, the parent/caregiver group is more similar to the CLAs with incomes over 50% FPL on this measure and will serve as our primary comparison group for this question.

Claims-Data Analysis of Diagnoses Related to Alcohol Use

To assess whether the health assessment is changing how beneficiaries interact with their doctors around alcohol-related problems, we turn our attention to the rate at which those subject to the premium and potential comparison groups have an outpatient visit with an alcohol use disorder diagnosis. We begin by comparing trends over time on average numbers of outpatient visits and then focus on visits with alcohol use disorder diagnoses.

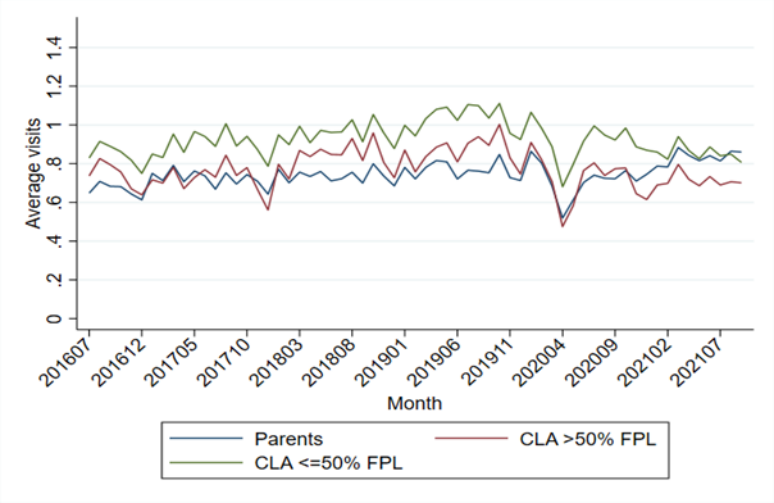
Figure 2.2 shows very similar trends for all three groups across average rates of outpatient visits prior to 2020. The level of visits is more similar between CLAs > 50% FPL and parents/caregivers than between the two CLA groups. However, trends for the two income groups within CLAs match more tightly. This is particularly true during the pandemic period in 2020. We see that all groups reduced their outpatient visits dramatically at the start of the pandemic, with a partial rebound in the summer of 2020 and a further drop toward December of 2020. However, the proportional drops are more similar between the two income groups within CLAs, suggesting that CLAs <= 50% FPL may be the better comparison group for our difference-in-differences analysis over time.

Figure 2.2: Average Number of Outpatient Visits by Month



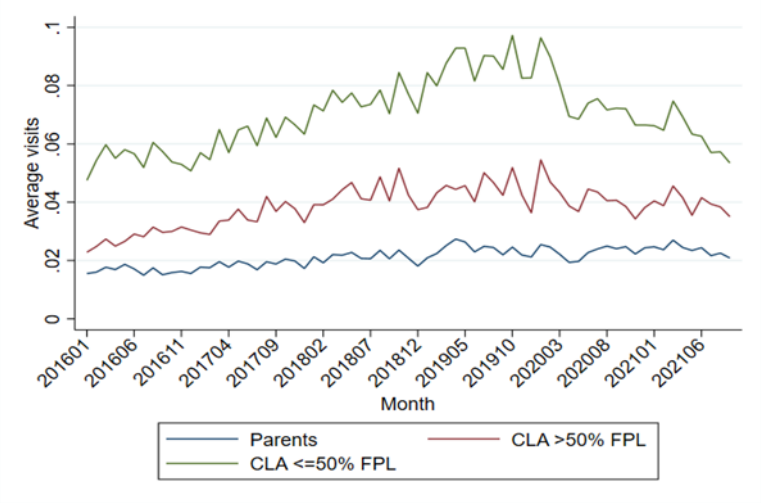
In **Figure 2.3** we analyze these trends limiting to those who are within their first six months of membership in BadgerCare. The reason for this subsample focus is that when the provisions eventually go into effect at the end of the public health emergency, any potential effects the provisions may have will emerge among the populations going through the Medicaid enrollment process. Focusing on a subsample of new members will help to isolate those who were more likely to have engaged with the HNA/HRA. In addition, those who are establishing new insurance coverage are more likely to be establishing new relationships with health care providers (e.g., primary care doctors) than those with continuing coverage. It is possible that the HNA/HRA answers may be most impactful during initial appointments with new providers since they may focus attention on health behavior modification. The subsample analysis will allow us to investigate whether the waiver provisions are having an impact specifically among new members. Our analysis of trends finds that for new members it is even more clear that the two groups of CLAs follow similar trends since the start of the pandemic period, while trends for parents have diverged (with a rising relative trend in outpatient visits for parents).

Figure 2.3: Average Number of Outpatient Visits by Month (First 6 months of membership)



As an initial approach to answer question 2.1.d, we investigate the rate at which those subject to the premium and potential comparison groups have an outpatient visit with an alcohol use disorder diagnosis. This diagnosis is a potential indicator of interactions between patients and doctors that might be a precursor to improvements in health behaviors.

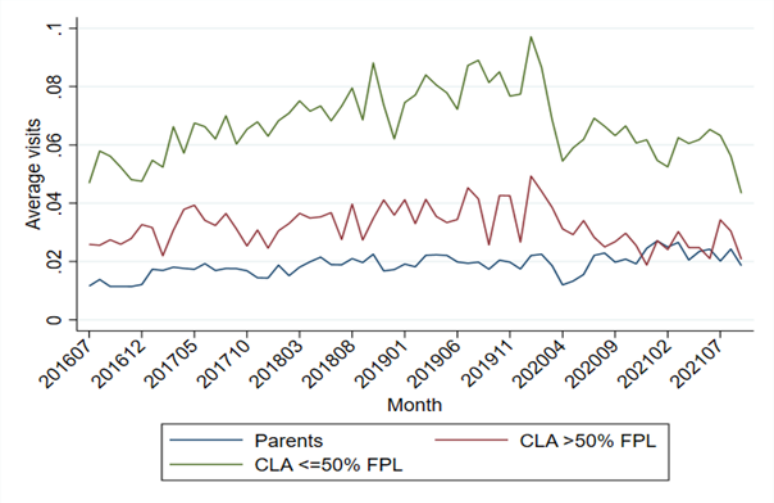
Figure 2.4: Average Number of Outpatient Visits with Alcohol Use Disorder Diagnosis by Month



In **Figure 2.4** we plot the average number of outpatient visits with a diagnosis code related to alcohol use disorder. This is a subset of the visits graphed in Figure 2.2. Here we see that the CLA groups have quite different trend patterns than the parent/caregiver sample, especially during 2020. Both groups of CLAs had rising trends of outpatient visits with diagnoses for alcohol use disorders prior to 2020. The rate of such visits is approximately double for the lower income CLAs than the higher income CLAs, but the trends are similar, which is important for future difference-in-differences analyses. Both groups saw a consistent declining trend after the start of the pandemic and into 2021, with rates falling to about half what they were at the start of the pandemic. The reasons for these declines are unclear. It may be that alcohol-related problems fell during 2020 for this group. However, it is also quite plausible that the patterns we observe in claim records reflect changes in access to outpatient care such that the decline in 2020 diagnoses rates reflect under-diagnosis, at least in part. Similarity in trends for CLAs below and above 50% FPL suggests that we can use the CLAs <= 50% FPL as an effective comparison group for our difference-in-differences analysis of this provision. The parent/caregiver sample does not appear to be an effective comparison group for this measure and will not be used in the difference-in-differences analysis.

The conclusion that the parent/caregiver population may not be as effective of a comparison group as the lower-income CLAs is again strengthened if we focus on those within the first 6 months of Medicaid membership, shown in **Figure 2.5**. Here we see particularly sharp drops at the onset of the pandemic for lower-income CLAs that are not mirrored by the parent/caregiver subgroup. The higher-income CLAs and lower-income CLAs have much more similar rates (though very different levels) in these visits early in membership spells, especially since the onset of the pandemic.

Figure 2.5: Average Number of Outpatient Visits with Alcohol Use Disorder Diagnosis by Month (First 6 Months of Membership)



Question 2.1.e. Did the fraction of CLAs receiving prescriptions for nicotine cessation medications (e.g., nicotine replacement therapies, bupropion, and varenicline) increase after the introduction of the health assessment? We conducted analysis of baseline data for this evaluation question from two sources: a) the initial survey of Medicaid beneficiaries for this waiver evaluation and b) claims and encounter data.

Survey Data Related to Nicotine Use

Survey questions on smoking: Our initial survey measure asked three questions about smoking. **Table 2.7** reports the fraction of survey respondents in each of our three groups answering "yes" to one of these smoking-related questions.

Table 2.7: Affirmative Responses to Survey Questions on Smoking

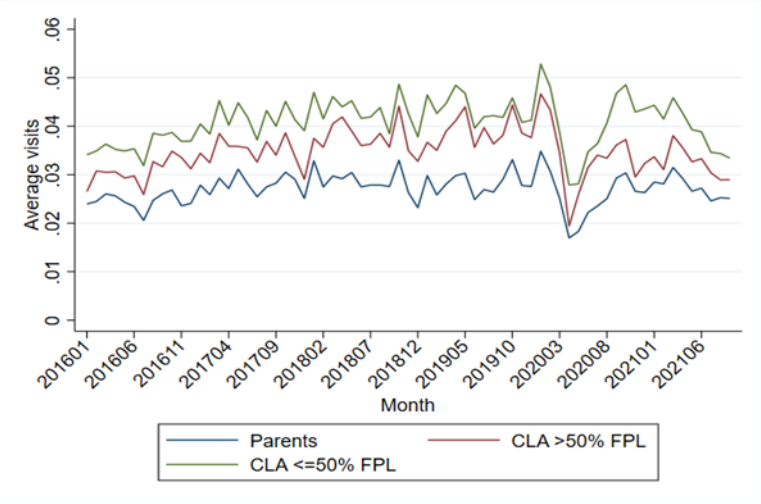
Question	CLAs <= 50% FPL	CLAs > 50% FPL	Parent/Caregiver
Do you currently smoke cigarettes every day or some days?	33%	30%	39%
During the past 12 months, have you stopped smoking for more than one day because you were trying to quit smoking?	18%	13%	21%
In the past 12 months, has a health professional advised you about ways to stop smoking?	19%	20%	22%

We see in **Table 2.7** that between 30-40% of beneficiaries in these groups report smoking. Between 13–21% of beneficiaries (or around half of those who report smoking) tried to quit at least once during the past year, with slightly higher shares reporting being advised by a doctor to quit. The CLAs with incomes > 50% FPL are more similar to the lower income CLAs than the parent/caregiver comparison group on these measures, suggesting that lower-income CLAs will be the primary comparison group for tracking differences in these measures over time.

Claims-Data Analysis of Diagnoses Related to Nicotine Dependence

We currently report on the patterns of diagnoses of nicotine dependence from outpatient visits as a first step in our analyses of potential changes in medication treatment for nicotine dependence. An outpatient visit with a nicotine dependence diagnosis is a useful proxy for medication receipt because prescription medications usually require an associated outpatient diagnosis.

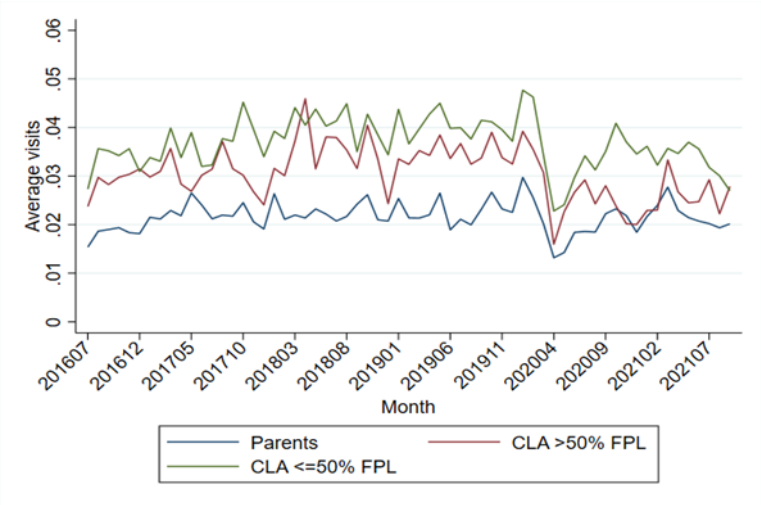
Figure 2.6: Average Number of Outpatient Visits with Nicotine Dependence Diagnosis by Month



We can see in **Figure 2.6** that the rates of nicotine-dependence diagnoses have generally trended similarly for all three groups, with both CLA groups having higher average numbers of such visits than parent/caregiver beneficiaries. There was a fairly wide gap in nicotine-dependence diagnoses for the two CLA groups throughout much of 2020, but the two series have started to trend more similarly again since the end of 2020.

However, when we restrict to those within the first six months of their memberships (**Figure 2.7**), there continue to be more noticeable differential trends between all three groups since the onset of the pandemic. This may indicate that it may not be feasible to use the planned difference-in-differences strategy to obtain valid comparisons for the target population when focusing on newly-enrolled members.

Figure 2.7: Average Number of Outpatient Visits with Nicotine Dependence Diagnosis by Month (First 6 Months of Membership)



Hypothesis 2.2. The health assessment will increase the number of beneficiaries receiving treatment for substance use disorders.

Primary Research Question 2.2. Did implementation of the health assessment increase use of non-emergency, outpatient treatment for SUDs, and medication-assisted treatment for opioid use disorder in particular? Since the elements of this waiver provision have been suspended during the public health emergency, we do not have analytic results related to this research question at this time. We refer readers to the portion of the interim report covering Waiver Provision 4, which has established measures of treatment related to SUDs. The eventual analysis for this research question will build on the measures established for the evaluation of Provision 4.

Hypothesis 2.3. The requirement to answer the health assessment as a condition of eligibility will discourage some potential beneficiaries from enrolling in Medicaid.

Primary Research Question 2.3. Did monthly new enrollments by CLAs in Medicaid fall after the introduction of the health assessment requirement?

Question 2.3a. Did the monthly fraction of incomplete applications increase among childless adult applicants and renewing beneficiaries after introduction of the health assessment as a condition of eligibility? Since the elements of this waiver provision have been suspended during the public health emergency, we do not have analytic results related to this research question at this time.

Conclusions, Interpretation, and Policy Implications

Our preliminary analyses of baseline data on health behaviors, both from survey data and claims records, indicate that the primary target population for this waiver provision, CLAs with incomes > 50% FPL, have scope for improving health behaviors. For example, 26% of this population reports in our baseline survey having one week or fewer in the past month when they exercised on at least two days, and 31% report their eating habits as fair or poor. We also observe measurable rates of diagnoses for alcohol use and nicotine use in this population,

around 4% and 3% per month respectively, which suggests that these measures can be used to track changes in response to the waiver provision.

Importantly, the preliminary analyses of claims-based measures of alcohol use disorder and nicotine dependence diagnoses illustrate the groups that are likely to serve as meaningful comparison groups for the primary target population of CLAs with income >50% FPL. Our analysis of trends suggests that the CLAs with incomes < 50% FPL and to a lesser extent the parent/caregivers can serve as a valid comparison groups. The two income groups of CLAs in particular have had very similar trends in these claims-based outcomes overall in the sample period from 2016 to 2021 and in particular since August 2020. As such, the CLAs with incomes < 50% FPL may be appropriate as the primary comparison group for our planned DiD analysis. In addition, the planned DiD analysis that compares outcomes starting from 2016 can be supplemented with analysis using data since August 2020 as the pre-treatment period to help alleviate potential concerns that may arise with the DiD strategy given changes in health care utilization that occurred as the result of the start of the pandemic and public health emergency.

Next Steps

We will continue to monitor the pre-trends in the outcomes for evaluation of this provision and prepare for our analysis of these measures when the COVID-19 public health emergency is lifted, and the health assessment provision goes into place. We have two pieces of analysis that will be our primary focus in the near term. First, we will finalize establishing measures and trend analysis for pharmaceutical data on smoking cessation medications. Second, initial work has started on cleaning and processing initial data from health needs assessments for those who have voluntarily completed these assessments.

PROVISION 3: PREMIUMS, LOCK-OUTS, AND EMERGENCY DEPARTMENT COPAYMENTS

Background on Provision

Provision 3: Implement two cost-sharing components:

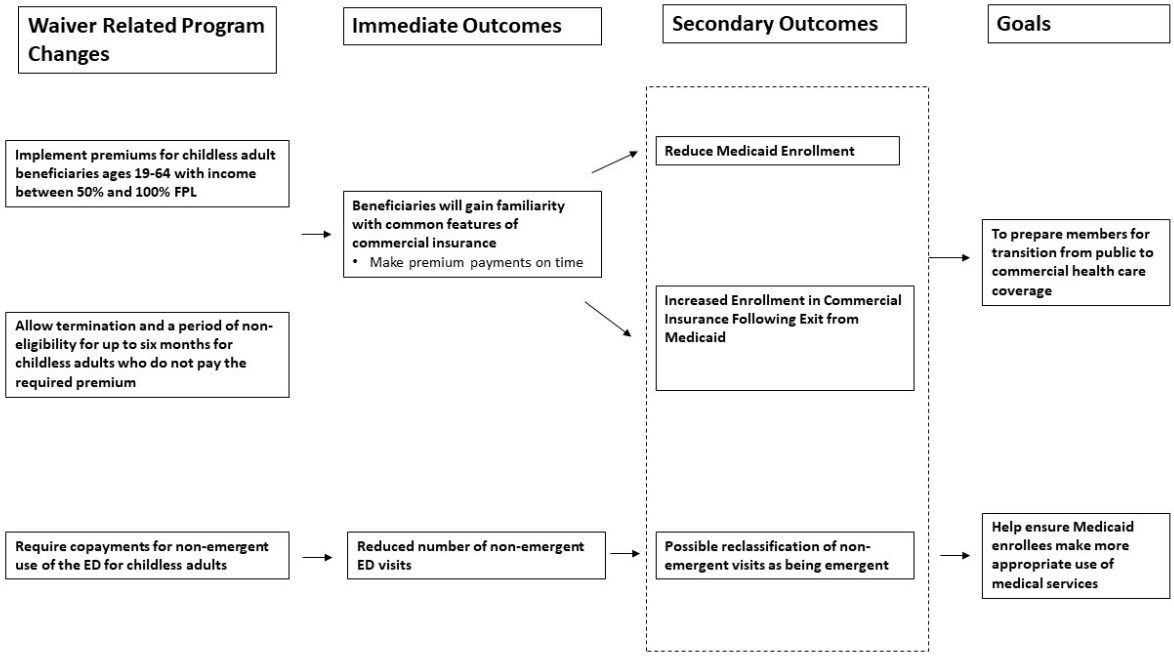
1) Premiums for childless adult (CLA) beneficiaries ages 19–64 with income from 50% to 100% of the federal poverty line (FPL). Those CLAs who are subject to the premium requirement but do not make such payments will, at the time of annual renewal, be terminated from Medicaid enrollment and placed in a period of non-eligibility for up to six months. However, the beneficiary may reenroll at any time prior to the end of the six-month period if he or she pays all owed premiums, or if his or her situation changes such that he or she would no longer be subject to a premium requirement. After the six-month period, the beneficiary may be reenrolled in BadgerCare upon request, if he or she meets all program rules, even if he or she continues to have unpaid premiums from the prior period of enrollment. Premiums went into effect February 1, 2020 but were retroactively suspended due to the maintenance of eligibility (MOE) policy under the public health emergency (PHE) and remain suspended until the end of the PHE.

2) For CLAs, require an $8 copayment for non-emergent use of the hospital emergency department (ED). The provider is responsible for using a “prudent layperson” standard in the determination of whether a member has an emergency medical condition. Prior to providing non-emergency services subject to the co-pay, hospitals must provide a medical screening, inform the member of the potential cost sharing, and provide the name and location of an alternative provider who could provide services with a lesser or no cost share, including a referral. Providers cannot refuse treatment for nonpayment. This part of the provision has been in place since November 2, 2020.

Medicaid program goal: To provide beneficiaries with coverage that more closely aligns with commercial coverage, promote participant engagement and readiness to transition to commercial coverage.

Evaluation Questions and Hypotheses

Figure 3.1: Driver Diagram for Premium and Emergency Department Copayment Requirements



Hypothesis 3.1. Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance.

Primary Research Question 3.1. Did beneficiaries required to make premium payments understand their requirements and make premium payments?

Question 3.1a. How many beneficiaries are required to make premium payments? How does this number change over time?

Question 3.1b. How many beneficiaries make premium payments? On what timeline do beneficiaries typically make payments (monthly, quarterly, annually, or other)? How do these numbers change over time?

Question 3.1c. How do the characteristics of those who make their required premium payments differ from those of beneficiaries who fail to make these payments? How do these characteristics change over time?

Question 3.1d. How many beneficiaries have premium payments made on their behalf by third-party entities? How do these numbers change over time?

Question 3.1e. How many beneficiaries are terminated for non-payment and being locked out? Of those terminated, how many reenroll at the end of their period of non-eligibility? How do these numbers change over time?

Question 3.1f. Do beneficiaries with premium requirements understand their payment obligations and the consequences of non-payment?

Hypothesis 3.2. The imposition of premium requirements for CLAs will reduce enrollment in Medicaid.

Primary Research Question 3.2. Did the imposition of premium requirements reduce enrollment in Medicaid?

Question 3.2a. What effects does the premium requirement have on total and new enrollment in Medicaid?

Question 3.2b. Do beneficiaries with premium obligations who initiate payments continue to make regular payments throughout their 12-month enrollment periods?

Question 3.2c. What effects do premiums have on continuity of coverage, as reflected by mid-year disenrollments and renewal decisions?

Hypothesis 3.3. The imposition of premium requirements for CLAs will increase enrollment in commercial insurance following exits from Medicaid.

Primary Research Question 3.3. Did the imposition of premium requirements increase enrollment in commercial insurance following exits from Medicaid?

Question 3.3a. Did the imposition of premium requirements increase enrollment in employer-sponsored/large group insurance following exits from Medicaid?

Question 3.3b. Did the imposition of premium requirements increase enrollment in individual market/ACA Marketplace insurance following exits from Medicaid?

Question 3.3c. To what extent do disenrolled beneficiaries reenroll in Medicaid following their period of non-eligibility?

Hypothesis 3.4. The imposition of premium requirements for CLAs will lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums.

Primary Research Question 3.4. Did the imposition of premium requirements lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums?

Hypothesis 3.5. The imposition of a copayment for non-emergent use of the emergency department will lead to more appropriate uses of medical care among CLAs enrolled in Medicaid.

Primary Research Question 3.5. Did the imposition of a copayment for non-emergent use of the emergency department reduce the number of non-emergency visits to the emergency department among CLAs enrolled in Medicaid?

Question 3.5a. What was the number of non-emergent visits to the emergency department among CLAs prior to the imposition of copayments?

Question 3.5b. What was the total number of emergency department visits among CLAs prior to the imposition of copayments?

Question 3.5c. How did the numbers of emergency department visits and non-emergent visits change among CLAs after the imposition of copayments?

Question 3.5d. How did the use of primary care change among CLAs after the imposition of copayments for non-emergent visits to the emergency department?

Question 3.5e. Do beneficiaries with copayment requirements understand their payment obligations?

Hypothesis 3.6. Hospitals vary in how they implement the required copayment for non-emergency use of the emergency department (ED).

Primary Research Question 3.6. Are hospitals consistent in how they define non-emergent use of the emergency department, as necessary to apply the associated Medicaid copayment policy?

Question 3.6a. Do hospitals understand the policy requiring a copayment for non-emergent use of the emergency department?

Hypothesis 3.7. Hospitals are implementing the policy requiring a copayment for non-emergent use of the emergency department in a consistent manner.

Primary Research Question 3.7. Are hospitals consistent in how they are implementing the policy requiring a copayment for non-emergent use of the emergency department?

Question 3.7a. Is the definition of non-emergent ED visits consistently applied across hospitals?

Methodology

Evaluation Design

We will use two analytic approaches to address the primary research questions for evaluation of Waiver Provision 3, the premium and copayment requirement for CLAs: DiD and Regression Discontinuity method (RD). Because of pandemic disruptions to data and policy, we will no longer use ITS or individual-level fixed effects models to address the research questions under this provision. We will include models that exclude the pandemic period for DiD analyses to avoid COVID-related disruptions in the baseline. The approach to answer several research questions involved a descriptive analysis of trends and, in these cases, we do not have alternatives available and must carefully interpret results as they are likely affected by the pandemic. The Design Table (**Table 3.1**) summarizes the key features of the evaluation design.

Table 3.1: Provision 3: Summary of Hypotheses, Questions, Data Sources, and Analytic Approaches for Evaluation of Premiums for CLAs

Comparison Strategy	Outcome Measures	Data Sources	Analytic Approach	
			Original	Revised
Hypothesis 3.1: Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance.				
Primary research question 3.1: Did beneficiaries required to make premium payments understand their requirements and make premium payments?				
Question 3.1a: How many beneficiaries are required to make premium payments? How does this number change over time?				
Answering this research question requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs required to make premium payments	CARES	Descriptive	Unchanged
Question 3.1b: How many beneficiaries make premium payments? On what timeline do beneficiaries typically make payments (monthly, quarterly, annually, or other? How do these numbers change over time?				
Answering this research question requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs who make premium payments	CARES	Descriptive	Unchanged
Question 3.1c: How do the characteristics of those who make their required premium payments differ from those of beneficiaries who fail to make these payments? How do these characteristics change over time?				
Answering this research question requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Demographic and health-related characteristics of CLAs required to make premium payments	CARES and WI Medicaid Claims and Encounter Data	Descriptive	Unchanged
Question 3.1d: How many beneficiaries have premium payments made on their behalf by third-party entities? How do these numbers change over time?				
Answering this research question requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs whose premium payments were made by third parties.	CARES	Descriptive	Unchanged

Comparison Strategy	Outcome Measures	Data Sources	Analytic Approach	
			Original	Revised
Question 3.1e: How many beneficiaries are terminated and locked out for non-payment? Of those terminated, how many re-enroll at the end of their period of non-eligibility? How do these numbers change over time?				
Answering this research question requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs terminated for failure to make premium payments	CARES	Descriptive	Unchanged
	Counts of previously locked-out CLAs who re-enroll following the lock-out period.			
Question 3.1f: Do beneficiaries with premium requirements understand their payment obligations and the consequences of non-payment?				
Answering this research question requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Understanding of premium requirements	CLA Survey	Descriptive	Unchanged
Hypothesis 3.2: The imposition of premium requirements for childless adults will reduce enrollment in Medicaid.				
Primary research question 3.2: Did the imposition of premium requirements reduce enrollment in Medicaid?				
Question 3.2a: What effects does the premium requirement have on total and new enrollment in Medicaid?				
CLAs in other states	Medicaid enrollment	American Community Survey (ACS)	DiD	Include models that exclude pandemic period from baseline; Comparator states will be selected to be as similar as possible in both COVID-19 outcomes as well baseline characteristics.
Parents and CLAs in Wisconsin not subject to premiums	Medicaid reenrollment and disenrollment	CARES	DiD	
CLAs in Wisconsin not subject to premiums	Medicaid reenrollment and disenrollment	CARES	RD	Unchanged
CLAs in Wisconsin prior to waiver	Medicaid reenrollment and disenrollment	CARES	ITS	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider ITS a valid evaluation strategy, and we will rely on DiD and RD approaches to answer this question.

Comparison Strategy	Outcome Measures	Data Sources	Analytic Approach	
			Original	Revised
Question 3.2b: Do beneficiaries with premium obligations who initiate payments continue to make regular payments throughout their 12-month enrollment periods?				
Answering this research question requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs who continuously make premium payments throughout their 12-month enrollment period	CARES	Descriptive	Unchanged
Question 3.2c: What effects do premiums have on continuity of coverage, as reflected by mid-year disenrollments and renewal decisions?				
CLAs in other states	Mid-year disenrollment and renewals	American Community Survey (ACS)	DiD	Include models that exclude pandemic period from baseline; Comparator states will be selected to be as similar as possible in both COVID-19 outcomes as well baseline characteristics.
Parents and CLAs in Wisconsin not subject to premiums	Mid-year disenrollment and renewals	CARES	DiD	
CLAs in Wisconsin not subject to premiums	Mid-year disenrollment and renewals	CARES	RD	Unchanged
CLAs in Wisconsin prior to waiver	Mid-year disenrollment and renewals	CARES	ITS	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider ITS a valid evaluation strategy, and we will rely on DiD and RD approaches to answer this question.

Comparison Strategy	Outcome Measures	Data Sources	Analytic Approach	
			Original	Revised
Hypothesis 3.3: The imposition of premium requirements for childless adults will increase enrollment in commercial insurance following exits from Medicaid.				
Primary research question 3.3: Did the imposition of premium requirements increase enrollment in commercial insurance following exits from Medicaid?				
Question 3.3a: Did the imposition of premium requirements increase enrollment in employer-sponsored / large group insurance following exits from Medicaid?				
CLAs leavers prior to waiver	Enrollment in commercial insurance	WI TPL data UI Data linked to DOL self-insured data WHIO	ITS	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider ITS a valid evaluation strategy, and we will rely on an RD approach to answer this research question.
CLAs leavers not subject to premiums prior to waiver	Enrollment in commercial insurance	WI TPL data UI Data linked to DOL self-insured data WHIO	RD	Unchanged
Question 3.3b: Did the imposition of premium requirements increase enrollment in individual market / ACA Marketplace insurance following exits from Medicaid?				
CLAs leavers prior to waiver	Enrollment in commercial insurance	WI TPL data UI Data linked to DOL self-insured data WHIO	ITS	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider ITS a valid evaluation strategy, and we will rely on an RD approach to answer this research question.
CLAs leavers not subject to premiums prior to waiver	Enrollment in commercial insurance	WI TPL data UI Data linked to DOL self-insured data WHIO	RD	Unchanged
Question 3.3c: To what extent do disenrolled beneficiaries re-enroll in Medicaid following their period of non-eligibility?				
Answering this research question requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs disenrolled from Medicaid due to lack of premium payment who subsequently re-enroll in Medicaid following their period of non-eligibility	CARES	Descriptive	Unchanged

Comparison Strategy	Outcome Measures	Data Sources	Analytic Approach	
			Original	Revised
Hypothesis 3.4: The imposition of premium requirements for CLAs will lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums.				
Primary research question 3.4: Did the imposition of premium requirements lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums?				
CLAs prior to disenrollment	Use of medical care	CARES and WI Medicaid Claims and Encounter Data	Individual-level fixed effects analysis	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider individual fixed effects a valid evaluation strategy and we will rely on a DiD approach to answer this question.
Continuously enrolled CLAs	Use of medical care	CARES and WI Medicaid Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline.
Hypothesis 3.5: The imposition of a copayment for non-emergent use of the emergency department will lead to more appropriate uses of medical care among CLAs enrolled in Medicaid.				
Primary research question 3.5: Did the imposition of a copayment for non-emergent use of the emergency department reduce the number of non-emergency visits to the emergency department among CLAs enrolled in Medicaid?				
Question 3.5a: What was the number of non-emergent visits to the emergency department among CLAs prior to the imposition of copayments?				
Answering this research question requires only data on CLAs who are subject to premiums; no comparison strategy is required	Number of non-emergent ED visits	CARES and WI Medicaid Claims and Encounter Data	Descriptive	Unchanged
Question 3.5b: What was the total number of emergency department visits among CLAs prior to the imposition of copayments?				
Answering this research question requires only data on CLAs who are subject to premiums; no comparison strategy is required	Total number of ED visits	CARES and WI Medicaid Claims and Encounter Data	Descriptive	Unchanged

Comparison Strategy	Outcome Measures	Data Sources	Analytic Approach	
			Original	Revised
Question 3.5c: How did the numbers of emergency department visits and non-emergent visits change among CLAs after the imposition of copayments?				
CLAs enrolled prior to introduction of ED copayments	Total number and number of non-emergent ED visits	CARES and WI Medicaid Claims and Encounter Data	ITS	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider ITS a valid evaluation strategy, and we will rely on a DiD approach to answer this question.
Parents and caregiver adults	Total number and number of non-emergent ED visits	CARES and WI Medicaid Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline
Commercially insured adults	Total number and number of non-emergent ED visits	WHIO	DiD	Include models that exclude pandemic period from baseline
Question 3.5d: How did the use of primary care change among CLAs after the imposition of copayments for non-emergent visits to the emergency department?				
Parents and caregiver adults	Total number and number of primary care visits	CARES and WI Medicaid Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline
Commercially insured adults	Total number and number of primary care visits	WHIO	DiD	Include models that exclude pandemic period from baseline
Question 3.5e: Do beneficiaries with copayment requirements understand their payment obligations?				
Answering this research questions requires only data on CLAs who are subject to premiums; no comparison strategy is required	Knowledge and understanding of payment obligations	Beneficiary survey	Descriptive	Unchanged

Comparison Strategy	Outcome Measures	Data Sources	Analytic Approach	
			Original	Revised
Hypothesis 3.6: Hospitals vary in how they implement the required copayment for non-emergency use of the ED.				
Primary research question 3.6: Are hospitals consistent in how they are defining non-emergent use of the emergency department, as necessary to apply the associated Medicaid copayment policy?				
Question 3.6a. Do hospitals understand the policy requiring a copayment for non-emergent use of the emergency department?				
Answering this research question requires only data on Wisconsin hospitals; no comparison strategy is required	Understanding of copayment requirements	Beneficiary survey and interviews	Descriptive	Unchanged
Hypothesis 3.7. Hospitals implement the policy requiring a copayment for non-emergent use of the emergency department in a consistent manner.				
Primary research question 3.7: Are hospitals consistent in how they are implementing the policy requiring a copayment for non-emergent use of the emergency department?				
Question 3.7a: Is the definition of non-emergent ED visits consistently applied across hospitals?				
CLAs subject to copayments	Hospital-level measure of the ratio of visits for which copayments assessed, relative to the number of non-emergent visits measured using the Billings (2000) probabilistic method	CARES and WI Medicaid Claims and Encounter Data	Descriptive	Unchanged
Parents and caregiver adults	Hospital-level measure of the ratio of non-emergent to total ED visits	CARES and WI Medicaid Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline

Target and Comparison Populations

The target populations for the evaluation of Waiver Provision 3— Premiums, Lock-Outs, and Emergency Department Copayments—include CLAs in the Wisconsin Medicaid program and CLAs who exit Medicaid in Wisconsin. We will address the primary research questions as follows:

Question 3.1. Did beneficiaries required to make premium payments understand their requirements and make premium payments? Conduct a descriptive analysis using data from Wisconsin administrative enrollment systems, which does not require the use of a comparison group.

Question 3.2. Did the imposition of premium requirements reduce enrollment in Medicaid? Use three different comparison groups. We will first use a comparison group of lower-income CLAs in Wisconsin enrolled in Medicaid who are not subject to premiums. The second comparison group is parents/caregivers in Wisconsin enrolled in Medicaid who also are not subject to premiums. Finally, we will use CLAs enrolled in Medicaid prior to the waiver implementation (and who look like they would have been subject to premiums).

Question 3.3. Did the imposition of premium requirements increase enrollment in commercial insurance among CLAs who exit Medicaid? We will use two comparison groups. First, CLAs who exited Medicaid prior to the imposition of the premium requirement and, second, lower-income CLAs who are not subject to premiums and who exit Medicaid.

Question 3.4. Did the imposition of premium requirements lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums? We will use two comparison groups. First, a comparison group of CLAs enrolled in Medicaid prior to the waiver implementation (and who look like they would have been subject to premiums). Second, we will use a comparison group of continuously enrolled CLAs (who were also subject to premiums).

Question 3.5. Did the imposition of a copayment for non-emergent use of the emergency department reduce the number of these visits among CLAs enrolled in Medicaid? We will use three comparison groups. First, CLAs enrolled in Medicaid prior to the imposition of copayments for non-emergent use of the emergency department. Second, parents and caregivers in Wisconsin who were enrolled in Medicaid. Third, adults enrolled in commercial insurance in Wisconsin.

Question 3.6. Are hospitals consistent in how they are defining non-emergent use of the emergency department, as necessary to apply the associated Medicaid copayment policy? The Design Report proposed that we hold hospital focus groups to evaluate this hypothesis. In consultation with DHS, we no longer plan to pursue this method given the burdens faced by hospitals due to the COVID-19 pandemic including ongoing staff shortages. We will rely on the beneficiary survey, interviews, and administrative data to understand how hospitals vary in their implementation of the ED co-pays (see Hypothesis 3.7).

Question 3.7. Are hospitals consistent in how they are implementing the policy requiring a copayment for non-emergent use of the emergency department? We will use two comparison groups. First, CLAs enrolled in Medicaid prior to the imposition of copayments for non-emergent use of the emergency department. Second, parents and caregivers in Wisconsin who were enrolled in Medicaid.

Evaluation Period

The evaluation period will include the years 2016 through 2023, which includes a pre-period before premiums and copayments begin, through the end of the evaluation period.

Evaluation Measures and Data Sources

The outcome measures for this evaluation are defined in **Table 3.1** above. This evaluation will involve multiple data sources. They are noted in **Table 3.2**, along with the hypotheses for which these data will be used. The Data Sources section of the Demonstration Waiver and Evaluation Background component of this report provides a full description of these data sources.

Table 3.2: Provision 3 Data Sources

	Hypotheses
Medicaid enrollment (CARES), claims, and encounter data. To estimate the number of CLAs that are required to make premium payment and do make premium payments. We also will use any available data on whether a third-party makes premium payments on behalf of a beneficiary. Finally, we will use these data to calculate Medicaid enrollment rates for the target and comparison groups noted in Table 1.	H1 H2 H4 H5 H7
Medicaid Beneficiary Survey. Data from the questions intended to elicit understanding of premiums, knowledge of program requirements related to premiums, and self-reported reasons why individuals may experience difficulty paying required premiums.	H1
Wisconsin's All-Payer Claims Database (known as WHIO). To measure Medicaid enrollment and transitions to commercial insurance.	H2 H3 H5
Wisconsin Third Party Liability Database (TPL). To identify individuals enrolled in Medicaid who are covered by a private health insurance plan.	H3
Unemployment Insurance data (UI) and Department of Labor (DOL) data. To match individuals enrolled in Medicaid to their current and future employers, which when linked to DOL data, can be used to identify individuals transitioning into employment at self-insured firms.	H3

Analytic Methods

We will address the primary research questions as follows:

Question 3.1. Did beneficiaries required to make premium payments understand their requirements and make payments on time? We will conduct a descriptive analysis using data from Wisconsin administrative enrollment systems.

Question 3.2. Did the imposition of premium requirements reduce enrollment in Medicaid? We will employ DiD and RD. Using the comparison group of adults in Wisconsin enrolled in Medicaid that are not subject to premiums, we will estimate DiD models on Medicaid enrollment and disenrollment. In addition, using the comparison group of lower-income CLAs in Wisconsin enrolled in Medicaid who are not subject to premiums, we will employ RD models on Medicaid enrollment and disenrollment.

Question 3.3. Did the imposition of premium requirements increase enrollment in commercial insurance among CLAs who exit Medicaid? We will employ an RD design. Using the comparison group of low-income adults exiting Medicaid who were not subject to premiums, we will employ RD models on enrollment in commercial insurance. Due to pandemic-related

disruptions in waiver implementation and data trends, we have abandoned plans to use an ITS method.

Question 3.4. Did the imposition of premium requirements lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums? We will employ two different analytic approaches, individual-level fixed effects and DiD. Use of medical care will be measured by total number of visits, number of inpatient hospital stays, and number of visits to the ED.

Question 3.5. Did the imposition of a copayment for non-emergent visits to the emergency department reduce the number these visits among CLAs enrolled in Medicaid? We will employ a DiD design. Non-emergent visits will be measured using a probabilistic method developed for claims data.[13] By using this method, we will ensure that we will identify non-emergent visits before and after implementation in a consistent manner. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans to use an ITS method.

To conduct the analysis, using the comparison group of parents and caregivers enrolled in Wisconsin Medicaid, we will estimate DiD models on non-emergent and total ED visits. We also will estimate DiD models on non-emergent and total emergency department visits using the comparison group of commercially insured adults in Wisconsin.

Question 3.6. Are hospitals consistent in how they are defining non-emergent use of the emergency department, as necessary to apply the associated Medicaid copayment policy? We had planned to perform a thematic analysis of focus group results; however, in consultation with DHS, we no longer plan to pursue this method given the burdens faced by hospitals due to the COVID-19 pandemic including ongoing staff shortages. Instead, we will examine the interim beneficiary survey and its attached qualitative beneficiary interview component, which will help us understand implementation of the ED co-pays.

Question 3.7. Are hospitals consistent in how they are implementing the policy requiring a copayment for non-emergent use of the emergency department? We will employ DiD methods. Collections of copayments will be determined from administrative data. Non-emergent visits will be measured using the probabilistic method developed for claims data described above. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans to also use an ITS method. To conduct the analysis, we will first conduct a descriptive analysis of the extent of variation across hospitals in whether they collect copayments, relative to a consistent measure of non-emergent visits. Second, using the comparison group of parents and caregivers enrolled in Wisconsin Medicaid, we will determine whether hospitals changed their coding of ED visits following the imposition of the copayment requirement.

Methodological Limitations

The methods we propose are all quasi-experimental. It is possible that there are other factors that are not fully accounted for in the design that may have a more direct effect on outcomes, particularly enrollment in commercial insurance, such as the availability of commercial coverage

[13]See, for reference: Billings J, Parikh N, Mijanovich T. Emergency Department Use: The New York Story. New York (NY): Commonwealth Fund; 2000 Nov. (Issue Brief). Available at: https://www.commonwealthfund.org/sites/default/files/documents/___media_files_publications_issue_brief_2000_nov_emergency_room_use__the_new_york_story_billings_nystory_pdf.pdf

options, co-insurance costs, and income levels. A limitation for studying ED copayments is the implementation sequence; because they took effect on July 1, 2020, but were retroactively eliminated and again implemented November 2, 2020, it is somewhat unclear what to expect about beneficiary response. The main remaining limitation is the occurrence of the implementation during the pandemic.

Results

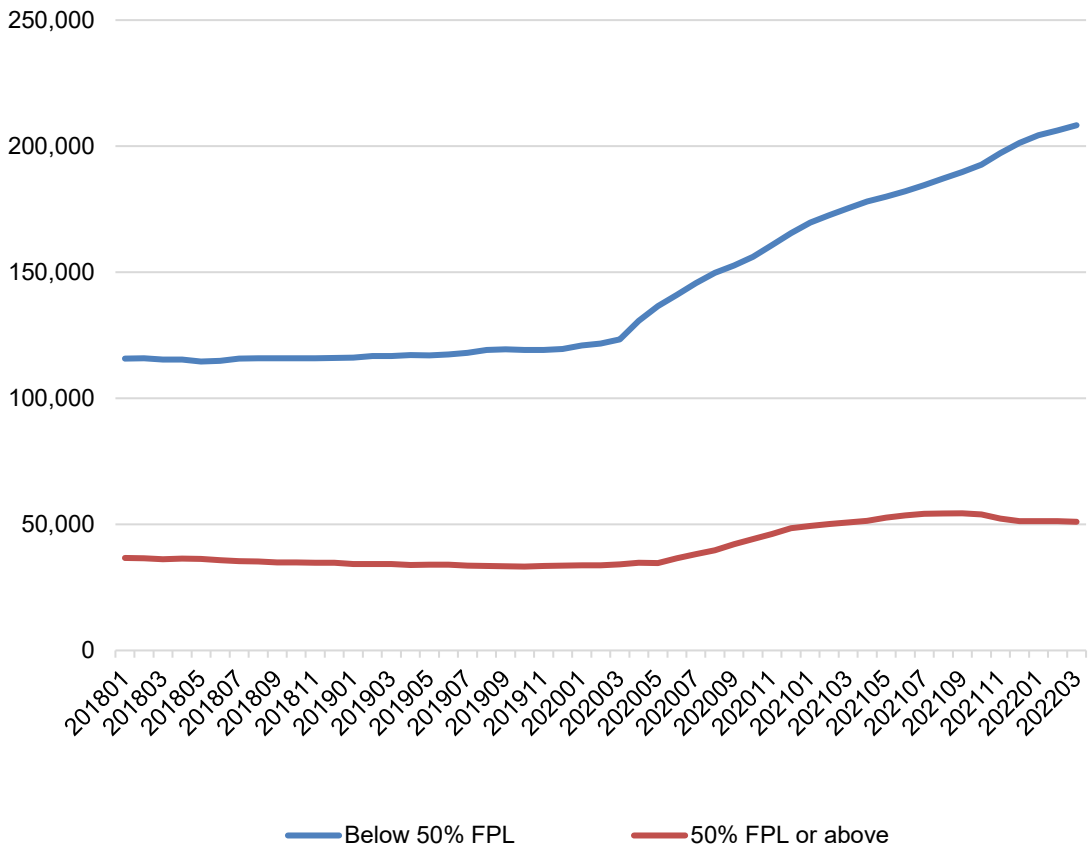
Note that because of the suspension of premiums, we have been unable to make analytic progress on many of the hypotheses related to premiums for Provision 3. We continue to clean and prepare our periodically updated CARES, Medicaid claims and encounter data, and the WHIO data. We plan to request the TPL and DOL data this year. We provide relevant baseline data wherever available below and discuss the context.

Hypothesis 3.1. Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance.

Primary Research Question 3.1. Did beneficiaries required to make premium payments understand their requirements and make premium payments?

Question 3.1a. How many beneficiaries are required to make premium payments? How does this number change over time? **Figure 3.2** shows the number of beneficiaries who would have been required to make premium payments (and those in the same eligibility category who would not have been required to) from January 2018 to March 2022. In February 2020, 121,776 childless adults with incomes below 50% FPL, who would not have been required to pay premiums, and 33,773 with incomes greater than or equal to 50% FPL, who would have had to pay premiums, were enrolled in BadgerCare. This means that about 21.7% of all childless adults would have had a required premium (10.1% of all nonelderly adult members). Following the start of the COVID-19 pandemic and the beginning of maintenance of eligibility policy, growth in the under 50% FPL population was higher than in the above 50% FPL population; total enrollment had increased in the under 50% FPL population to 208,307 in March 2022, a 71.1% increase, and in the above 50% FPL population to 51,036, a 51.1% increase. The premium-required population was then 19.7% of all childless adult members (9.6% of all nonelderly adult members). Once the PHE ends, and members' incomes are re-evaluated, those with incomes above 50% FPL will be required to pay premiums once more. It is unclear at this point how many in each group are will still be eligible at the income recorded in the CARES eligibility system that we use for accessing income data.

Figure 3.2: Trend in the Number of CLA With Income <50% FPL vs. =50% FPL, January 2018-March 2022



Question 3.1b. How many beneficiaries make premium payments? On what timeline do beneficiaries typically make payments (monthly, quarterly, annually, or other?) How do these numbers change over time? Since premiums have been suspended, we are unable to progress on this hypothesis at this time. We will begin analyses once data are available on these measures.

Question 3.1c. How do the characteristics of those who make their required premium payments differ from those of beneficiaries who fail to make these payments? How do these characteristics change over time? Since premiums have been suspended, we are unable to progress on this hypothesis at this time. We will begin analyses once data are available on these measures.

Question 3.1d. How many beneficiaries have premium payments made on their behalf by third-party entities? How do these numbers change over time? Since premiums have been suspended, we are unable to progress on this hypothesis at this time. We will begin analyses once data are available on these measures.

Question 3.1e. How many beneficiaries are terminated for non-payment and are being locked out? Of those terminated, how many re-enroll at the end of their period of non-eligibility? How do these numbers change over time? Since premiums have been suspended, we are unable to progress on this hypothesis at this time. We will begin analyses once data are available on these measures.

Question 3.1f. Do beneficiaries with premium requirements understand their payment obligations and the consequences of non-payment? Although the premiums were suspended at the time of the survey, we asked some related questions in the baseline survey to get a sense of beneficiary awareness of premium policies and how they currently interpret them. Our sampling frame included one group of CLA beneficiaries with income <50% FPL and one group with income >=50% FPL. We provide a summary of the characteristics of these groups in **Table 3.3**, and **Table 3.4** provides responses relevant to member awareness of the premium policy. We test for differences across the two groups using two-sided t tests (or chi-squared tests for response options with more than two levels). We also test for differences adjusted by age category, race, Hispanic ethnicity, and gender in a logistic (or multinomial logistic, as appropriate) regression. We report p-values for both tests in the table and focus on unadjusted p-values in the description of results.

All responses are weighted. Weights were created with two components. First, the base weights calculated by NORC during the sample selection were applied to the respondents. Second, the weights were raked to match the age, sex, and group distributions of the sampling frames as a post-stratification adjustment. Post-stratification adjustment changes the sampling weights so that the distribution of select demographic characteristics among respondents matches the distribution of those characteristics in the population from which samples were drawn (childless adults in the Wisconsin Medicaid program).

Table 3.3 summarizes the demographic and employment characteristics for the two groups. CLAs with incomes 50% FPL or higher have a different gender distribution than those with incomes below 50% FPL; they are more likely to be female (55.6% vs. 39.1%, p<.01) less likely to be male, and more likely to prefer a different gender label. They are similar in age distribution, Hispanic ethnicity, and along many race categories but are slightly more likely to be White (70.7% vs. 61.2%, p<.10) and less likely to be Asian (1.7% vs 4.0%, p<.05). The educational distributions are similar. As expected, their household gross income for 2019 is generally higher, they are more likely to be working more hours (for example, the fraction working 30 or more hours per week is 42.7% vs. 34.2%, with the hours distribution different at p<.05) and are less likely to report receiving benefits from Wisconsin Works/TANF (.7% vs. 7.2%, p<.01).

Table 3.3: Summary of CLA Characteristics by Income Group, BadgerCare Survey

	CLA						
	Below 50% FPL			50% FPL or above			
	n	Percent	N (max possible count including non-respondents=435)	N	Percent	N (max possible count including non-respondents=513)	p-value (adjusted)
Demographic Characteristics							
Gender							
Male	256	59.1%	434	206	40.4%	509	0.0004
Female	169	39.1%	434	283	55.6%	509	
Prefer to describe myself as non-binary, gender-fluid, or agender/Prefer not to say	8	1.9%	434	20	4.0%	509	
Age							
Age 18 to 29	135	31.0%	435	177	34.5%	513	0.3395
Age 30 to 39	84	19.2%	435	66	12.8%	513	
Age 40 to 49	63	14.6%	435	96	18.8%	513	
Age 50 to 59	108	24.8%	435	108	21.0%	513	
Age 60 or older	45	10.3%	435	66	12.8%	513	
Ethnicity (Hispanic)							
Yes	129	29.7%	433	154	30.3%	509	0.9316
No	304	70.3%	433	355	69.7%	509	
Race							
White	266	61.2%	435	363	70.7%	513	0.0908
Black	62	14.3%	435	59	11.4%	513	0.4062
Native American/Alaskan Native	16	3.6%	435	16	3.1%	513	0.6511
Asian	17	4.0%	435	9	1.7%	513	0.0447
Native Hawaiian/Pacific Islander	9	2.2%	435	4	0.7%	513	0.2829
Other	79	18.1%	435	82	16.1%	513	0.7181
Education							
Less than high school	105	24.4%	431	81	15.9%	510	0.0931 (0.1170)
High school diploma or General Education	115	26.6%	431	160	31.4%	510	
Vocational training or 2-year degree/ Some college but no degree	129	30.0%	431	196	38.4%	510	
A 4-year college degree or more	82	19.0%	431	74	14.4%	510	

	CLA						
	Below 50% FPL			50% FPL or above			
	n	Percent	N (max possible count including non-respondents=435)	N	Percent	N (max possible count including non-respondents=513)	p-value (adjusted)
Have any children under 19							
Yes	77	18.6%	414	112	22.9%	488	0.3759 (0.340)
No	337	81.4%	414	376	77.1%	488	
Household gross income for 2019							
Less than $10,000	180	47.5%	378	166	34.3%	483	0.0999 (0.0446)
$10,000 to 19,999	91	24.1%	378	169	35.1%	483	
$20,000 to $29,999	49	12.9%	378	61	12.6%	483	
$30, 000 and above	58	15.4%	378	87	18.0%	483	
Employment Characteristics							
Current Employment							
Not currently employed or retired	203	47.1%	432	193	37.8%	510	0.0844 (0.184)
Employed by someone else or self-employed	229	52.9%	432	317	62.2%	510	
Hours worked on average per week							
I work less than 20 hours per week	100	44.6%	225	87	27.5%	316	0.0209 (0.0071)
I work 20 to 29 hours per week	48	21.2%	225	94	29.8%	316	
I work 30 or more hours per week	77	34.2%	225	135	42.7%	316	
Social Health							
Receive benefits from Foodshare/SNAP							
Yes	221	51.0%	434	284	55.4%	512	0.4006 (0.111)
No	213	49.0%	434	228	44.6%	512	
Receive benefits from Wisconsin Works/TANF							
Yes	30	7.2%	424	4	0.7%	507	0.0009 (0.256)
No	394	92.8%	424	503	99.3%	507	

In **Table 3.4**, we highlight responses to selected questions from the survey. The survey took place while premiums were suspended. Respondents with incomes above 50% FPL were more likely to report that they or their family would be charged a premium for Medicaid/BadgerCare (11.8% vs. 4.0%, $p<.01$). They were no more likely to report having to borrow or skip paying other bills to pay for premiums/co-pays in the last 12 months. There were no statistically or economically important differences in the questions we asked about awareness of health coverage: whether members understand the letters they receive (more than 88% of respondents agree), whether they understand what payments are required (more than 86% of respondents agree), whether they understand who is eligible (more than 90% of respondents agree), and whether they understand how changes to the Medicaid/BadgerCare program might affect them, which had the lowest agreement with more than 72% agreeing.

Table 3.4: Awareness of Premium Policies and Coverage Satisfaction by Income Group, BadgerCare Survey

	CLA						
	Below 50% FPL			50% FPL or above			
Premium Knowledge	n	percent	N (max possible count including non-respondents=435)	N	percent	N (max possible count including non-respondents=513)	p-value (adjusted)
Premiums							
To your knowledge will you/your family be charged a premium for Medicaid/BadgerCare?							
Yes	15	4.0%	369	51	11.8%	429.4	0.0003 (0.000)
No	354	96.0%	369	379	88.2%	429.4	
Had to borrow/skip paying other bills to pay for premiums/co-pays in last 12 months							
Yes	21	4.9%	433	40	7.8%	508.3	0.2915 (0.063)
No	412	95.1%	433	469	92.2%	508.3	
Awareness About Health Care Coverage							
I understand the letters I receive from the Medicaid/BadgerCare program							
Agree	353	87.7%	402.4	405	89.2%	453.5	0.6214 (0.402)
Disagree	50	12.3%	402.4	49	10.8%	453.5	
I understand what payments are required							
Agree	332	86.9%	381.7	391	85.8%	455.5	0.7367 (0.648)
Disagree	50	13.1%	381.7	65	14.2%	455.5	
I understand who is eligible							
Agree	352	90.4%	389.3	417	91.4%	456.5	0.6693 (0.637)
Disagree	37	9.6%	389.3	39	8.6%	456.5	
I understand how changes to the Medicaid/BadgerCare program might affect me							
Agree	275	72.2%	380.9	337	74.5%	452.8	0.6573 (0.303)
Disagree	106	27.8%	380.9	115	25.5%	452.8	

Hypothesis 3.2. The imposition of premium requirements for CLAs will reduce enrollment in Medicaid.

Primary Research Question 3.2. Did the imposition of premium requirements reduce enrollment in Medicaid?

Question 3.2a. What effects does the premium requirement have on total and new enrollment in Medicaid? Since premiums have been suspended, we are unable to progress on this hypothesis at this time. We will begin analyses once data are available on these measures.

Question 3.2b. Do beneficiaries with premium obligations who initiate payments continue to make regular payments throughout their 12-month enrollment periods? Since premiums have been suspended, we are unable to progress on this hypothesis at this time. We will begin analyses once data are available on these measures.

Question 3.2c. What effects do premiums have on continuity of coverage, as reflected by mid-year disenrollments and renewal decisions? Since premiums have been suspended, we are unable to progress on this hypothesis at this time. We will begin analyses once data are available on these measures.

Hypothesis 3.3. The imposition of premium requirements for CLAs will increase enrollment in commercial insurance following exits from Medicaid.

Primary Research Question 3.3. Did the imposition of premium requirements increase enrollment in commercial insurance following exits from Medicaid?

Question 3.3a. Did the imposition of premium requirements increase enrollment in employer-sponsored/large group insurance following exits from Medicaid? Since premiums have been suspended, we are unable to progress on this hypothesis at this time. We will begin analyses once data are available on these measures.

Question 3.3b. Did the imposition of premium requirements increase enrollment in individual market/ACA Marketplace insurance following exits from Medicaid? Since premiums have been suspended, we are unable to progress on this hypothesis at this time. We will begin analyses once data are available on these measures.

Question 3.3c. To what extent do disenrolled beneficiaries reenroll in Medicaid following their period of non-eligibility? Since premiums have been suspended, we are unable to progress on this hypothesis at this time. We will begin analyses once data are available on these measures.

Hypothesis 3.4. The imposition of premium requirements for CLAs will lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums.

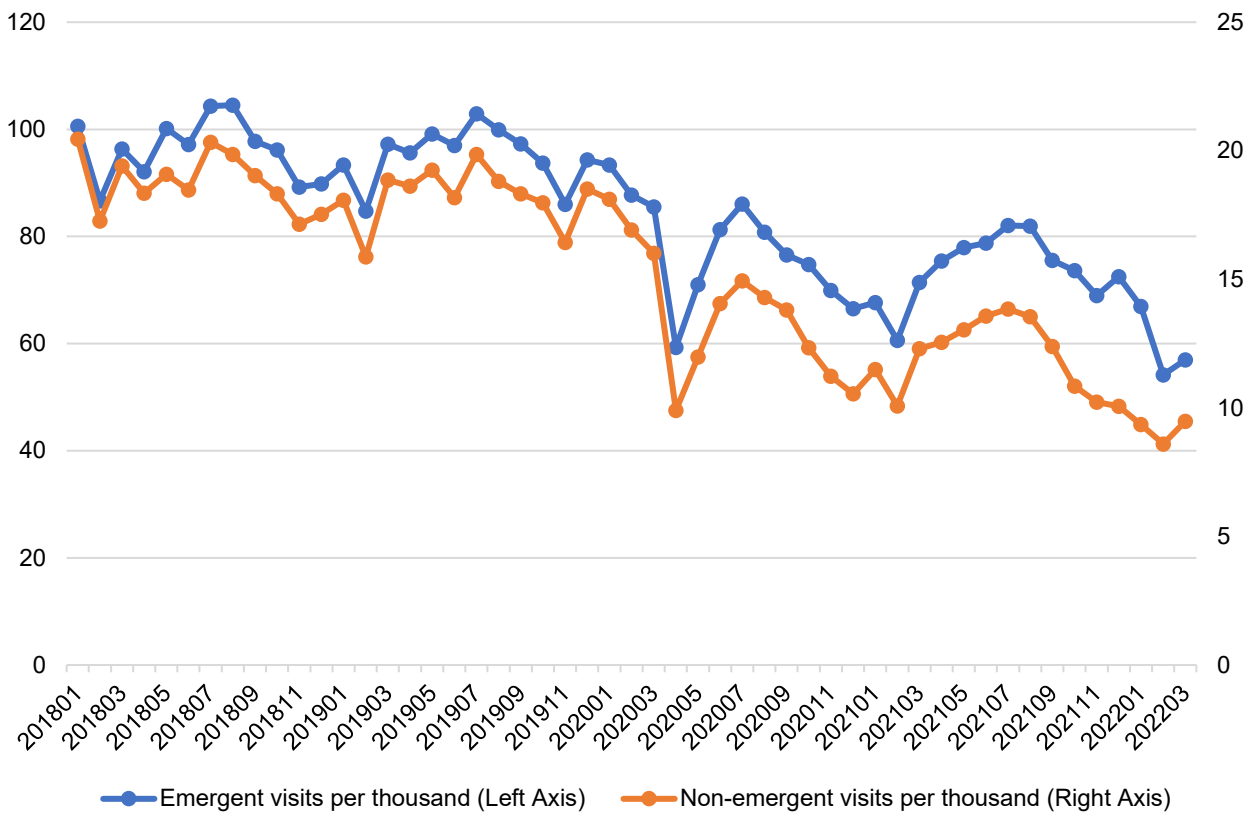
Primary Research Question 3.4. Did the imposition of premium requirements lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums? Since premiums have been suspended, we are unable to progress on this hypothesis at this time. We will begin analyses once premiums have begun to be charged.

Hypothesis 3.5. The imposition of a copayment for non-emergent use of the emergency department will lead to more appropriate uses of medical care among CLAs enrolled in Medicaid.

Primary Research Question 3.5. Did the imposition of a copayment for non-emergent use of the emergency department reduce the number of non-emergency visits to the emergency department among CLAs enrolled in Medicaid?

Question 3.5a. What was the number of non-emergent visits to the emergency department among CLAs prior to the imposition of copayments? Analysis of 3.5a is purely descriptive and the relevant data are contained in **Figure 3.3**. The figure shows total emergent and non-emergent visits per thousand beneficiaries by month, with total visits on the left axis and non-emergent visits on the right axis. The definitions of emergent and non-emergent are based on the Billings algorithm categorizations, which assign probabilities to ED visits based on the claim's codes using a standardized algorithm. We note that this measure of non-emergent visits was created as a way to use administrative records to measure population emergency department use, not as a way to triage patients or classify them for reimbursement purposes or to assess appropriateness of ED utilization, which may depend on factors not available for measurement in the administrative data. The two series trend quite similarly over time (note again the differing scales; the average ratio of non-emergent to emergent visits is 0.18). Non-emergent visits from July 2019 to November 2019 averaged 18 per thousand per month, and from July 2019 to November 2020 averaged 15 per thousand per month. The ratio of non-emergent to total visits was relatively consistent across time until April 2020, when it suddenly dropped, slowly recovered, and trended down again. No sudden disproportionate change in non-emergent visits is evident beginning in November 2020. Rather, continuation of a downward trend in both overall and non-emergent visits that began in July is evident. These trends are very similar for other visit types in the Billings algorithm and for the probability of any visit (not shown).

Figure 3.3: Emergent and Non-Emergent Visits among Childless Adults, per Thousand



Question 3.5b. What was the total number of emergency department visits among CLAs prior to the imposition of copayments? **Figure 3.3** includes the total number of emergency department visits per month among CLAs from January 2018 to March 2022. From July 2019 to November 2019, the childless adult population averaged 96 visits per thousand per month, while from July 2019 to November 2020 they averaged 85 visits per thousand per month. As with non-emergent visits, no sudden change in emergent visits is evident beginning November 2020. Rather, continuation of a downward trend in both overall and non-emergent visits that began in July is evident. We will continue to monitor trends in emergency department visits.

Question 3.5c. How did the numbers of emergency department visits and non-emergent visits change among CLAs after the imposition of copayments? To answer this question, we examine difference-in-differences models comparing childless adults to parents before and after the imposition of copayments. We aggregate to average visits per thousand per month by eligibility group prior to estimation and provide robust standard errors. **Figure 3.4** shows total emergency department visits per person per month for parents and caretakers relative to childless adults from January 2019 to December 2021, and **Figure 3.5** shows total non-emergent visits per person per month for parents and caretakers relative to childless adults for the same time period.

Figure 3.4: Emergency Department Visits among Parents and Childless Adults, per Thousand

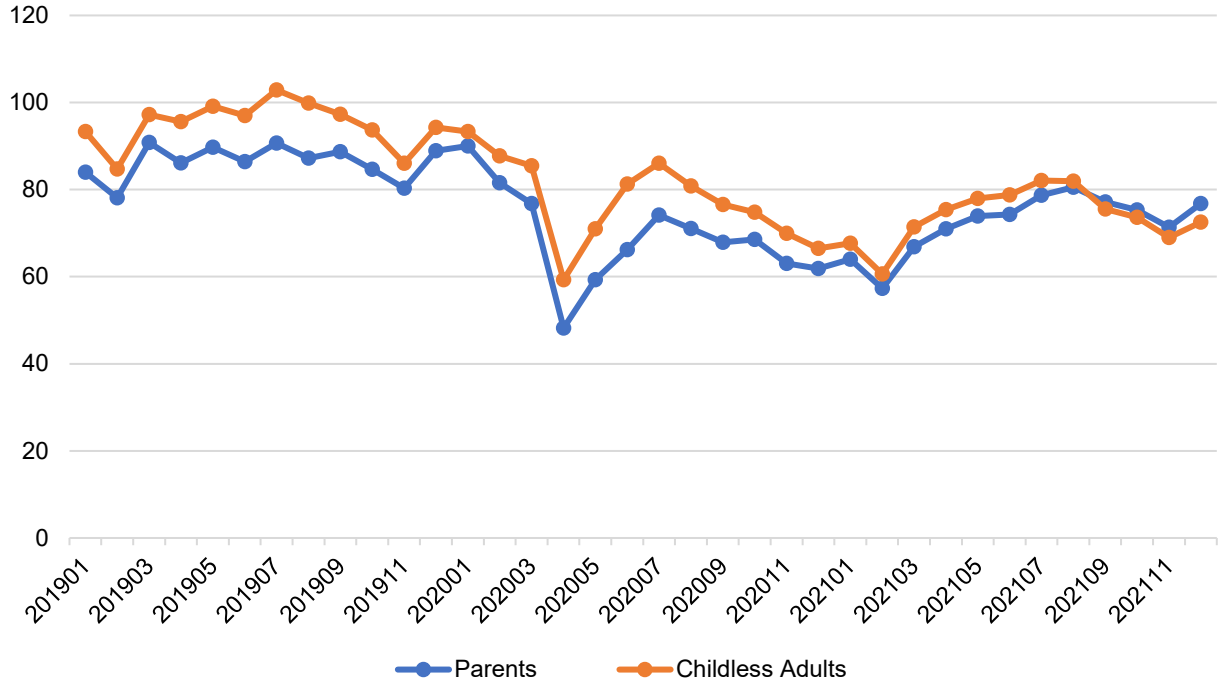


Figure 3.5: Non-Emergent Visits among Parents and Childless Adults, per Thousand

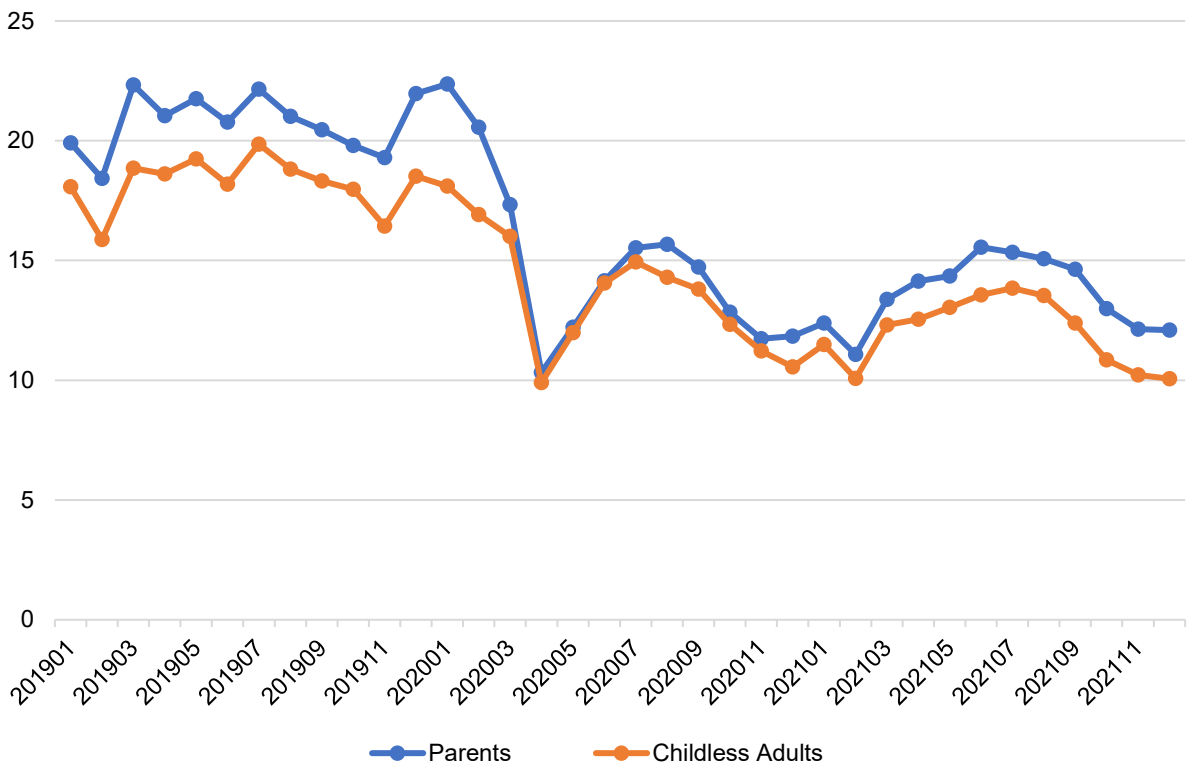


Table 3.5 is a difference-in-differences analysis of the two groups before and after November 2020. Two models are estimated; one includes all months and the other excludes March 2020 to March 2021 (both because of the pandemic and because of the implementation changes). For emergency department visits, the difference-in-differences coefficient is negative, meaning that relative to parents, CLAs experienced a decline in visits after November 2020 relative to before. However, it is not statistically significant at standard levels in either Model 1, which includes all months, or Model 2, which excludes data from March 2020 through March 2021 (vaccinations for COVID-19 were widely available beginning in April 2021, motivating this

specific time exclusion). For non-emergent visits, there is no evidence that CLAs experienced a relative decline (as the coefficient is positive and not statistically distinguishable from zero).

Table 3.5: Difference-in-Differences Analysis of Emergency Visits and Non-Emergent Visits Before and After Imposition of Copayments

	Model 1 (Includes all months)	Model 2 (Excludes pandemic period)
Emergency Department Visits		
Coefficient	-7.104	-7.843
Robust Standard Error	(3.7246)	(3.6961000)
P-Value	0.059	0.037
Baseline Average Visits (CLA)	84	88
Non-Emergent Visits		
Coefficient	0.694	0.93
Robust Standard Error	(0.9199)	(0.8286)
P-Value	0.452	0.266
Baseline Average Visits (CLA)	15	16

A comparison of Medicaid adults to commercially insured adults using the WHIO data is still pending as we discovered some data quality issues and are working with the vendor to resolve them.

Question 3.5d. How did the use of primary care change among CLAs after the imposition of copayments for non-emergent visits to the emergency department?

To identify primary care utilization, we have included any visits with one of the "definite" codes ("320" for geriatrics; "316" for family practice; "271" and "318" for general practice; and "92" for nurse practitioner family practice). **Figure 3.6** shows total primary care visits per thousand persons per month for parents and caretakers relative to childless adults from January 2019 to December 2021. **Table 3.6** is a difference-in-differences analysis of the two groups before and after November 2020. Two models are estimated; one includes all months and the other excludes March 2020 to 2021 (both because of the pandemic and because of the implementation changes). There is no evidence of any difference in the use of primary care among CLAs in either model; although the coefficients are negative in both models (suggesting a relative decline in primary care among CLAs relative to parents), they are not statistically distinguishable from zero.

Figure 3.6: Primary Care Visits among Parents and Childless Adults, per Thousand

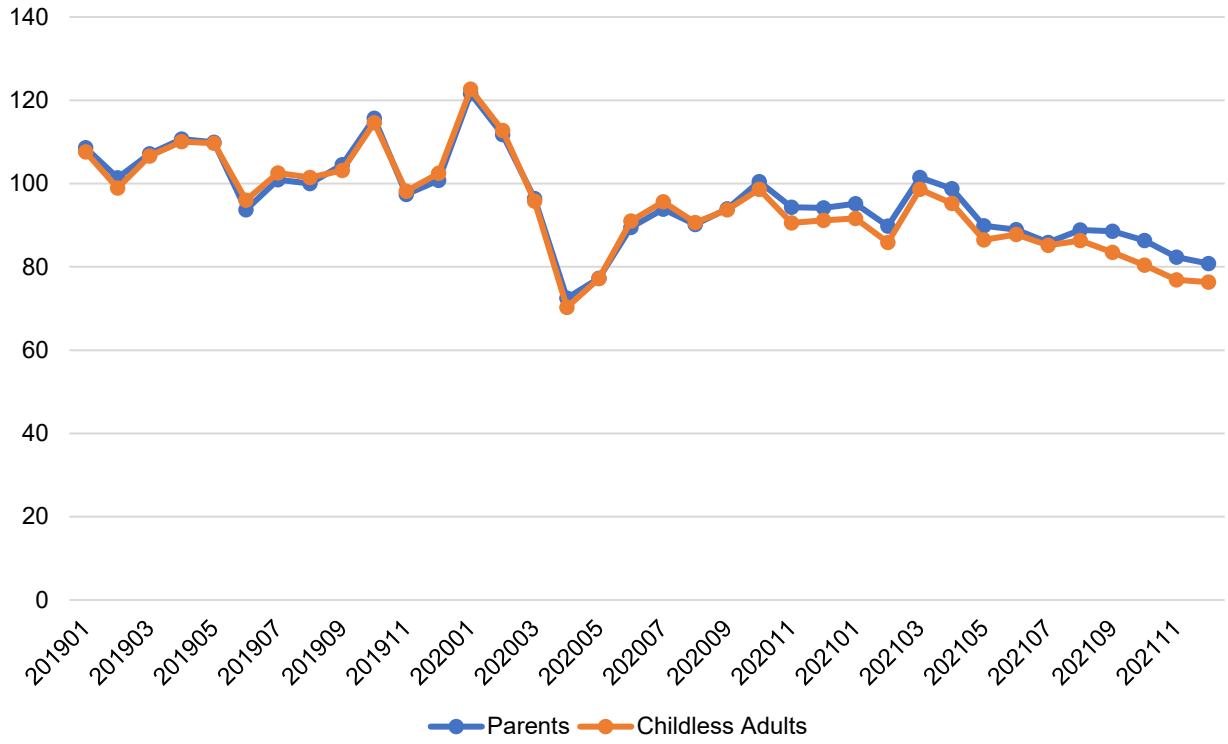


Table 3.6: Difference-in-Differences Analysis of Primary Care Visits Before and After Imposition of Copayments

	Model 1 (Includes all months)	Model 2 (Excludes pandemic period)
Primary Care Visits		
Coefficient	-3.907	-4.16
Robust Standard Error	(3.8848)	(3.6916)
P-Value	0.317	0.264
Baseline Average Visits (CLA)	97	100

Question 3.5e. Do beneficiaries with copayment requirements understand their payment obligations? In order to begin to understand this, we provide data from the 2020 BadgerCare Survey. The majority of respondents, though not all, were surveyed during a time when copayments were in place. We show responses for CLAs compared to parents. We provide a summary of the characteristics of these groups in **Table 3.6**, and **Table 3.7** provides responses relevant to member health care access and awareness of copayment policy. We test for differences across the two groups using two-sided t tests (or chi-squared tests for response options with more than two levels). We also test for differences adjusted by age category, race, Hispanic ethnicity, and gender in a logistic (or multinomial logistic, as appropriate) regression.

We report p-values for both tests in the table and focus on unadjusted p-values in the description of results.

All responses are weighted. Weights were created with two components. First, the base weights calculated by NORC during the sample selection were applied to the respondents. Second, the weights were raked to match the age, sex, and group distributions of the sampling frames as a post-stratification adjustment. Post-stratification adjustment changes the sampling weights so that the distribution of select demographic characteristics among respondents matches the distribution of those characteristics in the population from which samples were drawn.

Table 3.7 indicates that there are some demographic differences in CLA respondents relative to parents. CLAs are much more likely to be male (53.2% vs. 28.8%, p<.01), and have an older age distribution (p<.01). They are more likely to be of Hispanic ethnicity (19.7% vs. 12.4%, p<.01), less likely to be Black (13.6% vs. 20.9%, p<.01), and more likely to report being of "other" race (12.4% vs. 7.5%, p<.05). CLAs have a different education distribution than parents (p<.01) and are much less likely to report having children under 19 (18.4% vs. 92.2%, p<.01). Their income distribution is also lower (p<.01). They are more likely to report not being currently employed (p<.01), and less likely to receive SNAP benefits (59.5% vs. 82.6%, p<.01) and TANF benefits (2.8% vs. 12.6%, p<.01).

Table 3.7: Summary of Beneficiary Characteristics, BadgerCare Survey

	CLA			Parents			
	n	Percent	N (max possible count including non-respondents=1919)	N	Percent	N (max possible count including non-respondents=479)	p-value (adjusted)
Demographic Characteristics							
Gender							
Male	1,016	53.2%	1911	138	28.8%	478	0.000
Female	854	44.7%	1911	337	70.4%	478	
Prefer to describe myself as non-binary, gender-fluid, or agender/Prefer not to say	41	2.1%	1911	4	0.8%	478	
Age							
Age 18 to 29	519	27.1%	1917	202	42.5%	476	0.000
Age 30 to 39	396	20.7%	1917	171	35.9%	476	
Age 40 to 49	316	16.5%	1917	72	15.2%	476	
Age 50 to 59	429	22.4%	1917	25	5.2%	476	
Age 60 or older	255	13.3%	1917	6	1.2%	476	
Ethnicity (Hispanic)							
Yes	376	19.7%	1909	59	12.4%	479	0.003
No	1,533	80.3%	1909	419	87.6%	479	
Race							
White	1,353	70.5%	1919	325	67.9%	479	0.346
Black	261	13.6%	1919	100	20.9%	479	0.001
Native American/Alaskan Native	66	3.4%	1919	25	5.2%	479	0.088
Asian	52	2.7%	1919	10	2.1%	479	0.508
Native Hawaiian/Pacific Islander	12	0.6%	1919	5	1.0%	479	0.593
Other	238	12.4%	1919	36	7.5%	479	0.016
Education							
Less than high school	349	18.3%	1900	50	10.4%	478	0.0001 (0.0017)
High school diploma or General Education	685	36.1%	1900	217	45.4%	478	
Vocational training or 2-year degree/ Some college but no degree	654	34.4%	1900	171	35.8%	478	
A 4-year college degree or more	213	11.2%	1900	40	8.3%	478	
Have any children under 19							
Yes	330	18.4%	1798	437	92.2%	474	0.000 (0.000)
No	1,467	81.6%	1798	37	7.8%	474	

	CLA			Parents			
	n	Percent	N (max possible count including non-respondents=1919)	N	Percent	N (max possible count including non-respondents=479)	p-value (adjusted)
Household gross income for 2019							
Less than $10,000	787	46.8%	1681	176	41.4%	425	0.0005 (0.0025)
$10,000 to 19,999	484	28.8%	1681	96	22.5%	425	
$20,000 to $29,999	192	11.4%	1681	68	16.1%	425	
$30, 000 and above	218	13.0%	1681	85	20.0%	425	
Employment Characteristics							
Current Employment							
Not currently employed or retired	1,112	58.7%	1894	235	49.5%	474	0.0015 (0.284)
Employed by someone else or self-employed	782	41.3%	1894	240	50.5%	474	
Hours worked on average per week							
I work less than 20 hours per week	256	33.5%	765	64	26.8%	237	0.131 (0.1027)
I work 20 to 29 hours per week	200	26.2%	765	59	24.9%	237	
I work 30 or more hours per week	309	40.3%	765	114	48.3%	237	
Social Health							
Receive benefits from Foodshare/SNAP							
Yes	1,131	59.5%	1900	393	82.6%	476	0.000 (0.000)
No	769	40.5%	1900	83	17.4%	476	
Receive benefits from Wisconsin Works/TANF							
Yes	52	2.8%	1880	60	12.6%	477	0.000 (0.000)
No	1,828	97.2%	1880	416	87.4%	477	

Notes: Table shows chi-square p-values (unadjusted) to check if the difference among CLA vs parents is significant. The denominator of the percentage of each outcome variable does not include "legitimate skip," "missing responses," "don't know," or "prefer not to share" (as they were not response categories in the main questionnaire).

Table 3.8 examines member health care access, awareness of copayment policies, and coverage satisfaction. Similar proportions of CLAs and parents report having a usual place for care (90.5% and 89.3%, respectively). CLAs and parents have a different distribution of getting all care needed ($p<.01$), with CLAs less likely to say they got all care if needed (85.1% vs. 90.1%) and more likely to report not needing care (6.9% vs 2.0%). Visiting the doctor was similar across the two groups, although use of the ED was different, with CLAs more likely to report both visiting zero times (61.7% vs. 55.3%) and four or more times (6.7% vs 5.5%); these distributions are different with unadjusted p-value <.05.

When those who responded they had visited the ED were asked about their last visit, 12.1% of CLAs reported they didn't have another place to go, which was disproportionately lower than for parents (18.1%, $p<.05$). Fourteen percent of CLAs reported they went to the ED because their health provider advised them to, which was not lower than among parents, and 39.7% reported that the problem was too serious for a doctor's office or clinic. Only 4.2% agreed that they get most of their care at the ED, and 7.8% were trying to get tested for COVID-19. CLAs were less likely to report they had avoided going to the ED because of COVID-19 concerns (22.4% vs. 34.4%, $p<.01$). They were similarly likely to report an overnight hospitalization (14.4%) and less likely to report being refused service because they owed money for past treatment (1.7% vs. 3.7%, $p<.05$). These results do not broadly suggest major differences in care-seeking or access among CLAs relative to parents.

Similar proportions of CLAs and parents (8%) report they or their family will be charged a premium, although childless adults are more likely to report that they or their family had paid a co-pay for Medicaid/BadgerCare services in the last 12 months (37.2% vs. 30.1%, $p<.05$). When asked to indicate what they believed to be the co-pay policy regarding ED visits, the distribution of responses was different for childless adults ($p<.05$), but baseline awareness was low. For example, 79.2% reported they "never need to pay a co-pay," 11.1% reported the correct policy (vs. 6.4% of parents), and 9.7% reported they "always need to pay a co-pay." There were no differences in the fraction who said they were too worried about the co-pay and avoided the ED (6.0% of CLA vs. 7.7% of parents). Satisfaction measures were broadly similar across the two groups, with 94.3% of childless adults indicating they were satisfied or very satisfied with the range of services available, 92.3% with the choice of doctors and other providers, 94.3% with costs, and 95.6% with their most current coverage. There were some differences in the awareness measures, with a lower fraction of childless adults than parents indicating agreement with understanding the letters received from the program (85.9% vs. 91.0%, $p<.01$), what payments are required (84.0% vs. 88.5%, $p<.05$), who is eligible (88.2% vs 93.5%, $p<.01$), and how changes to the program might affect them (72.7% vs. 80.5%, $p<.01$).

Table 3.8: Awareness of Copayment Policies and Coverage Satisfaction, BadgerCare Survey

	CLA			Parents			
ED use and copays	n	Percent	N (max possible count including non-respondents=1919)	n	Percent	N (max possible count including non-respondents=479)	p-value (adjusted)
Health Care Access							
Is there a place you usually go for your healthcare?							
Yes	1,732	90.5%	1914	425	89.3%	476	0.4957 (0.906)
No	182	9.5%	1914	51	10.7%	476	
Did you get all care if needed							
Yes	1,622	85.1%	1906	431	90.1%	478	0.0007 (0.0018)
No	152	8.0%	1906	38	7.9%	478	
I did not need care in the last 12 months	132	6.9%	1906	9	2.0%	478	
Visit doctor in last 12 months							
0 times	345	18.2%	1899	73	15.3%	479	0.5497 (0.7234)
1-3 times	900	47.4%	1899	236	49.2%	479	
4-8 times	387	20.4%	1899	106	22.0%	479	
9 or more times	268	14.1%	1899	64	13.5%	479	
Visit ED in last 12 months							
0 times	1,179	61.7%	1911	265	55.3%	479	0.0226 (0.0996)
1 to 3 times	604	31.6%	1911	188	39.2%	479	
4 or more times	128	6.7%	1911	26	5.5%	479	
Which of these apply to last ED visit?							
Didn't have another place to go							
Yes	88	12.1%	728	39	18.3%	213	0.039 (0.017)
No	640	87.9%	728	174	81.7%	213	
Health provider advised to go							
Yes	102	14.0%	728	21	9.8%	213	0.1275 (0.140)
No	626	86.0%	728	192	90.2%	213	

ED use and copays	CLA			Parents			
	n	Percent	N (max possible count including non-respondents=1919)	n	Percent	N (max possible count including non-respondents=479)	p-value (adjusted)
Problem was too serious for doctor's office/clinic							
Yes	289	39.7%	728	71	33.5%	213	0.1577 (0.233)
No	439	60.3%	728	142	66.5%	213	
Get most of care at the ED							
Yes	30	4.2%	728	8	4.0%	213	0.9013 (0.768)
No	698	95.8%	728	205	96.0%	213	
Was trying to get tested for COVID-19							
Yes	57	7.8%	728	16	7.4%	213	0.8914 (0.682)
No	671	92.2%	728	197	92.6%	213	
Other							
Yes	236	32.4%	728	79	37.1%	213	0.2581 (0.682)
No	493	67.6%	728	134	62.9%	213	
Have you avoided going to ED since Feb 2020 because worried about getting COVID-19?							
Yes	427	22.4%	1905	165	34.4%	479	0.000 (0.001)
No	1,478	77.6%	1905	314	65.6%	479	
Overnight hospitalization in last 12 months							
Yes	276	14.4%	1917	54	11.3%	479	0.1128 (0.554)
No	1,641	85.6%	1917	425	88.7%	479	
Refused service b/c you owed money for past treatment							
Yes	33	1.7%	1889	17	3.7%	471	0.0268 (0.308)
No	1,856	98.3%	1889	454	96.3%	471	

ED use and copays	CLA			Parents			
	n	Percent	N (max possible count including non-respondents=1919)	n	Percent	N (max possible count including non-respondents=479)	p-value (adjusted)
Premiums and Co-Pays							
To your knowledge will you/your family be charged a premium for Medicaid/BadgerCare?							
Yes	143	8.0%	1780	37	8.1%	459	0.9784 (0.915)
No	1,636	92.0%	1780	422	91.9%	459	
Did you /your family ever pay co-pay for services by Medicaid/BadgerCare in last 12 months?							
Yes	694	37.2%	1868	143	30.1%	476	0.0103 (0.050)
No	1,174	62.8%	1868	332	69.9%	476	
Which of these is true for visits to ED? (select one)							
I never need to pay a co-pay	1,379	79.2%	1742	396	85.1%	465	0.0111 (0.0028)
I only need to pay a co-pay for care that the doctor determines was not an emergency	194	11.1%	1742	30	6.4%	465	
I always need to pay a co-pay	169	9.7%	1742	39	8.5%	465	
Too worried about co-pay and avoided ED							
Yes	115	6.0%	1900	37	7.7%	476	0.2492 (0.188)
No	1,785	94.0%	1900	440	92.3%	476	
Had to borrow/skip paying other bills to pay for premiums/co-pays in last 12 months							
Yes	142	7.4%	1907	41	8.7%	476	0.4166 (0.990)
No	1,765	92.6%	1907	435	91.3%	476	

ED use and copays	CLA			Parents			
	n	Percent	N (max possible count including non-respondents=1919)	n	Percent	N (max possible count including non-respondents=479)	p-value (adjusted)
Satisfaction with health care coverage							
The range of health care services available							
Very Satisfied	1,260	66.1%	1906	286	60.3%	474	0.0114 (0.4620)
Somewhat Satisfied	537	28.2%	1906	144	30.4%	474	
Somewhat Dissatisfied	70	3.7%	1906	34	7.2%	474	
Very Dissatisfied	39	2.1%	1906	10	2.1%	474	
The choice of doctors and other providers							
Very Satisfied	1,227	64.9%	1889	298	62.8%	474	0.8466 (0.7770)
Somewhat Satisfied	517	27.4%	1889	135	28.6%	474	
Somewhat Dissatisfied	101	5.4%	1889	30	6.3%	474	
Very Dissatisfied	44	2.3%	1889	11	2.4%	474	
My health care costs							
Very Satisfied	1,415	75.0%	1888	359	75.9%	473	0.715 (0.3039)
Somewhat Satisfied	365	19.3%	1888	90	19.0%	473	
Somewhat Dissatisfied	58	3.1%	1888	16	3.4%	473	
Very Dissatisfied	50	2.7%	1888	8	1.7%	473	
My current or most recent health care coverage							
Very Satisfied	1,391	73.3%	1898	333	70.4%	472	0.6572 (0.6795)
Somewhat Satisfied	422	22.3%	1898	118	24.9%	472	
Somewhat Dissatisfied	54	2.8%	1898	13	2.7%	472	
Very Dissatisfied	30	1.6%	1898	9	2.0%	472	
Awareness About Health Care Coverage							
I understand the letters I receive from the Medicaid/BadgerCare program							
Agree	1,602	85.9%	1864	430	91.0%	472	0.0081 (0.108)
Disagree	262	14.1%	1864	42	9.0%	472	

ED use and copays	CLA			Parents			
	n	Percent	N (max possible count including non-respondents=1919)	n	Percent	N (max possible count including non-respondents=479)	p-value (adjusted)
I understand what payments are required							
Agree	1,543	84.0%	1836	415	88.5%	469	0.028 (0.047)
Disagree	293	16.0%	1836	54	11.5%	469	
I understand who is eligible							
Agree	1,632	88.2%	1850	442	93.5%	473	0.0022 (0.002)
Disagree	218	11.8%	1850	31	6.5%	473	
I understand how changes to the Medicaid/BadgerCare program might affect me							
Agree	1,331	72.7%	1829	376	80.5%	467	0.0025 (0.010)
Disagree	499	27.3%	1829	91	19.5%	467	

Notes: Table shows chi-square p-values (unadjusted) to check if the difference among CLA vs parents is significant. The denominator of the percentage of each outcome variable does not include "legitimate skip," "missing responses," "don't know," or "prefer not to share" (as they were not response categories in the main questionnaire).

Hypothesis 3.6. Hospitals vary in how they implement the required copayment for non-emergency use of the ED.

Primary Research Question 3.6. Are hospitals consistent in how they define non-emergent use of the emergency department, as necessary to apply the associated Medicaid copayment policy?

Question 3.6a. Do hospitals understand the policy requiring a copayment for non-emergent use of the emergency department? The Design Report proposed that we hold hospital focus groups to evaluate this hypothesis. Given the challenges faced by hospitals due to the COVID-19 pandemic, including ongoing staff shortages, we no longer plan to pursue this method and will rely on the beneficiary survey, interviews, and administrative data to understand how hospitals vary in their implementation of the ED co-pays (see Hypothesis 3.7). The interim survey and its attached qualitative data collection, for which one of the major domains will be the ED co-pays, we particularly believe will yield useful information about the ED co-pay implementation.

Hypothesis 3.7. Hospitals implement the policy requiring a copayment for non-emergent use of the emergency department in a consistent manner.

Primary research question 3.7. Are hospitals consistent in how they are implementing the policy requiring a copayment for non-emergent use of the emergency department?

Question 3.7a. Is the definition of non-emergent ED visits consistently applied across hospitals? To study this question, we examined the Medicaid claims and encounter data. We identified all emergency department visit claims for parents and childless adults from January 1, 2018, to March 31, 2022. In the administrative data, we are unable to directly observe the provider's decision-making process or their application of the prudent layperson standard that hospitals have been directed to use (as defined in 42 C.F.R. § 438.114). Instead, we provide two measures of non-emergent visits over time: one that identifies visits that were likely subject to the co-pay requirement with respect to the provider's application of the standard (generally referred to as "possible ED co-pay visits"); and one that assigns visits algorithmically, allowing non-emergent visits to be measured consistently over time, and represents a broader set of visits than those specifically subject to or targeted by the copayment policy (generally referred to as non-emergent visits).

The first measure identifies the set of visits that are billed in a way indicating them to be subject to the co-pay requirement. We identified a total of 24 possible ED co-pay visits over the 21 months from July 2020 to March 2022 which were billed according to the state's indications ([modifier ("U1"), procedure codes (99281:99285, revenue codes (450:459)]) and the visits took place at 8 different facilities. Fifteen of them took place after November 1, 2020. Of these, only 4 indicated a charge of $8 in the co-pay field constituting two different facilities. All had facility descriptions as either General Acute Care Hospitals (7) or Rehabilitation Units (1).

Our assessment is that it is not meaningful to report the ratio of visits for which copayments were assessed to the overall number of non-emergent visits at the hospital level as planned as it would be effectively zero for almost all facilities. We instead note some differences among hospitals that did and did not charge co-pays and describe hospital-level differences in total and non-emergent visit rates for CLA and parent beneficiaries over time, defining non-emergent

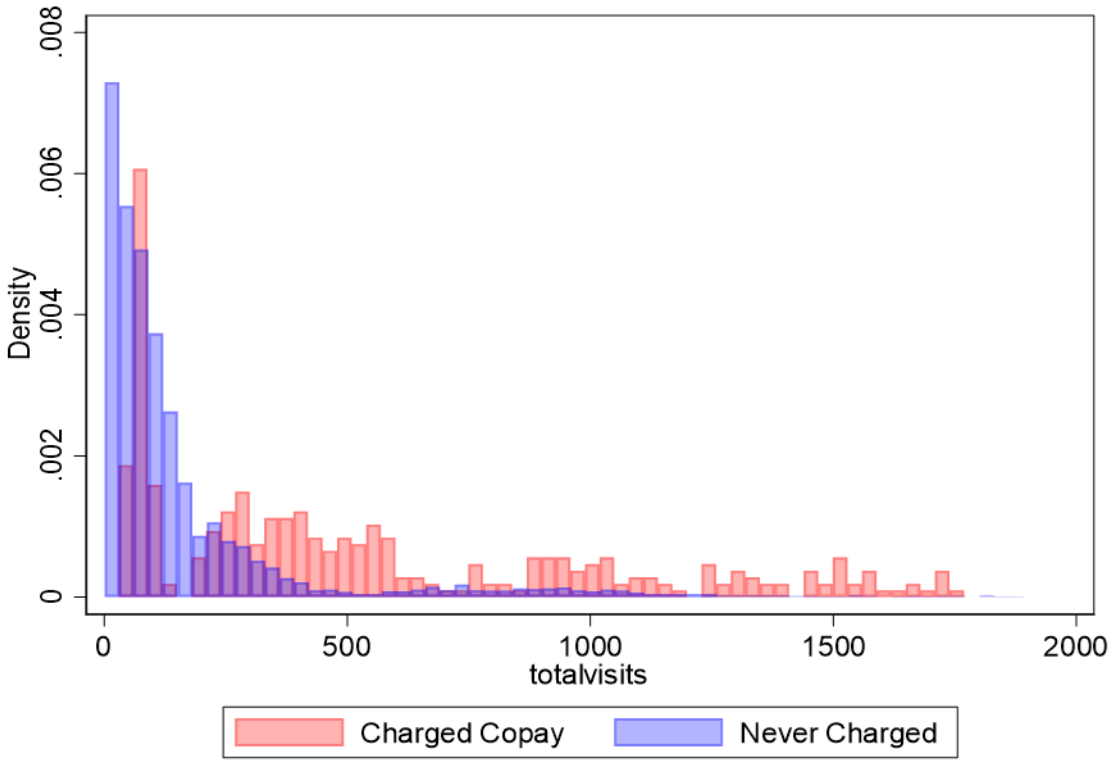
visits using a standardized algorithm[14] that probabilistically assigns visits as either non-emergent or emergent (and further classifies emergent visits as primary care treatable/ED care needed, and by whether or not they are likely to be preventable/avoidable, although we only use the emergent/non-emergent classifications in this analysis). We note that this measure of non-emergent visits was created as a way to use administrative records to measure population emergency department use, not as a way to triage patients or classify them for reimbursement purposes or to assess appropriateness of ED utilization, which may depend on factors not available for measurement in the administrative data. This measure allows us to create a time-consistent definition of the broader set of visits most likely to be impacted by the copayment policy. Our hospital level measures of non-emergent visits sum the probabilities that visits are non-emergent by hospital, eligibility group, and month.

In what follows, we restrict attention to facilities billing for emergency visits that are described either General Acute Care Hospitals (including critical access and rural) or Emergency Medicine; this removes one facility that charged at least one ED copayment but was classified as a Rehabilitation Unit. There were 2,146 separate facility IDs with these descriptions that billed for at least one visit during the study period, seven of which ever charged an ED co-pay. Since this is far larger than the number of hospitals in Wisconsin, we further limited to those with greater than 100 total visits from January 2018–December 2019. This left us with 87 facilities that did not charge a co-pay to include as well as the seven which did. The observation level is the facility-month-eligibility group and for an observation to be included in the analysis, at least one visit must have been billed per group per period (necessary to construct the ratio of nonemergent to total visits). This creates an unbalanced panel of hospital-eligibility groups.

In **Figure 3.7**, we plot a histogram of the distribution of total Medicaid parent/caretaker or CLA ED visits per hospital-month during January 2018 to March 2022, with hospitals that ever had a visit with a possible ED co-pay plotted separately from those that did not have a possible ED co-pay visit. Hospitals where co-pays may have been charged serve a higher volume of Medicaid patients, with 527 visits per month on average, compared to those that did not have any visits satisfying the co-pay criteria, which averaged 164 visits per month. However, not all hospitals with at least one ED co-pay visit were large: two of the seven facilities averaged under 100 Medicaid patient visits per month.

[14]See, for reference: Billings J, Parikh N, Mijanovich T. Emergency Department Use: The New York Story. New York (NY): Commonwealth Fund; 2000 Nov. (Issue Brief). Available at: https://www.commonwealthfund.org/sites/default/files/documents/___media_files_publications_issue_brief_2000_nov_emergency_room_use__the_new_york_story_billings_nystory_pdf.pdf

Figure 3.7: Histogram of Total Visits Per Month, by ED Co-Pay Status



The average ratio of total (parent/caretaker plus childless adult) nonemergent visits to total visits for facilities was quite similar regardless of whether they ever charged ED copays. For those that did, the ratio was .20, and for those that did not, the ratio was .19.

We include a difference-in-differences analysis in **Table 3.9** for total visits and the visit ratio, comparing these outcomes for parents vs. childless adult eligibility groups at the hospital-month level before and after November 2020, with hospital and calendar month fixed effects. We include two models, one that includes all months from January 2018 through March 2022 and one that excludes March 2020-March 2021. Although there was an absolute increase in visits and a decline in the ratio of nonemergent visits to total visits for CLAs, neither model shows any evidence of a decline in visits or the ratio of nonemergent to emergent visits compared to the control group of parents. If anything, the difference-in-differences suggests that CLAs had a relative increase in both visits and the ratio of non-emergent to all visits when compared to parents.

Table 3.9: Difference-in-Differences Analysis of Hospital-Level Visits Before and After Imposition of Copayments

	Model 1 (Includes all months)	Model 2 (Excludes pandemic period)
Fraction Nonemergent		
Coefficient	0.023	0.022
Robust Standard Error	(0.0043)	(0.0051)
P-Value	0.00	0.00
Baseline Average (CLA)	0.18	0.19
Post-Implementation Average	0.16	0.16
All Visits		
Coefficient	20.6	26.44
Robust Standard Error	(2.01)	(2.48)
P-Value	0.00	0.00
Baseline Average (CLA)	106	107
Post-Implementation Average	119	125

Conclusions, Interpretation, and Policy Implications

Some cost-sharing in the form of premiums and copayments is consistent with the waiver goal of providing beneficiaries with coverage that more closely aligns with commercial coverage, which typically features such requirements. With respect to whether the waiver's premium and copayment policies promote participant engagement and readiness to transition to commercial coverage, we turn to discussing results from the hypotheses.

With respect to Hypothesis 3.1, which posits that beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance, and for the hypotheses which rely on understanding the same population, we can provide some preliminary context. Data suggest that as the state exits the PHE, approximately 51,036 (19.7%) of CLA members could be subject to premiums as of March 2022. Prior to the PHE, this would have been 33,773 (21.7%) of CLA members. The actual number and fraction will depend on how many members will still be eligible as redeterminations progress during the unwinding of the maintenance of eligibility (MOE) policy.

Baseline survey results indicate that respondents with incomes above 50% FPL were more likely to report that they or their family would be charged a premium for Medicaid/BadgerCare (11.8% vs. 4.0%, $p<.01$), so there is some level of awareness of premiums even though they were suspended at the time of the survey. There were no statistically or economically important differences in the questions we asked about awareness of health coverage: whether members understand the letters they receive (more than 88% of respondents agree), whether they understand what payments are required (more than 86% of respondents agree), whether they understand who is eligible (more than 90% of respondents agree), and whether they understand how changes to the Medicaid/BadgerCare program might affect them, which had the lowest

agreement with more than 72% agreeing. We expect that policy awareness will increase once the suspension ends, and we recommend clear communication with members regarding how and when they will be charged as well as the consequences for nonpayment. Member awareness will be important for achieving the goal of engagement.

Because premiums are suspended during the public health emergency, we are unable to make any conclusions or interpretations regarding Hypothesis 3.2-3.4, which all involve understanding the causal effects of premium requirements (on enrollment in Medicaid, enrollment in commercial insurance, and on pent-up demand for medical care among beneficiaries disenrolled due to failure to pay).

If the imposition of a copayment for non-emergent use of the emergency department is expected to lead to more appropriate uses of medical care (Hypothesis 3.5), the target population of childless adults must have some awareness of the policy. In the baseline survey, the majority of which took place when co-pays were in effect, childless adults were more likely to report that they or their family had paid a co-pay for Medicaid/BadgerCare services in the last 12 months (37.2% vs. 30.1%, $p<.05$). However, baseline awareness of the ED co-pay policy was somewhat low, with the majority (79.2%) of childless adults reporting they "never need to pay a co-pay," 11.1% reporting the correct policy (vs. 6.4% of parents), and 9.7% reporting they "always need to pay a co-pay." While satisfaction measures were universally higher than 90%, awareness measures were lower among childless adults compared to parents, with a lower fraction indicating agreement with understanding the letters received from the program (85.9% vs. 91.0%, $p<.01$), what payments are required (84.0% vs. 88.5%, $p<.05$), who is eligible (88.2% vs 93.5%, $p<.01$), and possibly most importantly, how changes to the program might affect them (72.7% vs. 80.5%, $p<.01$). Because member awareness is an important component of the goal of engagement, this may suggest a need for refinement in communication strategies about the changes faced by beneficiaries going forward and may indicate that the policies in flux in 2020 were disproportionately difficult for the waiver population to understand.

Although emergency department visits trended down following the initial implementation of the copayment policy, they did so across the board for all emergency visit types and trended similarly for parents. This may be explained by pandemic trends rather than the co-pay policy. No sudden change was evident in November when the copayment requirement was re-initiated. Difference-in-differences models do not suggest an impact of the co-pay policy on total emergency visits, non-emergent visits as measured by an algorithm designed to classify emergency visits at the population level using administrative claims data, or primary care.

Regarding Hypothesis 3.6, whether hospitals vary in how they implement the required copayment for non-emergency use of the ED, and Hypothesis 3.7, whether hospitals implement the policy requiring a copayment for non-emergent use of the emergency department in a consistent manner, after November 2020, the copayment requirement was in effect, but there is no evidence of widespread charging of copayments. We identified 24 visits over the 21 months from July 2020 to March 2022 which were billed in the way the state requested visits requiring the co-pay to be billed. These visits took place at 8 different facilities. Thus, very few emergency department visits seem to have been subject to copayments in the claims data.

We cannot determine the explanation for these finding from our data; however, we offer several potential explanations. There may have been very few visits that hospitals would define as nonemergent using the prudent layperson standard published in the provider guideline. Alternatively, the limited number of billed visits may result from other reasons; for example, if the copayments cost more to collect than would result in revenue. Per Wisc. Stat. 49.45(18),

“providers are required to make a reasonable attempt at collecting the co-pay from the member unless the provider determines that the cost of collecting the co-pay is more than the amount the provider would collect.” This condition may apply for the case of the $8 copayment.

It is also possible that visits potentially subject to copayments were diverted to other facilities as there is a requirement to inform the beneficiary of the copayment. In our analysis of visit rates by eligibility group that compared childless adult to parent visits at the hospital level before and after implementation, we found no evidence of a decline in either total ED visits or the ratio of nonemergent to total visits, so we do not believe this to be the case. It also remains possible that parents are not a good comparison group for CLAs for these outcomes. The pandemic period complicates interpretations because if the two groups had a heterogenous response to the pandemic, there is no way to evaluate the counterfactual level of visits. Finally, there may not be consistent implementation of the policy. The pandemic period and its burden on hospitals complicates interpretations of these results as does the delayed implementation that was followed by retroactive suspension and re-implementation. We will continue to monitor these outcomes as planned and welcome any input on identifying relevant visits.

Next Steps

We will continue to monitor trends in the relevant outcomes and prepare our analysis of premium-related measures when the public health emergency is lifted. We will also obtain the TPL and DOL data and resolve issues with the WHIO data. We will continue to refine the difference-in-differences models of the ED co-pays (in particular, adjusting for the age compositions of the populations). Finally, we expect that the interim survey and its attached qualitative data collection, for which one of the major domains will be the ED copays, will yield additional useful information about the ED co-pay implementation.

PROVISION 4: EXPANSION OF COVERAGE FOR SUBSTANCE USE DISORDER TREATMENT SERVICES

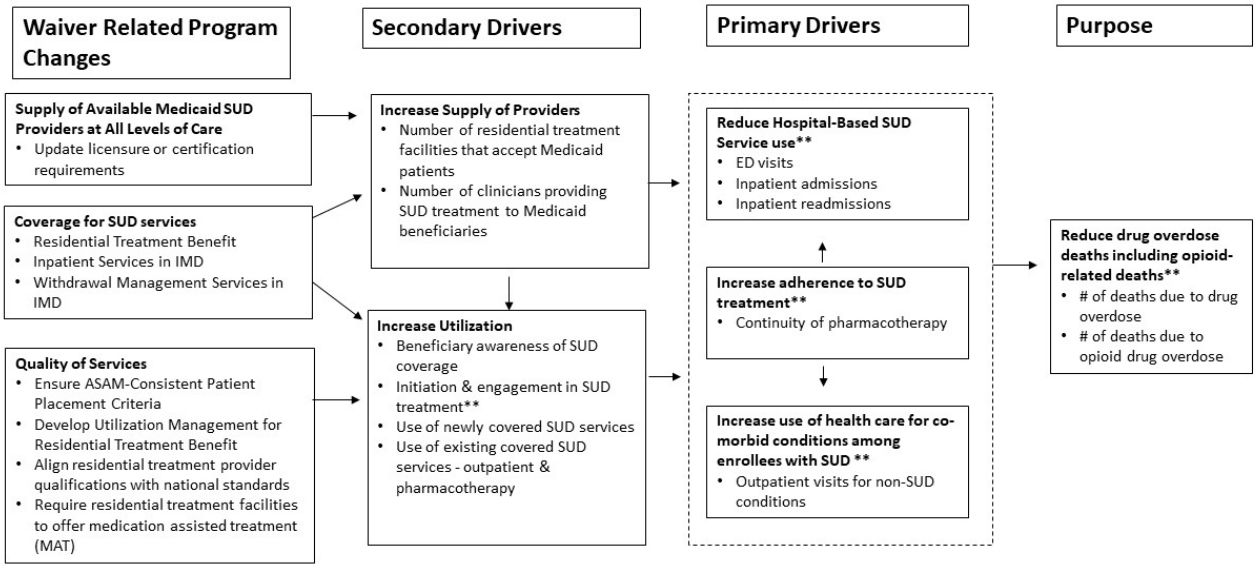
Background

This provision of the waiver modifies the benefit package for substance use disorder (SUD) treatment for all full-benefit Medicaid enrollees. Specifically, the demonstration waiver authorizes federal funding for treatment provided to enrollees in institutions for mental disease (IMD), allowing Wisconsin Medicaid to make two significant programmatic changes: 1) establish a residential treatment benefit for SUD; and 2) cover existing Medicaid services when they are provided in an IMD including medically supervised withdrawal management, inpatient services, and medication-assisted treatment (MAT).

Additionally, this provision includes several new or revised policies to support the implementation and quality of these newly covered services. These policies are as follows: updated licensure/certification requirements for providers; ensuring placement criteria consistent with American Society of Addiction Medicine (ASAM); utilization management for the residential treatment benefit; residential treatment provider qualifications that align with national standards; requirement that residential treatment facilities offer MAT.

Evaluation Questions and Hypotheses

Figure 4.1: Driver Diagram for Substance Use Disorder Treatment Services Coverage Expansion



***Goal for SUD treatment reform per Wisconsin Medicaid's SUD Implementation Protocol, June 2019*

Figure 4.1 displays the driver diagram that informs this component of the evaluation. In the logic of a driver diagram, secondary drivers are mechanisms or conditions that are necessary to achieve the primary drivers, which in turn contribute directly to realizing the overall purpose of the demonstration waiver. **Figure 4.1** also includes the specific programmatic changes that the

Wisconsin Medicaid program will implement under the SUD demonstration waiver. We do so to show how these changes hypothetically relate to the demonstration waiver's overall goal of reducing drug overdose deaths in the Medicaid population.

The programmatic changes fall within three functional categories: supply of Medicaid SUD providers at all levels of care; coverage for SUD services; and quality of SUD services. These changes have the potential to impact the rate of drug overdose deaths through a sequence of mechanisms. Most directly, the programmatic changes have the potential to increase the supply of SUD providers that accept and treat Medicaid enrollees, and to increase Medicaid enrollees' use of SUD services. These mechanisms are represented in **Figure 4.1** as secondary drivers.

These secondary drivers may, in turn, influence the primary drivers: 1) enrollees' health care needs and preferences, and 2) their capacity to seek care that is suited to their needs. For example, increased access to SUD providers and increased use of SUD services may reduce symptoms of SUD, increase the likelihood of recovery, increase engagement in health care, and foster knowledge and awareness of treatment needs. These changes may thus enable enrollees to remain in SUD treatment, reduce hospital-based SUD service use, and/or address previously ignored physical and mental health co-morbidities. Improvements in outcomes considered primary drivers then have the potential to influence the waiver's overall goal of reducing drug overdose deaths among Medicaid enrollees.

We derive the evaluation design for the SUD demonstration waiver from the logic of the driver diagram and will proceed in stages. First, we monitor and describe changes over time in the secondary and primary drivers and assess the causal effects of the demonstration waiver on the outcomes listed as secondary drivers because the planned programmatic changes are most directly related to these outcomes.

In the second stage of the evaluation, we will evaluate the causal effects of the SUD demonstration waiver on the outcomes noted as primary drivers in **Figure 4.1**—conditional on finding that the waiver influences the supply of SUD providers and/or use of SUD services. If the SUD demonstration waiver has no significant impact on the secondary drivers, we will not attempt to estimate the causal effects of the SUD demonstration waiver on primary drivers because there would be no empirical basis on which to expect an effect. Rather, we will conduct descriptive analyses to quantify the association between the primary drivers and factors that may provide insight to the Wisconsin Medicaid program regarding potential change over time in these outcomes.

If we find that the SUD demonstration waiver significantly impacts the primary drivers as hypothesized in **Figure 4.1,** we will assess the demonstration waiver's causal impact on the rate of drug overdose deaths among Medicaid beneficiaries. If the SUD waiver has no effect on the primary drivers, or if we do not conduct that causal analysis because of null effects in the first stage of the evaluation, we will conduct descriptive analyses to quantify the association between the rate of deaths due to drug overdose and factors that may provide insight to the Wisconsin Medicaid program regarding potential change over time in this outcome.

In this interim report, we provide descriptive analysis of selected outcomes for the secondary and primary drivers before implementation of the provision and during its first year of operations in 2021, as well as preliminary causal analysis examining the change in SUD provider supply following implementation of Provision 4. The evaluation questions and hypotheses are noted below. Consistent with the CMS guidance for evaluation of SUD waivers, the evaluation for the

SUD portion is organized around evaluation questions, with specific hypotheses following each question in contrast to Provisions 1–3.

Question 4.1. Does the SUD demonstration waiver increase the supply of SUD providers for Medicaid enrollees?

H4.1a. The SUD demonstration waiver will increase the supply of SUD providers that accept and/or treat Medicaid enrollees.

Question 4.2. Does the SUD demonstration waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees?

H4.2a. After implementation of the SUD demonstration waiver, enrollees' awareness of available SUD treatment services will increase over time.

H4.2b. The SUD demonstration waiver will increase use of SUD treatment in IMD settings.

H4.2c. The SUD demonstration waiver will increase initiation and engagement in SUD treatment.

Question 4.3. Does the SUD demonstration waiver change Medicaid enrollees' use of existing covered SUD services?

H4.3a. The SUD demonstration waiver will increase or have no effect on SUD outpatient services and pharmacotherapy treatment provided outside IMD settings.

H4.3b. The SUD demonstration waiver will reduce use of hospital-based SUD services, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.

H4.3c. The SUD demonstration waiver will increase access to health care for co-morbid physical and mental health conditions among enrollees with a SUD, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.

H4.3d. The SUD demonstration waiver will increase adherence to SUD treatment, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.

Question 4.4. Does the SUD demonstration waiver reduce the rate of drug overdose deaths among Medicaid enrollees, including opioid-related deaths?

H4.4a. The SUD demonstration waiver will reduce the rate of drug overdose deaths among Medicaid beneficiaries, including opioid-related overdose deaths, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.

Question 4.5. What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver?

The final research question, Q4.5, follows from the recommendations in the Centers for Medicare and Medicaid Services (CMS) technical assistance guidance on SUD demonstration waiver evaluations. Consistent with this guidance, there are no accompanying hypotheses.

Methodology

Evaluation Design

We use descriptive analyses to characterize changes over time in evaluation outcomes and a difference-in-differences (DiD) design for causal analysis. The Design Table, **Table 4.1**, provides a summary of the key features of the evaluation design, including evaluation questions, hypotheses, data sources, and analytic approaches. The Analytical Approach column includes both the originally proposed analytical strategies and the revised strategies that we developed in response to the declaration of the public health emergency (PHE) and the recommendations of the CMS.

Table 4.1 Provision 4: Summary of Questions, Hypotheses, Data Sources, and Analytic Approaches for Evaluation of the SUD Demonstration Waiver

NOTE: This provision was implemented on February 1, 2021.

Driver	Measure Description [steward]	Numerator	Denominator	Data Source	Comparison Group(S)	Analytical Approach	
						Original	Revised
Q4.1 Does the SUD demonstration waiver increase the supply of SUD providers for Medicaid enrollees? **H4.1a. The SUD demonstration waiver will increase the supply of SUD providers that accept and/or treat Medicaid enrollees.**							
Secondary Driver (Increase Supply of Providers)	Number of residential treatment facilities that accept Medicaid patients [n/a]	Facility reports willingness to accept Medicaid patients	Federal, state, and local government and private residential treatment facilities that provide substance abuse treatment services	National Survey of Substance Abuse Treatment Facilities	All treatment facilities in Wisconsin and in selected comparison states for the measurement period	DiD	Exclude 2020 from the baseline period for DiD models to avoid COVID-19 related effects on outcomes during the baseline. Modify selection criteria of comparison states to include state-level COVID-19 outcomes. Interpretation of DiD findings will include discussion of the potential residual confounding effects of the pandemic.
Secondary Driver (Increase Supply of Providers)	Proportion of Medicaid clinicians that provide treatment for SUD [n/a]	Number of clinicians that provide one or more services with an SUD diagnosis in any category of service (i.e., outpatient, inpatient, emergency department) in the measurement period	Number of active clinicians that provide any outpatient, inpatient, IMD, or emergency department service to one or more adult Medicaid enrollees in the measurement period.	WI Medicaid claims and encounter	Clinicians who provided any service to one or more adult Medicaid enrollee during the three years before SUD waiver implementation, and clinicians who provided any service to one or more adult Medicaid enrollee during the three years after SUD waiver implementation.	ITS	No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Implement a DiD in which we compare the change in # of clinicians that provide one or more services with an SUD diagnosis, to the change in # of clinicians who provide one or more services with a diabetes diagnosis. Exclude 2020 from the baseline period for DiD models to avoid COVID-19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.

Driver	Measure Description [steward]	Numerator	Denominator	Data Source	Comparison Group(S)	Analytical Approach	
						Original	Revised
Q4.2 Does the SUD demonstration waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees?							
H4.2a. After implementation of the SUD demonstration waiver, enrollees' awareness of available SUD treatment services will increase over time							
Secondary Driver (Increase Utilization)	Awareness of Medicaid coverage for SUD services [n/a]	Beneficiary Survey	Beneficiary Survey	Beneficiary Survey	Cross-sectional sample of enrollees at two post-implementation time points	Descriptive Analysis	The delayed implementation of the SUD waiver results in one survey assessment pre-implementation (Fall 2020). Descriptive analysis will compare pre- and post-implementation outcomes recognizing the potential confounding effect of the pandemic.
H4.2b. The SUD demonstration waiver will increase use of SUD treatment in IMD settings including residential treatment, inpatient treatment, medically supervised withdrawal services and MAT for opioid use disorder.							
Secondary Driver (Increase Utilization)	Any use of SUD treatment in IMD setting and volume of use, overall and by service type [n/a]	Any SUD treatment use overall and by service type; quantity of SUD treatment services received by service type.	All admissions during the measurement period from treatment facilities that receive state funds or federal block grant funds to provide alcohol and/or drug treatment services	Treatment Episode Dataset - Admissions	Admissions to drug treatment facilities in WI and a set of comparison states for three years before and two years after implementation of the SUD demonstration waiver in WI.	DID	Exclude 2020 from the baseline period for DiD models to avoid COVID-19 related effects on outcomes during the baseline. Modify selection criteria of comparison states to include state-level COVID-19 outcomes. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
H4.2c. The SUD demonstration waiver will increase initiation and engagement in SUD treatment.							
Secondary Driver (Increase Utilization)	Initiation and engagement of alcohol and other drug dependence treatment [NCQA-IET]	Initiation- # of enrollees who initiated treatment w/in 14 days of the index episode. Engagement- # of enrollees who initiated treatment & had >=2 additional services with a diagnosis of AOD w/in 30 days of initiation visit	Enrollees with a new diagnosis of AOD received between 1/1-11/15 of the measurement year, and continuous enrollment 60 days before new diagnosis and 44 days post.	WI all-payer claims database (DD analysis); Medicaid claims and encounter (validation analysis)	For DD: Non-elderly adults enrolled in Medicaid and non-elderly adults enrolled in private insurance during the three years before and/or after implementation of the waiver.	ITS and DiD	No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Implement descriptive trend analysis with Medicaid data to validate all-payer data. Exclude 2020 from the baseline period for DiD models to avoid COVID-19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.

Driver	Measure Description [steward]	Numerator	Denominator	Data Source	Comparison Group(S)	Analytical Approach	
						Original	Revised
Q4.3 Does the SUD demonstration waiver change Medicaid enrollees' use of existing covered SUD services?							
H4.3a. The SUD demonstration waiver will increase or have no effect on SUD outpatient services, including in-person and telehealth, and pharmacotherapy treatment provided outside of IMD settings.							
Secondary Driver (Increase Utilization)	Any outpatient visit for SUD treatment, and volume of outpatient visits for SUD treatment. [MODRN]	Any, and # of non-emergency department, outpatient claims with a SUD diagnosis and of an OUD diagnosis. Outpatient visits include in-person and telehealth visits.	All member-months observed for target population and comparison group during the measurement period	Same as H4.2c	Same as H4.2c	Same as H4.2c	No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
Secondary Driver (Increase Utilization)	Any medication assisted treatment for opioid use disorder [MODRN]	Any claim for buprenorphine, naltrexone (oral), injectable naltrexone, buprenorphine/Naloxone or a HCPCs code for buprenorphine or buprenorphine/ naloxone, methadone administration, or naltrexone	All member-months observed for enrollees with at least one encounter with a diagnosis of OUD in inpatient, outpatient and professional claims during the measurement period	Same as H4.2c	Same as H4.2c	Same as H4.2c	No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID-19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
Secondary Driver (Increase Utilization)	Any outpatient visit for SUD treatment; any prescription medication treatment for SUD [n/a]	Beneficiary Survey	Beneficiary Survey	Beneficiary Survey	Cross-sectional sample of enrollees at two post-implementation time points	Descriptive Analysis	The delayed implementation of the SUD waiver results in one survey assessment pre-implementation (Fall 2020). Descriptive analysis will compare pre- and post-implementation outcomes recognizing the potential confounding effect of the pandemic.

Driver	Measure Description [steward]	Numerator	Denominator	Data Source	Comparison Group(S)	Analytical Approach	
						Original	Revised
H4.3b. The SUD demonstration waiver will reduce use of hospital-based services, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.							
Primary Driver (Reduce Hospital-Based SUD Service Use)	Any emergency department visit with a SUD-diagnosis, and volume of emergency department visits with an SUD diagnosis [MODRN]	Any, and # of ED visits with a SUD diagnosis of any kind; any and # of ED visits with an OUD diagnosis	All member-months observed for target population and comparison group during the measurement period	Same as H4.2c	Same as H4.2c	Descriptive Analysis, and same as H4.2c	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID-19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
	Any hospitalization with a SUD diagnosis, and number of hospitalizations with a SUD diagnosis [MODRN]	Any, and # of hospitalizations with a SUD diagnosis of any kind; any, and # of hospitalizations with an OUD diagnosis	All member-months observed for target population and comparison group during the measurement period	Same as H4.2c	Same as H4.2c	Descriptive Analysis, and same as H4.2c	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID-19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
Primary Driver (Reduce Hospital-Based SUD Service Use)	Any, and volume of readmissions within 30-days following hospitalization for a SUD diagnosis [n/a]	Any, and # of readmissions to the hospital within 30-days for an SUD diagnosis of any kind; any and # of readmissions to the hospital within 30-days for an OUD diagnosis	Hospital discharges with a diagnosis of SUD in the measurement period among enrollees with continuous enrollment for a least 31 days post-hospitalization.	Same as H4.2c	Same as H4.2c	Descriptive Analysis, and same as H4.2c	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID-19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
	Any emergency department visit for a SUD; any hospitalization for a SUD [n/a]	Beneficiary Survey	Beneficiary Survey	Beneficiary Survey	Cross-sectional sample of enrollees at two post-implementation time points	Descriptive Analysis	The delayed implementation of the SUD waiver results in one survey assessment pre-implementation (Fall 2020). Descriptive analysis will compare pre- and post-implementation outcomes recognizing the potential confounding effect of the pandemic.

Driver	Measure Description [steward]	Numerator	Denominator	Data Source	Comparison Group(S)	Analytical Approach	
						Original	Revised
H4.3c The SUD demonstration waiver will increase use of health care for co-morbid physical and mental health conditions among enrollees with a SUD, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.							
Primary Driver (Increase Use of Health Care for Co-Morbid Conditions)	Any outpatient visit for a non-SUD diagnosis; Quantity of outpatient visits for a non-SUD diagnosis [n/a]. Outpatient visit includes in-person and telehealth visits.	Any, and # of non-emergency department, outpatient claim with a non-SUD diagnosis; any, and # of non-emergency department outpatient claims with a non-SUD diagnosis	All member-months observed for target population and comparison group members with at least one inpatient, outpatient, emergency department or IMD claim with an SUD diagnosis	Same as H4.2c	Same as H4.2c	Descriptive Analysis, and same as H4.2c	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID-19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
Primary Driver (Increase Use of Health Care for Co-Morbid Conditions)	Health status and chronic conditions; access and use of general medical care; Substance use and SUD; access and use of drug Tx; knowledge/ understanding of waiver provisions	Beneficiary Survey	Beneficiary Survey	Survey	Cross-sectional sample of enrollees at two post-implementation time points	Descriptive Analysis	The delayed implementation of the SUD waiver results in one survey assessment pre-implementation (Fall 2020). Descriptive analysis will compare pre- and post-implementation outcomes recognizing the potential confounding effect of the pandemic.

Driver	Measure Description [steward]	Numerator	Denominator	Data Source	Comparison Group(S)	Analytical Approach	
						Original	Revised
H4.3d. The SUD demonstration waiver will increase adherence to SUD treatment, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.							
Primary Driver (Increase adherence to SUD treatment)	Continuity of pharmacotherapy for OUD [NQF 3175, MODRN]	Enrollees who have at least a) 90 days, and b) 180 days of continuous pharmacotherapy with a medication prescribed for OUD without a gap of more than 7 days.	Enrollees that meet Inclusion criteria: individuals with a diagnosis of OUD in inpatient, outpatient or professional claims at any time during the measurement period; and at least one claim for an oral OUD medication during the measurement period received with at least 180 days before the end of the final calendar year of the measurement period; and continuously enrolled for at least 6 months after the month with the first OUD medication claim in the measurement period with no gap in that enrollment.	Same as H4.2c	Same as H4.2c	Descriptive Analysis, and same as H4.2c	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID-19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential residual confounding effects of the pandemic.

Driver	Measure Description [steward]	Numerator	Denominator	Data Source	Comparison Group(S)	Analytical Approach	
						Original	Revised
Q4.4 Does the SUD demonstration waiver reduce the rate of drug overdose deaths among Medicaid enrollees including opioid-related deaths?							
H4.4a. The SUD demonstration waiver will reduce the rate of drug overdose deaths among Medicaid beneficiaries, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.							
Purpose (Reduce drug overdose deaths including opioid-related deaths)	Rate of drug overdose death, and opioid-related drug overdose death [WIDHS - Technical Notes Annual Death Report, 2017, P-01170-19]	# of deaths due to any type of drug overdose; # of deaths due to opioid drug overdose	Medicaid non-elderly adult population for the measurement period; Estimated Wisconsin non-elderly adult population not enrolled in Medicaid for the measurement period; Estimated Wisconsin non-elderly population in the measurement period.	WI Death Records; Census Estimates; Medicaid Enrollment	For DD: Wisconsin non-elderly adult population not enrolled in Medicaid during the measurement period	Descriptive Analysis, ITS, DiD	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID-19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
Q4.5 What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver?							
	Total health care costs; SUD and non-SUD costs; category-specific costs (e.g., inpatient, pharmacy, outpatient non-ED, outpatient ED, long-term care). [CMS SUD Evaluation Design TA Attachment A]	Medicaid amount paid for each outcome noted.	All member-months observed during the measurement period for the target population.	Medicaid claims and encounter data.	Non-elderly adult Medicaid beneficiaries enrolled during the 3 years before and/or after waiver implementation.	Descriptive analysis and ITS	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions.
Note: MODRN refers to the Medicaid Outcomes Distributed Research Network's Opioid Use Disorder workgroup. https://www.academyhealth.org/MODRN							

Target and Comparison Populations

The evaluation focuses on non-elderly adult, full-benefit Medicaid beneficiaries, ages 21–64. Specifically, the population includes individuals ages 21–64 with at least one month of eligibility during the evaluation period (currently 2017–2021), in any of the following eligibility categories: parent/caretakers, childless adults, pregnant women, income extension, and disabled. The eligibility categories are defined according to the program identification numbers used to generate Forward Health enrollment reports: parents/caretakers (3), childless adults (25), pregnant women (1, 7, 9), income extensions (6), and disabled (10).

In addition to the full study population, we identify the subset of this population in each year with a history of substance use for select analyses. This subset includes beneficiaries with any outpatient, emergency department (ED) or inpatient claim in the year that includes a diagnosis of abuse or dependence of any of the following substances: alcohol; opioids; cannabis; sedative, hypnotic, or anxiolytic; cocaine; other stimulant; hallucinogen; nicotine; inhalant; and other psychoactive substance.

We will employ several comparison groups; these vary according to the research question as summarized in **Table 4.1**. In the following paragraphs, we provide additional description of the target and comparison populations for the evaluation questions for which results are provided in this Interim Report.

Question 4.1. Does the SUD demonstration waiver increase the supply of SUD providers for Medicaid enrollees? The target population is clinicians who provide SUD services to enrollees. We use Wisconsin Medicaid claims and encounter data to identify the clinicians who provided any outpatient, inpatient, or emergency department service with a diagnosis of SUD to an adult Medicaid beneficiary during the study period. The comparison population is clinicians who provide diabetes care to enrollees. Using the Medicaid claims and encounter data, we identify clinicians who provided any outpatient, inpatient, or emergency department service with a diagnosis of diabetes to an adult Medicaid beneficiary during the study period. This comparison group represents a plausible counterfactual, conditional on two assumptions: expanded coverage for SUD treatment does not influence the supply of diabetes' providers in Medicaid; and diabetes and SUD providers otherwise respond similarly to Medicaid programmatic and secular events.

Question 4.2. Does the SUD demonstration waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees? First, we will compare respondents to the first survey of Medicaid beneficiaries that the team fielded in Calendar Year (CY) 2020 to the final beneficiary survey that we will field in CY2023, to determine the magnitude of potential increase in beneficiary awareness of SUD treatment services in the years following its implementation (H4.2a). In the current report, we present results for the CY2020 survey. Second, we will compare use of residential SUD treatment over time among Medicaid beneficiaries relative to commercially-insured adults within the state using the Wisconsin all-payer claims database from the Wisconsin Health Information Organization (WHIO). A within-state Medicaid comparison group is not possible because the benefit is available to all full-benefit enrollees. In the current report, we describe trends over time for the Medicaid beneficiary population.

Question 4.3. Does the SUD demonstration waiver change Medicaid enrollees' use of existing covered SUD services? We will compare use of existing covered SUD services over time among Medicaid beneficiaries relative to commercially-insured adults within the state using

the Wisconsin all-payer claims database, WHIO. In the current report, we describe trends over time for the Medicaid beneficiary population using the Medicaid claims and encounter data.

Question 4.4. Does the SUD demonstration waiver reduce the rate of drug overdose deaths among Medicaid enrollees including opioid-related deaths? The target population includes non-elderly adult, full-benefit Medicaid beneficiaries enrolled at any point during the analytical pre-period for this question, 2017–2019, and the post-period, 2021–2022. The comparison population includes non-elderly adult Wisconsin residents during the same time periods who are not enrolled in Medicaid. Using a DiD framework, we will compare the change in death rate due to drug overdose after implementation of this provision (2021–2022) relative to the pre-period (2017–2019) for the target and comparison populations. We will report these findings in the Final Report after complete mortality data for these time periods are available.

Question 4.5. What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver? The target population includes non-elderly adult, full-benefit Medicaid beneficiaries enrolled at any point between February 2017 and January 2023. There is no comparison population for this descriptive evaluation question. In the current report, we summarize health care expenditures during the evaluation period beginning in 2017 through 2021.

Evaluation Period

The provision to expand coverage for substance use disorder treatment services took effect on February 1, 2021. The evaluation period for this provision waiver is February 1, 2017, to January 31, 2023. The specific years included in the evaluation vary according to the question and hypothesis. For all difference-in-differences analyses we omit 2020 to reduce the potential confounding effect of the declaration of the public health emergency on the outcomes.

Evaluation Measures

The complete list of outcome measures included in this interim report for Provision 4 is shown in **Table DW1** of the Demonstration Waiver and Evaluation Background section of this report. Additional information about the measures is provided below.

Question 4.1. Does the SUD demonstration waiver increase the supply of SUD providers for Medicaid enrollees? The primary outcome measure is the number of providers per 1,000 Medicaid beneficiaries ages 21–64 per month (H4.1a). We constructed this measure for two types of providers, SUD and diabetes. To do so, we identified the number of unique providers who had at least one claim with an ICD-10 diagnosis code of SUD or of diabetes in any position in the outpatient, emergency department, or inpatient setting in the month. We used the national provider identification number to identify unique providers.

Question 4.2. Does the SUD demonstration waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees? We assess both awareness of coverage for residential treatment of SUD (H4.2a) and receipt of residential SUD services (H4.2b). Using the Medicaid Beneficiary Survey, we assess awareness by asking respondents if their insurance plan covers residential drug treatment. We assess use of the newly covered residential SUD treatment using the Medicaid claims and encounter data. Following the ForwardHealth Update 2020-42, we identified claims for residential SUD treatment as those with a procedure code of H0018 coupled with the revenue code of 1002.

Question 4.3. Does the SUD demonstration waiver change Medicaid enrollees' use of existing covered SUD services? To address this question, we assess changes in health care in several service categories: outpatient visits and pharmacotherapy treatment for SUD (H4.3a); and hospital-based SUD services (4.3b).

We used procedure codes and admission and discharge dates to identify outpatient visits, emergency department visits, and inpatient stays. SUD-related care is defined as a claim with an ICD-10 diagnosis code of abuse or dependence of any of the following substances: alcohol; opioids; cannabis; sedative, hypnotic, or anxiolytic; cocaine; other stimulant; hallucinogen; nicotine; inhalant; and other psychoactive substance. Diagnosis codes that are specifically related to remission of an SUD are excluded from the definition of SUD diagnosis because the focus is on treatment for SUDs.

We constructed monthly and annual binary and count variables for in-person and telehealth-based visits with any diagnosis of SUD and with a diagnosis of opioid use disorder (OUD) specifically. Similarly, for hospital-based care, we constructed monthly and annual binary and count variables to capture health care with any SUD diagnosis and with a diagnosis of OUD. Additionally, we constructed a binary measure of all-cause hospital readmission within 30 days of a SUD-related hospitalization.

We constructed four binary measures to assess receipt of medication treatment for a substance use disorder within the calendar year. Medications for opioid use disorder include naltrexone, buprenorphine, and methadone. Medications for tobacco use disorder include varenicline, nicotine replacement, and bupropion. Medications for alcohol use disorder includes naltrexone, acamprosate, and disulfiram. A summary measure of any medication for substance use disorder takes on a value of one if the beneficiary has a prescription claim for any of the three categories noted above.

Question 4.5. What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver? We calculated the average annual expenditures per beneficiary for the study cohort by applying the WI Medicaid fee-for-service fee schedule to all encounter and fee-for-service claims in the categories of outpatient, emergency department, inpatient care use, and prescription medications. These expenditures are also broken down to show SUD-related expenditures. Consistent with the definition used above to summarize health care use, we identified a claim as SUD-related if there was a SUD diagnosis in any position on the claim.

Data Sources

Evaluation of this provision involves multiple data sources. The data sources are described below in **Table 4.2**, along with the hypotheses for which these data will be used.

Table 4.2: Data Sources

	Hypotheses
All-Payer Claims Database, WHIO. Use the member file to identify both the Medicaid and privately insured samples to implement difference-in-differences analyses, and the claims files as the source of health care-use related outcomes. We will purchase the data for the evaluation years from the WHIO. In the evaluation of the SUD provision of the waiver, the WHIO provides a source for a within state comparison group of commercially insured individuals.	H4.2c H4.3a-d
American Community Survey (ACS). To estimate the annual size of the adult population in Wisconsin by age, an input into calculating age-adjusted rate of death due to drug overdose overall and opioid-related specifically. The ACS is a publicly available survey.	H4.4a
Medicaid beneficiary survey. To assess enrollees' awareness of coverage for SUD treatment services under Medicaid, use of those services and self-reported treatment outcomes particularly among individuals who self-report harmful substance use. The Medicaid Beneficiary Survey is designed and implemented by this evaluation team.	H4.2a H4.3a H4.3b
Medicaid enrollment, claims, and encounter data. We obtain enrollment, claims and encounter data through regular extracts from the Department of Health Services. We use the fee-for-service allowable charges schedule to impute costs for encounter data.	H4.1a H4.2c H4.3 H4.4a, Q4.5
National Survey of Substance Abuse Treatment Services (N-SSATS). This N-SSATS is the key source of treatment facilities and facility characteristics in each state for our analysis of facility acceptance of Medicaid patients. The N-SSATS is a publicly available dataset.	H4.1a
Treatment Episode Data Set – Admissions (TEDS-A). The TEDS-A is the source of outcome data to assess Medicaid enrollee use of SUD services within an IMD setting. This dataset is published approximately two-years after the close of the calendar year (e.g., May 2019 for the 2017 dataset), so we expect to use five datasets covering the years 2017–2021.	H4.2b
Wisconsin Death Records. To obtain deaths due to drug overdose overall and opioid-related specifically. We will obtain these data from the Wisconsin Department of Health Services Vital Records Services.	H4.4a

Analytic Methods

A complete summary of the analytic methods for evaluation of Provision 4 is provided in **Table 4.1**. We provide additional description below for the methods used to generate the results presented in this Interim Report.

We will implement descriptive analyses to characterize the population and outcomes over time (Q4.1, Q4.2, Q4.3, Q4.5). We will implement a difference-in-differences (DiD) model to test the equivalence of a change in outcome after implementation of the SUD demonstration waiver relative to the pre-waiver period for the target group relative to a change in the outcome for the comparison group (Q4.1, Q4.4). In the current report, we implement the DiD approach to estimate the change in the supply of SUD providers compared to the change in supply of diabetes providers after implementation of the SUD provision compared to the prior period.

Our application of DiD regression analyses to the evaluation of a change in SUD provider supply is described below beginning with the general form of the model.

$$Y_{it} = \beta_1 TG_i + \beta_2 post_t + \beta_3 (TG_i * post_t) + \varepsilon_{it}$$

Y is an outcome of interest for unit *i* at time *t*, TG is an indicator for membership in the target group, and $post$ is an indicator for the post-waiver period, the period on or after the first implementation date for the SUD demonstration waiver. Observations are at the unit and time period (e.g., person-month, facility-year, etc.,) that is appropriate to the outcome.

Methodological Limitations

As noted in the Background section above, the evaluation of Provision 4 proceeds in stages. We first monitor and describe changes over time in the secondary and primary drivers and estimate the causal effect of Provision 4 on secondary drivers. This Interim Report includes preliminary results for the descriptive stage of the evaluation for outcomes related to questions 4.1, 4.2, 4.3, and 4.5, through the first year of the provision's implementation. These descriptive analyses are not designed to produce causal estimates. The current report additionally includes preliminary results estimating the effect of Provision 4 on SUD provider supply. To do so, we use a DiD design which allows us to identify the causal effect of the SUD demonstration waiver conditional on the assumption that the outcomes for the target and comparison groups would have trended similarly over time in the absence of the implementation of the waiver. While this assumption is not directly testable, we assess its plausibility by comparing the pre-intervention outcome trends for the target and comparison groups. Changes in the composition of the beneficiary population coincident with implementation of the SUD provision that are related to the demand for SUD or diabetes care may confound the relationship between implementation of the provision and provider supply. In future analyses, we will incorporate population characteristics into the regression models to account for this possibility.

Results

The overall study population is described in **Figure 4.2** and **Table 4.3**. **Figure 4.2** provides an overview of enrollment trends by eligibility category. The baseline period for our difference-in-differences analytic models includes January 2017 to December 2019 and omits 2020 to mitigate the confounding effects of the public health emergency as discussed in the Evaluation Design Report (Attachment 1). We include 2020 outcome data in the descriptive analyses presented in this report for completeness.

Figure 4.2: Enrollment Trends by Eligibility Category, 2017–2021

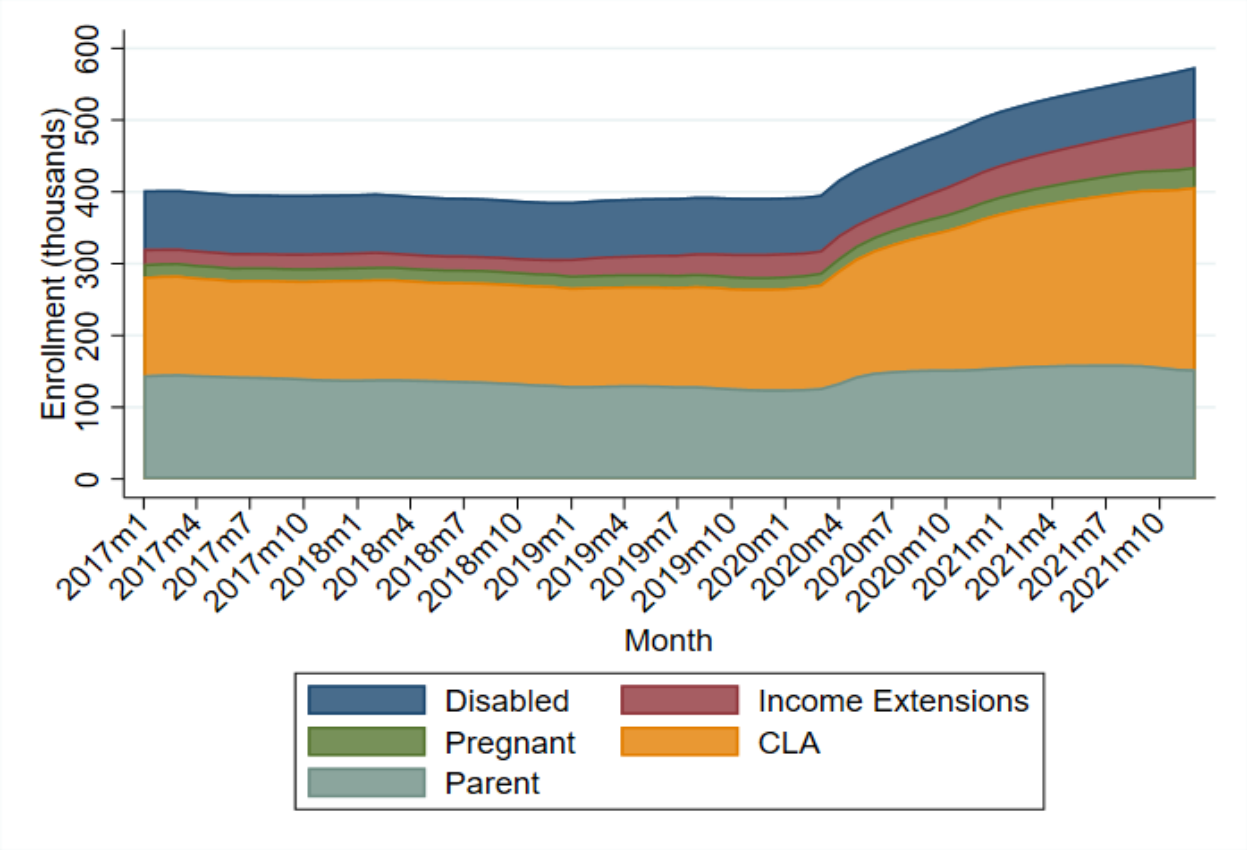


Table 4.3: Characteristics of Study Cohort, 2017–2021

	2017	2018	2019	2020	2021
N=unique subjects	527253	515304	506685	536238	601224
Average # months enrolled	9.10	9.10	9.30	10	10.9
Eligibility Group, %					
Childless Adults	37.7%	38.3%	38.9%	41.4%	44.2%
Parents & Caretakers	35.0%	34.2%	32.2%	31.8%	28.9%
Pregnant Women	5.6%	5.7%	5.5%	5.1%	5.2%
Income Extension	5.1%	5.1%	6.7%	6.7%	8.8%
Disabled	16.6%	16.7%	16.6%	15.1%	12.8%
Age Group, %					
21-34	46.7%	46.3%	45.8%	45.6%	45.7%
35-49	31.2%	31.5%	31.9%	32.4%	32.5%
>49	22.1%	22.2%	22.3%	22.1%	21.7%
Race, %					
Asian	3.1%	3.1%	3.2%	3.2%	3.4%
Black	20.3%	20.7%	21.1%	20.6%	20.1%
Hispanic	8.3%	8.5%	8.6%	9.0%	9.4%
Other	3.7%	3.8%	3.9%	4.1%	4.1%
White	56.5%	55.7%	55.0%	55.2%	55.3%
Missing	8.1%	8.2%	8.2%	7.9%	7.7%
Language, %					
English	95.1%	95.2%	95.3%	95.4%	95.1%
Spanish	2.8%	2.9%	2.8%	2.8%	3.0%
Other	2.1%	2.0%	2.0%	1.9%	1.9%
Tribe Member, %					
No	98.0%	98.0%	98.0%	98.0%	98.0%
Yes	1.9%	2.0%	2.0%	2.0%	2.0%
Notes: Non-constant demographic variables are counted from first observed month in the year. For enrollees who change eligibility categories within the year, we assign them to the category with the most observed months that year.					

Over the baseline period, 2017 to 2019, the size of the population declined from 527,253 to 506,685. The enrollment increase observed in 2020 and 2021 is associated with the maintenance of eligibility policy implemented after announcement of the public health emergency. A contextual analysis of the changes in enrollment coincident with the implementation of the maintenance of eligibility policy is provided in Attachment 4.

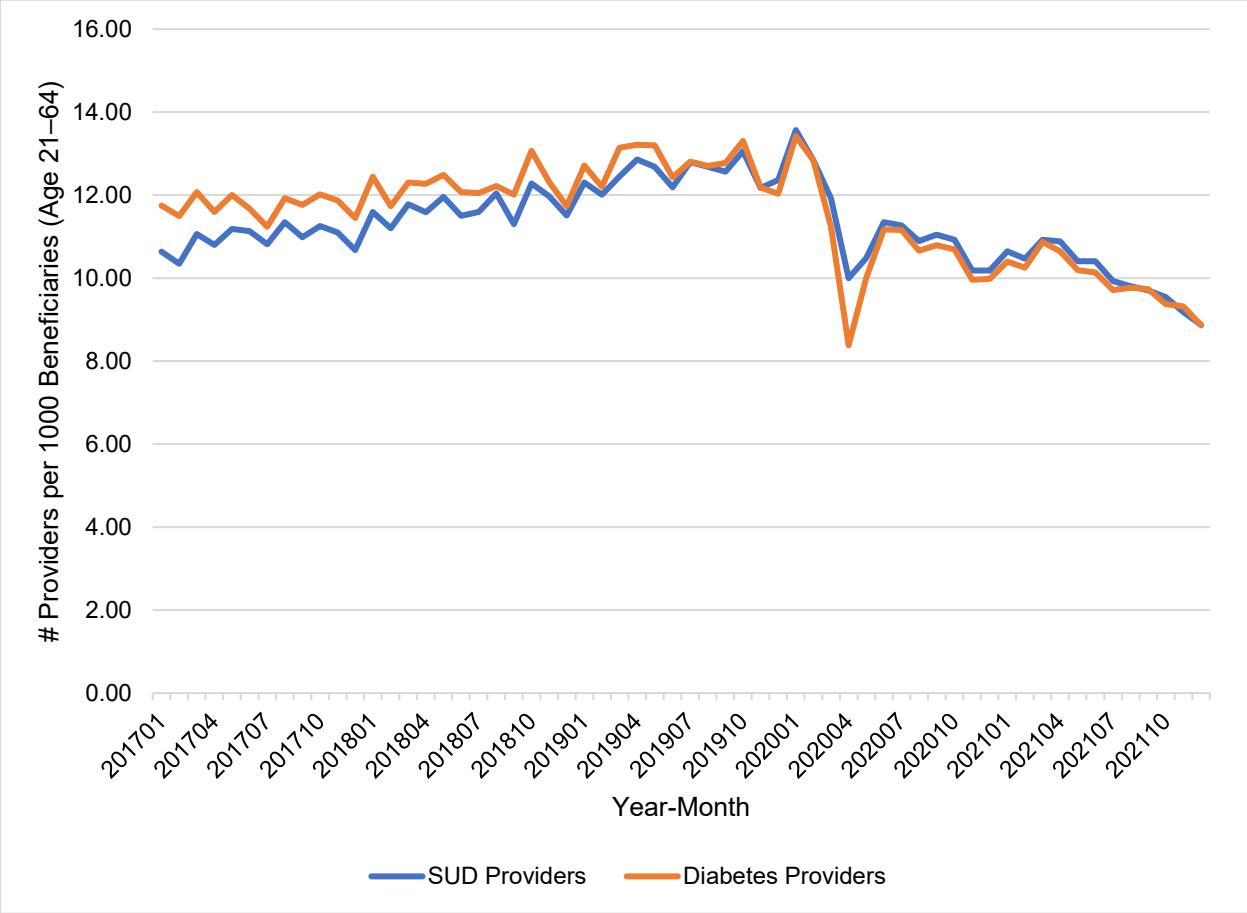
While the population declined somewhat during the baseline period, the average number of months enrolled per year remained constant from 2017 to 2019. Demographic characteristics and the distribution of beneficiaries across eligibility categories were also generally consistent over the baseline period.

Question 4.1. Does the SUD demonstration waiver increase the supply of SUD providers for Medicaid enrollees?

H4.1a. The SUD demonstration waiver will increase the supply of SUD providers that accept and/or treat Medicaid beneficiaries.

Figure 4.3 presents the trends over time in the number of providers per 1,000 Medicaid beneficiaries, ages 21–64, with a claim for SUD and with a claim for diabetes. The trends are generally parallel and increasing from 2017 through the start of the public health emergency. Following an immediate decline coincident with the declaration of the public health emergency, the monthly volume of both SUD and diabetes providers per beneficiaries rose. The rebound did not persist, and the volume of providers per beneficiaries remained lower following declaration of the PHE than in the prior period.

Figure 4.3: Number of Providers with At Least One Claim for SUD or Diabetes per 1,000 Medicaid Beneficiaries — 2017–2021



We implemented DiD analyses to test hypothesis H4.1a. We compared the change in the number of SUD providers per 1,000 Medicaid beneficiaries after implementation of Provision 4 (2021) relative to the pre-period (2017–2019) to the analogous change in the rate of diabetes providers per 1,000 Medicaid beneficiaries. As previously noted, the analysis yields a causal estimate conditional on the assumption that the trends in the rate of SUD providers and diabetes providers would have been parallel in the absence of implementation of Provision 4. The similar pre-period trends shown in **Figure 4.3** suggest its plausibility.

Table 4.4: Comparison of Change in SUD Provider Supply Compared to Change in Diabetes Provider Supply After Implementation of SUD Residential Treatment Benefit

	Average Monthly Rate		Average Difference (95% CI)	
	Pre Period (2017–2019)	Post Period (2021)	Post - Pre	64
# SUD providers per 1,000 per month	11.72	10.06	-1.65	0.64*
			(-1.19, -2.12)	
# Diabetes provider per 1,000 per month	12.23	9.94	-2.29	(0.05, 1.2)
			(-1.89, -2.69)	

Notes: Providers with >0 SUD claims in the month are considered SUD providers for that month. Providers with >0 diabetes claims in the month are considered diabetes providers in that month. The difference-in-differences estimate represents the marginal difference in monthly SUD provider supply attributable to the SUD provision in its first year relative to the comparison group, diabetes providers. *p-value of <.05

During the pre-period, 2017–2019, the average monthly rate of SUD and diabetes providers was 11.72 per 1,000 adult Medicaid beneficiaries and 12.23 per 1,000 adult Medicaid beneficiaries respectively (**Table 4.4**). Consistent with **Figure 4.3**, the average monthly rate decreased to 10.06 and 9.94 respectively. The estimated difference between the change in SUD provider supply and the change in diabetes provider supply after implementation of Provision 4 relative to the pre-period is 0.64 per 1,000 beneficiaries (95% CI: 0.05, 1.20; p-value < .05). The positively signed estimate may be unexpected given the overall decline in the supply of both SUD and diabetes providers relative to the pre-period. The interpretation of this finding is that the decrease in the SUD provider supply after implementation of the new benefit was smaller in magnitude than the decline in the diabetes provider supply. While this point estimate is statistically significant at p <.05, we refrain from drawing conclusions about the causal effect of the new benefit on SUD provider supply given the relatively short post-implementation time frame. Future analyses will include additional years of post-implementation data and will adjust for potential changes in the composition of the underlying population that may influence the supply of SUD and diabetes providers.

Question 4.2. Does the SUD demonstration waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees?

H4.2a. After implementation of the SUD demonstration waiver, enrollees' awareness of available SUD treatment services will increase over time.

As part of the first Medicaid Beneficiary Survey (CY2020), we assessed awareness of the new SUD benefit by asking respondents if their insurance plan covers residential drug treatment. This estimate, obtained before the SUD residential treatment benefit was introduced, serves as the baseline value against which we will compare changes in awareness after the new benefit was implemented.

We posed the benefit awareness question to a subset of the survey respondents who might be expected to have the greatest awareness of the benefit, those who responded affirmatively to either of the following questions, "In the past year, did you ever drink or use drugs more than you wanted to?" or "In the past year, have you wanted to cut down on drinking or drug use?" Characteristics of this sample are presented in **Table 4.5**.

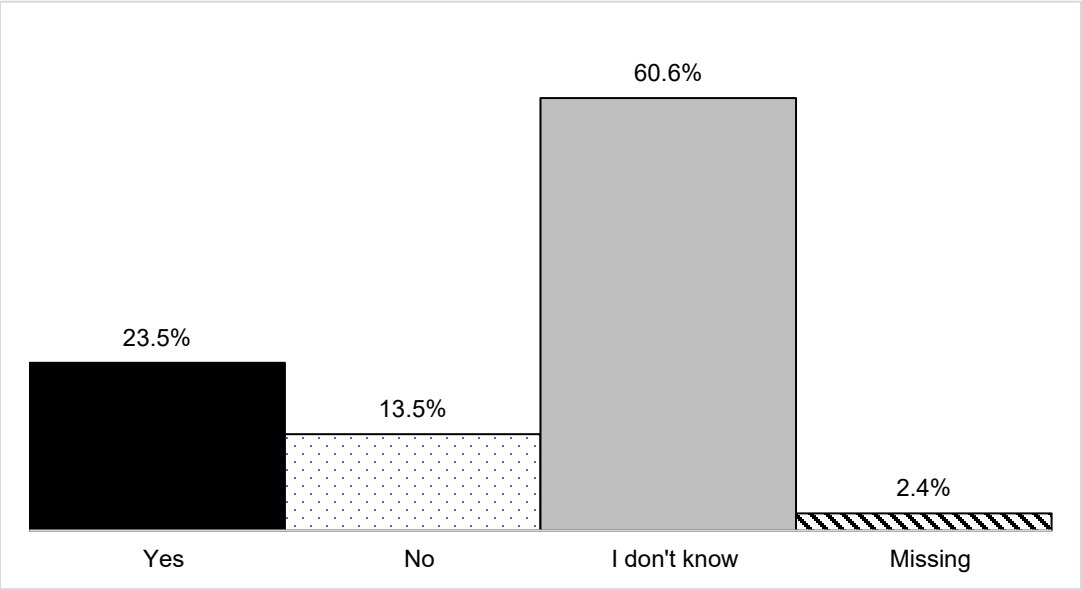
The large majority (81.3%) of the sample were childless adult Medicaid beneficiaries and were evenly split between male and female respondents. Among this population, 60.6% of

respondents did not know if their insurance plan covered residential SUD treatment (**Figure 4.4**), while 23.5% indicated that their plan provided such coverage, and 13.5% did not think their plan provided this coverage. Notably, at the time the survey was fielded, Medicaid did not provide coverage for residential SUD treatment. The positive responses regarding the provision of coverage may reflect misunderstanding about coverage among Medicaid beneficiaries. Alternatively, some respondents who were enrolled in Medicaid at the time the sample was drawn may have had a different source of insurance when they participated in the survey because of the unavoidable time lag between sample construction and survey implementation. When we compare the results from the CY2023 survey to the CY2020 survey, we will examine the potential influence of a self-reported change in coverage on the response to the awareness question.

Table 4.5: Characteristics of Beneficiaries Who Report a Potential Substance Use Disorder

	N	Percent
Eligibility Category		
Childless Adult	409	81.30%
Parent/Caretaker	94	18.70%
Gender		
Male	250	49.70%
Female	244	48.50%
Prefer to describe myself as non- binary, gender-fluid, or agender	5	1.00%
Don't know/Prefer not to say	4	0.80%
Age		
Age 18 to 29	101	20.10%
Age 30 to 39	99	19.70%
Age 40 to 49	82	16.30%
Age 50 to 59	149	29.60%
Age 60 to 64	61	12.10%
Age 65 or older	11	2.20%
Race		
Native American/Alaskan Native		
Yes	29	5.80%
No	473	94.00%
Missing	1	0.20%
Asian		
Yes	3	0.60%
No	499	99.20%
Missing	1	0.20%
Black		
Yes	104	20.70%
No	398	79.10%
Missing	1	0.20%
Native Hawaiian/Pacific Islander		
Yes	4	0.80%
No	498	99.00%
Missing	1	0.20%
White		
Yes	351	69.80%
No	151	30.00%
Missing	1	0.20%
Other		
Yes	35	7.00%
No	467	92.80%
Missing	1	0.20%
Notes: The sample includes those survey respondents who answered affirmatively to either of the following questions, "In the past year, did you ever drink or use drugs more than you wanted to?" or "In the past year, have you wanted to cut down on drinking or drug use?		

Figure 4.4: Awareness of SUD Residential Treatment Benefit among Beneficiaries Who Report a Potential SUD



H4.2b. The SUD demonstration waiver will increase use of SUD treatment in IMD settings.

Figure 4.5 presents the number of unique beneficiaries with a claim for residential SUD treatment in each month from January 2021 through December 2021. The benefit was introduced on February 1, 2021. Results illustrate the use of residential SUD treatment during the first 11 months of its availability.

As expected, we observed no claims for the new benefit before its start date of February 2021. The monthly number of unique beneficiaries with a claim for residential SUD treatment rose rapidly to almost 500 beneficiaries in June 2021 and remained stable at that level through the last month observed, December 2021. The large majority of beneficiaries who received residential SUD treatment were childless adults (CLAs) as shown in the orange segment of **Figure 4.5**.

Figure 4.5: Unique Individuals with Residential Treatment Claim by Eligibility Group — CY2021

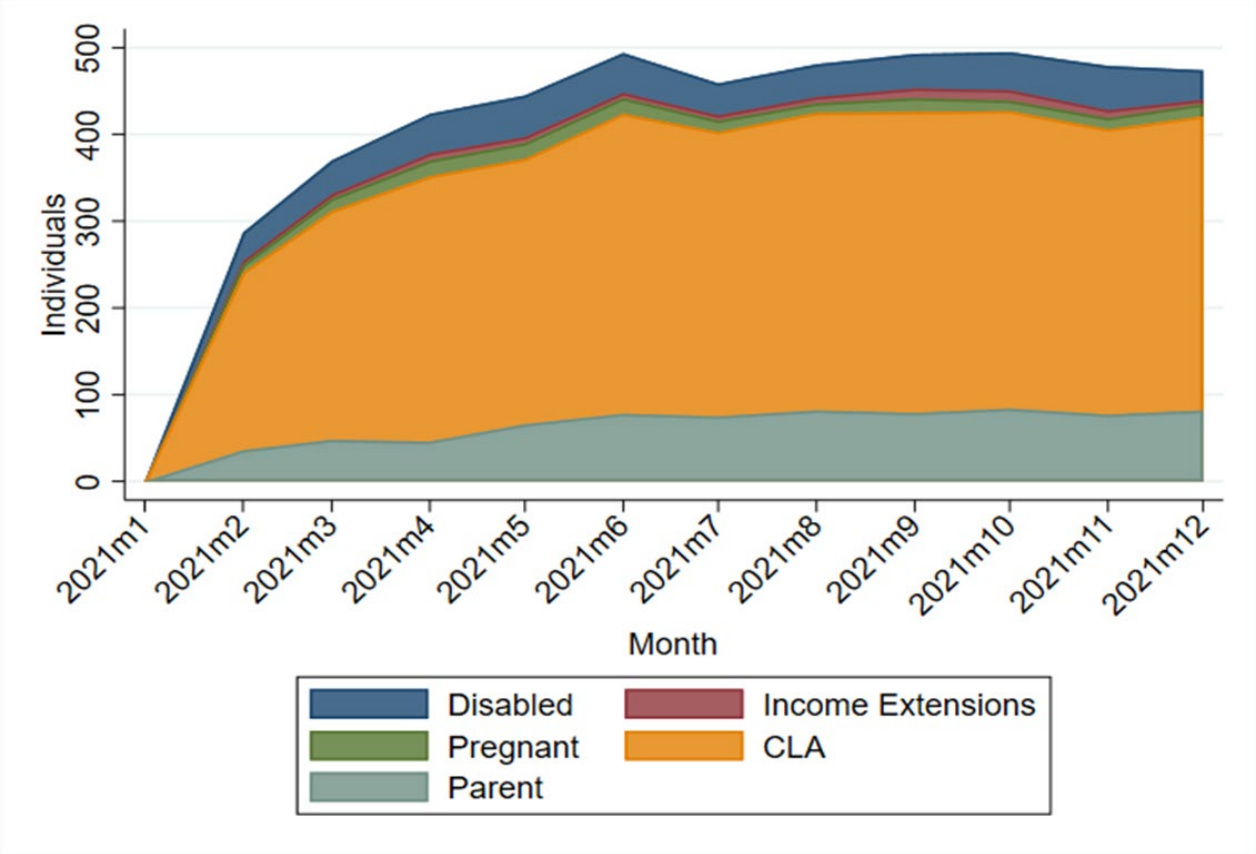


Table 4.6 describes the characteristics of three mutually exclusive beneficiary groups: those who received residential SUD treatment (column A); those who had at least one claim during the year with an SUD diagnosis (column B); and those who had no claim during the year with a SUD diagnosis (Column C). The subset of beneficiaries who received residential SUD treatment are substantially more likely to be CLA beneficiaries, between the ages of 21–34, and White, relative to other beneficiaries with or without a diagnosis of SUD.

Table 4.6: Characteristics of Beneficiaries Who Receive Residential Treatment for SUD Compared to All Beneficiaries — CY2021

	A	B	C
	Beneficiaries who received residential treatment for SUD	Beneficiaries with any SUD diagnosis in 2021 (excluding column A)	Beneficiaries without any SUD Diagnosis
N=unique subjects	454	41754	559016
Eligibility Group, %			
Childless Adults	70.4%	52.1%	43.6%
Parents & Caretakers	19.4%	24.0%	29.3%
Pregnant Women	6.1%	2.4%	5.4%
Income Extension	2.0%	4.4%	9.2%
Disabled	2.0%	17.2%	12.5%
Age group, %			
21-34	64.1%	36.9%	46.4%
35-49	34.4%	38.5%	32.1%
>49	1.6%	24.5%	21.5%
Race, %			
Asian	0.0%	0.6%	3.6%
Black	6.3%	17.3%	20.3%
Hispanic	1.6%	6.5%	9.6%
Other	7.8%	6.1%	4.0%
White	81.3%	62.7%	54.8%
Missing	3.1%	6.7%	7.8%
Language, %			
English	100.0%	98.4%	94.9%
Spanish	0.0%	0.9%	3.1%
Other	0.0%	0.6%	2.0%
Tribe member, %			
No	96.9%	96.1%	98.1%
Yes	3.1%	3.9%	1.9%
Notes: Non-constant demographic variables are counted from first observed month in the year. Eligibility defined as category with the most observed months that year.			

Table 4.7 summarizes the distribution of beneficiaries who received residential SUD treatment by county as well as the number of unique facilities who served at least one beneficiary.

In total, 2,680 unique beneficiaries received residential SUD treatment across the state between February 2021–December 2021. The counties with the largest number of individuals receiving SUD residential treatment services were Milwaukee (n=622), Waukesha (N=265), Winnebago (N=226), Eau Claire (N=244), and Manitowoc (N=211). A total of 57 facilities located in 15 counties across the state provided residential SUD treatment services to at least one Medicaid enrollee between February–December 2021.

Table 4.7: Distribution of Beneficiaries Who Received Residential SUD Treatment by County — CY 2021

County Name	Unique Facilities	Unique Beneficiaries
Brown	1	72
Dane	3	177
Dunn	2	178
Eau Claire	4	244
Fond du Lac	3	106
La Crosse	3	53
Manitowoc	3	211
Milwaukee	16	622
Oneida	2	159
Outagamie	4	176
Portage	2	55
Racine	4	80
Washington	1	56
Waukesha	8	265
Winnebago	1	226
Total	**57**	**2680**

Question 4.3. Does the SUD demonstration waiver change Medicaid enrollees' use of existing covered SUD services?

We assessed health care use specific to substance use disorders in each major service category: outpatient, emergency department, hospitalization, and prescription medications. Question 4.3 includes several hypotheses. We present results below according to these hypotheses.

H4.3a. The SUD demonstration waiver will increase or have no effect on SUD outpatient services and pharmacotherapy treatment provided outside IMD settings.

Table 4.8 presents the annual proportion of beneficiaries in the study cohort with at least one outpatient visit for any SUD diagnosis, and for any OUD diagnosis. **Table 4.8** also presents the average number of visits per beneficiary per year for an SUD or OUD diagnosis among all beneficiaries in the cohort. We separately present outpatient visits by modality, in-person or via telehealth, given the expected change in the delivery of care via telehealth following the implementation of the public health emergency.

Table 4.8: Annual SUD-Related Outpatient Visits Among Study Cohort — 2017–2021

	2017	2018	2019	2020	2021
N=unique subjects	527253	515304	506685	536238	601224
Telehealth or In-Person					
% with visit with diagnosis of OUD	3.8%	3.9%	4.1%	3.9%	3.7%
Mean number of visits with diagnosis of OUD	2.41	2.79	3.00	3.14	3.00
% with visit with diagnosis of SUD	16.6%	17.3%	18.1%	16.7%	16.2%
Mean number of visits with diagnosis of SUD	3.08	3.57	3.87	3.95	3.75
In-Person					
% with visit with diagnosis of OUD	3.8%	3.9%	4.1%	3.7%	3.5%
Mean number of visits with diagnosis of OUD	2.41	2.79	3.00	2.92	2.85
% with visit with diagnosis of SUD	16.6%	17.3%	18.1%	15.5%	15.2%
Mean number of visits with diagnosis of SUD	3.08	3.57	3.87	3.56	3.47
Telehealth					
% with visit with diagnosis of OUD	0.0%	0.0%	0.0%	2.6%	2.2%
Mean number of visits with diagnosis of OUD	0.00	0.00	0.00	0.22	0.15
% with visit with diagnosis of SUD	0.0%	0.0%	0.0%	6.2%	4.9%
Mean number of visits with diagnosis of SUD	0.00	0.00	0.00	0.39	0.28

Notes: Study cohort includes beneficiaries ages 21-64 with at least one month of eligibility in the study years in the following categories: childless adult, parent and caretaker, pregnant, income extension, disabled. We include all beneficiaries enrolled during the year as the denominator to calculate the mean number of visits in the year.

In each of the baseline years, 2017–2019, approximately 4% of beneficiaries had an OUD-related visit, and we observed an increase from 16.6–18.0% of beneficiaries who had a visit related to any SUD. On average during the baseline period, we observed more than 3 visits per beneficiary per year related to any SUD. Visits for OUD, a subset of the any-SUD visit category, appear to be driving this outcome, ranging from 2.4–3.0 visits per beneficiary per year. Although only 3–4% of beneficiaries had any OUD visit in the year, the average number of OUD visits among them in the year ranges from 60–80, which explains the 2.4–3.0 visits per beneficiary per year when the full cohort is included in the denominator. Results for 2021 reflect the first year of the post-implementation period. The proportion of beneficiaries with any SUD and any OUD visit in the year, as well as the average number of visits, are consistent with annual rates observed in the first year of the pre-period, 2017.

The composition of outpatient visits, defined by in-person or telehealth modality, changed over time (**Table 4.8**). During the pre-period, 2017–2019, essentially all SUD- or OUD-related outpatient visits that we observed were provided in-person. In the first year after implementation of the residential treatment benefit, 4.9% of beneficiaries had an SUD-related outpatient visit delivered by telehealth and 2.2% of beneficiaries had an OUD-related outpatient visit delivered by telehealth.

Figure 4.6: Proportion of Enrollees with Any Outpatient Visits with SUD Diagnosis

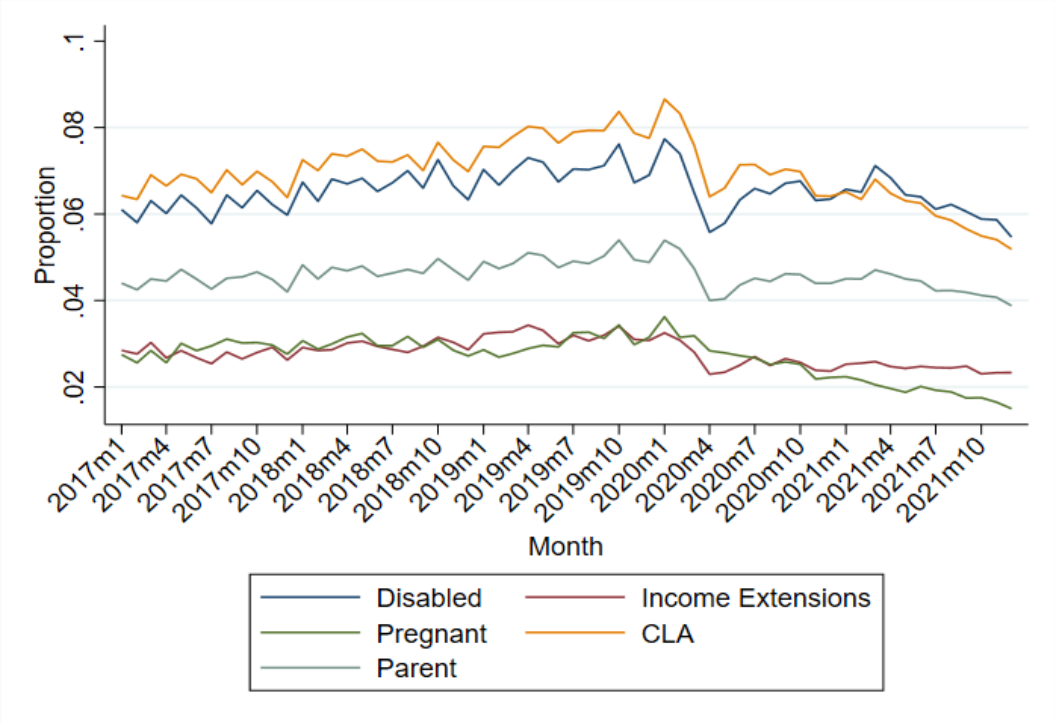


Figure 4.7: Average Number of Outpatient Visits with SUD Diagnosis Per Enrollee

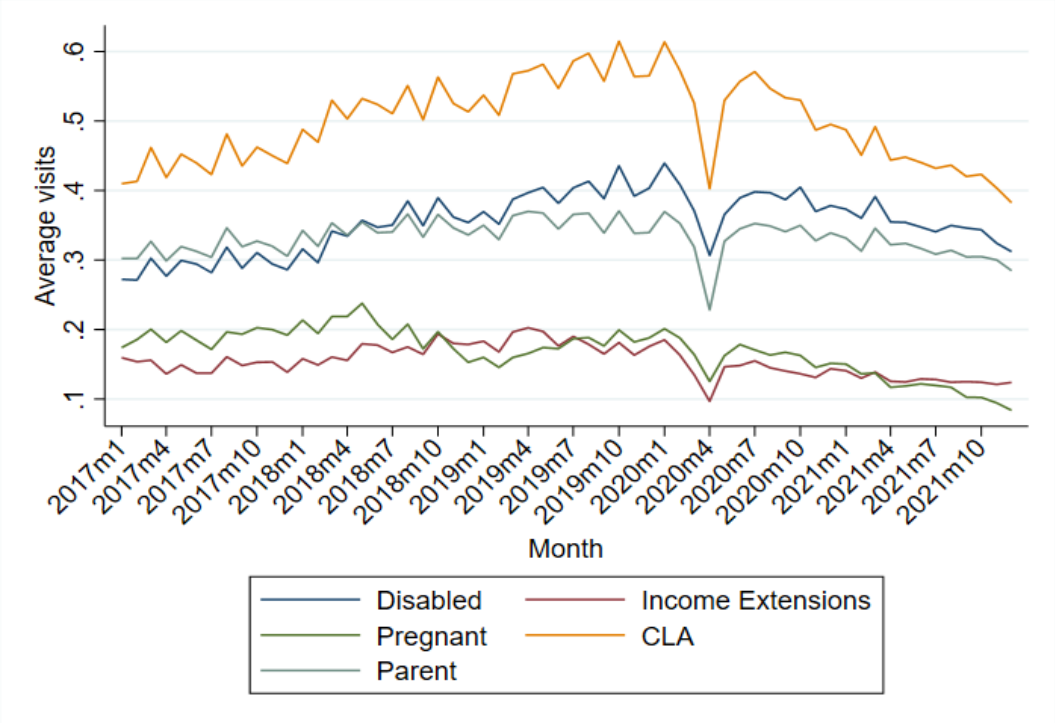


Figure 4.8: Proportion of Enrollees with Any Outpatient Visits with OUD Diagnosis

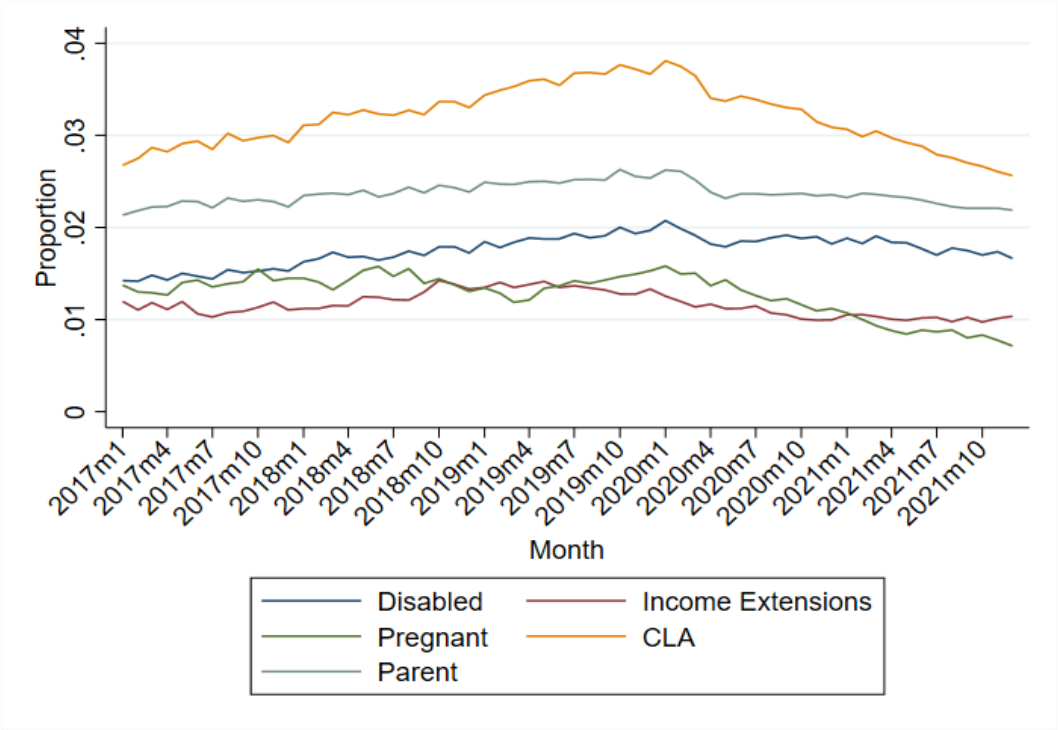
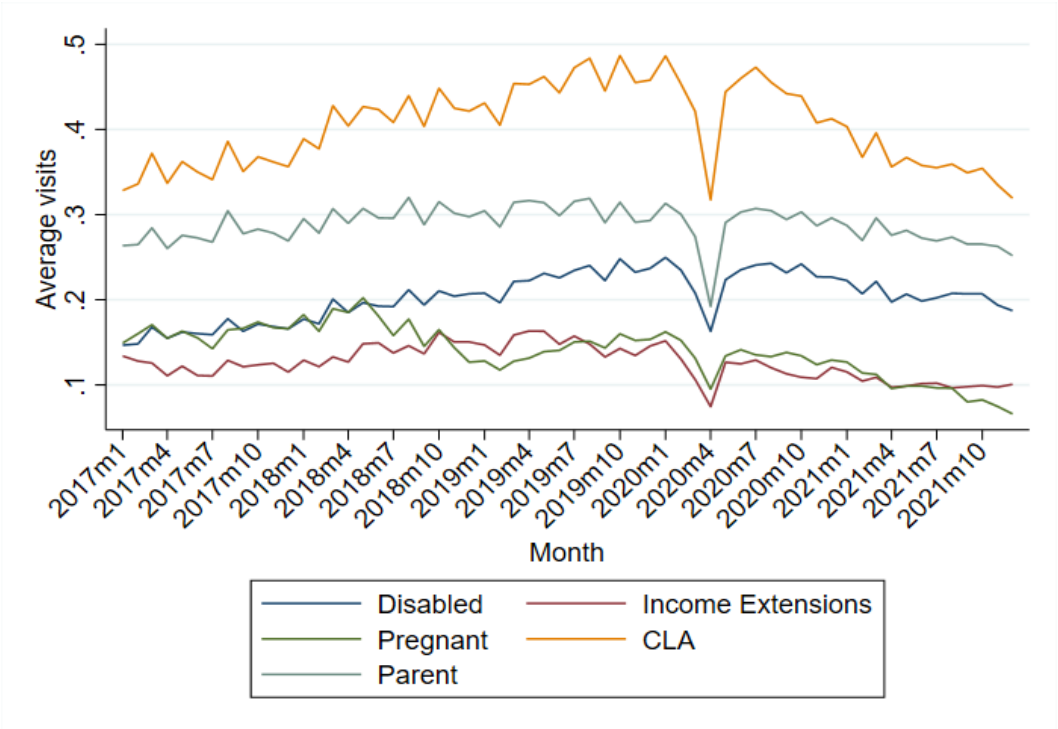


Figure 4.9: Average Number of Outpatient Visits with OUD Diagnosis Per Enrollee



Figures 4.6–4.9 present a more granular view of SUD-related outpatient visits during the evaluation period; these include the trend in the monthly average proportion of individuals with any such visit and the average number of visits in the month among cohort members enrolled in that month.

The monthly trends in the proportion of beneficiaries with a SUD-related outpatient visit shown in **Figure 4.6** illustrate a general increase among all eligibility categories throughout the baseline period, 2017–2019. We see a similar increase in the average number of these visits in the month during the baseline period with the exception of the pregnant eligibility category (**Figure 4.7**). Declaration of the PHE disrupted these rising trends, although there was a short-term uptick in the mean number of visits in the immediate post-PHE period. However, by the first year of the post-period for this evaluation, 2021, the trends had not rebounded to baseline levels and were stable or declining. The patterns for OUD-related visits are similar (**Figures 4.8–4.9**).

Figure 4.10: Proportion of Cohort with SUD Medication

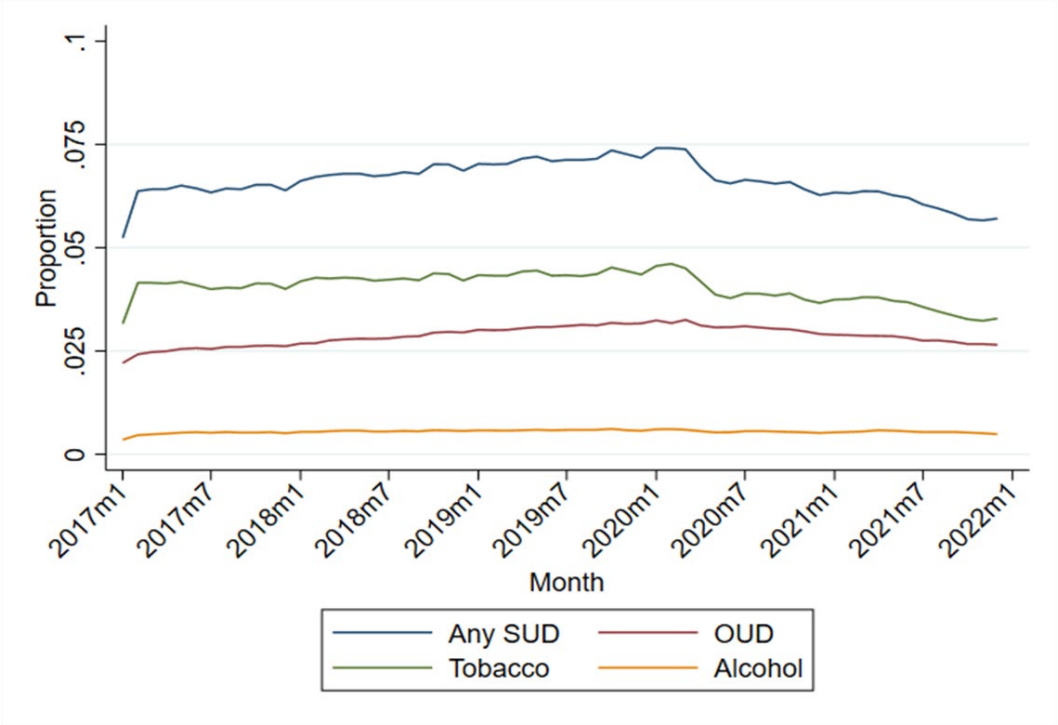
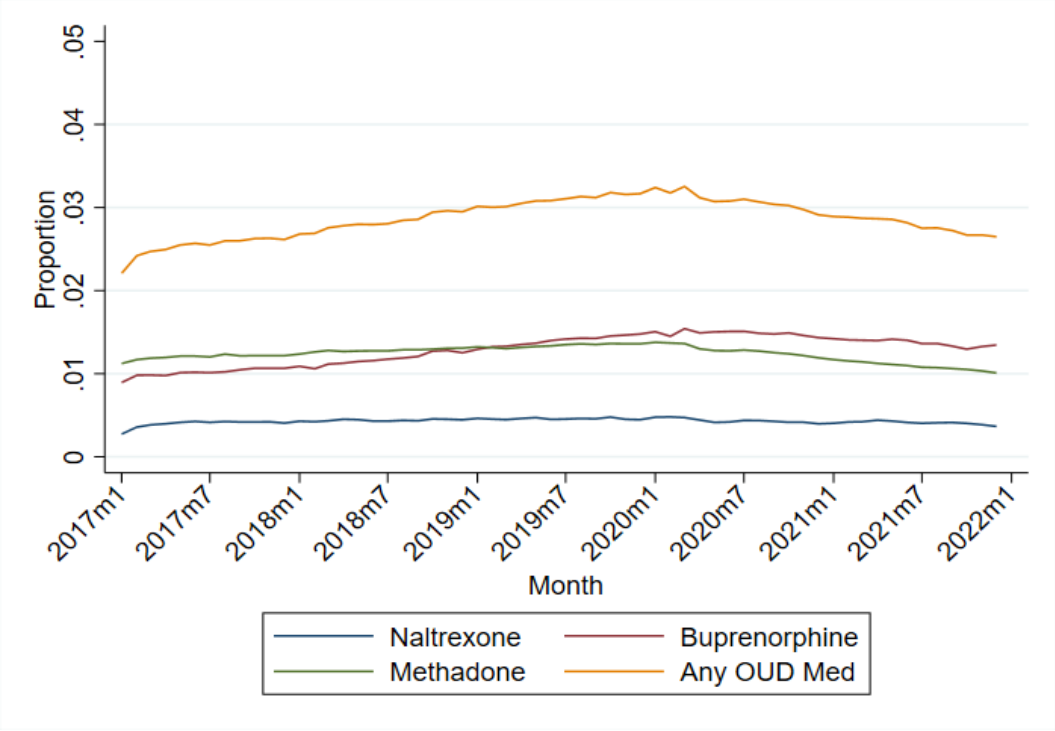


Figure 4.11: Proportion of Cohort with Opioid Use Disorder Medication



As shown in **Table 4.9**, during the baseline period, 2017–2019, there was a slight increasing trend from 6.3%–7.1% in the percentage of beneficiaries that received medication treatment for a substance use disorder, including medications for opioid use disorder, tobacco use disorder, and alcohol use disorder. Monthly trends show a decline in the proportion of those receiving medication treatment coincident with the declaration of the PHE that is largely driven by a decline in receipt of medication treatment for OUD (**Figure 4.10**). Closer examination of OUD treatment during the first year after implementation of the SUD residential treatment benefit, 2021, indicates a stable trend for buprenorphine and naltrexone with a slightly declining trend in methadone (**Figure 4.11**).

Table 4.9: Annual Medication Treatment for Substance Use Disorders — 2017–2021

	2017	2018	2019	2020	2021
N=unique subjects	527253	515304	506685	536238	601224
Medication for any substance use disorder					
% with any claim	6.3%	6.8%	7.1%	6.8%	6.1%
Medication for opioid use disorder					
% with any claim	2.5%	2.8%	3.1%	3.1%	2.8%
Medication for tobacco use disorder					
% with any claim	4.0%	4.3%	4.4%	4.0%	3.5%
Medication for alcohol use disorder					
% with any claim	0.5%	0.6%	0.6%	0.6%	0.5%

Notes: Study cohort includes beneficiaries ages 21-64 with at least one month of eligibility in the study years in the following categories: childless adult, parent and caretaker, pregnant, income extension, disabled. We include all beneficiaries enrolled during the year as the denominator to calculate the mean number of visits in the year. Medications for any substance use disorder includes any medication for opioid use disorder, tobacco use disorder or alcohol use disorder. Medications for opioid use disorder include naltrexone, buprenorphine and methadone. Medications for tobacco use disorder include varenicline, nicotine replacement and bupropion. Medications for alcohol use disorder includes naltrexone, acamprosate and disulfiram.

H4.3b. The SUD demonstration waiver will reduce use of hospital-based SUD services, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.

Table 4.10 presents the annual proportion of beneficiaries in the cohort that have an ED visit or hospitalization with an SUD or OUD diagnosis indicated on the claim, as well as the average number of these events. Additionally, for context, we include the volume of all-cause hospital-based care.

Table 4.10: Annual Hospital-Based Care Use Among Study Cohort — 2017–2021

	2017	2018	2019	2020	2021
N=unique subjects	527253	515304	506685	536238	601224
Emergency Department Visits, any substance use disorder diagnosis					
% with any visit in the year	10.5%	11.8%	10.7%	9.0%	8.9%
mean number of visits in the year	0.19	0.22	0.20	0.16	0.16
Emergency Department Visits, any diagnosis of opioid use disorder					
% with any visit in the year	0.7%	0.7%	0.6%	0.6%	0.5%
mean number of visits in the year	0.010	0.010	0.008	0.007	0.007
Emergency Department Visits, All Cause					
% with any visit in the year	36.8%	37.1%	37.2%	33.6%	35.3%
mean number of visits in the year	0.93	0.92	0.92	0.79	0.84
Hospitalizations, any substance use disorder diagnosis					
% with any visit in the year	3.5%	3.6%	3.6%	3.3%	3.1%
mean number of visits in the year	0.05	0.05	0.05	0.05	0.04
Hospitalizations, any diagnosis of opioid use disorder					
% with any visit in the year	0.8%	0.7%	0.7%	0.7%	0.6%
mean number of visits in the year	0.011	0.010	0.010	0.009	0.008
Hospital Readmission within 30-days of SUD-Related hospitalization					
% of SUD hospitalizations followed by readmission within 30-days	14.0%	14.1%	14.3%	14.3%	14.6%
Hospitalizations, All Cause					
% with any visit in the year	9.1%	9.1%	9.1%	8.5%	8.1%
mean number of visits in the year	0.12	0.12	0.12	0.11	0.10
Notes: Study cohort includes beneficiaries ages 21-64 with at least one month of eligibility in the study years in the following categories: childless adult, parent and caretaker, pregnant, income extension, disabled. We include all beneficiaries enrolled during the year as the denominator to calculate the mean number of visits or admissions in the year. The denominator for our measure of readmission is the number of SUD-related hospitalizations in the year.					

During the baseline period, 2017–2019, approximately 10%–11% of beneficiaries had an ED visit with a SUD diagnosis indicated on the claim during the year, while 0.6%–0.7% had at least one OUD-related ED visit. The proportion of beneficiaries during the same timeframe with any ED visit in the year for any cause was stable at approximately 37%. In 2021, the first year after implementation of the SUD residential treatment benefit, the proportion of beneficiaries with any SUD- or OUD-related ED visit was relatively lower at 8.9% and 0.5% respectively. All-cause ED visits were also lower; 35.3% of beneficiaries had at least one ED visit in 2021.

Among the cohort, approximately 3.6% of beneficiaries were hospitalized with a diagnosis of SUD during the baseline period, and 0.7% of beneficiaries were hospitalized with a diagnosis of OUD. During the same time frame, 9.1% of beneficiaries were hospitalized for any cause. In the first year following implementation of the residential treatment benefit, 3.1% of beneficiaries were hospitalized with a diagnosis of SUD, 0.6% were hospitalized with a diagnosis of OUD, and 8.1% were hospitalized for any cause.

Figures 4.12 through **4.15**, provide monthly trends in the proportion of the cohort with the outcome. The maximum value on the Y axis varies across outcomes to accommodate variation in the likelihood of use across service types. We also note that the maximum value of the Y axis is less than 0.04 in all cases because these events are infrequent. These trends provide insight into the annual estimates reported in **Table 4.10**. Specifically, by showing values at the monthly level, we observe small declines in the outcomes coincident with the declaration of the PHE that do not return to baseline levels during the first year after implementation of the residential treatment benefit.

Figure 4.12: Proportion of Enrollees with Any ED Visit with SUD Diagnosis

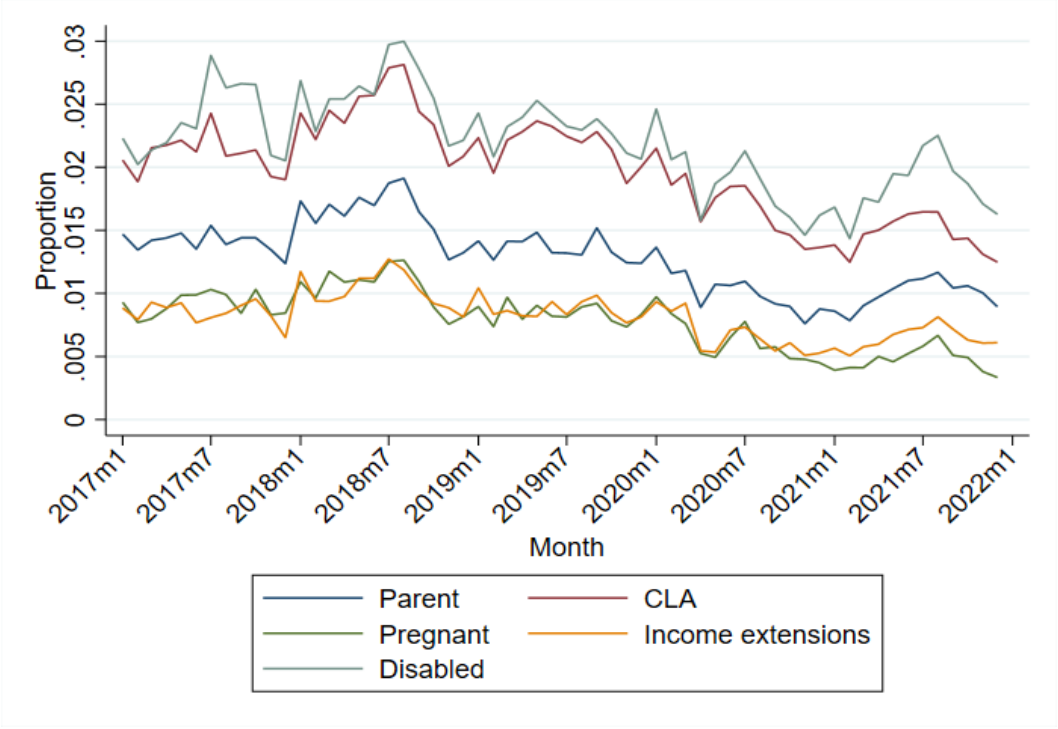


Figure 4.13: Proportion of Enrollees with Any ED Visit with OUD Diagnosis

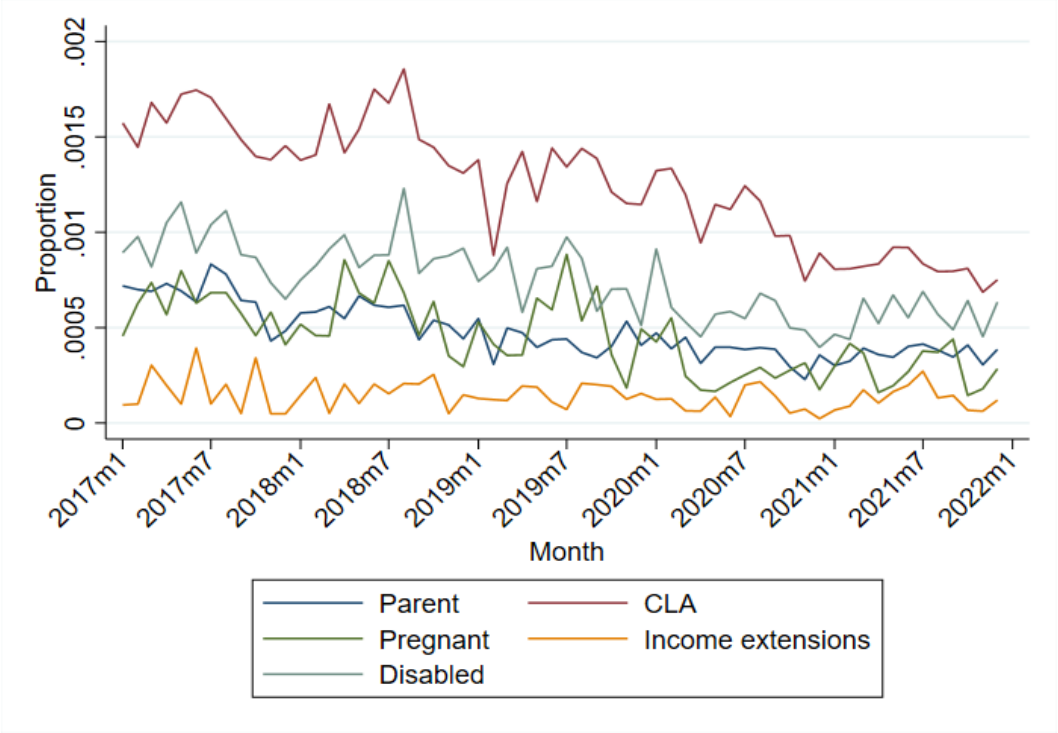


Figure 4.14: Proportion of Enrollees with Any Inpatient Visits with SUD Diagnosis

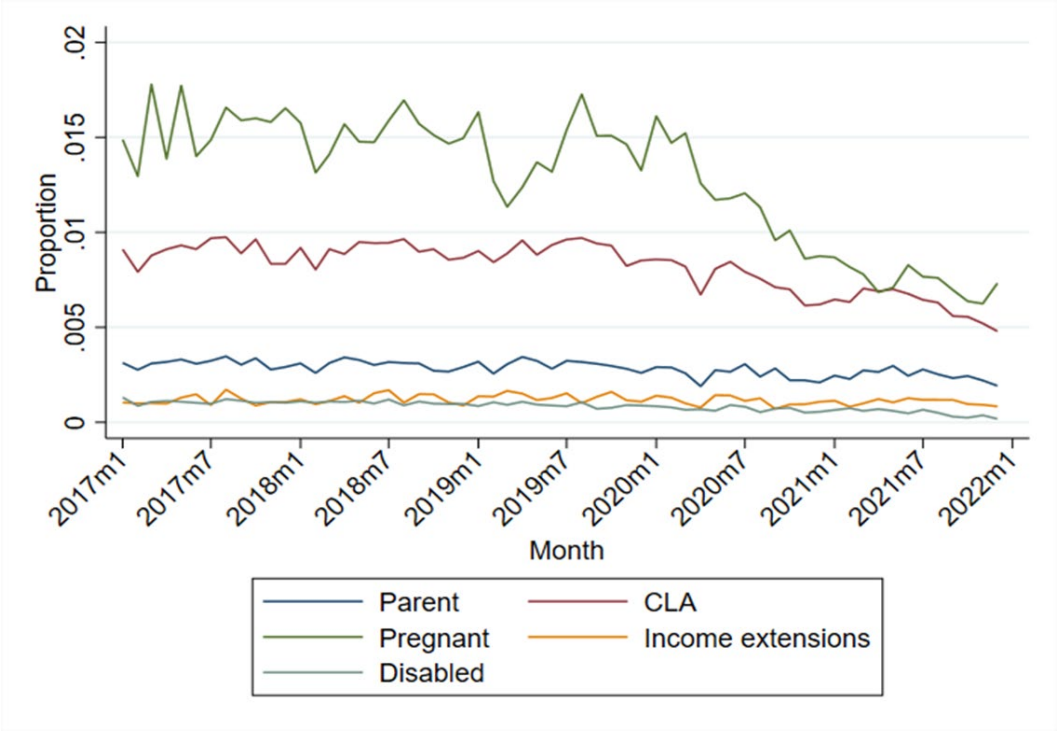
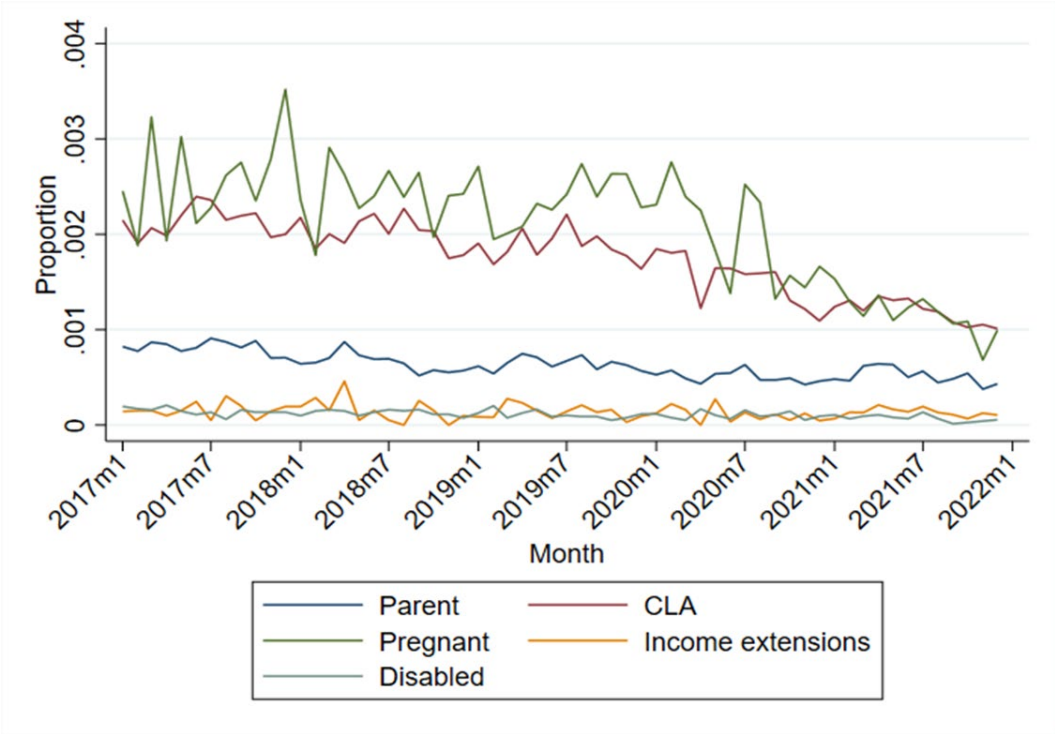


Figure 4.15: Proportion of Enrollees with Any Inpatient Visits with OUD Diagnosis



Question 4.4. Does the SUD demonstration waiver reduce the rate of drug overdose deaths among Medicaid enrollees including opioid-related deaths?

We will report these findings in the Final Report after complete mortality data for the evaluation time period are available.

Question 4.5. What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver?

We calculated the average real annual expenditures per beneficiary for the study cohort by applying the Wisconsin Medicaid fee-for-service schedule to all encounter and fee-for-service claims in the categories of outpatient, emergency department and inpatient care use. **Table 4.11** shows the results from this analysis. Expenditures are presented in constant (2021) dollars. These expenditures are also broken down to show SUD-related expenditures.

Table 4.11: Average Real Annual Expenditures per Beneficiary in the Study Cohort, 2017–2021

Year	2017	2018	2019	2020	2021
	$	$	$	$	$
	SE	SE	SE	SE	SE
Total expenditures	5648.12	6527.85	6796.51	7683.51	7945.54
	32.05	40.17	42.58	47.35	43.49
Total SUD-Related Expenditures	552.18	701.66	705.74	715.36	702.25
	9.41	12.44	9.11	6.95	6.09
Prescription medications	2860.27	3218.29	3692.91	4693.03	4680.36
	20.71	25.03	30.84	37.59	36.42
SUD-Related prescription medications	151.01	160.53	196.41	232.08	208.74
	8.34	5.59	6.63	4.36	2.47
Outpatient Visits	909.76	1093.40	1080.26	1084.87	1110.85
	5.10	6.23	6.35	7.55	5.36
SUD-Related Outpatient Visits	145.46	205.78	219.77	218.80	201.08
	1.72	2.31	2.46	2.22	1.83
Emergency Department Visits	517.92	611.13	487.51	474.59	492.81
	7.04	9.89	5.25	6.30	4.84
SUD-Related Emergency Department Visits	114.24	163.66	128.24	122.81	119.25
	1.76	2.49	2.05	2.18	1.86
Hospitalizations	165.35	166.88	214.39	183.55	208.18
	8.04	4.64	27.08	6.49	14.62
SUD-Related Hospitalizations	37.70	35.03	41.27	40.11	38.13
	1.16	1.06	1.53	1.26	1.69

Notes: Study cohort includes beneficiaries ages 21-64 with at least one month of eligibility in the study years in the following categories: childless adult, parent and caretaker, pregnant, income extension, disabled. Total expenditures include prescription medications, outpatient, emergency department, and hospitalization expenditures. SE refers to standard error.

Average total expenditures per beneficiary per year increased from $5,648 to $6,797 over the baseline period, 2017–2019. We observed increases in each category of service except emergency department visits. SUD-related expenditures totaled $522 on average per beneficiary in 2017 and $705 in 2019. During the first year after implementation of the residential treatment benefit, the average total expenditures per beneficiary per year was $7,945; for SUD-related expenditures it was $702.

Conclusions, Interpretation, and Policy Implications

The purpose of the SUD residential treatment provision within the demonstration waiver is to ensure that a broad continuum of care is available to Wisconsin Medicaid beneficiaries with a substance use disorder, helping improve the quality, care, and health outcomes for those

Medicaid beneficiaries. The State of Wisconsin identifies this waiver provision as part of a comprehensive statewide strategy to combat substance use disorders and drug overdose. We will evaluate the effects of this provision on drug overdose deaths upon receipt of the vital records data covering the post-implementation period. With respect to whether the provision expands the continuum of care for SUD treatment and influences SUD health care access and outcomes, we turn to discussing the preliminary results of the evaluation questions.

A necessary first step in achieving the overall purpose of this waiver provision is that beneficiaries receive residential SUD treatment. The use of residential SUD treatment increased abruptly coincident with the introduction of this benefit in February 2021 (Q4.2). The unique number of beneficiaries with any claim for residential SUD treatment increased from zero in January 2021 to 300 in February 2021. Within six months, 500 unique beneficiaries on average were receiving this service per month; that rate remained stable through the end of 2021. These findings provide initial evidence of a realized expansion in the continuum of care for treatment of SUDs.

The increased use of residential SUD treatment signals improved access to the full continuum of care for Medicaid beneficiaries relative to the pre-waiver period; however, it does not indicate the degree to which demand for residential treatment was met. Specifically, the residential treatment benefit does not provide coverage for the cost of room and board which may have impeded beneficiary use of the benefit during its first year of operation. In 2022, the Wisconsin Department of Health Services made a total of $2.5 million in grants available to more than 50 counties and tribal agencies to support the cost of room and board for Medicaid beneficiaries seeking residential treatment for opioid use disorder. We will account for this policy change, which may increase use of the new benefit, in our ongoing evaluation.

The addition of residential treatment to the continuum of care available for Medicaid beneficiaries with SUDs may help improve SUD health care access and outcomes as illustrated in **Figure 4.1**. We operationally define access in terms of SUD provider supply (Q4.1) and the use of existing SUD services (Q4.3). We found that the trend in the supply of SUD providers tracked closely to a comparison group of providers plausibly unaffected by the new benefit—diabetes providers—in the years preceding the implementation of residential SUD treatment and in the first year that the benefit was in place. These preliminary findings do not provide evidence of an increase in the supply of SUD providers following the implementation of the residential SUD treatment benefit. Future analyses will incorporate additional years post-implementation and adjust for potential changes in the composition of the beneficiary population that may influence provider supply.

Use of existing SUD services may increase as a consequence of the introduction of the residential SUD treatment benefit to the extent that this newly covered service stimulates patient demand and/or referrals for other SUD-related care (Q4.3). The descriptive results presented in this report illustrate a common pattern of SUD care use across service categories in which monthly use increased during the 3-year pre-period, 2017–2019, followed by a decline coincident with the declaration of the public health emergency in 2020. SUD health care use generally remained at pre-pandemic levels during the first year of the new provision's operation. It is premature to draw conclusions regarding the effect of the residential SUD treatment benefit on other types of SUD care use. In ongoing analyses, we will mitigate the confounding role of the public health emergency by adding a within state comparison group, and as noted in **Table 4.1**, the year 2020 will be omitted from all DiD models.

Next Steps

We will complete the first stage of our evaluation of Provision 4 to assess the causal effects of the demonstration waiver on the secondary drivers shown in **Figure 4.1**. For this stage of the evaluation, the key next steps include completing the construction of comparison groups, and implementation of covariate-adjusted DiD regression analyses.

Subsequently, we will evaluate the causal effects of Provision 4 on the outcomes noted as primary drivers in **Figure 4.1**—conditional on a finding that the residential treatment benefit influences the supply of SUD providers and/or use of SUD services. If Provision 4 has no significant impact on the secondary drivers, we will conduct descriptive analyses to quantify the association between the primary drivers and factors that may provide insight to the Wisconsin Medicaid program regarding potential change over time in these outcomes. For example, these factors may include beneficiary characteristics, county-level SUD prevention and treatment resources, and significant state or federal policies related to SUD prevention and treatment implemented during the observation period.

Finally, if we find that the SUD demonstration waiver significantly impacts the primary drivers as hypothesized in **Figure 4.1**, we will assess the demonstration waiver's causal impact on the rate of drug overdose deaths among Medicaid beneficiaries. If the SUD waiver has no effect on these primary drivers, we will conduct descriptive analyses to quantify the association between the rate of deaths due to drug overdose and factors that may provide insight to the Wisconsin Medicaid program regarding potential change over time in this outcome.

Wisconsin's Medicaid & BadgerCare Plus Health Coverage
CMS § 1115 Waiver Provisions for 2019-2023

Evaluation Design Report

Revised Version 3
Based on CMS Review and Comments

Submitted to the
Wisconsin Department of Health Services

September 15, 2021

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The preparation of this design report benefited from regular consultation with staff of the Wisconsin Department of Health Services

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ABBREVIATIONS & GLOSSARY OF TERMS

ACS	American Community Survey
BRFSS	Behavioral Risk Factor Surveillance Survey
CARES	Wisconsin Medicaid's Eligibility and Enrollment System
CE	Community Engagement: Requirements for Medicaid program beneficiaries to participate in employment, training, education, or other qualifying activities
CLA	Childless Adults: Adults without dependent children who are eligible for Wisconsin's BadgerCare program
CMS	U.S. Centers for Medicare and Medicaid Services
DHS	Wisconsin Department of Health Services
DiD	Difference-in-Differences method
DOL	U.S. Department of Labor
FPL	Federal Poverty Level
FSET	Food Share Employment and Training program: Required activities for non-excluded able-bodied adults who receive nutrition support benefits.
HIPAA	Health Insurance Portability and Accountability Act: Federal law governing privacy of patient and consumer health information
IRP	University of Wisconsin-Madison Institute for Research on Poverty: independent evaluators for Wisconsin's Medicaid waiver
ITS	Interrupted Time Series method
RD	Regression Discontinuity method
SAHIE	Small Area Health Insurance Estimates
SID	State Inpatient Databases
SNAP	Supplemental Nutrition Assistance Program, called "FoodShare" in Wisconsin
SUD	Substance Use Disorder
TANF	Temporary Assistance for Needy Families
TEDS-A	Treatment Episode Data Set – Admissions
UI	Unemployment Insurance
WHIO	Wisconsin Health Information Organization: Wisconsin's private sector, voluntary all-payer claims database

WAIVER PROVISION IMPLEMENTATION DATES: REFERENCE KEY

The Wisconsin Department of Health Services (DHS) has been adjusting the dates for implementation of the various waiver provisions, with some initial programmatic delays, the onset of the COVID-19 public health emergency in March 2020, and finally the withdrawal of CMS approval for the community engagement requirements in April 2021. (See, for reference, Attachment A: Waiver approval letter, waiver provisions.) Specific evaluation elements have undergone adjustments as changes occur to the implementation of the waiver provisions. (Table 1)

The Evaluation Design Report submitted in December 2019 did not reference specific dates but, rather, tied various evaluation elements to implementation milestones. In 2020, several evaluation documents were submitted to DHS and CMS that describe changes to the evaluation plan under changing circumstances. Finally, in 2021, the Evaluation Design Report was revised to reflect the new set of approved waiver provisions. The changes are reviewed in Attachment B: CMS Comments and UW/DHS Responses.

Table 1. Waiver Provisions' Implementation Status as of January 2021

Waiver Provision	Time Frame/Status
Community Engagement	Suspended during PHE
Launch member communications	Initiated in November 2019, through February 2020, then suspended
Employability assessment and plan (App/ACCESS)	Suspended, then approval was withdrawn for the CE requirements provision by CMS on April 6, 2021
Activity reporting portal (App/ACCESS) soft-launch	
Member notices begin	
Member reporting of CE begins CLAs	
E&T program in place for CLAs	
48-month clock begins CLAs	
HRA/HNA	Suspended during PHE
HRA (Treatment Needs Questionnaire) and HNA questions added to the application process	HNA and Treatment Needs Questionnaire added to enrollment process in February 2020, and suspended in mid-March 2020, upon declaration of PHE. Data had been collected for that brief time frame.
Premiums	Suspended during PHE
Member communication begins	Initiated in November 2019, through February 2020, then suspended
First premiums charged/premium payment begins	Suspended
ED Co-Payment	Delayed, then Commenced July 1, 2020
Member notices begin	Implementation delayed, with member notices delivered in May-June 2020
First co-payments charged	July 1, 2020
SUD Program	Start February 1, 2021
Residential treatment benefit begins	Implementation delayed, with implementation launched February 2021
Coverage of current SUD services within IMD settings	

I. EXECUTIVE SUMMARY

The University of Wisconsin-Madison Institute for Research on Poverty is conducting an evaluation of the Wisconsin BadgerCare Reform Demonstration Project, as proposed by the Wisconsin Department of Health Services (DHS) and approved by the federal Centers for Medicare and Medicaid Services (CMS). The evaluation uses quasi-experimental study designs to assess how the provisions of Wisconsin's Medicaid § 1115 Waiver Demonstration, for the period CY2019-CY2023, affect two Medicaid populations: (1) childless adults (CLAs) with an effective income at or below 100% of the federal poverty level (FPL), and (2) all Medicaid beneficiaries eligible for an expanded coverage of treatment services for substance use disorders (SUD).

The evaluation addresses the waiver demonstration provisions defined by DHS and approved by CMS for a five-year demonstration period, ending December 31, 2023. (Attachment A. Approved Waiver) Hypotheses and associated research questions focus on the following provisions and programmatic changes:

- Extension of a full Medicaid benefit for adults without dependent children ("childless adults") with incomes up to and including 100% FPL.
- Premiums for childless adults with incomes greater than 50% up to and including 100% FPL as a condition of enrollment.
- A period of non-eligibility for up to six months for childless adults who do not pay the required premium, with on-ramps to reactivate coverage during the non-eligibility period.
- An $8 co-payment for non-emergency use of the emergency department.
- Required completion of a health risk assessment as a condition of eligibility for childless adults.
- Opportunity for reduced premiums for childless adults based on the health risks and healthy behaviors reported on health risk and needs assessments.
- Expanded coverage for substance use disorders including a residential treatment benefit and coverage for existing services when they are provided in an institution of mental disease (IMD) specifically including medically supervised withdrawal management, inpatient services, and medication-assisted treatment (MAT).

The evaluation requires administrative data from the Wisconsin DHS pertaining to application and enrollment, claims and encounters, health risk and needs assessments, premium payments, and vital statistics (for example, death records). The evaluation team also uses several other sources of administrative data, including Wisconsin's all-payer claims database and unemployment insurance data, along with state and national population survey data. Three separate beneficiary surveys, occurring in CY2020, CY2022, and CY2024, will provide an important source of primary data for evaluation of multiple hypotheses and research questions.

The COVID-19 public health emergency led the state to suspend implementation of several waiver provisions. In adhering to provisions of the federal Families First Coronavirus Response Act, the state

Medicaid agency has generally not conducted eligibility redeterminations or disenrollments since March 28, 2020. The pandemic-related and other changes to the waiver implementation include the following:

- Suspended the emergency department co-payment, and then initiated it on July 1, 2020.
- During the entire period of the federally-designated public health emergency (PHE):
    - Suspended premium co-payments, including those for childless adults with incomes between 51-100% FPL.
    - Suspended community-engagement/work requirements reporting and start-up.
    - Suspended requirement for completion of the Health Risk Assessment and Treatment Needs Question, which had been implemented for the month of March 2020.
- Delayed initiation of the SUD waiver provision, as the state addressed various policy and programmatic details. The SUD residential treatment benefit was implemented on February 1, 2021.

This evaluation design report, originally submitted in 2019, has been updated to reflect those changes along with responses to CMS comments received throughout CY2020. (See Attachment B: CMS Comments and UW/DHS Responses.) The report describes how the evaluation plan has been adjusted to account for the change in the waiver's implementation, and for the unusual pandemic circumstances as they might affect Medicaid enrollment, health care use, and other data trends.

In April 2021, CMS withdrew approval for the community engagement requirement provision of the waiver. The evaluation design report has been updated to reflect this provision's withdrawal. Although it was never implemented, because members received some communications about this requirement prior to its suspension at the beginning of the COVID-19 pandemic, we have retained some references to this former provision where appropriate.

This multi-disciplinary evaluation team, with collaborating scholars from several universities, has conducted Medicaid section 1115 waiver evaluations for over a decade, and has published a wide range of Medicaid-related research and evaluation studies. The investigators bring expertise and skills with the full range of health services and econometric methods needed to assure a rigorous independent evaluation. The Wisconsin Medicaid agency lays out ambitious goals with this demonstration waiver, and the evaluation will contribute important findings for state and federal Medicaid policy.

WAIVER PROVISIONS AND HYPOTHESES

Provision 1: Medicaid benefits to non-elderly childless adults (CLAs) up to 100% FPL.

- H1.1. Expansion of benefits to non-elderly childless adults will reduce the state's uninsured rate.
- H1.2. Expansion of benefits to CLAs will lead to their increased access to medical care.
- H1.3. Expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals.
- H1.4. Additional requirements of the current demonstration may increase administrative costs.

Provision 2: Health Assessment linked to eligibility and premiums

- H2.1. Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in healthier behaviors.
- H2.2. The health assessment will increase the number of beneficiaries receiving treatment for substance-use disorders
- H2.3. The requirement to answer the health assessment as a condition of eligibility will discourage some potential beneficiaries from enrolling in Medicaid.

Provision 3: Premiums for childless adult beneficiaries ages 19-64 with income 50% through 100% FPL; $8 co-payment for non-emergent use of the emergency department for childless adults

- H3.1. Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance.
- H3.2. The imposition of premium requirements for childless adults will reduce enrollment in Medicaid.
- H3.3. The imposition of premium requirements for childless adults will increase enrollment in commercial insurance following exits from Medicaid.
- H3.4. The imposition of premium requirements for childless adults will lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums.
- H3.5. The imposition of a co-payment for non-emergent use of the emergency department will lead to more appropriate uses of medical care among childless adults enrolled in Medicaid.
- H3.6. Hospitals vary in how they implement the required co-payment for non-emergency use of the ED.

Provision 4: Substance Use Disorder (SUD) Demonstration Waiver: Expansion of coverage of substance abuse disorder treatment services*

- Q4.1. Does the waiver increase the supply of SUD providers for Medicaid enrollees?
- Q4.2. Does the waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees?
- Q4.3. Does the waiver change Medicaid enrollees' use of existing covered SUD services?
- Q4.4. Does the waiver reduce the rate of drug overdose deaths among Medicaid enrollees including opioid-related deaths?
- Q4.5. What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver?

* Consistent with the CMS guidance for evaluation of SUD waivers, the evaluation for the SUD portion is organized around evaluation questions, with specific hypotheses following each question (as shown in Section IIIE)

II. DEMONSTRATION WAIVER AND EVALUATION BACKGROUND

The University of Wisconsin-Madison Institute for Research on Poverty (IRP) is conducting an evaluation of the Wisconsin BadgerCare Reform Demonstration Project, as proposed by the Wisconsin Department of Health Services (DHS) and approved by the federal Centers for Medicare and Medicaid Services (CMS). BadgerCare is Wisconsin's combined Medicaid and Children's Health Insurance Program (CHIP) for low-income families and for adults without dependent children.

IIA. Waiver Overview and Target Populations

The 2018 Wisconsin waiver primarily concerns adults without dependent children, referred to as childless adults (CLAs), and also includes a substance use disorder (SUD) provision that applies to the entire Medicaid population. CMS approved the waiver provisions on October 31, 2018, with an approval period through December 31, 2023. The various provisions take effect gradually throughout the calendar years 2019-2021.[1]

Childless Adults Waiver Provisions

The BadgerCare Reform demonstration waiver authorizes Wisconsin to provide a full Medicaid benefit package to non-pregnant, non-disabled, non-elderly childless adults with incomes of up to and including 100% FPL. This coverage began under a prior waiver, initiated in April 2014, and the current demonstration approval continues coverage for this population for five years.

The 2018 waiver also includes several other important features, also subject to evaluation. Childless adults with incomes greater than 50% and up to and including 100% FPL are required to pay a premium as a condition of eligibility. They are subject to termination and a period of non-eligibility for up to six months if they do not pay the required premium by the end of their certification period, with on-ramps to reactivate coverage during the non-eligibility period. The waiver introduces an $8 co-payment for non-emergent use of the emergency department for childless adults. It requires completion of a health risk assessment as a condition of eligibility for childless adults and offers opportunities for reduced premiums based on the health risks and healthy behaviors reported on health risk and needs assessments.

The original waiver allowed Wisconsin to require these childless adult beneficiaries, ages 19 through 49, with certain exceptions, to participate in, document, and report 80 hours per month of community engagement activities. Qualifying activities included employment, self-employment, in-kind work, job training, or community service. The community engagement incentive was not to apply to beneficiaries ages 50 and older. Medicaid beneficiaries subject to the community engagement requirement, but who have not met the community engagement requirements for 48 aggregate months (without qualifying for an exemption), would have been disenrolled from Medicaid at the end of their certification period and

[1] For additional detail regarding the 2018 WI Medicaid waiver and the Special Terms and Conditions, see Wisconsin Department of Health Services. Section 11115 BadgerCare Reform Demonstration Waiver. Available at https://www.dhs.wisconsin.gov/badgercareplus/waivers-cla.htm

unable to re-enroll as a childless adult for six months. However, if that individual reapplied for Medicaid during that six-month period of non-eligibility and is found eligible under another Medicaid eligibility group, the individual would be enrolled into Medicaid. Early information about this provision was communicated to members, but the requirement was suspended and later approval for the provision was withdrawn by CMS, so it has never been in effect.

SUD Waiver Provision

This demonstration waiver also includes a substance use disorder (SUD) program available to all Wisconsin Medicaid beneficiaries. The SUD program expands coverage for substance use disorder treatment in facilities that qualify as institutions for mental diseases (IMDs) for all Medicaid enrollees. The provision authorizes a new residential treatment benefit and coverage for existing services when provided in an institution of mental disease (IMD) specifically including medically supervised withdrawal management, inpatient services, and medication-assisted treatment (MAT). The purpose of the program is to ensure that a broad continuum of care is available to Wisconsin Medicaid beneficiaries with a substance use disorder, helping improve the quality, care, and health outcomes for those Medicaid beneficiaries. The State of Wisconsin identifies this waiver provision as part of a comprehensive statewide strategy to combat substance use disorders and drug overdose.

COVID-Related Changes to Waiver Implementation

The federal Families First Coronavirus Response Act, in providing increased Medicaid funding for states during the federally declared public health emergency (PHE), includes a continuous coverage provision that prohibits Medicaid agencies from terminating coverage for most enrollees during the PHE. Wisconsin has been adhering to this provision and, as of March 2020, has not terminated Medicaid coverage during the PHE unless an enrollee requests termination, moves out of state, or dies. As well, states may not impose conditions of eligibility more restrictive than those in place as of January 1, 2020.

This policy placed in suspension many of the existing waiver's provisions. As well, Medicaid beneficiaries would normally be required to complete annual eligibility renewals, report changes in income and other circumstances, and otherwise respond to requests for information when the Medicaid agency identifies a potential need to verify income. The state will prepare re-activate this process in CY2021, at the end of the federally-declared public health emergency. But, since March 2020, virtually no Medicaid disenrollments have occurred.

In summary, the following changes occurred to the implementation of the waiver's provisions:

- Suspended the emergency department co-payment, and then initiating it on July 1, 2020.
- During the entire period of the federally-designated PHE:
    - Suspended premium co-payments, including those for childless adults with incomes between 51-100% FPL.
    - Suspended community-engagement/work requirements reporting and start-up.
    - Suspended requirement for completion of the Health Risk Assessment and Treatment Needs Question, which had been implemented for the month of March 2020.

- Delayed initiation of the SUD waiver provision, as the state addressed various policy and programmatic details. The SUD residential treatment benefit was implemented in February 2021.
- CMS withdrawal of permission for the community engagement requirements in April 2021

The evaluation team has adjusted its data collection and analysis plan in response to the changes in waiver implementation and approval. Memos submitted by the evaluation team review these changes. (Attachment B: CMS Comments and UW/DHS Responses) These changes are incorporated into this updated Design Report.

IIB. Evaluation Team Background and Qualifications

Our team has conducted and published studies on a broad range of Medicaid-related evaluation and research topics, addressing coverage and care utilization, labor market impacts, crowd-out of private insurance, premiums, restrictive non-enrollment periods, health needs assessments, application and enrollment systems, and churning.[2] Sponsors of this team's work include the state and federal governments, foundations, and private sector concerns. We have conducted the CMS-required evaluations of Wisconsin's BadgerCare demonstration § 1115 waivers that were approved in 2008, 2012, and 2014, of Wisconsin's SeniorCare prescription drug program, and of the Medicaid medical homes for high risk pregnant women.

The multi-disciplinary team of faculty and staff researchers is based at the University of Wisconsin-Madison, in the Institute for Research on Poverty, with the following collaborating faculty investigators: Dr. Marguerite Burns, a health services researcher in the UW School of Medicine and Public Health; Dr. Laura Dague, an economist at Texas A&M University's Bush School of Government & Public Service; Dr. Thomas DeLeire, an economist at the Georgetown University McCourt School of Public Policy; Dr. Brendan Saloner, a health services researcher at Johns Hopkins University Bloomberg School of Public Health; Dr. Justin Sydnor, an economist at the UW School of Business; and Dr. Alyssa Tilhou, a physician and health services researcher at Boston University in the Department of Family Medicine.

IIC. Evaluation Design Approach and Methods

The evaluation of the demonstration waiver will involve a variety of analytic approaches. We describe below the three approaches that cut across most components of the evaluation design. Further detail regarding the application of these methods to specific evaluation questions is included in the Section III of this evaluation design report, in addition to methods that are unique to a given question or hypothesis.

Section III, below, also details the planned changes to the evaluation plan that account for the pandemic circumstances and the state's delay in implementing various waiver provisions. In general, we will treat 2020 carefully in any analytical models that rely on across-time comparisons, including allowing for flexibility in modeling time and excluding 2020 from the models. Where relevant, we will be using 2019

[2] Information about the team's work is available here: https://www.irp.wisc.edu/health-policy/

rather than 2020 as baseline for analyses of the pre-period and for secondary data. Any comparisons over time will account for differences in the pool of beneficiaries enrolled in 2020 and later.

We also consider how the beneficiary pool and outcomes in 2021 and later will be affected by the pandemic. Instead of previously planned use of ITS models, we place greater emphasis on DiD, regression discontinuity (RD), and other models that use a simultaneous comparison group, because they are better able to control for pandemic impacts. The evaluation will use time period indicators in regression models that control for pandemic months or estimate treatment effects for periods before, during, and after the public health emergency period. Planned analyses include robustness checks. We will also, as appropriate, consider sensitivity analyses that keep the analytic sample constant in order to isolate the demonstration impact from changing characteristics of Medicaid beneficiaries.

Difference-in-Differences (DiD) Method

The objective in evaluating a treatment's effect on an outcome is to find the difference between the improvement (or degradation) in an outcome in the presence of the treatment to the change in an outcome that would have occurred in the absence of the treatment. In the group of individuals who receive the treatment, this counterfactual change—the amount that an outcome would have improved absent the treatment—is not observed. Therefore, this counterfactual change must be estimated somehow.

A popular method applied to estimate this change is the difference-in-differences (DiD) approach. In this approach, two populations of subjects, treatment and control, are observed at two points in time: at baseline, before the intervention is applied, and at follow-up, after the intervention is applied to the treatment population. The outcome is measured in each population at each time. The average effect of the treatment is estimated by subtracting the change in outcomes in the control group from the change in outcomes in the treatment group. The control group thus provides the counterfactual for the trend that would have occurred in the treatment group in the absence of the intervention.

DiD can be implemented either by literally taking averages and subtracting, as described above, or via regression modeling. The advantages of using a regression framework is that a researcher can incorporate more than one time period before and after intervention into the empirical analysis and can adjust for potential confounders arising from differences in demographic and baseline health characteristics and time trends. For continuous outcomes, a linear regression model takes the form:

$$(1) \qquad Outcome_{it} = \alpha + \beta T_i + \delta post_t + \lambda T_i \times post_t + \gamma X_{it} + \varepsilon_{it}$$

where $Outcome_{it}$ is the outcome measure of interest for subject *i* at time *t*; T_i takes the value of 1 if subject *i* is in the treatment group, and 0 otherwise; and post_t equals 1 if time *t* is after the treatment/intervention was applied, and equals 0 otherwise. The interaction term, $T_i \times \text{post}_t$, equals 1 for members in the treatment group after the treatment has been applied. X_{it} represents a set of control variables for subject *i* at time *t*, such as demographic and health characteristics. These

characteristics are either measured in the baseline period or considered not to be directly influenced by the treatment. The average effect of the treatment/intervention is measured by the estimate of the coefficient λ. Where feasible and appropriate, the set of control variables may include county by year fixed effects to address the potential for time-varying geographic differences to help isolate the demonstration impact.

One can readily generalize this regression framework to deal with non-continuous outcome variables such as discrete outcomes, proportions, or percentages. A major advantage of using this DiD regression approach is that it can yield an estimate unbiased by time-invariant differences between treatment and comparison group individuals when covariates are included to control for initial heterogeneity of treatment and comparison groups. We will also include specifications that allow for heterogeneity in the effect by year (defining *post* as indicator variables for year) to observe the impact of the demonstration in years during and right after the COVID-19 pandemic and in later years when the pandemic has further subsided, where appropriate.

It will not generally be possible to create control groups that perfectly match the treatment groups on all observable correlates related to the various outcomes of interest. Consequently, the distribution of the characteristics of subjects will, to some extent, differ between treatment and control groups. To create unbiased estimates of intervention effects in the presence of such heterogeneity and to improve the precision of our estimates, we will implement matching methods such as propensity score matching and the more general approach of "cell matching."

In cell matching, sample members in treatment and comparison groups are allocated to cells based on values of their covariates which have been determined to be potential factors influencing outcomes (e.g., age, gender, region, race, health status, etc.). Cells, then, comprise persons with similar values of combination of covariates. Given this homogeneity within cells, treatment effects can essentially be estimated by cell using the simple variant of DiD methods described above, and an average treatment effects for a population can be estimated by weighting cell estimates by the proportions of the population deemed to occupy each cell.

Regression Discontinuity (RD)

Regression Discontinuity (RD) is generally regarded as a strong program evaluation design.[3,4] The RD takes the following form:

$$(1) \qquad Y_i = \alpha + \theta(X_i - x_0) + \tau W_i + \gamma(X_i - x_0)W_i + \epsilon_i,$$

[3] Lee, David S., and Thomas Lemieux.2010. Regression Discontinuity Designs in Economics. *Journal of Economic Literature* 48, No. 2 (2010): 281-355.

[4] Abadie, Alberto, and Matias D. Cattaneo. 2018. Econometric Methods for Program Evaluation." *Annual Review of Economics* 10: 465-503.

Implemented via local linear regression with triangular kernel weights, where all observations outside the bandwidth h (more than h away from x_0) are discarded. Here, Y_i is the outcome under consideration, X_i is the running variable that determines whether the individual is subject to the treatment (e.g., age of the member), x_0 is the cutoff level of *X*, , W_i is an indicator for whether or not the individual was subject to the treatment (e.g., subject to premiums) and equals zero if not and 1 if so, and ϵ_i is a random error term. The treatment effect of interest is τ. The coefficients θ and γ allow the slope of the regression to differ on either side of the cutoff x_0. The design also allows us to control for potentially confounding covariates.

Interrupted Time Series (ITS) Estimation

We had planned to assess outcome changes before and after implementation of the demonstration waiver within the enrollee population using an Interrupted Time Series (ITS) model, an approach that is commonly relied upon to ascertain outcomes when an intervention or policy is implemented for an entire population at the same time. In an ITS model, a researcher can segment outcome data into pre- and post-waiver components in a linear regression specification and quantify the differences between the two segments by testing the change in levels (absolute change in outcome) and slopes (rate of change in outcome) before and after program enrollment. This specification can also adjust for autocorrelation properties of error terms in empirical specification of the sort illustrated below:

$$(2) \qquad \text{Outcome}_{it} = \alpha + \delta \text{post}_t + \gamma X_{it} + \varepsilon_{it}$$

In this framework, the effect of the change in treatment is estimated by the regression estimator of δ. The framework can allow differences in the trend in outcomes trend between pre- and post-treatment periods by interacting post_t with the time trend variable(s) in X_{it}. Additionally, treatment effects may be permitted to differ among individuals by interacting post_t with other elements of X_{it}.

The pandemic-related disruptions, however, hinder the use of data from CY2020 (and perhaps 2021), in an ITS model. We have generally abandoned previously planned use of ITS models, placing greater emphasis on DiD, regression discontinuity (RD), and other models that use a comparison group because they are better able to control for pandemic impacts.

IID. Data Sources

The evaluation of the demonstration waiver will rely on multiple data sources, including state and national administrative data, population survey data, and a beneficiary survey. These data elements are described below. The specific sources that will be used to evaluate each provision, and the outcomes derived from each source, are noted in the relevant sections of this evaluation design report.

1. All Payer Claims Database, WHIO.[5] The Wisconsin Health Information Organization, known as WHIO, is private-sector-operated, voluntary, multi-payer claims database. WHIO includes Medicaid along with commercial insurance covering most of Wisconsin's population. It is missing

[5] Wisconsin Health Information Organization. Datamart Guide Version 2.1. 2014. Optum, Inc: Waltham, MA.

Medicare fee-for-service, self-funded employers whose third-party administrators do not submit claims, and individuals insured by national or border state companies (examples include HealthPartners, Aetna, and Cigna). The WHIO data have both a claims file and a member enrollment file, which permits us to track unique individuals' enrollment in health insurance regardless of whether members actually incur claims. WHIO does not release identifiable data, so it is not possible to link these data directly to Medicaid administrative data in order to identify the Medicaid sample. Rather, we will use the member file to identify both the Medicaid and privately insured samples.

Note: In 2019, the WHIO hired a new contractor to collect and construct the all-payer-claims database. We do not expect that the change in contractor will impede the use of these data longitudinally; however, we will confirm that there have been no changes in the methodology for data construction that would introduce bias into the study designs when technical information is available from the new contractor. In the evaluation, the WHIO provides a source for a within state comparison group of commercially insured individuals to complement the primary designs. Thus, in the unlikely event that the new WHIO data are not usable, our capacity to answer the research question will not be affected.

2. American Community Survey. The American Community Survey (ACS), a nationally representative survey conducted by the U.S. Census Bureau, contains state-level geographic identifiers. The survey asks about sources of health insurance coverage in the previous year, including Medicaid coverage, private group and non-group insurance, Medicare, and military coverage. The survey is administered annually and is publicly available with only a short lag.

3. Behavioral Risk Factor Surveillance System (BRFSS)**.** Run by the Centers for Disease Control and Prevention, the BRFSS is a set of state-level surveys that collect data from all 50 states and the District of Columbia on the health and health behaviors of U.S. residents. The survey also collects information on health insurance coverage, though not the source of that coverage, and on employment. The data are available at the state level and with roughly a two-year lag.

4. CARES*.* Wisconsin CARES is the state's online eligibility and enrollment portal for public benefits, including Medicaid, TANF, and FoodShare (SNAP). We use data from CARES to attain longitudinal administrative data pertaining to enrollment. Demographic information includes age, sex, educational attainment, county of residence, income, and income sources. CARES data also include reason codes associated with disenrollment, and "premium payment files" that contain monthly information on the dollar amount of premium owed, whether it was paid, and the date of payment.

5. Hospital Cost Reports. These reports are submitted annually to CMS by all acute-care and critical access hospitals. Data on uncompensated care (UCC) are reported in Worksheet S-10 of Form CMS-2552-10, which was first used beginning in May 2010. UCC is the sum of two reported items: the cost of charity care provided to uninsured patients (line 23 column 1) and the cost of

non-Medicare bad-debt expense (line 29). As needed, we will supplement Hospital Cost Report data with Wisconsin data on hospital uncompensated care available from the Wisconsin Hospital Association.[6]

6. Marketplace Enrollment. CMS public use files provide data on enrollment at the zip code and county level, by FPL, in ACA Marketplace plans for each annual open enrollment period. These data do not allow matching on the individual level, but may be used to demonstrate trends in enrollment at various income levels over time.

7. Medicaid Beneficiary Survey. Described in detail in Section IIE. Primary Data Collection, below.

8. National Survey of Substance Abuse Treatment Services (N-SSATS).[7] The Substance Abuse and Mental Health Services Administration (SAMHSA) conducts this annual survey to provide a census of facilities nationwide that provide substance abuse treatment and collect data on their location in each state and characteristics including populations served, available services, and whether the facility accepts Medicaid as a payer.

9. Other Wisconsin Medicaid Administrative Data. The Wisconsin Medicaid agency will provide the data from the health risk and health needs assessments, including completion rates and substantive response information.

10. Small Area Health Insurance Estimates (SAHIE). The SAHIE program was created to develop model-based estimates of health insurance coverage for counties and states. SAHIE data can be used to analyze geographic variation in health insurance coverage, as well as disparities in coverage by race/ethnicity, sex, age and income levels that reflect thresholds for state and federal assistance programs.

11. Wisconsin Mental Health and Substance Use Needs Assessment.[8] The Wisconsin Division of Care and Treatment Services publishes this report biannually. It provides county-specific indicators of SUD treatment needs and available resources.

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[6] Uncompensated care for Wisconsin hospitals is reported by the Wisconsin Hospital Association annually, available here: https://www.whainfocenter.com/uploads/PDFs/Publications/Uncompensated/Uncompensated_2017.pdf ; Other financials for WI hospitals available here: https://www.whainfocenter.com/services/publications/?ID=49

[7] Substance Abuse and Mental Health Services Administration. National Survey of Substance Abuse Treatment Services. Information available at: https://www.samhsa.gov/data/data-we-collect/nssats-national-survey-substance-abuse-treatment-services

[8] Wisconsin Department of Health Services, Division of Care and Treatment Services. 2017 Wisconsin Mental Health and Substance Use Needs Assessment. July 2018. P-00613. Accessed 6/27/19 at https://www.dhs.wisconsin.gov/publications/p00613-17.pdf

12. Wisconsin Family Health Survey. The Wisconsin Family Health Survey is an annual statewide random-sample telephone survey of all household residents. This survey includes topics such as health insurance coverage, health status, health problems, and use of health care services. It is currently available from 2008 through 2017 (and we will add additional years as they become available).

13. Wisconsin Medicaid claims and encounter data. We will obtain claims and encounter data from the State's MMIS claims database. These data files include detailed ICD-10 diagnostic codes. The claims and encounter data contain detailed information on diagnoses, procedure, and billing codes from which we will construct outcomes measures of health care use.

14. State Inpatient Databases (SID). The SIDs are part of the Healthcare Cost and Utilization Project (HCUP). The SID includes inpatient and emergency department discharge records from community hospitals in participating states. SID files encompass all patients, regardless of payer. The SID contain a core set of clinical and nonclinical information on all patients, including individuals covered by Medicare, Medicaid, or private insurance, as well as those who are uninsured. We will use Wisconsin data from 2012 through 2017, the last year of data currently available (and will add additional years of data as they become available). We will also obtain data from the same years for two Midwestern states that expanded Medicaid (Michigan and Minnesota) and three states that did not expand Medicaid (Florida, North Carolina, and Kansas).

15. Treatment Episode Data Set – Admissions (TEDS-A).[9] The TEDS-A is a national dataset that includes substance abuse treatment admission-level data for facilities that receive state funds or federal block grant funds to provide alcohol and/or drug treatment services. The dataset is structured at the admission-level and includes many characteristics of each admission including patient demographics, dates of admission, payer, services received, and the state in which facility is located. This dataset is published approximately two-years after the close of the calendar year (e.g., May 2019 for the 2017 dataset).

16. Unemployment Insurance Wage and Benefits Records (UI). UI wage and benefits records are longitudinal administrative data from the UI earnings reporting system, with individual-level measures of reported quarterly employment, wages, and firm industry code. These data may be matched to Medicaid administrative enrollment data from CARES, to identify an individual's employment status regardless of whether they are currently enrolled in Medicaid.

17. Wisconsin Death Records. The State Registrar in the WIDHS collects vital statistics death data. The source of these data are death certificates filed with the WIDHS. Cause of death is coded according to ICD-10. We will examine resident deaths, specifically all deaths that occurred in Wisconsin within the Wisconsin resident population. Conditional on approval by the WI DHS, we

[9] Substance Abuse and Mental Health Services Administration. Treatment Episode Data Set. Accessed 6/27/19 at https://www.samhsa.gov/data/data-we-collect/teds-treatment-episode-data-set.

will link death records to Medicaid enrollment date to identify deaths among Medicaid enrollees.

18. Wisconsin Third Party Liability (TPL) Database. TPL is an individual-level database that contains all enrollees in state health insurance programs who are covered by a private health insurance plan. We can match individuals in TPL using social security numbers. This database may not contain information on whether individuals were covered by health insurance provided by a self-funded employer (whose policies are not subject to state regulation).

19. U.S. Department of Labor (DOL) Self-Insured Firms list: To assess whether enrollees may have access to health insurance coverage through a self-funded employer, we can connect CARES cases to their employers by linking CARES through SSNs to a database of quarterly earnings records from Wisconsin's UI system. Next, we can use FEINs (obtained from UI) to link to data from the DOL that comes from the required reporting of self-insured firms to the Internal Revenue Service. The DOL data cover the universe of self-insured employers within the United States. We have previously obtained these data through a Freedom of Information Act request, and we will use the process again for this project. From these data, we can infer coverage from a self-insured firm.

IIE. Primary Data Collection: Medicaid Beneficiary Survey

A survey of current and former Medicaid beneficiaries provides the opportunity to examine the respondents' experiences specifically in relation to the waiver provisions, including several domains not well-suited to measurement with administrative data or other state and national data. These domains include perceptions and understanding of various waiver provisions, reported reasons for changes in enrollment status or health care use, reported health status over different enrollment entry and exit spells, and knowledge of and interest in various services (such as SUD treatment).

The evaluation design includes use of a survey at three separate points in the five-year evaluation period, in CY2020, 2022, and 2023-24 (Table 6). This design report provides detail about the first survey, including sample construction, data collection, and next steps. The evaluation plan, under the highly fluid policy environment, relies on an agile project management approach for design of the subsequent two beneficiary surveys. We expect to re-define the more specific parameters of the survey cohorts, instrument domains, and data collection as the dates for those next surveys draw near.

i. Survey Domains

The evaluation design includes plans to field cross-sectional surveys of beneficiaries at three separate points in the five-year evaluation period. Overall plans are as follows:

- Mixed mode (self-administered questionnaire (SAQ), web, and telephone)
- Surveys in the first and final round are sent to 15,000 people; Offered in Spanish and English
- Sample groups include childless adults and parents/caretakers, people with a history of SUD treatment, and previous Medicaid members who have left the program

- The second round of data collection will target a smaller group of individuals for open-ended qualitative interviews

The domains within the 2020/2021 survey instrument included the following:

- Health insurance coverage status – past year and current
- Medicaid eligibility and enrollment changes
- Health care needs, access and use
- Health status and health behaviors
- Access to care and use of services related to COVID-19
- Employment and workforce activities
- Awareness of waiver provisions
- Demographics

Questions were developed using items from previous surveys of Wisconsin Medicaid beneficiaries, from national surveys and from other state surveys of Medicaid beneficiaries. These include: the Behavioral Risk Factor and Surveillance System, the Urban Institute Health Reforming Monitoring Survey, Kaiser Family Foundation Health Tracking Polls, the National Health Interview Survey, the Michigan waiver's survey of Medicaid beneficiaries[10] and the Oregon Health Insurance Experiment[11].

Table 4 displays how the waiver provision and hypotheses relate to each of the survey domains.

We may adjust future survey questions and planned analyses depending on the outcomes of the 2020/2021 wave, and also to account for changes in the waiver implementation and in the Medicaid context and policy environment over the demonstration time period.

ii. Sample Construction and Data Collection

The original planned field date for the baseline survey was May 2020, but was delayed due to the postponement of waiver provisions and logistical challenges arising at the start of the COVID-19 pandemic. It was re-scheduled to begin in the first week of October 2020 and concluded in February 2021.

Beginning with the onset of the federal public health emergency in March 2020, we worked with our survey partner, NORC at the University of Chicago, to carefully reconsider the timing and schedule for fielding the survey. We explored different strategies for contacting and offering incentives to beneficiaries to participate in the survey, because the pandemic made data collection more challenging.

The revised timing of the 2020/2021 survey was designed to provide a baseline for the evolving timeline of state waiver provisions. While some of the waiver provisions remain suspended under the public health emergency, the state Medicaid agency has begun to implement some waiver provisions and has

[10] Healthy Michigan Voices Survey. https://ihpi.umich.edu/featured-work/healthy-michigan-plan-evaluation/healthy-michigan-voices-survey

[11] Oregon Health Insurance Experiment – Documents. https://www.nber.org/programs-projects/projects-and-centers/oregon-health-insurance-experiment/oregon-health-insurance-experiment-documents

been preparing for others. The emergency department co-payment took effect in July 2020. When other provisions would be activated has remained unclear. The ability to collect useful baseline data would be eroding as Medicaid members became exposed to any waiver provisions over time, motivating our decision to field the survey in early fall 2020.

The evaluation will include three rounds of data collection, but the timeline for this data collection has been revised. We concluded that it would not be feasible to postpone the first survey until late 2021, for a potential post-pandemic time frame. The original evaluation plan had specified two data collection rounds, one at the demonstration period start, in waiver year 01, and the other at the late stage in waiver year 04-05. CMS, in its response, requested that the evaluation plan add a third beneficiary survey or interview protocol, to occur at a mid-point, around year 02 of the waiver. The evaluation team then met this request, submitting a plan to field the added survey in 2022.

With the evaluation plan now entailing three surveys in a five-year period, the workplan schedule requires a continuous cycle of 1) survey planning and preparation, 2) data collection, and 3) data analysis and reporting. The evaluation has proceeded with baseline data collection in fall 2020, with plans for a second data collection effort scheduled for CY22.The fielding of the survey in fall 2020 included the addition of some items specific to the COVID-19 pandemic and the experience of Medicaid members under the pandemic circumstances, which will support the analysis of the administrative data.

The first survey data collection included the following contacts:

- Contact 1: A mailing was sent to 15,000 current and former Badger Care recipients following the sampling plan developed by UW. This mailing included a “push to web,” with a URL allowing individuals to complete the survey by the web.
- Contacts 2 and 3: NORC sends a self-administered questionnaire (SAQ) mailing to those respondents who have not yet completed the web survey (1 page cover letter, first class postage-paid return envelope, 16-page survey); then a follow-up second mailing of the SAQ to those respondents who have not yet completed the survey.
- Contact 4: NORC team of interviewers contact potential respondents who have not responded to the web survey invitation or the SAQ. NORC will place up to six calls to each sampled beneficiary in order to maximize response. When NORC encounters disconnected or invalid lines, it uses a proprietary database to search for other contact information (e.g., using contact information that is harvested by credit reporting agencies).

Table 2 shows the CY20 data collection timeline.

Table 2. Survey Data Collection Timeline

Milestone	Start	End	Weeks
Modified Contract start date	8/24/20		
Multi-mode Survey Data Collection			
Develop survey instrument	N/A	8/10/20	
Recruit and hire interviewers	8/10/20	9/21/20	6
Program, test, and deploy survey instrument and case management system	8/10/20	10/2/20	8
IRB submission and approval	8/24/20	9/21/20	4
Train interviewers	9/21/20	9/28/20	1
Survey Data Collection	10/5/20	1/25/21	16
Contact 1: Mail invitation to web survey	10/5/20	N/A	
Contact 2: Mail SAQ	10/19/20		
Contact 3: second mailing of SAQ	10/26/20		
Contact 4: Initiate telephone follow-up calling	12/1/20	1/25/21	8
Survey data delivery	1/26/21	3/22/21	8

Table 3 displays the sample groups included in the CY2020 survey. The main sample groups are based on eligibility and enrollment status.

The baseline survey, which sampled 15,750 people to be interviewed, includes a subgroup of individuals who had been enrolled as childless adults during the time frame from August 2019 through March 2020 but disenrolled from that coverage prior to April 2020. These individuals would otherwise have been subject to the waiver provisions had they remained enrolled. The inclusion of this cohort is intended to provide information about 1) the target population's understanding of the pending waiver provisions and 2) the degree to which the state notifications about upcoming implementation of the waiver (which occurred in the months prior to April 2020) may have affected these former members' continuing enrollment in Medicaid.

We ask both current and former beneficiaries the same set of questions so that we are able to measure different response outcomes; survey items such as questions 2 and 4 help us to assess current enrollment and reasons for leaving BadgerCare.

We also designed for inclusion of Spanish-language speakers, given the unique challenges – in health insurance and in employment -- that face this population. The survey recruited an oversample of Medicaid/BadgerCare members, adding 750 people to the survey sample who were identified (in the administrative data) as having Spanish as their primary language.

Table 3. Survey Sample Groups

Group	Composition	Sample	Spanish Language Over-Sample	Total Sample
A	Childless adults randomly sampled from the list of current enrollees at the time of the sample construction with incomes 0–49 FPL	2,135	107	2,242
B	Childless adults randomly sampled from the list of current enrollees at the time of the sample construction with incomes 50–100% FPL	2,300	115	2,415
C	(A subset of the other sample groups) All adults who have a diagnosis of a substance use disorder or a hospital/ED visit related to a substance use disorder in the prior 12 months based on recent claims	2,994	150	3,144
D	Childless adults who have been long-term enrolled (>24 months) in the program without a history of employment	2,203	110	2,313
E	Individuals who disenrolled from CLA and were likely to have been subject to the waiver provisions	2,375	119	2,494
F	Parents and caregivers who are not subject to the premium requirement, and will serve as a contemporaneous comparison group	2,993	149	3,142
Total Sample		**15,000**	**750**	**15,750**

The interim evaluation reports will detail the survey response rates across subpopulations, describe how the pandemic may have affected beneficiary responses, and outline efforts to improve data collection in the next survey waves. We will also continuously assess how any pandemic-related complications may affect the interpretation of survey results and other data analyses.

As noted, and particularly relevant to group E, the state suspended Medicaid disenrollment during the public health emergency. Medicaid disenrollments will resume once the PHE expires. The next round of data collection in CY22 will include a cohort of members who had previously been enrolled in Medicaid/BadgerCare at the start of the waiver, but were no longer enrolled at the point of the survey data collection.

The CY22 data collection plan includes a close-ended survey cohort of 1,500 randomly selected current and former Medicaid members:

- Formerly enrolled adults, who had been enrolled between October 1, 2019 and December 31, 2021.

- Medicaid members who enrolled in April-May 2020, during the COVID-19 pandemic (regardless of their CY22 enrollment status).
- Childless Adults and Parents/Caretaker Adults currently enrolled (at the time of the survey frame sample drawing), who had enrolled prior to policy implementation
- Childless Adults and Parents/Caretaker Adults currently enrolled (at the time of the survey frame sample drawing), who had enrolled after policy implementation

We will carefully assess the quality and representativeness of the data collected from the 2020 survey, and may adjust the sample frame and cohorts for the 2022 and 2024 surveys to assure that they match the goals at the time. Our plan for the second survey, in 2022, focuses on current and former member experience with the waiver implementation process and requirements, and will involve a set of semi-structured interviews to complement the survey protocol. The waiver implementation has, to date, been highly fluid, with several of the provisions remaining subject to change going forward. For this reason, and as noted above, we use an agile project management approach to planning for each of the three beneficiary surveys, and expect to re-define the more specific parameters of the survey cohorts, instrument domains, and data collection as the dates for those next surveys draw near.

iii. Weighting, Coding, and Analysis

After the baseline data are collected, we will construct survey weights. Following best practices in statistical survey, we will likely use "raking weights" (i.e., iterative proportional fitting)[12], as we did in our prior survey analysis. This method will allow us to adjust for non-response to the survey by adjusting on observed factors from the sample to make it match the sampling frame (e.g., in terms of age, sex, race/ethnicity, and rurality).

Survey weights will be designed to address two issues: purposeful over-sampling of subgroups and differential non-response (i.e., differences in the likelihood of different contacted individuals completing the survey). Survey weighting will take place in two steps. First, we will derive weights within each sampling group to upweight or downweight respondents to more closely resemble the known demographic characteristics of the population from which they were sampled. Raking weights work by first adjusting to make the sample weights adjust to the sampling frame on each factor (e.g., age), and then iteratively readjusting the weights to ensure strong match on additional factors (e.g., sex, race/ethnicity). This evaluation team used raking weights in prior beneficiary surveys fielded by this team in 2016 and 2018.

Second, we will create weights that will allow us to derive estimates of the prevalence of different indicators among all childless adults by upweighting or downweighting the survey groups (i.e., the survey strata) to their proportions in the childless adult population. Strata weights will not be required for parents and caregivers since we are pulling a simple random sample from this group.

[12] Battaglia, M. P., Izrael, D., Hoaglin, D. C., & Frankel, M. R. (2009). Practical considerations in raking survey data. *Survey Practice*, *2*(5), 1-10.

As with prior surveys, we will recode variables from their "raw" response categories to grouping that enhance their interpretability. We will also examine outlier values and ensure logical consistency, making data cleaning decisions that we will document for consumers of the survey.

Planned analytic tasks include the following:

- Conduct descriptive analysis with weighted and unweighted samples.
- Examine means and frequencies for all key study variables and compare differences across different study populations of interest (e.g., between childless adults and parents/caretakers).
- Focus some analyses on specific groups (e.g., use of substance use treatment among people with recent experiences of treatment).
- Run regression models to predict the likelihood of key study outcomes. For example, since age and sex may independently influence health care demand, we will include the variables in regression models examining group-level differences in health care use.
- Leverage data from historical surveys (e.g., 2018 waiver evaluation) to compare trends in outcomes that may be influenced by changes in program design over time.

After the survey is implemented, our design will allow us to link survey responses back to administrative data.

iv. Relationship of the Survey to Econometric Study Designs

The survey is designed to test for differences-in-differences (DiD) comparing different segments of the CLA population and to support descriptive analyses. Based on the survey sample groups A-F shown in **Table 3**. **Table 5** identifies how each of these study design group will be used for comparisons.

Notably, Provision 4 relates to a program change that is implemented statewide. Accordingly, we have no true comparison group within the state for the survey. For this hypothesis, we will not be able to implement a quasi-experimental comparison with study data and will therefore only implement descriptive analyses to identify rates of service use without attempting to draw causal inferences.

v. Power Calculations

Our difference-in-difference analysis will be conducted using a regression-based approach where random effect regression model is fit to estimate (for linear models) or (for dichotomous outcomes) $\Lambda(\Pr(y_{it}=1)) = \zeta + \phi Treat_i + \gamma t + \lambda Treat_i \times t + u_i$ where Λ is the logistic function that links the predicted probability into an expression of log-odds. The power analyses presented here evaluate the chance of a significant result on parameter λ.

Linear Models

For linear models, the effect size of standardized mean differences is defined as $\delta = \frac{\lambda}{\sigma_T}$, where σ_T is the residual variance defined as $\sigma_T = \sqrt{\sigma_u^2 + \sigma_e^2}$. The Intraclass correlation is defined as $ICC = \frac{\sigma_u^2}{\sigma_T^2}$, and the within-group standard deviation used in the random intercept model is (1-ICC; details in working paper). Based on work conducted by Hedberg (2020 working paper), the linear model minimum detectable effect size can be approximated by the following formula:

$$\delta = g(\alpha, \beta)\sqrt{\frac{\text{Deff}}{nT(P^2 - P)(Q^2 - Q)}(1 - ICC)}$$

Where g is a factor based on the desired level of significance (α) and power ($1 - \beta$). For .8 power and $\alpha = .05$, this factor is approximately 2.8. The other parameters include the ICC, a design effect due to weighting, the total number of respondents followed (n), the total number of time points ($T = 2$), the proportion of time points exposed to the program ($P = .5$) and the proportion of units exposed the program (Q).

Logistic Models

For logistic models fitting the probability of a positive response to a dichotomous outcome, the effect size is the estimated difference in the log-odds (λ), and its exponent expresses the odds-ratio as the effect size. Since the effect size is based only on the model coefficient, the difference in the log-odds (λ), the formulas for the minimum detectable effect size is adjusted by the square root of the inverse variance of the logistic (log-odds) distribution, which is $\frac{1}{\sqrt{\frac{\pi^2}{3}}} = \frac{\sqrt{3}}{\pi}$.

The minimum odds ratio formula contains additional elements, namely the square root of the variance of the logistic distribution, adding $\left(\frac{\pi}{\sqrt{3}}\right)$ s the within cluster variance.

$$\ln(OR) = \delta\sqrt{\frac{\pi^2}{3}} = g(\alpha, \beta)\sqrt{\frac{\left(\frac{\pi}{\sqrt{3}}\right)\text{Deff}}{nT(P^2 - P)(Q^2 - Q)}}$$

In addition, the design effect due to clustering is different. Since the ICC is employs the well-known variance of the logistic model ($\frac{\pi^2}{3}$) as the level 1 variance component, it is defined as $ICC = \frac{\sigma_u^2}{\sigma_u^2 + \frac{\pi^2}{3}}$, with the identity that $\sigma_u^2 = \left(\frac{\pi^2}{3}\right)\frac{ICC}{1-ICC}$, this will lead to another factor that must be applied to the linear minimum effect size to estimate the minimum difference in log odds.

$$\frac{V_{cluster}}{V_{srs}} = \frac{\sigma_u^2 + \frac{\pi^2}{3}}{\frac{\pi^2}{3}} = \frac{\left(\frac{\pi^2}{3}\right)\frac{ICC}{1-ICC} + \frac{\pi^2}{3}}{\frac{\pi^2}{3}} = 1 + \frac{ICC}{1-ICC}$$

The natural log of this minimum odds ratio is

$$\ln(OR) = g(\alpha,\beta)\sqrt{\frac{\left(\frac{\pi}{\sqrt{3}}\right)\text{Deff}}{nT(P^2-P)(Q^2-Q)}\left(1+\frac{ICC}{1-ICC}\right)}$$

For our hypothesis-testing difference-in-differences analyses, and as elaborated above, we expect to achieve an average response rate of 40%. That means that we would expect to have sample sizes of 840 for each of the groups A-E and 1800 in group F in each survey round.

Using a power calculation tool developed by a statistician at NORC.[13] we have conducted a power calculation to illustrate the minimum effect sizes (for linear and logit models) we would be powered to detect with these sample sizes. Specifically, we assume that we are testing two-sided hypotheses at an alpha level of .05 and are adopting a power level of 80%. We assume that each sample is drawn independently and there is no correlation among survey respondents across years. We also assume a weighting design effect of 1.25, which is similar to what is seen in other analyses of this type. Under these circumstances, we assume that we would obtain a minimum detectable effect of 0.11 standard deviations for linear models, and an odds ratio of 1.52. These calculations are for unconditional models without covariates. If the correlation between the covariates and the treatment indicator are small, power will improve. However, if the correlations are large, the benefit of covariates may be outweighed by the induced multicollinearity.

vi. Beneficiary Interviews

In addition to the surveys, the evaluation team plans to conduct a series of individual interviews with beneficiaries, in CY 2022, using a protocol designed and implemented by NORC at the University of Chicago for use in the evaluation of the Kentucky Medicaid 1115 waiver. The Kentucky waiver protocol had included surveys with 125 Medicaid beneficiaries. For Wisconsin's project, we have planned to conduct interviews with 25 beneficiaries. This number of interviews will yield sufficient information to inform the process and quality improvement aims attached to this component of the evaluation.

Respondents who complete and return the CY22 mail survey will be considered eligible for an in-person interview if they indicate willingness to be contacted for a follow-up interview. We will select potential interview sample members from two to three targeted geographic areas within the state of Wisconsin, from both urban and rural regions with an aim toward including diverse perspectives. The interview participants will receive a $50 participation incentive, designed to attract interest in participation. The

[13]Hedberg E. Optimal Time-points for Difference in Difference Models with Multiple Indicators and (Possibly) Repeated Cross Sections. NORC, Chicago. Unpublished Working Paper.

selection of participants will be finalized once the full universe of interested potential participants is identified.

We consider it important to seek diverse perspectives in the interview pool, along characteristics such as urban/rural residents, sex or gender identity, age, race, ethnicity, health status. But, for the intended purposes of the qualitative methods, we are not particularly concerned about statistical representation across each specific geographic area of the state.

The collection of interview data, using qualitative methods, is not expected to provide a fully representative sample of the state population. Rather, this approach to data collection is designed to answer questions about lived experiences, gathering narrative (rather than numeric) data, and analyzing these data thematically (rather than mathematically). These qualitative methods help to understand how people experience events, programs, policies and services, and how and why they may respond in various ways.

Such qualitative methods help evaluators to better understand the role of factors that are difficult to fully quantify or isolate, such as feelings, attitudes, social environments, relationships, and how these factors might affect individuals differently. Qualitative methods can be especially useful for constructing theories or generating hypotheses in areas in which causal pathways are unclear. In this way, our planned qualitative methods can help support or alter hypotheses and suggest underlying mechanisms to explain observed trends and otherwise measured outcomes.

Table 4. Survey Domains Relevant to Study Hypotheses

Hypothesis	Target population	Survey domain(s)	Survey question(s)
Provision 1: Provide state plan benefits, other than family planning and tuberculosis-related services, to non-elderly childless adults with family income of up to 100% FPL			
Hypothesis 1.2. The expansion of benefits to non-elderly childless adults (CLAs) will lead to increased access to medical care among poor CLAs.	CLA	• Health insurance status and recent history of uninsurance • Access and use of general medical care • Demographics and socioeconomic status	Self-reported access/barriers to care, utilization of care, self-reported quality of care, annual household income, recently uninsured status
Hypothesis 1.3. The expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals.		• Health insurance status and recent history of uninsurance • Access and use of general medical care	Self-reported use of uncompensated care, recently uninsured status
Provision 2: Health Assessment Linked to Eligibility and Premiums			
Hypothesis 2.1 Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in more healthy behaviors.	CLA	• Exercise, smoking, diet and other preventive health behaviors • Health status and chronic conditions • Access and utilization of general medical care • Knowledge and perceptions of current provisions of the waiver • Attitudes about consumerism and personal responsibility • Demographics and socioeconomic status	Self-reported eligibility for the premiums, knowledge and completion of HA, risk behaviors (e.g., tobacco use), healthy behaviors (e.g., exercise and seatbelt use), motivation and attempts to change behaviors

Hypothesis	Target population	Survey domain(s)	Survey question(s)
Hypothesis 2.2 The health assessment will increase the number of beneficiaries receiving treatment for substance-use disorders.		• Substance use and use disorders • Access and utilization of drug treatment • Exercise, smoking, diet and other preventive health behaviors • Health status and chronic conditions • Access and utilization of general medical care • Demographics and socioeconomic status	Substance use/use disorders, access and utilization of SUD treatment, interest and motivation to receive SUD treatment; self-reported eligibility for the premiums, ability to pay premiums
Provision 3: Implement premiums for childless adult beneficiaries ages 19-64 with income between 50% and 100% FPL; Allow termination and a period of non-eligibility for up to six months for childless adults who do not pay the required premium; Implement an $8 copayment for non-emergent use of the emergency department for childless adults			
Hypothesis 3.1. Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance.	CLA	• Knowledge and perceptions of current provisions of the waiver • Attitudes about consumerism and personal responsibility • Demographics and socioeconomic status	Health insurance literacy; self-reported eligibility for the premiums, ability to pay premiums
Hypothesis 3.5. The imposition of a copayment for non-emergent use of the emergency department (ED) will lead to more appropriate uses of medical care among CLAs enrolled in Medicaid.		• Knowledge and perceptions of current provisions of the waiver • Attitudes about consumerism and personal responsibility • Demographics and socioeconomic status	Health insurance literacy; self-reported eligibility for the copayments, ability to pay copayments

Hypothesis	Target population	Survey domain(s)	Survey question(s)
Provision 4: Provide residential benefit for SUD treatment and coverage for existing SUD services when they are provided in an institution of mental disease (IMD).			
Hypothesis 4.2a. After implementation of the SUD demonstration waiver, enrollees' awareness of available SUD treatment services will increase over time	All Medicaid-Enrolled Adults	• Substance use and use disorders • Access and utilization of drug treatment • Knowledge and perceptions of current provisions of the waiver	Substance use/use disorders, access and utilization of SUD treatment, interest and motivation to receive SUD treatment
Hypothesis 4.3a. The SUD demonstration waiver will increase or have no effect on SUD outpatient services and pharmacotherapy treatment provided outside of IMD settings.		• Substance use and use disorders • Access and utilization of drug treatment • Knowledge and perceptions of current provisions of the waiver	Substance use/use disorders, access and utilization of SUD treatment, interest and motivation to receive SUD treatment
Hypothesis 4.3b. The SUD demonstration waiver will reduce use of hospital-based services, conditional on increased supply of SUD providers or increased use of new and existing covered SUD services.	All Medicaid-Enrolled Adults	• Access and utilization of general medical care • Substance use and use disorders • Access and utilization of drug treatment • Knowledge and perceptions of current provisions of the waiver	Self-reported access/barriers to care, utilization of care; substance use/use disorders, access and utilization of SUD treatment, interest and motivation to receive SUD treatment
Hypothesis 4.3c. The SUD demonstration waiver will increase use of health care for co-morbid physical and mental health conditions among enrollees with an SUD, conditional on increased supply of SUD providers or increased use of new and existing covered SUD services.		• Health status and chronic conditions • Access and utilization of general medical care • Substance use and use disorders • Access and utilization of drug treatment • Knowledge and perceptions of current provisions of the waiver	Self-reported access/barriers to care, utilization of care, quality of care; substance use/use disorders, access and utilization of SUD treatment, interest and motivation to receive SUD treatment

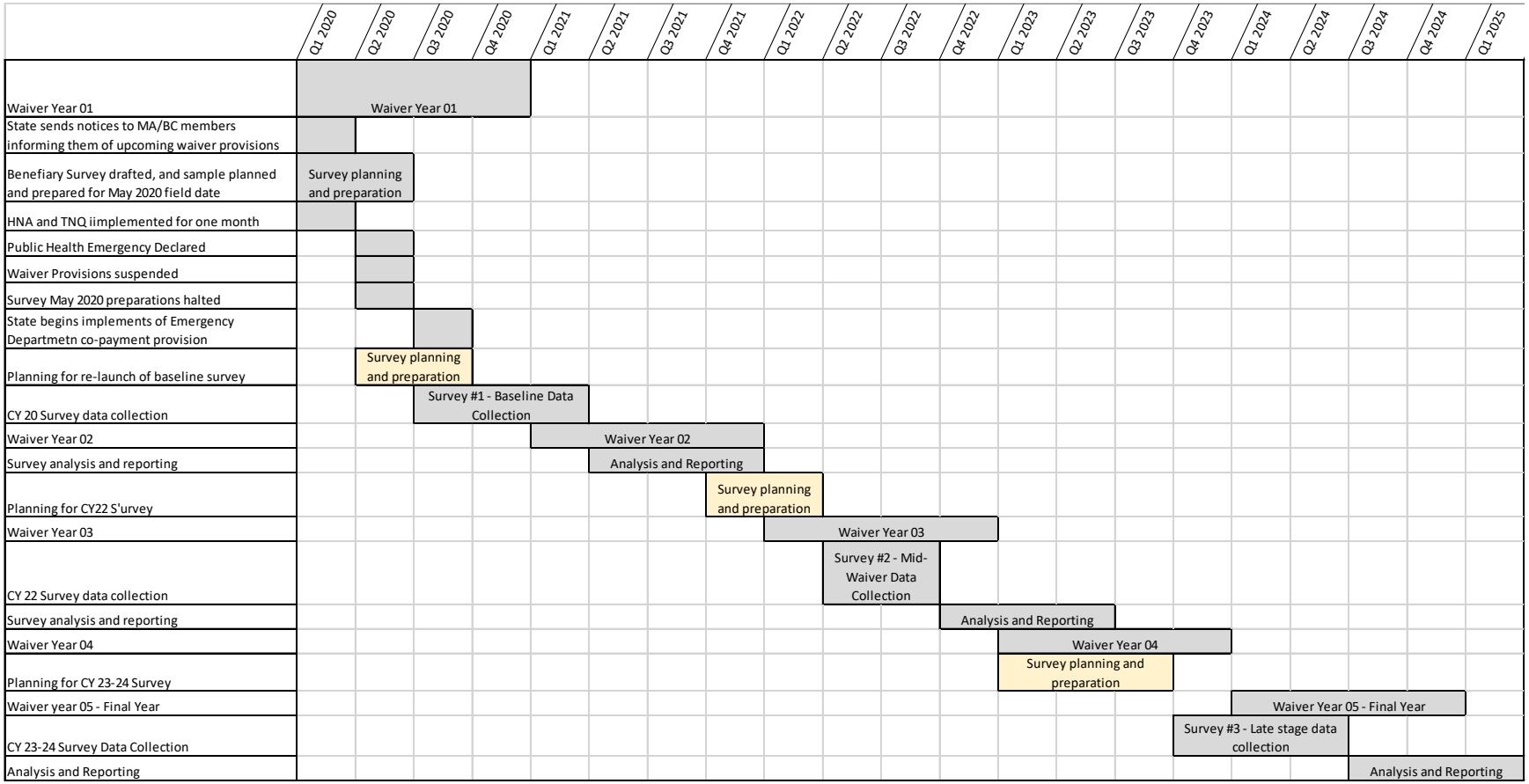
Hypothesis	Target population	Survey domain(s)	Survey question(s)
Hypothesis 4.3d. The SUD demonstration waiver will increase adherence to SUD treatment, conditional on increased supply of SUD providers or increased use of new and existing covered SUD services.		• Substance use and use disorders • Access and utilization of drug treatment • Knowledge and perceptions of current provisions of the waiver	Self-reported access/barriers to care, utilization of care; substance use/use disorders, access and utilization of SUD treatment, interest and motivation to receive SUD treatment

Table 5. Survey Study Design Comparisons

Provision	Primary treated group(s)	Primary comparison group(s)
Provision 1: Provide state plan benefits, other than family planning and tuberculosis-related services, to non-elderly childless adults with family income of up to 100% FPL		
Hypothesis 1.2. The expansion of benefits to non-elderly childless adults (CLAs) will lead to increased access to medical care among poor CLAs.	Groups A+B	Group E
Hypothesis 1.3. By expanding the safety net, the expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals.	Groups A+B	Group E
Provision 2: Health Assessment Linked to Eligibility and Premiums		
Hypothesis 2.1 Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in more healthy behaviors.	Groups A+B	Group E
Hypothesis 2.2 The health assessment will increase the number of beneficiaries receiving treatment for substance-use disorders.	Groups A+B	Group E
Provision 3: Implement premiums for childless adult beneficiaries ages 19-64 with income between 50% and 100% FPL; Allow termination and a period of non-eligibility for up to six months for childless adults who do not pay the required premium; Implement an $8 copayment for non-emergent use of the emergency department for childless adults		
Hypothesis 3.1. Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance.	Groups B, D	Group A
Hypothesis 3.54. The imposition of a copayment for non-emergent use of the emergency department (ED) will lead to more appropriate uses of medical care among CLAs enrolled in Medicaid.	Groups B, D	Group A

Provision	Primary treated group(s)	Primary comparison group(s)
Provision 4: Provide residential treatment benefit for SUD and coverage for existing SUD services when they are provided in an institution of mental disease (IMD).		
Hypothesis 4.2a. After implementation of the SUD demonstration waiver, enrollees' awareness of available SUD treatment services will increase over time	Group A, B, C, F	None
Hypothesis 4.3a. The SUD demonstration waiver will increase or have no effect on SUD outpatient services and pharmacotherapy treatment provided outside of IMD settings.	Group A, B, C, F	None
Hypothesis 4.3b. The SUD demonstration waiver will reduce use of hospital-based services, conditional on increased supply of SUD providers or increased use of new and existing covered SUD services.	Group A, B, C, F	None
Hypothesis 4.3c. The SUD demonstration waiver will increase use of health care for co-morbid physical and mental health conditions among enrollees with an SUD, conditional on increased supply of SUD providers or increased use of new and existing covered SUD services.	Group A, B, C, F	None
Hypothesis 4.3d. The SUD demonstration waiver will increase adherence to SUD treatment, conditional on increased supply of SUD providers or increased use of new and existing covered SUD services.	Group A, B, C, F	None

Table 6. Beneficiary Surveys: Timeframe across the Waiver Demonstration Period



III. EVALUATION PROVISIONS, HYPOTHESES, AND QUESTIONS

Note regarding the COVID-19 pandemic's effect on the waiver evaluation:

Since the COVID-19 public health emergency declared on March 18, 2020, the Wisconsin Medicaid program has suspended the several of its waiver provisions, including premiums and the health needs assessment. We expect that these provisions will remain in suspension during the entire period of the federally-designated public health emergency. The state has implemented, as of July 2020, the provision requiring a copayment for emergency department services when identified as a non-emergency. The SUD residential treatment benefit was implemented in on February 1, 2021.

The evaluation team adjusted its data collection and analysis plan, previously detailed in the December 2019 version of the Design Report, in response to the change in waiver implementation. Generally, these revisions include greater flexibility in modeling time, the exclusion of 2020 from the baseline or pre-period, and dropping interrupted time series analyses as the assumption of a stable pre-trend is no longer tenable. The following sections outline in detail these changes to the evaluation plan including the effects of potential changes in the beneficiary pool. The team continues to monitor COVID-19 related secular and programmatic changes that may influence evaluation outcomes (e.g., expanded coverage for telehealth services, maintenance of eligibility, expanded access to subsidized Marketplace coverage, etc.). We will continue to analyze changes in enrollment and health care use patterns among the waiver populations that are associated with these programmatic and secular changes to inform if or how we need to account for such changes in the evaluation of the waiver provisions.

IIIA. Provision I: Coverage up to 100% FPL for Childless Adults

A1. General Background Information

Provision: Provide state plan benefits, other than family planning and tuberculosis-related services, to non-elderly childless adults with family income of up to 100% FPL.

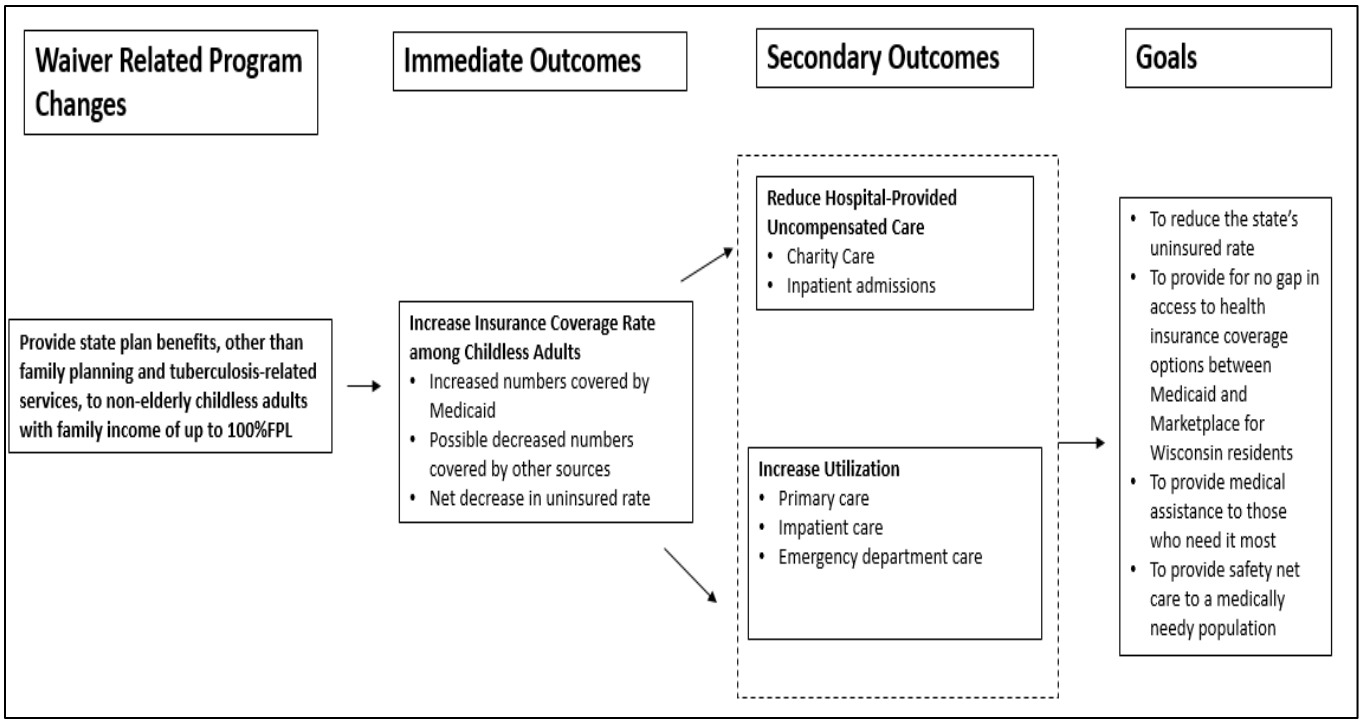
In April 2014, Wisconsin initiated a CMS-approved 1115 Demonstration Waiver that allowed federal Medicaid matching funds for providing health care coverage for childless adults between the ages of 19 and 64 years old who have income at or below 100% FPL. The childless adult population receives the standard benefit plan, which is the same benefit plan that covers parents, caregivers, and children. That waiver expired on December 31, 2018, and the new CMS waiver approved through 2023 extends this existing coverage for childless adults.

Medicaid program goal: To improve health outcomes and reduce unnecessary services. As well, by establishing an eligibility income limit at 100% FPL, rather than implementing a full ACA-authorized Medicaid expansion, the State of Wisconsin focused on "creating a program that is sustainable" and "available to those who need it most."

A2. Evaluation Questions and Hypotheses

A2.1. Driver Diagram

Figure 1. Driver Diagram for Childless Adults Coverage Expansion



A2.2. Hypotheses & Research Questions

Hypothesis 1.1. The expansion of benefits to non-elderly childless adults (CLAs) will reduce the state's uninsured rate.

Primary Research Question 1.1: Did the expansion of benefits to CLAs reduce the state's uninsured rate?

Q 1.1a. What are the trends in Wisconsin's adult uninsured rate and uninsured rate among CLAs?

Q 1.1b. How much did the change in the number of CLAs due to the Medicaid expansion contribute to the overall change in the adult uninsured rate in Wisconsin?

Hypothesis 1.2. The expansion of benefits to CLAs will lead to increased access to medical care among poor CLAs.

Primary Research Question 1.2: How did the CLA expansion affect the use of health care services?

Q 1.2a. Did the expansion of benefits to CLAs increase the use of primary care among poor CLAs in Wisconsin?

Q 1.2b. What are the short- and long-term effects of eligibility and coverage policies, including maintenance of eligibility, on Medicaid health service expenditures?

Hypothesis 1.3. By expanding the safety net, the expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals.

Primary Research Question 1.3. Did the expansion of benefits to CLAs reduce the provision of uncompensated care (charity care plus bad debt) among Wisconsin acute care hospitals?

Q 1.3a. What are the trends in the provision of uncompensated care among Wisconsin hospitals and did it change along with the expansion of benefits to CLAs?

Q 1.3b. Did hospitals in areas with greater reductions in the number of uninsured CLAs experience differential changes in uncompensated care?

Hypothesis 1.4. Additional requirements of the current demonstration may increase administrative costs.

Primary Research Question 1. 4. What are the administrative costs incurred by the state and counties to implement and operate the demonstration?

Q1.4a What are the administrative costs incurred by the state to implement and operate the demonstration?

Q1.4b How did county income maintenance staff workloads change around implementation of the current demonstration?

A3. Methodology

A3.1. Evaluation design summary

We will use three analytic approaches to address the primary research question for evaluation of waiver provision 1, the expansion of Medicaid coverage to childless adults up to 100% FPL. These are ITS, DiD, and panel data models based on geographically contiguous and matched counties.

COVID-related note: Waiver provision 1 has been underway since 2014. Its evaluation does not rely on post 2020 data for causal inference and can include the pandemic and post-pandemic periods in a descriptive form. The evaluation of this provision can readily exclude the 2020 period and retain the use of ITS methods. However, because trends in the waiver population during the pandemic period and beyond are of interest to understand the remaining waiver provisions, we will also include a description of them, allowing for heterogeneity over time, when feasible.

The Design Table (**Table 7**) summarizes the key features of the evaluation design.

Table 7. Provision 1: Summary of Hypotheses, Questions, Data Sources, and Analytic Approaches for Evaluation of the Expansion of Medicaid Benefits to Childless Adults (CLAs)

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 1.1: *The expansion of benefits to CLAs will reduce the state's uninsured rate.*				
Primary research question 1.1: Did the expansion of benefits to CLAs reduce the state's uninsured rate?				
Question 1.1a: What are the trends in Wisconsin's adult uninsured rate and uninsured rate among CLAs?				
CLAs prior to expansion	No source of insurance coverage	American Community Survey	ITS	This analysis will only rely on data prior to 2020.
	Covered by Medicaid/BadgerCare			
	Covered by private insurance	Family Health Survey		
	Other public coverage			
Question 1.1b: How much did the change in the number of CLAs due to the Medicaid expansion contribute to the overall change in the adult uninsured rate in Wisconsin?				
CLAs in other states	No source of insurance coverage	American Community Survey	DiD	Causal analysis will only rely on data prior to 2020; descriptive analysis of 2020 forward will be included.
	Covered by Medicaid/BadgerCare			
	Covered by private insurance	Behavioral Risk Factor Surveillance System		
	Other public coverage			
Adults in counties that neighbor Wisconsin	No source of insurance coverage	Small Area Health Insurance Estimates	Panel data models based on geographically contiguous and matched border counties	

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 1.2: *The expansion of benefits to CLAs will lead to increased access to medical care among poor CLAs.*				
Primary research question 1.2: How did the CLA expansion affect the use of health care services?				
Question 1.2a: Did the CLA expansion increase the use of medical care among low-income CLAs in Wisconsin?				
CLAs in other states	Doctor Visits	Behavioral Risk Factor Surveillance System	DiD	Causal analysis will only rely on data prior to 2020; descriptive analysis of 2020 forward will be included.
	Dentist Visits			
	Health care access	Family Health Survey		
Adults in other states	Hospital stays	State Inpatient Databases	DiD	Causal analysis will only rely on data prior to 2020; descriptive analysis of 2020 forward will be included.
	Emergency department visits			
Parents and caregivers in Wisconsin	Self-reported utilization and access to care	Survey of beneficiaries	DiD	
Question 1.2b: What are the short- and long-term effects of eligibility and coverage policies, including maintenance of eligibility, on Medicaid health service expenditures?				
CLAs in other states	Total Medicaid-paid inpatient expenditures	State Inpatient Databases	DiD	This analysis will only rely on data prior to 2020.
	Per-person Medicaid-paid inpatient expenditures			
Parents and caregivers in Wisconsin	Total Medicaid-paid health care expenditures	State Medicaid Claims	DiD	Causal analysis will only rely on data prior to 2020; descriptive analysis of 2020 forward will be included.
	Per-person Medicaid-paid health care expenditures			

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 1.3: *By expanding the safety net, the expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals.*				
Primary research question 1.3: Did the CLA expansion reduce the provision of uncompensated care among Wisconsin acute care hospitals?				
Question 1.3a: What are the trends in the provision of uncompensated care among Wisconsin hospitals and did it change along with the expansion of benefits to CLAs?				
Hospitals prior to CLA expansion	Dollar amount of charity care provision Dollar amount of bad debt	CMS Hospital Cost Reports	ITS	This analysis will only rely on data prior to 2020.
Question 1.3b: Did hospitals in areas with greater reductions in the number of uninsured CLAs experience differential changes in uncompensated care?				
Hospitals in other states	Dollar amount of charity care provision Dollar amount of bad debt	CMS Hospital Cost Reports	DiD	Causal analysis will only rely on data prior to 2020; descriptive analysis of 2020 forward will be included.
Hospitals in neighboring geographic areas	Dollar amount of charity care provision Dollar amount of bad debt	CMS Hospital Cost Reports	Panel data models based on geographically contiguous and matched border areas	Causal analysis will only rely on data prior to 2020; descriptive analysis of 2020 forward will be included.
Hypothesis 1.4: *Additional requirements of the demonstration may increase administrative costs.*				
Primary research question 1.4: What are the administrative costs incurred by the state and counties to implement and operate the demonstration?				
Question 1.4a: What are the administrative costs incurred by the state to implement and operate the demonstration?				
N/A	Administrative costs associated with demonstration startup Ongoing administrative costs of demonstration operations	DHS-provided estimates of contract costs, staff-time equivalents, and other costs	Descriptive analysis of administrative costs over time	Unchanged
Question 1.4b: How did county income maintenance staff workloads change around implementation of the current demonstration?				
N/A	County administrative costs	County workload reporting data	Descriptive analysis of administrative costs over time	Unchanged

A3.2. Target and Comparison Populations

The target populations for the evaluation of waiver provision 1 include (i) CLAs in Wisconsin; (ii) adults in Wisconsin; and (iii) acute-care hospitals in Wisconsin.

We will address each of the primary research questions as follows:

Q 1.1. "Did the CLA expansion reduce the state's uninsured rate?": Construct three comparison groups for CLAs subject to the CLA expansion. The first is CLAs in years prior to the CLA expansion (years prior to 2014). The second comparison group is CLAs from other states (both states that fully expanded Medicaid to 138% FPL and states that did not expand at all). The third comparison group is adults in counties that border Wisconsin.

Q 1.2. "How did the CLA expansion affect the use of health care services?": Construct three comparison groups: CLAs in other states, adults in other states, and parents and caregivers in Wisconsin BadgerCare who were consistently able to access comprehensive benefits.

Q 1.3. "Did the CLA expansion reduce the provision of uncompensated care among Wisconsin acute care hospitals?": Compare acute care hospitals in Wisconsin to three comparison groups of hospitals: hospitals in Wisconsin prior to the CLA expansion, hospitals in other states, and hospitals in geographic areas in other states that border Wisconsin.

Q 1.4. "What are the administrative costs incurred by the state and counties to implement and operate the demonstration?" No comparison group; descriptive analysis of administrative costs over time as reported by state records and through interviews.

Table 8. Provision 1 Data Sources

	Hypotheses
The American Community Survey (ACS). To estimate sources of health insurance coverage in the previous year among CLAs in Wisconsin and in comparison states.	H1.1
Behavioral Risk Factor Surveillance System (BRFSS). To estimate both health insurance coverage and measures of access to health care.	H1.1 H1.2
Small Area Health Insurance Estimates (SAHIE). To estimate health insurance coverage rates at the county level.	H1.1
Wisconsin Family Health Survey (FHS). To estimate Wisconsin rates of health insurance coverage, measures of health status, health problems, and use of health care services.	H1.1 H1.2
State Inpatient Databases (SID). Data on six states from the SID to measure inpatient stays and emergency department visits.	H1.2
Medicaid beneficiary survey. To assess CHA enrollees' experiences with barriers related to cost, availability, and benefit design.	H1.2
Hospital Cost Reports. To measure hospitals' provision of uncompensated care.	H1.3
State and Managed Care Administrative Records. To estimate the staff and other inputs for implementing and operating the demonstration.	H1.4
Interviews with state agency staff and partner organizations. To identify staff effort and administrative costs associated with implementing and operating the demonstration.	H1.4

A3.3. Evaluation Period

The evaluation period will include the years 2012 (prior to initial CLA coverage expansion), through 2023, including both a period prior to and a period following the launch of the new waiver in 2020. The Provision 1 analyses will apply to the current demonstration period while including the timeline of the 2014 initial expansion to the CLA population as relevant contextual background. Effects may differ across these time periods, which we will allow for in the analyses.

A3.4. Data Sources & Outcome Measures

The outcome measures for this evaluation are defined in **Table 7**. This evaluation will involve multiple data sources. They are noted in **Table 8**, along with the hypotheses for which these data will be used. Section IID, above, provides a full description of these data sources.

A3.5. Analytic Methods

We will address each of the primary research questions as follows:

Q1.1. "Did the CLA expansion reduce the state's uninsured rate?": Compare CLAs in Wisconsin both pre- and post-expansion. We will conduct interrupted time-series analyses (described below and in Section IIB) to determine whether the CLA expansion reduced the fraction of CLAs in the state who did not have any source of health insurance. Additional outcomes we will examine include sources of insurance coverage, including Medicaid/BadgerCare, private insurance, and other sources of public coverage (such as Medicare). We can construct these groups using data from the American Community Survey (ACS) and from Wisconsin's Family Health Survey.

We will also compare CLAs in Wisconsin with CLAs in other states using DiD (described below and in Section IIB). In particular, we will use the ACS to compare the change in the fraction of CLAs in Wisconsin without health insurance with the change in the fraction of CLAs in states that did not expand Medicaid and, similarly, with the change in states that fully expanded Medicaid. This analysis will also examine changes in sources of coverage (Medicaid/BadgerCare, private, other public).

We will compare adults in counties that border Wisconsin with adults in Wisconsin by geographically matching border counties in Wisconsin to their contiguous border counties in neighboring states and by estimating panel data models (described below) and using data from the Census Small Area Health Insurance Estimates program. These models will enable us to determine the effect of the CLA expansion on the fraction of adults without health insurance. Since all of Wisconsin's neighboring states implemented a full ACA Medicaid expansion (with the exception of Iowa), we will be comparing the CLA expansion to a full Medicaid expansion.

Q1.2. "Did the CLA expansion increase the use of medical care among poor CLAs in Wisconsin?" We will compare CLAs in Wisconsin with CLAs in other states using DiD and data from the BRFSS. Comparing adults in Wisconsin and in other states and using data from the SID, we will estimate DiD models on the number of hospital stays, and emergency department visits. We will undertake a similar comparison between parents and caregivers enrolled in Medicaid and CLAs enrolled in

Medicaid taking advantage of the historical data available in the Wisconsin Medicaid beneficiary survey (i.e., data that our team collected in 2014, 2016, and 2018).

Q1.3. "Did the CLA expansion reduce the provision of uncompensated care among Wisconsin acute care hospitals?": We will employ ITS, DiD, and panel data models on hospitals in geographically matched areas to determine the impact of the CLA expansion on the provision of charity care and on bad debt by hospitals.

Q1.4. "What are the administrative costs incurred by the state to implement and operate the demonstration?": We will perform a descriptive analysis of DHS-provided reports of contract costs, staff-time equivalents, and other administrative costs 1) to establish demonstration policies, typically incurred in the years prior to and including the initial year of the demonstration, 2) operate the ongoing demonstration, and 3) for state agencies partnering with Medicaid to implement and operate the demonstration.

Difference-in-Differences Method

When using data sources that span multiple states, and when we are able to construct comparison group of CLAs in other states, we will use DiD to compare changes in outcomes among CLAs in Wisconsin to that change among CLAs in other states. This method is described in Section IIC.[14] We will allow effects to differ over time.

ITS Estimation

It may not be possible to construct valid control groups to estimate each treatment effect, because the Medicaid program will implement select waiver provisions for all eligible beneficiaries at the same time, and may change implementation practices in light of information learned in the process of monitoring, rapid-cycle evaluation, shared learning, and quality/process improvement. These changes in implementation are intended to improve population outcomes, and evaluating these changes is an important component of the analysis. Consequently, to the extent that these changes affect an entire state's enrolled population, there will be no control group against which to compare. To account for this, we will also assess changes in outcomes for Wisconsin CLAs using time series models such as the ITS (ITS) model, which is described in Section IIC.[15] The pandemic-related disruptions in data do not affect the use of ITS for this provision, as we are able to use data entirely prior to that year to observe the effects of the policy change, which occurred in 2014.

[14]See Wing, C., Simon, K., & Bello-Gomez, R. A. (2018) Designing Difference in Difference Studies: Best Practices for Public Health Policy Research. Annual Review of Public Health 39(1):453-469; Dague L, Lahey JN. Causal Inference Methods: Lessons from Applied Microeconomics. 2019. Journal of Public Administration Research and Theory. 29(3): 511–529.

[15] See Kontopantelis E, Doran T, Springate DA, Buchan I, Reeves D. 2015. Regression-Based Quasi-Experimental Approach When Randomisation Is Not an Option: Interrupted Time Series Analysis BMJ. 350:h2750.

Panel Data Methods with Geographically Matched Border Counties

We will implement our panel data models on a geographically matched sample, following the local identification methodology of Dube, Lester, and Reich (2010)[16], and compare outcomes in adjacent counties that straddle a state border with Wisconsin. This local identification strategy relies on contiguous counties being similar in terms of population and market characteristics. We will use the U.S. Census County Adjacency File to identify all counties in states that are adjacent to one or more counties in Wisconsin. To estimate the effect of the CLA expansion on outcomes, we estimate the following fixed-effects regression on a sample of matched counties:

$$(1) \qquad y_{c,m,t} = \alpha + \gamma expansion_{c,m,t} + \varphi_m + \phi_c + \tau_t + e_{c,m,t}.$$

where $y_{c,m,t}$ is the outcome in county *c* in the matched-county pair *m* in year *t*, $expansion_{c,m,t}$ is a dummy variable indicating that county *c* in group *m* is in a Wisconsin following the CLA expansion, τ_t is a year fixed effect, φ_m is a matched-county pair fixed effect, and ϕ_c is a county fixed effect. We will allow effects to differ over time.

A4. Methodological Limitations

Because the CLA expansion was implemented at a single time statewide and without randomized controls, the evaluation relies on quasi-experimental methods.

IIIB. Provision 2: Health Assessment Linked to Eligibility and Premiums

B1. General Background Information

Provision: For childless adults, 1) require completion of a health risk assessment as a condition of eligibility and linked to potential reduction in premiums for those subject to premiums, and 2) provide a voluntary health needs assessment linked to potential reduction in premiums for those subject to premiums.

The Wisconsin Medicaid program had planned and did initiate this provision in February 2020. However, it was in effect only until March 18, 2020, the date of enactment of the federally public health emergency, at which point this provision were suspended.

Once re-activated, the target population for this provision includes childless adult applicants and beneficiaries. The two parts include 1) a single question, presented during the application process, which requires a response from any childless adult applicant as a condition of eligibility and is linked to premium reductions for childless adults who are subject to premiums, and 2) voluntary questions, linked

[16] Dube A, Lester TW, Reich M. 2010. Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties. The Review of Economics and Statistics. Vol. 92(4):945-964.

to premium reductions for childless adults who are subject to premiums (the childless adult population with incomes 50% through 100% FPL).

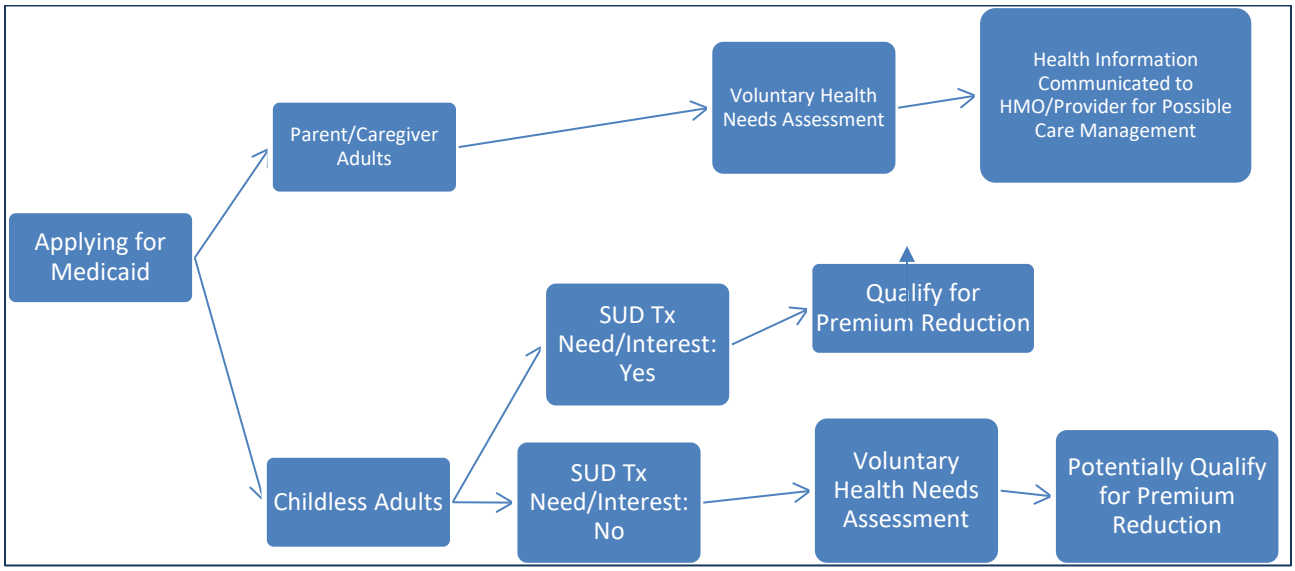
All childless adults applying for Medicaid will be asked, as part of the application process, a single question to assess the applicant's (or renewing beneficiary's) interest in receiving treatment for a substance use disorder. The state refers to this as the Treatment Needs Questionnaire (TNQ). Any response to the question satisfies the condition of eligibility. The Medicaid program will inform the beneficiary's HMO if s/he is interested in receiving treatment for a SUD. An affirmative response will also reduce the premium for CLAs that are subject to premiums. It is important to note that CLA applicants/beneficiaries will not be aware of any potential premium implications related to their response on their interest in receiving treatment for a substance use disorder. Notification of premium reductions will occur only after completion of the entire enrollment process. For this reason, any impact of the health assessment on treatment for SUDs will likely result from identification of the SUD and subsequent communication to the HMO for treatment follow up. The premium differentials are not a likely mechanism through which the health assessment could affect SUD treatment.

After the application, all CLAs will be invited to complete further questions within the voluntary component of the health assessment. The introductory text will inform the individual that completion of this portion of the assessment provides an opportunity to reduce the monthly premium for those income-eligible for premiums. The introductory text will also suggest that the question will be used to communicate care needs to the members' HMOs. The assessment will include questions about health-promoting behaviors (such as daily exercise), health risks (such as smoking), and about intention to reduce those risks through health care-seeking and/or behavior change. The substantive responses to these questions determine whether a premium-eligible CLA qualifies for a premium reduction.

The Medicaid program will also make this voluntary component of the health assessment available for any parent/caregiver applicant or adult BadgerCare Plus beneficiary who wishes to complete it. This beneficiary population is not subject to premiums. This group will see the same introductory language pertaining to the use of the health assessment for communicating with the HMOs and better managing their care plans.

Medicaid program goals: To improve beneficiaries' engagement in their health care choices by increasing their awareness of behaviors that might be detrimental to their health, while also encouraging them to make healthier choices.

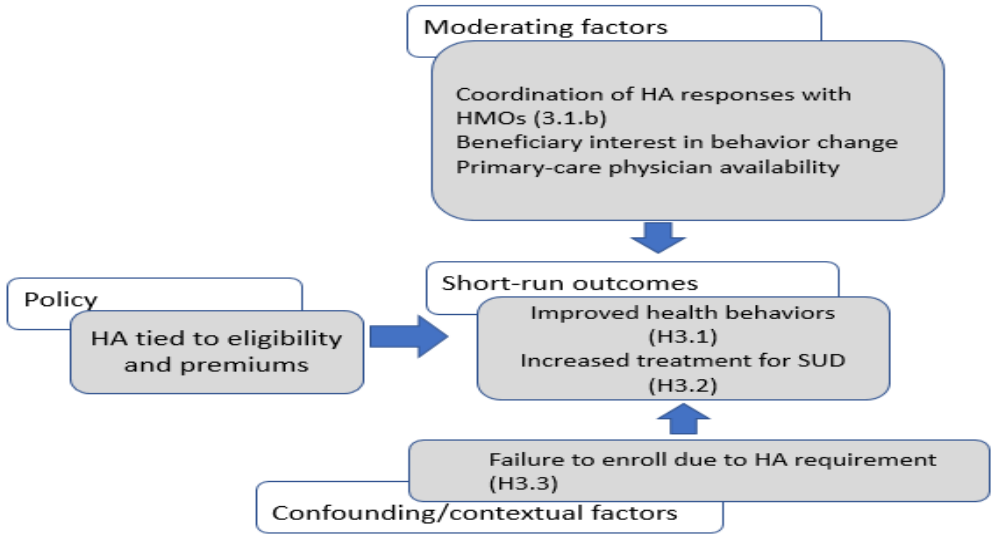
Figure 2. Health Assessment Pathways: Eligibility, Health Assessment, and Premium Reduction



B2. Evaluation Questions and Hypotheses

B2.1. Driver Diagram

Figure 3. Driver Diagram: Health Risk and Needs Assessment



B2.2. Hypotheses & Research Questions

This provision of the demonstration waiver will implement an assessment of health risks and needs that is linked to eligibility and premium reductions for childless adult beneficiaries. Childless adults (CLAs) are required to answer a question on their interest in treatment for substance-use disorders as a requirement of eligibility (the treatment needs questionnaire), and an affirmative response will reduce the premium for CLAs who are subject to the premium requirement. The voluntary health needs assessment includes additional questions assessing healthy behaviors (e.g., alcohol consumption, smoking, exercise). Answering the additional questions on healthy behaviors is not a requirement of eligibility, but CLAs with incomes greater than 50% and up to and including 100% will receive a premium reduction if their responses reveal that they engage in at least one risk-mitigating or healthy behavior.

Hypothesis 2.1. Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in healthier behaviors.

Primary Research Question 2.1: Did CLA beneficiaries reduce risky health behaviors and increase healthy behaviors after the introduction of the health assessment?

Q 2.1.a. What fraction of CLA enrollees completed the second part of the health assessment? How does this compare to the fraction of non-CLA adult enrollees completing it?

Q 2.1.b. What is the distribution of healthy behaviors reported by CLAs completing the health assessment? What fraction of CLAs achieved a premium reduction based on their answers to the health assessment? How did these two patterns trend over time?

Q 2.1.c. How did the number of health behaviors reported by CLAs in the health assessment change from initial enrollment to reenrollment?

Q 2.1.d. Did the fraction of CLAs self-reporting higher alcohol consumption and low physical activity fall after the introduction of the health assessment?

Q 2.1.e. Did the fraction of CLAs receiving prescriptions for nicotine cessation medications (e.g., nicotine replacement therapies, bupropion, and varenicline) increase after the introduction of the health assessment?

Hypothesis 2.2. The health assessment will increase the number of beneficiaries receiving treatment for substance-use disorders.

Primary Research Question 2.2: Did implementation of the health assessment increase use of non-emergency, outpatient treatment for SUDs, and medication-assisted treatment for opioid use disorder in particular?

Hypothesis 2.3. The requirement to answer the health assessment as a condition of eligibility will discourage some potential beneficiaries from enrolling in Medicaid.

Primary Research Question 3.3: Did monthly new enrollments by CLAs in Medicaid fall after the introduction of the health assessment requirement?

Q 2.3a. Did the monthly fraction of incomplete applications increase among childless adult applicants and renewing beneficiaries after introduction of the health assessment as a condition of eligibility?

B2. Methodology

B2.1. Evaluation Design Summary

We will address the evaluation questions of this waiver provision, the implementation of a health assessment linked to eligibility and premium reductions for CLAs, using DiD, and simple pre-post regression comparisons.

COVID-related note: the Health Needs Assessment and Treatment Needs Question has been suspended during the federally-declared public health emergency. The evaluation of this provision will no longer involve an ITS. We will include analyses that exclude the pandemic period from the baseline period because of the potential for COVID-related disruptions and/or allow for heterogeneity in the treatment effect over time as appropriate. We believe that, due to the pandemic, it may be difficult to assess one of the research questions: Did monthly new enrollments by CLAs in Medicaid fall after the introduction of the health assessment requirement? The parallel trends assumption for enrollment between CLAs and Parents/Caregivers in a DiD analysis is more questionable in the current environment. We will analyze enrollment trends for these two groups during 2020 (when the provision was delayed but COVID disruptions were present) to help gauge whether parallel trends may be a reasonable assumption. Based on that analysis we will determine whether to include analysis of this question in our evaluation. Even if the analysis for the primary research question 3.3 cannot be completed, we will be able to investigate Q 3.3a that explores whether the fraction of incomplete applications changed for childless adults.

The Design Table (**Table 9**) summarizes the key features of the evaluation design.

Table 9. Provision 2: Summary of Hypotheses, Questions, Data Sources, and Analytic Approaches for Evaluation of HRA/HNA

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 2.1: *Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in more healthy behaviors.*				
Primary research question 2.1: Did CLA beneficiaries reduce risky health behaviors and increase healthy behaviors after the introduction of the health assessment?				
Question 2.1a: What fraction of CLA enrollees completed the second part of the health assessment? How does this compare to the fraction of non-CLA adult enrollees completing it?				
n.a. (descriptive)	Completion of health assessment	Wisconsin Medicaid Administrative Data	Descriptive analysis of completion rates	Unchanged
Question 2.1.b: What is the distribution of healthy behaviors reported by CLAs completing the health assessment? What fraction of CLAs achieved a premium reduction based on their answers to the health assessment? How did these two patterns trend over time?				
n.a. (descriptive)	Number of healthy behaviors reported in the health assessment	Wisconsin Medicaid Administrative Data	Descriptive analysis of numbers of healthy behaviors reported in health assessment	Unchanged
Question 2.1.c: How did the number of health behaviors reported by CLAs in the health assessment change from initial enrollment to reenrollment?				
CLAs in Wisconsin subject to the waiver at initial enrollment are comparison for same enrollee at reenrollment.	Number of healthy behaviors reported in the health assessment	Wisconsin Medicaid Administrative Data	Regression analysis of the change in number of healthy behaviors for re-enrollees relative to initial enrollment.	Unchanged, but the caveats on interpreting these patterns will be even stronger during the COVID-19 pandemic and recession.

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Question 2.1.d: Did the fraction of CLAs self-reporting problems with alcohol consumption and low physical activity fall after the introduction of the health assessment?				
CLAs in Wisconsin prior to waiver.	Fraction of CLAs with a claim diagnosis code related to alcohol consumption	Wisconsin Medicaid Enrollment, Claims and Encounter Data	ITS	We no longer plan to do the ITS analysis due to 2020 COVID disruptions. We will instead focus our attention on the DiD analysis listed just below.
Parents/Caregivers and CLAs in Wisconsin not subject to premiums under the waiver (i.e., income < 50% FPL).	Fraction of CLAs with a claim diagnosis code related to alcohol consumption	Wisconsin Medicaid Enrollment, Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline.
Question 2.1.e: Did the fraction of CLAs receiving prescriptions for nicotine cessation medications (e.g., nicotine replacement therapies, bupropion, and varenicline) increase after the introduction of the health assessment?				
CLAs in Wisconsin prior to waiver.	Fraction of CLAs receiving prescription for nicotine replacement therapies	Wisconsin Medicaid Enrollment, Claims and Encounter Data	ITS	We no longer plan to do the ITS analysis due to 2020 COVID disruptions. We will instead focus our attention on the DiD analysis listed just below.
Parents/Caregivers and CLAs in Wisconsin not subject to premiums under the waiver (i.e., income < 50% FPL).	Fraction of CLAs receiving prescription for nicotine replacement therapies	Wisconsin Medicaid Enrollment, Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline.

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 2.2: *The health assessment will increase the number of beneficiaries receiving treatment for substance-use disorders.*				
Primary research question 2.2: Did implementation of the health assessment increase use of non-emergency, outpatient treatment for SUDs, and medication-assisted treatment for opioid use disorder in particular?				
CLAs in Wisconsin prior to waiver.	Claims for outpatient substance-use services and prescription medications for substance use disorders (any claim for buprenorphine, naltrexone (oral), injectable naltrexone, buprenorphine/Naloxone or a HCPCs code for buprenorphine or buprenorphine/naloxone, methadone administration, or naltrexone).	Wisconsin Medicaid Enrollment, Claims and Encounter Data	ITS	No longer plan to do the ITS analysis due to 2020 COVID disruptions. We will instead focus our attention on the DiD analysis listed just below.
Parents/ Caregivers.	Claims for outpatient substance-use services and prescription medications for substance use disorders (any claim for buprenorphine, naltrexone (oral), injectable naltrexone, buprenorphine/Naloxone or a HCPCs code for buprenorphine or buprenorphine/naloxone, methadone administration, or naltrexone).	Wisconsin Medicaid Enrollment, Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline.
Hypothesis 2.3: *The requirement to answer the health assessment will discourage some potential beneficiaries from enrolling in Medicaid.*				
Primary research question 2.3: Did monthly new enrollments by CLAs in Medicaid fall after the introduction of the health assessment requirement?				
CLAs in Wisconsin prior to waiver.	Number of new Medicaid enrollments at the monthly level	CARES	ITS	We will no longer use ITS in this hypothesis, and will monitor the enrollment trends through early 2020 to determine whether parallel trends assumption may be reasonable for DiD analysis.
Parents/ Caregivers.	Number of new Medicaid Enrollments at the monthly level	CARES	DiD	
Question 2.3.a Did the fraction of incomplete applications increase among childless adult applicants and renewing beneficiaries after introduction of the health assessment as a condition of eligibility?				
Wisconsin CLAs prior to waiver.	Ratio of incomplete to total initiated applications at the monthly level	CARES	ITS	Transition this approach to a DiD with Parents/ Caregivers, include models in which the baseline does not include the pandemic period.

B2.2. Target and comparison populations

We will use the following approaches to answer each primary research question:

Q2.1. "Did CLA beneficiaries reduce risky health behaviors and increase healthy behaviors after the introduction of the health assessment?": We will use two primary analytic approaches: simple pre-post regression comparisons and DiD. The target population for this part of the demonstration waiver is CLAs. All CLAs are required to complete the first part of the health assessment to gain Medicaid eligibility, and for CLAs with income between 50% and 100% FPL both parts of the health assessment can result in premium reductions. For the simple pre-post regression, we will compare the group of CLAs subject to this waiver requirement after the waiver is implemented to the same group of CLAs prior to the implementation of the waiver. The analysis in 2.1.c looks simply at the change in reported number of healthy behaviors for a given CLA subject to the waiver provision between initial enrollment and reenrollment and can only be analyzed for those who reenroll. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

For the DiD comparisons, we will compare the change in outcomes for CLAs with income between 50-100% FPL pre and post waiver to the changes in those same outcomes for two groups of Medicaid beneficiaries: (a) individuals who are not subject to the health assessment waiver requirements, parents and caregivers; and b) CLAs with incomes less than 50% of FPL, who are required to complete part 1 of the health assessment as a condition of eligibility but are not subject to the waiver's premium requirements and hence do not have a premium differential tied to their health assessment answers.

Primary research question 2.1 will also involve several supplementary descriptive analyses for which there are no comparison populations available (2.1.a – 2.1.b). These analyses will help to illuminate the extent to which each group considered above -- CLAs below 50% FPL, CLAs between 50%-100% FPL, and parents and caregivers -- are engaging with the health assessment.

Q2.2. "Did implementation of the health assessment increase use of non-emergency, outpatient treatment for SUDs, and medication-assisted treatment for opioid use disorder in particular"?: We will use DiD. The target population for this question is the full set of CLAs, including those with incomes below 50% of the FPL. These lower income CLAs, while not subject to the premium provisions of the waiver, are required to answer the first part of the health assessment on interest in treatment for substance-use disorders as a requirement for eligibility. For the DiD the comparison sample for this analysis is only the parents and caregivers population. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

Q2.3. "Did new enrollments by CLAs in Medicaid fall after the introduction of the health assessment requirements?": We will use DiD, with the target population as the full set of CLAs, including those with incomes below 50% of the FPL. These lower income CLAs, while not subject to the premium provisions of the waiver, are required to answer the first part of the health assessment

on interest in treatment for substance-use disorders as a requirement for eligibility. As such, they are exposed to the health assessment and any deterrent effect of answering these questions could be expected for this population as well. For the DiD the comparison sample for this analysis is only the parent and caregiver population. In both cases we will use enrollment data at the monthly level and examine whether there are reductions in completed application rates in the months immediately following the launch of the health assessment. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

B2.3. Evaluation Period

The evaluation period will include the years 2016 through 2023, which includes a pre-period before the demonstration waiver begins and continues through the waiver demonstration period. We will include models that exclude the pandemic period from the DiD analysis, to avoid COVID-related disruptions in the baseline, and the implementation period will commence once the provision is re-activated.

B2.4. Data Sources & Outcome Measures

The outcome measures for this evaluation are defined in **Table 9**. This evaluation will involve multiple data sources. They are noted in **Table 10**, below, along with the hypotheses for which these data will be used. Section IID, above, provides a full description of these data sources.

Table 90. Provision 2 Data Sources

	Hypotheses
Wisconsin Medicaid Administrative Data. Administrative data on health assessment completion and reporting will address Questions 2.1.a-2.1.c. These data will allow us to analyze both the patterns of enrollees engaging with the health assessment and the distributions of healthy behaviors reported. For Question 2.1.b. we will also see administrative data on the completion of health assessments administered by participating HMOs in years prior to this waiver provision.	H2.1
Wisconsin Beneficiary Survey. The survey will include questions designed to assess substance use and use disorder treatment, engaging in other risky behaviors (e.g., tobacco use), and physical activity. The responses to these questions will be used to answer Question 2.1.d.	H2.1
Medicaid claims, and encounter data. These data will track the use of nicotine replacement therapies as one of the key markers of treatment for risky behaviors that might be affected by the health assessment in Question 2.1.e. We will also use these data to investigate where the health assessment is associated with increased use of outpatient services for substance use disorders in Question 2.2.	H2.1 H2.2
CARES enrollment data. These data will track application and enrollment trends, and whether applicants abandon applications at any point during the application process when reaching specific questions pertaining to substance abuse or other health behaviors.	H2.3

B3.5. Analytic Methods

Q2.1. "Did CLA beneficiaries reduce risky health behaviors and increase healthy behaviors after the introduction of the health assessment?" We begin with a descriptive analysis of the patterns of responses to the health assessment itself. These analyses, described in Q2.1.a – 2.2.c, do not have a causal interpretation with a comparison group. For question 2.1.d we will use multiple approaches. First, we will use Medicaid Claims files to analyze the fraction of beneficiaries with at least one claim tied to a diagnosis code related to alcohol consumption. For this analysis we will use a DiD strategy (described in section IIB), comparing the change in this fraction with at least one alcohol-related diagnosis between the CLAs subject to the premium provision to the combined group of Parents/Caregivers and the CLAs between 0 and 50% of FPL. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

We will also use a simple regression approach to compare whether self-reports of healthy behaviors from the Medicaid Beneficiary Survey differ between early waves of the survey, around the time of the launch of the waiver provision, and later waves of the survey after the implementation of the health assessment. We will also do this pre-post comparison using a DiD strategy (described in section IIB) using the parents and caregivers as well as CLAs with incomes below 50% of the FPL as comparison groups. For these analyses we will use the full random samples of these groups from the Medicaid Beneficiary Survey.

Finally, for Question 2.1.e we will use claims data to estimate how the introduction of the health assessment affected use of nicotine replacement therapies, using DiD design (described in section IIB, above), again using the parents and caregivers as well as the CLAs with incomes below 50% FPL as comparison groups for the DiD. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

Q2.2. "Did implementation of the health assessment increase use of non-emergency, outpatient treatment for SUDs, and medication-assisted treatment for opioid use disorder in particular?" For this question we will analyze patterns of claims for outpatient substance-use services and medications for substance use disorders. Similar to Question 2.1. above, we will use DiD design. In this case, the DiD will use only the parents and caregivers (and not the CLAs with incomes below 50% FPL) because the requirement for answering the first part of the health assessment on substance use disorders is the same for all CLAs. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

Q2.3. "Did new enrollments by CLAs in Medicaid fall after introduction of the health assessment requirement?" To answer this question we will analyze patterns of Medicaid enrollments at the monthly level using a DiD design. The comparison group – parents and caregiver adults -- is the same as 2.2 above. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

B3. Methodological Limitations

Because the waiver provision will be implemented at a single time statewide and without randomized controls, the evaluation relies on quasi-experimental methods. There are two important limitations specific to the evaluation of the health assessment requirement. First, the health assessment will be available voluntarily to parents and caregiver populations. While there is no requirement that they engage with the health assessment, some may do so. This weakens our ability to use the parents and caregivers as a comparison sample for the difference-in-difference analysis described above for primary research questions 2.1-2.3. The descriptive analysis in questions 2.1.a-2.1.b will help illuminate the extent to which voluntary completion of the health assessment by parents and caregivers is a significant challenge for the evaluation strategy. A key requirement will be that the engagement with the health assessment is significantly higher for the CLAs subject to the waiver provision.

The second limitation is that Wisconsin's Medicaid-participating HMOs have been conducting their own health assessments with members prior to the implementation of this new waiver. This waiver provision replaces HMO-specific assessments with a newly designed Medicaid-level health assessment. The specific HMO-specific pre-waiver experience will vary across HMOs, which will require some of the analysis specified above to be conducted separately for different HMOs. Doing those splits will reduce the precision of estimates. The necessity of analyzing results separately by HMO will be clarified by the analysis in Questions 2.1.b.

IIIC. Provision 3: Premiums, Lock-out Periods, and ED Co-Payments

C1. General Background Information

Provision 3: Implement two cost-sharing components:

> 1) Premiums for CLA beneficiaries ages 19-64 with income between 50% and 100%FPL; and 2) For CLAs, require an $8 co-payment for non-emergent use of the hospital emergency department.

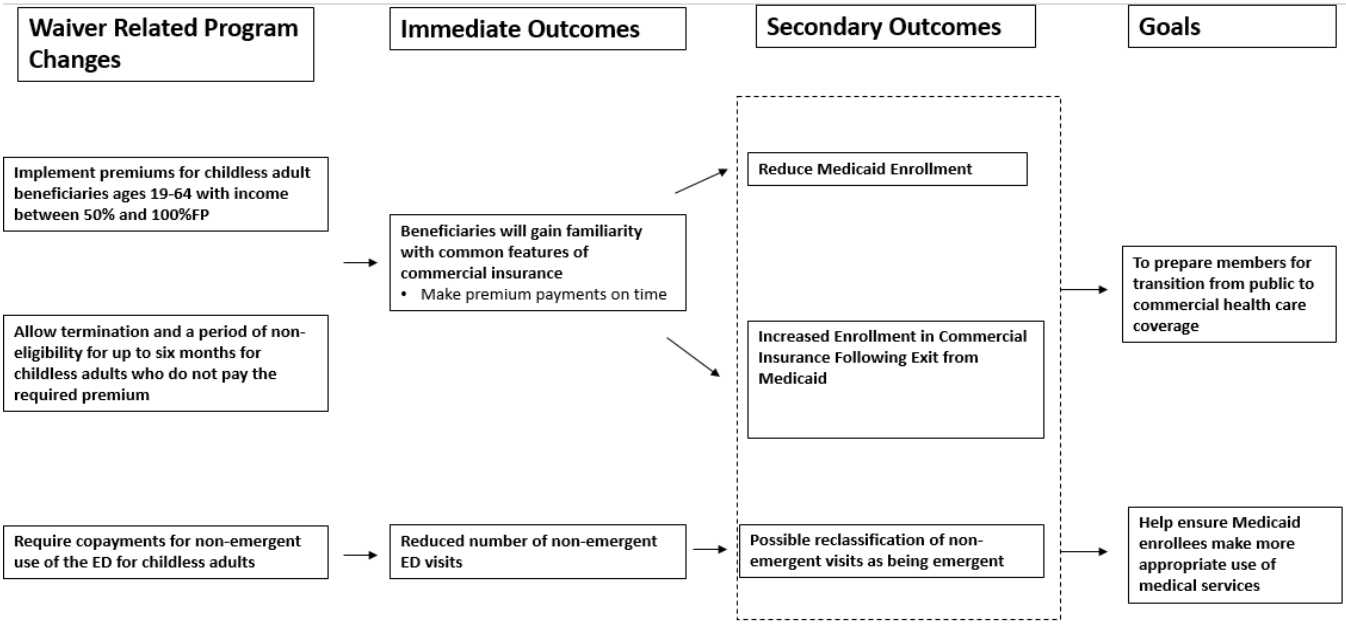
Those CLAs who are subject to the premium requirement but do not make such payments will, at the time of annual renewal, be terminated from Medicaid enrollment and placed in a period of non-eligibility for up to six months. However, the beneficiary may reenroll at any time prior to the end of the six-month period if he or she pays all owed premiums, or if his or her situation changes such that he or she would no longer be subject to a premium requirement. After the six-month period, the beneficiary may be re-enrolled in BadgerCare upon request, if he or she meets all program rules, even if he or she continues to have unpaid premiums from the prior period of enrollment.

Medicaid program goal: To provide beneficiaries with coverage that more closely aligns with commercial coverage, promote participant engagement and readiness to transition to commercial coverage.

C2. Evaluation Questions and Hypotheses

C2.1. Driver Diagram

Figure 4. Driver Diagram: Premium and Emergency Department Co-Payment Requirements



C2.2. Hypotheses & Research Questions

Hypothesis 3.1. Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance.

Primary Research Question 3.1: Did beneficiaries required to make premium payments understand their requirements and make premium payments?

Q 3.1a. How many beneficiaries are required to make premium payments? How does this number change over time?

Q 3.1b. How many beneficiaries make premium payments? On what timeline do beneficiaries typically make payments (monthly, quarterly, annually, or other? How do these numbers change over time?

Q 3.1c. How do the characteristics of those who make their required premium payments differ from those of beneficiaries who fail to make these payments? How do these characteristics change over time?

Q 3.1d. How many beneficiaries have premium payments made on their behalf by third-party entities? How do these numbers change over time?

Q 3.1e. How many beneficiaries are terminated for non-payment and being locked out? Of those terminated, how many re-enroll at the end of their period of non-eligibility? How do these numbers change over time?

Q 3.1f. Do beneficiaries with premium requirements understand their payment obligations and the consequences of non-payment?

Hypothesis 3.2. The imposition of premium requirements for CLAs will reduce enrollment in Medicaid.

Primary Research Question 3.2. Did the imposition of premium requirements reduce enrollment in Medicaid?

Q 3.2a. What effects does the premium requirement have on total and new enrollment in Medicaid?

Q 3.2b. Do beneficiaries with premium obligations who initiate payments continue to make regular payments throughout their 12-month enrollment periods?

Q 3.2c. What effects do premiums have on continuity of coverage, as reflected by mid-year disenrollments and renewal decisions?

Hypothesis 3.3. The imposition of premium requirements for CLAs will increase enrollment in commercial insurance following exits from Medicaid.

Primary Research Question 3.3: Did the imposition of premium requirements increase enrollment in commercial insurance following exits from Medicaid?

Q 3.3a. Did the imposition of premium requirements increase enrollment in employer-sponsored / large group insurance following exits from Medicaid?

Q 3.3b. Did the imposition of premium requirements increase enrollment in individual market / ACA Marketplace insurance following exits from Medicaid?

Q3.3c. To what extent do disenrolled beneficiaries re-enroll in Medicaid following their period of non-eligibility?

Hypothesis 3.4. The imposition of premium requirements for CLAs will lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums.

Primary Research Question 3.4. Did the imposition of premium requirements lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums?

Hypothesis 3.5. The imposition of a co-payment for non-emergent use of the emergency department will lead to more appropriate uses of medical care among CLAs enrolled in Medicaid.

Primary Research Question 3.5: Did the imposition of a co-payment for non-emergent use of the emergency department reduce the number of non-emergency visits to the emergency department among CLAs enrolled in Medicaid?

Q 3.5a. What was the number of non-emergent visits to the emergency department among CLAs prior to the imposition of copayments?

Q 3.5b. What was the total number of emergency department visits among CLAs prior to the imposition of copayments?

Q 3.5c. How did the numbers of emergency department visits and non-emergent visits change among CLAs after the imposition of copayments?

Q 3.5d. How did the use of primary care change among CLAs after the imposition of copayments for non-emergent visits to the emergency department?

Q 3.5e. Do beneficiaries with co-payment requirements understand their payment obligations?

Hypothesis 3.6. Hospitals vary in how they implement the required co-payment for non-emergency use of the ED.

Primary Research Question 3.6: Are hospitals consistent in how they define non-emergent use of the emergency department, as necessary to apply the associated Medicaid co-payment policy?

Q 3.6a. Do hospitals understand the policy requiring a co-payment for non-emergent use of the emergency department?

Hypothesis 3.7. Hospitals are implementing the policy requiring a co-payment for non-emergent use of the emergency department in a consistent manner.

Primary Research Question 3.7: Are hospitals consistent in how they are implementing the policy requiring a co-payment for non-emergent use of the emergency department?

Q 3.7a. Is the definition of non-emergent ED visits consistently applied across hospitals?

C3. Methodology

C3.1. Evaluation Design Summary

We will use three analytic approaches to address the primary research questions for evaluation of waiver Provision 3, the premium and co-payment requirement for CLAs: ITS, DiD, and RD.

COVID-related note: Provision 3, pertaining to premiums and copayments, is the provision most affected by the change in implementation schedule and by the pandemic circumstances. The implementation of premiums was halted and will not commence until the end of the federally-declared public health emergency. The co-payments for emergency department visits took effect on July 1, 2020, after an initial delay, but this provision is underway during the pandemic and a time of substantial distortions in health care use patterns.

We will no longer use ITS or individual-level fixed effects models to address the research questions under this provision but will instead rely on DiD and RD designs. We will include models that exclude the pandemic period for DiD analyses, to avoid COVID-related disruptions in the baseline. The approach to answer several research questions involved a descriptive analysis of trends and, in these cases, we do not have alternatives available and must carefully interpret results as they are likely affected by the pandemic.

The Design Table (**Table 11**) summarizes the key features of the evaluation design.

Table 101. Provision 3: Summary of Hypotheses, Questions, Data Sources, and Analytic Approaches for Evaluation of Premiums for CLAs

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 3.1: *Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance.*				
Primary research question 3.1: Did beneficiaries required to make premium payments understand their requirements and make premium payments?				
Question 3.1a: How many beneficiaries are required to make premium payments? How does this number change over time?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs required to make premium payments	CARES	Descriptive	Unchanged
Question 3.1b: How many beneficiaries make premium payments? On what timeline do beneficiaries typically make payments (monthly, quarterly, annually, or other? How do these numbers change over time?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs who make premium payments	CARES	Descriptive	Unchanged
Question 3.1c: How do the characteristics of those who make their required premium payments differ from those of beneficiaries who fail to make these payments? How do these characteristics change over time?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Demographic and health-related characteristics and of CLAs required to make premium payments	CARES and WI Medicaid Claims and Encounter Data	Descriptive	Unchanged

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Question 3.1d: How many beneficiaries have premium payments made on their behalf by third-party entities? How do these numbers change over time?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs whose premium payments were made by third parties.	CARES	Descriptive	Unchanged
Question 3.1e: How many beneficiaries are terminated and locked out for non-payment? Of those terminated, how many re-enroll at the end of their period of non-eligibility? How do these numbers change over time?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs terminated for failure to make premium payments	CARES	Descriptive	Unchanged
	Counts of previously locked-out CLAs who re-enroll following the lock-out period.			
Question 3.1f: Do beneficiaries with premium requirements understand their payment obligations and the consequences of non-payment?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Understanding of premium requirements	CLA Survey	Descriptive	Unchanged

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 3.2: *The imposition of premium requirements for childless adults will reduce enrollment in Medicaid.*				
Primary research question 3.2: Did the imposition of premium requirements reduce enrollment in Medicaid?				
Question 3.2a: What effects does the premium requirement have on total and new enrollment in Medicaid?				
CLAs in other states	Medicaid enrollment	American Community Survey	DiD	Include models that exclude pandemic period from baseline; Comparator states will be selected so as to be similar as possible in both COVID-19 outcomes as well baseline characteristics.
Parents and CLAs in Wisconsin not subject to premiums	Medicaid reenrollment and disenrollment	CARES	DiD	
CLAs in Wisconsin not subject to premiums	Medicaid reenrollment and disenrollment	CARES	RD	Unchanged
CLAs in Wisconsin prior to waiver	Medicaid reenrollment and disenrollment	CARES	ITS	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider ITS a valid evaluation strategy and we will rely on DiD and RD approaches to answer this question.

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Q 3.2b: Do beneficiaries with premium obligations who initiate payments continue to make regular payments throughout their 12-month enrollment periods?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs who continuously make premium payments throughout their 12-month enrollment period	CARES	Descriptive	Unchanged
Q 3.2c: What effects do premiums have on continuity of coverage, as reflected by mid-year disenrollments and renewal decisions?				
CLAs in other states	Mid-year disenrollment and renewals	American Community Survey	DiD	Include models that exclude pandemic period from baseline; Comparator states will be selected so as to be similar as possible in both COVID-19 outcomes as well baseline characteristics.
Parents and CLAs in Wisconsin not subject to premiums	Mid-year disenrollment and renewals	CARES	DiD	
CLAs in Wisconsin not subject to premiums	Mid-year disenrollment and renewals	CARES	RD	Unchanged
CLAs in Wisconsin prior to waiver	Mid-year disenrollment and renewals	CARES	ITS	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider ITS a valid evaluation strategy and we will rely on DiD and RD approaches to answer this question.

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 3.3: *The imposition of premium requirements for childless adults will increase enrollment in commercial insurance following exits from Medicaid.*				
Primary research question 3.3: Did the imposition of premium requirements increase enrollment in commercial insurance following exits from Medicaid?				
Question 3.3a: Did the imposition of premium requirements increase enrollment in employer-sponsored / large group insurance following exits from Medicaid?				
CLAs leavers prior to waiver	Enrollment in commercial insurance	WI TPL data UI Data linked to DOL self-insured data WHIO	ITS	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider ITS a valid evaluation strategy and we will rely on an RD approach to answer this research question.
CLAs leavers not subject to premiums prior to waiver	Enrollment in commercial insurance	WI TPL data UI Data linked to DOL self-insured data WHIO	RD	Unchanged
Question 3.3b: Did the imposition of premium requirements increase enrollment in individual market / ACA Marketplace insurance following exits from Medicaid?				
CLAs leavers prior to waiver	Enrollment in commercial insurance	WI TPL data UI Data linked to DOL self-insured data WHIO	ITS	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider ITS a valid evaluation strategy and we will rely on an RD approach to answer this research question.
CLAs leavers not subject to premiums prior to waiver	Enrollment in commercial insurance	WI TPL data UI Data linked to DOL self-insured data WHIO	RD	Unchanged

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Question 3.3c: To what extent do disenrolled beneficiaries re-enroll in Medicaid following their period of non-eligibility?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs disenrolled from Medicaid due to lack of premium payment who subsequently re-enroll in Medicaid following their period of non-eligibility	CARES	Descriptive	Unchanged
Hypothesis 3.4: *The imposition of premium requirements for CLAs will lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums.*				
Primary research question 3.4: Did the imposition of premium requirements lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums?				
CLAs prior to disenrollment	Use of medical care	CARES and WI Medicaid Claims and Encounter Data	Individual-level fixed effects analysis	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider individual fixed effects a valid evaluation strategy and we will rely on a DiD approach to answer this question.
Continuously enrolled CLAs	Use of medical care	CARES and WI Medicaid Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline.

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 3.5: *The imposition of a co-payment for non-emergent use of the emergency department will lead to more appropriate uses of medical care among CLAs enrolled in Medicaid.*				
Primary research question 3.5: Did the imposition of a co-payment for non-emergent use of the emergency department reduce the number of non-emergency visits to the emergency department among CLAs enrolled in Medicaid?				
Question 3.5a: What was the number of non-emergent visits to the emergency department among CLAs prior to the imposition of copayments?				
Answering this research questions requires only data on CLAs who are subject to premiums; no comparison strategy is required	Number of non-emergent ED visits	CARES and WI Medicaid Claims and Encounter Data	Descriptive	Unchanged
Question 3.5b: What was the total number of emergency department visits among CLAs prior to the imposition of copayments?				
Answering this research questions requires only data on CLAs who are subject to premiums; no comparison strategy is required	Total number of ED visits	CARES and WI Medicaid Claims and Encounter Data	Descriptive	Unchanged
Question 3.5c: How did the numbers of emergency department visits and non-emergent visits change among CLAs after the imposition of copayments?				
CLAs enrolled prior to introduction of ED copayments	Total number and number of non-emergent ED visits	CARES and WI Medicaid Claims and Encounter Data	ITS	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider ITS a valid evaluation strategy and we will rely on a DiD approach to answer this question.
Parents and caregiver adults	Total number and number of non-emergent ED visits	CARES and WI Medicaid Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline
Commercially insured adults	Total number and number of non-emergent ED visits	WHIO	DiD	Include models that exclude pandemic period from baseline

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Question 3.5d: How did the use of primary care change among CLAs after the imposition of copayments for non-emergent visits to the emergency department?				
Parents and caregiver adults	Total number and number of primary care visits	CARES and WI Medicaid Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline
Commercially insured adults	Total number and number of primary care visits	WHIO	DiD	Include models that exclude pandemic period from baseline
Question 3.5e: Do beneficiaries with co-payment requirements understand their payment obligations?				
Answering this research questions requires only data on CLAs who are subject to premiums; no comparison strategy is required	Knowledge and understanding of payment obligations	Beneficiary survey	Descriptive	Unchanged
Hypothesis 3.6: *Hospitals vary in how they implement the required co-payment for non-emergency use of the ED.*				
Primary research question 3.6: Are hospitals consistent in how they are defining non-emergent use of the emergency department, as necessary to apply the associated Medicaid co-payment policy?				
Q 3.6a. Do hospitals understand the policy requiring a co-payment for non-emergent use of the emergency department?				
Answering this research questions requires only data on Wisconsin hospitals; no comparison strategy is required	Understanding of co-payment requirements	Hospital focus groups	Descriptive	Unchanged

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 3.7. *Hospitals implement the policy requiring a co-payment for non-emergent use of the emergency department in a consistent manner.*				
Primary research question 3.7: Are hospitals consistent in how they are implementing the policy requiring a co-payment for non-emergent use of the emergency department?				
Question 3.7a: Is the definition of non-emergent ED visits consistently applied across hospitals?				
CLAs subject to co-payments	Hospital-level measure of the ratio of visits for which co-payments assessed, relative to the number of non-emergent visits measured using the Billings (2000) probabilistic method	CARES and WI Medicaid Claims and Encounter Data	Descriptive	Unchanged
Parents and caregiver adults	Hospital-level measure of the ratio of non-emergent to total ED visits	CARES and WI Medicaid Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline

C3.2. Target and Comparison Populations.

The target populations for the evaluation of waiver provision 3 -- premium requirement for CLAs and co-payments for non-emergent use of the emergency department -- include CLAs in the Wisconsin Medicaid program and CLAs who exit Medicaid in Wisconsin. We will address the primary research questions as follows:

Q3.1. "Did beneficiaries required to make premium payments understand their requirements and make premium payments?": Conduct a descriptive analysis using data from Wisconsin administrative enrollment systems, which does not require the use of a comparison group.

Q3.2. "Did the imposition of premium requirements reduce enrollment in Medicaid?": Use three different comparison groups. We will first use a comparison group of lower-income CLAs in Wisconsin enrolled in Medicaid that are not subject to premiums. The second comparison group is parents/caregivers in Wisconsin enrolled in Medicaid that also are not subject to premiums. Finally, we will use CLAs enrolled in Medicaid prior to the waiver implementation (and who look like they would have been subject to premiums).

Q3.3. "Did the imposition of premium requirements increase enrollment in commercial insurance among CLAs who exit Medicaid?": Use two comparison groups. First, CLAs who exited Medicaid prior to the imposition of the premium requirement and, second, lower income CLAs who are not subject to premiums and who exit Medicaid.

Q3.4. "Did the imposition of premium requirements lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums?": Use two different comparison groups. We will first use a comparison group of CLAs enrolled in Medicaid prior to the waiver implementation (and who look like they would have been subject to premiums). Second, we will use a comparison group of continuously enrolled CLAs (who were also subject to premiums).

Q3.5. "Did the imposition of a copayment for non-emergent use of the emergency department reduce the number of these visits among CLAs enrolled in Medicaid?": Use three comparison groups. First, CLAs enrolled in Medicaid prior to the imposition of co-payments for non-emergent use of the emergency department. Second, parents and caregivers in Wisconsin who were enrolled in Medicaid. Third, adults enrolled in commercial insurance in Wisconsin.

Q3.6. "Are hospitals consistent in how they are defining non-emergent use of the emergency department, as necessary to apply the associated Medicaid co-payment policy?": Conduct interviews with hospitals, which does not require the use of a comparison group.

Q3.7. "Are hospitals consistent in how they are implementing the policy requiring a co-payment for non-emergent use of the emergency department?": Use two comparison groups. First, CLAs enrolled in Medicaid prior to the imposition of co-payments for non-emergent use of the emergency department. Second, parents and caregivers in Wisconsin who were enrolled in Medicaid.

C3.3. Evaluation Period

The evaluation period will include the years 2016 through 2023, which includes a pre-period before premiums and copayments begin, through the end of the evaluation period.

C3.4. Data Sources and Outcome Measures

The outcome measures for this evaluation are defined in **Table 11**, above. This evaluation will involve multiple data sources. They are noted in **Table 12**, along with the hypotheses for which these data will be used. Section IID, above, provides a full description of these data sources.

Table 112. Provision 3 Data Sources

	Hypotheses
Medicaid enrollment (CARES), claims, and encounter data. To estimate the number of CLAs that are required to make premium payment and do make premium payments. We also will use any available data on whether a third-party makes premium payments on behalf of a beneficiary. Finally, we will use these data to calculate Medicaid enrollment rates for the target and comparison groups noted in Table 11.	H1 H2 H4 H5 H7
Medicaid Beneficiary Survey. Data from the questions intended to elicit understanding of premiums, knowledge of program requirements related to premiums, and self-reported reasons why individuals may experience difficulty paying required premiums.	H1
Wisconsin's All-Payer Claims Database (known as WHIO). To measure Medicaid enrollment and transitions to commercial insurance.	H2 H3 H5
Wisconsin Third Party Liability Database (TPL). To identify individuals enrolled in Medicaid who are covered by a private health insurance plan.	H3
Unemployment Insurance data (UI) and Department of Labor data (DOL). To match individuals enrolled in Medicaid to their current and future employers, which when linked to DOL data, can be used to identify individuals transitioning into employment at self-insured firms.	H3

C3.5. Analytic Methods

We will address the primary research questions as follows:

Q3.1. "Did beneficiaries required to make premium payments understand their requirements and make payments on time?" We will conduct a descriptive analysis using data from Wisconsin administrative enrollment systems.

Q3.2. "**Did the imposition of premium requirements reduce enrollment in Medicaid?"** We will employ DiD and RD (each described in Section IIB, above). Using the comparison group of adults in Wisconsin enrolled in Medicaid that are not subject to premiums, we will estimate DiD models on Medicaid enrollment and disenrollment. In addition, using the comparison group of lower-income CLAs in Wisconsin enrolled in Medicaid who are not subject to premiums, we will employ RD models on Medicaid enrollment and disenrollment.

Q3.3. "Did the imposition of premium requirements increase enrollment in commercial insurance among CLAs who exit Medicaid?" We will employ an RD design (described in Section IIB, above. Using the comparison group of low-income adults exiting Medicaid who were not subject to premiums, we will employ RD models on enrollment in commercial insurance. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

Q3.4. "Did the imposition of premium requirements lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums?" We will employ two different analytic approaches, individual-level fixed effects and DiD. Use of medical case will be measured by total number of visits, number of inpatient hospital stays, and number of visits to the ED.

Q3.5. "Did the imposition of a co-payment for non-emergent visits to the emergency department reduce the number these visits among CLAs enrolled in Medicaid?" We will employ a DiD design (described in Section IIB, above). Non-emergent visits will be measured using a using a probabilistic method developed for claims data.[17] By using this method, we will ensure that we will identify non-emergent visits before and after implementation in a consistent manner. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

To conduct the analysis, we will first conduct interrupted time-series analyses to determine whether the CLAs enrolled in Medicaid reduced their non-emergent use of the emergency department following the imposition of co-payments. We also will examine the total number of ED visits to help determine whether any observed reduction in non-emergent visits was the result of reclassification. Second, using the comparison group of parents and caregivers enrolled in Wisconsin Medicaid, we will estimate DiD models on non-emergent and total ED visits. We also will estimate DiD models on non-emergent and total emergency department visits using the comparison group of commercially insured adults in Wisconsin.

Q3.6. "Are hospitals consistent in how they are defining non-emergent use of the emergency department, as necessary to apply the associated Medicaid co-payment policy?":

We will perform a thematic analysis of focus group results.

[17] Codes available here: https://wagner.nyu.edu/faculty/billings/acs-algorithm
See, for reference: Billings J, Parikh N, Mijanovich T. Emergency Department Use: The New York Story. New York (NY): Commonwealth Fund; 2000 Nov. (Issue Brief). Available at: https://www.commonwealthfund.org/sites/default/files/documents/___media_files_publications_issue_brief_2000_nov_emergency_room_use__the_new_york_story_billings_nystory_pdf.pdf

Q3.7. "Are hospitals consistent in how they are implementing the policy requiring a co-payment for non-emergent use of the emergency department?": We will employ DiD method (described in Section IIB, above). Collections of co-payments will be determined from administrative data. Non-emergent visits will be measured using a using the probabilistic method developed for claims data described above. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

To conduct the analysis, we will first conduct a descriptive analysis of the extent of variation across hospitals in whether they collect co-payments, relative to a consistent measure of non-emergent visits. Second, using the comparison group of parents and caregivers enrolled in Wisconsin Medicaid, we determine whether hospitals changed their coding of ED visits following the imposition of the co-payment requirement.

C4. Methodological Limitations

Because the CLA coverage expansion was implemented at a single time statewide and without randomized controls, the methods we propose are all quasi-experimental. It is possible that there are other factors that are not fully accounted for in the design that may have a more direct effect on outcomes, particularly enrollment in commercial insurance, such as the availability of commercial coverage options, co-insurance costs, and income levels. The original design had assumed that co-payments for non-emergent use of the emergency department were to be implemented, as planned, concurrent with the premium. However, this limitation may be partially mitigated because the implementation sequence has changed under the pandemic public health emergency. While the premiums remain suspended, the ED co-payment took effect on July 1, 2020. The main remaining limitation is the occurrence of the implementation during the pandemic.

IIID. Provision 4: Substance Use Disorder – Expansion of Covered Services

D1. General Background Information

Provision: Modify the benefit package for substance use disorder (SUD) treatment for all Medicaid enrollees. Specifically, the demonstration waiver authorizes federal funding for treatment provided to all WI Medicaid enrollees in Institutions for Mental Disease (IMD) allowing WI Medicaid to make two significant programmatic changes: 1) to establish a residential treatment benefit for SUD; and 2) to cover existing services when they are provided in an IMD specifically including medically supervised withdrawal management, inpatient services, and medication-assisted treatment (MAT). Wisconsin Medicaid delayed implementation of both programmatic changes due to various challenges in CY2020, but the provisions took effect on February 1, 2021.

Additionally, the demonstration waiver includes several new or revised policies to support the implementation and quality of these newly covered services. These policies, took effect on February 1, 2021, are as follows: updated licensure/certification requirements for providers (ongoing); ensuring

ASAM-consistent placement criteria (ongoing); utilization management for the residential treatment benefit; residential treatment provider qualifications that align with national standards (ongoing); requirement that residential treatment facilities offer MAT.
The new residential treatment benefit builds on the existing robust set of services currently covered by the Wisconsin Medicaid program to treat substance use disorders (SUDs) for all enrollees, including outpatient counseling, day treatment, psychosocial rehabilitation, MAT, telehealth services (expanded with the onset of the COVID-19 PHE) and inpatient treatment.

The period of evaluation for the SUD demonstration waiver encompasses a six-year period, February 2017 – January 2023, allowing up to 3 years of observation before (2017-2019) and after (2021-2023) implementation of the first provision of the demonstration waiver, coverage for residential treatment services.

Medicaid program goal: To reduce the incidence of drug overdose deaths, including opioid-related deaths, by improving access to the full continuum of treatment.

D2. Evaluation Questions and Hypotheses

The following section of the evaluation design report follows the format and guidance that CMS issued specifically for evaluation of SUD demonstration waivers.[18] For this reason, the format of this section of the design report and its related tables/figures differs in some respects from the sections of the evaluation design that are focused on other provisions in the demonstration waiver (e.g., premium reductions).

D2.1. Driver Diagram

Figure 5 displays the driver diagram. In the logic of a driver diagram, secondary drivers are mechanisms or conditions that are necessary to achieve the primary drivers which in turn contribute directly to realizing the overall purpose of the demonstration waiver. **Figure** 5 also includes the specific programmatic changes that the Wisconsin Medicaid program will implement under the SUD demonstration waiver. We do so to show how these changes hypothetically relate to the demonstration waiver's overall goal of reducing drug overdose deaths in the Medicaid population.

The programmatic changes fall within three functional categories: supply of Medicaid SUD providers at all levels of care; coverage for SUD services; and quality of SUD services. These changes have the potential to impact the rate of drug overdose deaths through a sequence of mechanisms. Most directly, the programmatic changes have the potential to increase the supply of SUD providers that accept and treat Medicaid enrollees, and to increase Medicaid enrollees' use of SUD services. These mechanisms are represented in **Figure** 5 as secondary drivers.

[18] Centers for Medicare and Medicaid Services. Substance Use Disorder Section 1115 Demonstration Evaluation Design- Technical Assistance. March 6, 2019. Available at: https://www.medicaid.gov/medicaid/section-1115-demo/evaluation-reports/evaluation-designs-and-reports/index.html

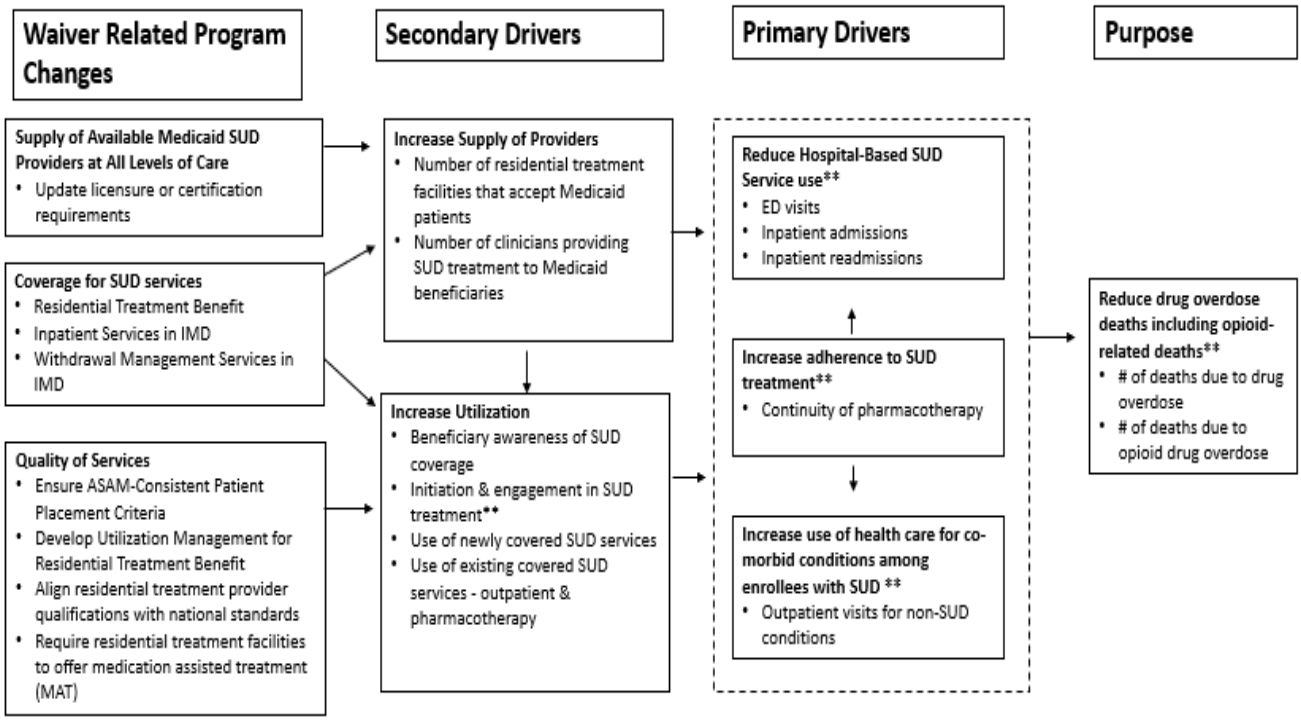
These secondary drivers may, in turn, influence the primary drivers: 1) enrollees' health care needs and preferences, and 2) their capacity to seek care that is suited to their needs. For example, increased access to SUD providers and increased use of SUD services may reduce symptoms of SUD, increase the likelihood of recovery, increase engagement in health care, and foster knowledge and awareness of treatment needs. These changes may thus enable enrollees to remain in SUD treatment, reduce hospital-based SUD service use, and/or address previously ignored physical and mental health co-morbidities. Improvements in outcomes considered primary drivers then have the potential to influence the waiver's overall goal of reducing drug overdose deaths among Medicaid enrollees.

We derive the evaluation design for the SUD demonstration waiver from the logic of the driver diagram and will proceed in stages. In the first stage of the evaluation, we will assess the causal effects of the demonstration waiver on the outcomes listed as secondary drivers because the planned programmatic changes are most directly related to these outcomes. We anticipate that the programmatic changes will increase the supply of providers, particularly residential treatment providers, and enrollees' use of newly covered SUD services.

In the second stage of the evaluation, we will evaluate the causal effects of the SUD demonstration waiver on the outcomes noted as primary drivers in **Figure** 5 -- conditional on finding that the waiver influences the supply of SUD providers and/or use of SUD services. If the SUD demonstration waiver has no significant impact on the secondary drivers, we will not attempt to estimate the causal effects of the SUD demonstration waiver on primary drivers, because there would be no empirical basis on which to expect an effect. Rather, we will conduct descriptive analyses to quantify the association between the primary drivers and factors that may provide insight to the Wisconsin Medicaid program regarding potential change over time in these outcomes. These factors include beneficiary characteristics, county-level SUD prevention and treatment resources, and significant state or federal policies related to SUD prevention and treatment implemented during the observation period.

If we find that the SUD demonstration waiver significantly impacts the primary drivers as hypothesized in **Figure** 5, we will assess the demonstration waiver's causal impact on the rate of drug overdose deaths among Medicaid beneficiaries. If the SUD waiver has no effect on the primary drivers, or if we do not conduct that causal analysis because of null effects in the first stage of the evaluation, we will conduct descriptive analyses to quantify the association between the rate of deaths due to drug overdose and factors that may provide insight to the Wisconsin Medicaid program regarding potential change over time in this outcome. These factors include beneficiary or population characteristics, county-level SUD prevention and treatment resources, and significant state or federal policies related to SUD prevention and treatment implemented during the observation period.

Figure 5. Driver Diagram: Substance use Disorder Waiver Provision



**Goal for SUD treatment reform per Wisconsin Medicaid's SUD Implementation Protocol, June 2019

D2.2. Hypotheses and Research Questions

SUD Demonstration Waiver: Expands coverage for SUD treatment in IMD settings including a new residential treatment benefit and coverage for inpatient and medically supervised withdrawal management services, and adopts new or revised policies to support implementation of this coverage expansion.

Question 4.1. Does the SUD demonstration waiver increase the supply of SUD providers for Medicaid enrollees?

H4.1a. The SUD demonstration waiver will increase the supply of SUD providers that accept and/or treat Medicaid enrollees.

Question 4.2. Does the SUD demonstration waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees?

H4.2a. After implementation of the SUD demonstration waiver, enrollees' awareness of available SUD treatment services will increase over time.

H4.2b. The SUD demonstration waiver will increase use of SUD treatment in IMD settings including residential treatment, impatient treatment, medically supervised withdrawal services and MAT for opioid use disorder.

H4.2c. The SUD demonstration waiver will increase initiation and engagement in SUD treatment.

Question 4.3. Does the SUD demonstration waiver change Medicaid enrollees' use of existing covered SUD services?

H4.3a. The SUD demonstration waiver will increase or have no effect on SUD outpatient services, including in-person and telehealth, and pharmacotherapy treatment provided outside IMD settings.

H4.3b. The SUD demonstration waiver will reduce use of hospital-based SUD services, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.

H4.3c. The SUD demonstration waiver will increase access to health care for co-morbid physical and mental health conditions among enrollees with a SUD, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.

H4.3d. The SUD demonstration waiver will increase adherence to SUD treatment, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.

Question 4.4. Does the SUD demonstration waiver reduce the rate of drug overdose deaths among Medicaid enrollees including opioid-related deaths?

H4.4a. The SUD demonstration waiver will reduce the rate of drug overdose deaths among Medicaid beneficiaries, including opioid-related overdose deaths, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.

The final research question, Q4.5, follows from the recommendations in the CMS technical assistance guidance on SUD demonstration waiver evaluations. Consistent with this guidance, there are no accompanying hypotheses.

Question 4.5. What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver?

D3. Methodology

D3.1. Evaluation Design Summary

We will use descriptive analyses to characterize changes over time in evaluation outcomes and to identify key correlates associated with the outcomes including beneficiary characteristics, county-level SUD prevention and treatment resources, and potential changes in state and federal policy or events within and beyond the Medicaid program that are related to SUD prevention and treatment. (e.g., expanded coverage of telehealth services for SUD treatment.) For causal analysis, we will use DiD. Section IIC, above, provides an overview of this analytic approach, and a discussion of its application to this component of the evaluation follows in section E3.5.

COVID-related note: Provision 4, the SUD residential treatment benefit, was substantially delayed, with implementation taking effect on February 1, 2021; The evaluation plan is affected by this change in schedule and by the pandemic circumstances. The original plan called for a combination of ITS and DiD approaches. We will no longer implement the ITS analysis, as it will be strongly confounded by COVID disruptions. We are still able to address all of the research questions. We will implement the DiD models excluding 2020 from the baseline period to avoid COVID19 related effects on outcomes during the baseline. The comparison populations and data sources for the DiD models are largely unchanged from the original analysis plan. Interpretation of DiD findings will include discussion of the potential residual confounding effects of the pandemic.

The Design Table (**Table 13**) summarizes the key features of the evaluation design, including evaluation questions, hypotheses, data sources and analytic approaches. As noted above, the format of this table conforms to CMS guidance for evaluation of the SUD provision and differs somewhat from the form of the table presented in prior sections.

Table 123. Provision 4: Summary of Questions, Hypotheses, Data Sources, and Analytic Approaches for Evaluation of the SUD Demonstration Waiver

NOTE: Implementation of this provision was delayed, with the new implementation set to February 1, 2021.							
DRIVER	**MEASURE DESCRIPTION [steward]**	**NUMERATOR**	**DENOMINATOR**	**DATA SOURCE**	**COMPARISON GROUP(S)**	**ANALYTICAL APPROACH**	
						Original	**Revised**
Q4.1 Does the SUD demonstration waiver increase the supply of SUD providers for Medicaid enrollees?							
H4.1a. The SUD demonstration waiver will increase the supply of SUD providers that accept and/or treat Medicaid enrollees.							
Secondary Driver (Increase Supply of Providers)	Number of residential treatment facilities that accept Medicaid patients [n/a]	Facility reports willingness to accept Medicaid patients	Federal, state, and local government and private residential treatment facilities that provide substance abuse treatment services	National Survey of Substance Abuse Treatment Facilities	All treatment facilities in Wisconsin and in selected comparison states for the measurement period	DiD	Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Modify selection criteria of comparison states to include state-level COVID-19 outcomes. Interpretation of DiD findings will include discussion of the potential residual confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
Secondary Driver (Increase Supply of Providers)	Proportion of Medicaid clinicians that provide treatment for SUD [n/a]	Number of clinicians that provide one or more services with an SUD diagnosis in any category of service (i.e., outpatient, inpatient, emergency department) in the measurement period	Number of active clinicians that provide any outpatient, inpatient, IMD, or emergency department service to one or more adult Medicaid enrollees in the measurement period.	WI Medicaid claims and encounter	Clinicians who provided any service to one or more adult Medicaid enrollee during the three years before SUD waiver implementation, and clinicians who provided any service to one or more adult Medicaid enrollee during the three years after SUD waiver implementation.	ITS	No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Implement a DiD in which we compare the change in # of clinicians that provide one or more services with an SUD diagnosis, to the change in # of clinicians who provide one or more services with a diabetes diagnosis. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
Q4.2 Does the SUD demonstration waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees?							
H4.2a. After implementation of the SUD demonstration waiver, enrollees' awareness of available SUD treatment services will increase over time							
Secondary Driver (Increase Utilization)	Awareness of Medicaid coverage for SUD services [n/a]	Beneficiary Survey	Beneficiary Survey	Beneficiary Survey	Cross-sectional sample of enrollees at two post-implementation time points	Descriptive Analysis	The delayed implementation of the SUD waiver results in one survey assessment pre-implementation (Fall 2020). Descriptive analysis will compare pre- and post-implementation outcomes recognizing the potential confounding effect of the pandemic.
H4.2b. The SUD demonstration waiver will increase use of SUD treatment in IMD settings including residential treatment, inpatient treatment, medically supervised withdrawal services and MAT for opioid use disorder.							
Secondary Driver (Increase Utilization)	Any use of SUD treatment in IMD setting and volume of use, overall and by service type [n/a]	Any SUD treatment use overall and by service type; Quantity of SUD treatment services received by service type.	All admissions during the measurement period from treatment facilities that receive state funds or federal block grant funds to provide alcohol and/or drug treatment services	Treatment Episode Dataset - Admissions	Admissions to drug treatment facilities in WI and a set of comparison states for three years before and two years after implementation of the SUD demonstration waiver in WI.	DID	Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Modify selection criteria of comparison states to include state-level COVID-19 outcomes. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
H4.2c. The SUD demonstration waiver will increase initiation and engagement in SUD treatment.							
Secondary Driver (Increase Utilization)	Initiation and engagement of alcohol and other drug dependence treatment [NCQA-IET]	Initiation- # of enrollees who initiated treatment w/in 14 days of the index episode. Engagement- # of enrollees who initiated treatment & had >=2 additional services with a diagnosis of AOD w/in 30 days of initiation visit	Enrollees with a new diagnosis of AOD received between 1/1-11/15 of the measurement year, and continuous enrollment 60 days before new diagnosis and 44 days post.	WI all payer claims database (DD analysis); Medicaid claims and encounter (validation analysis)	For DD: Non-elderly adults enrolled in Medicaid and non-elderly adults enrolled in private insurance during the three years before and/or after implementation of the waiver.	ITS and DiD	No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Implement descriptive trend analysis with Medicaid data to validate all-payer data. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
Q4.3 Does the SUD demonstration waiver change Medicaid enrollees' use of existing covered SUD services?							
H4.3a. The SUD demonstration waiver will increase or have no effect on SUD outpatient services, including in-person and telehealth, and pharmacotherapy treatment provided outside of IMD settings.							
Secondary Driver (Increase Utilization)	Any outpatient visit for SUD treatment, and volume of outpatient visits for SUD treatment. [MODRN]	any, and # of non-emergency department, outpatient claims with a SUD diagnosis and of an OUD diagnosis. Outpatient visits include in-person and telehealth visits.	all member-months observed for target population and comparison group during the measurement period	same as H4.2c	same as H4.2c	same as H4.2c	No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
Secondary Driver (Increase Utilization)	Any medication assisted treatment for opioid use disorder [MODRN]	any claim for buprenorphine, naltrexone (oral), injectable naltrexone, buprenorphine/Naloxone or a HCPCs code for buprenorphine or buprenorphine/ naloxone, methadone administration, or naltrexone	all member-months observed for enrollees with at least one encounter with a diagnosis of OUD in inpatient, outpatient and professional claims during the measurement period	same as H4.2c	same as H4.2c	same as H4.2c	No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
Secondary Driver (Increase Utilization)	Any outpatient visit for SUD treatment; any prescription medication treatment for SUD [n/a]	Beneficiary Survey	Beneficiary Survey	Beneficiary Survey	Cross-sectional sample of enrollees at two post-implementation time points	Descriptive Analysis	The delayed implementation of the SUD waiver results in one survey assessment pre-implementation (Fall 2020). Descriptive analysis will compare pre- and post-implementation outcomes recognizing the potential confounding effect of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
H4.3b. The SUD demonstration waiver will reduce use of hospital-based services, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.							
Primary Driver (Reduce Hospital-Based SUD Service Use)	Any emergency department visit with a SUD-diagnosis, and volume of emergency department visits with an SUD diagnosis [MODRN]	any, and # of ED visits with a SUD diagnosis of any kind; any and # of ED visits with an OUD diagnosis	all member-months observed for target population and comparison group during the measurement period	same as H4.2c	same as H4.2c	Descriptive Analysis, and same as H4.2c	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
	Any hospitalization with a SUD diagnosis, and number of hospitalizations with a SUD diagnosis [MODRN]	any, and # of hospitalizations with a SUD diagnosis of any kind; any, and # of hospitalizations with an OUD diagnosis	all member-months observed for target population and comparison group during the measurement period	same as H4.2c	same as H4.2c	Descriptive Analysis, and same as H4.2c	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
Primary Driver (Reduce Hospital-Based SUD Service Use)	Any, and volume of readmissions within 30-days following hospitalization for a SUD diagnosis [n/a]	any, and # of readmissions to the hospital within 30-days for an SUD diagnosis of any kind; any and # of readmissions to the hospital within 30-days for an OUD diagnosis	Hospital discharges with a diagnosis of SUD in the measurement period among enrollees with continuous enrollment for a least 31 days post-hospitalization.	same as H4.2c	same as H4.2c	Descriptive Analysis, and same as H4.2c	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
	Any emergency department visit for a SUD; any hospitalization for a SUD [n/a]	Beneficiary Survey	Beneficiary Survey	Beneficiary Survey	Cross-sectional sample of enrollees at two post-implementation time points	Descriptive Analysis	The delayed implementation of the SUD waiver results in one survey assessment pre-implementation (Fall 2020). Descriptive analysis will compare pre- and post-implementation outcomes recognizing the potential confounding effect of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
H4.3c The SUD demonstration waiver will increase use of health care for co-morbid physical and mental health conditions among enrollees with a SUD, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.							
Primary Driver (Increase Use of Health Care for Co-Morbid Conditions)	Any outpatient visit for a non-SUD diagnosis; Quantity of outpatient visits for a non-SUD diagnosis [n/a]. Outpatient visit includes in-person and telehealth visits.	any, and # of non-emergency department, outpatient claim with a non-SUD diagnosis; any, and # of non-emergency department outpatient claims with a non-SUD diagnosis	all member-months observed for target population and comparison group members with at least one inpatient, outpatient, emergency department or IMD claim with an SUD diagnosis	same as H4.2c	same as H4.2c	Descriptive Analysis, and same as H4.2c	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
Primary Driver (Increase Use of Health Care for Co-Morbid Conditions)	Health status and chronic conditions; Access and use of general medical care; Substance use and SUD; Access and use of drug tx; knowledge/ understanding of waiver provisions	Beneficiary Survey	Beneficiary Survey	Survey	Cross-sectional sample of enrollees at two post-implementation time points	Descriptive Analysis	The delayed implementation of the SUD waiver results in one survey assessment pre-implementation (Fall 2020). Descriptive analysis will compare pre- and post-implementation outcomes recognizing the potential confounding effect of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
H5.3d. The SUD demonstration waiver will increase adherence to SUD treatment, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.							
Primary Driver (Increase adherence to SUD treatment)	Continuity of pharmacotherapy for OUD [NQF 3175, MODRN]	Enrollees who have at least a) 90 days, and b) 180 days of continuous pharmacotherapy with a medication prescribed for OUD without a gap of more than 7 days.	Enrollees that meet Inclusion criteria: individuals with a diagnosis of OUD in inpatient, outpatient or professional claims at any time during the measurement period; and at least one claim for an oral OUD medication during the measurement period received with at least 180 days before the end of the final calendar year of the measurement period; and continuously enrolled for at least 6 months after the month with the first OUD medication claim in the measurement period with no gap in that enrollment.	same as H4.2c	same as H4.2c	Descriptive Analysis, and same as H4.2c	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential residual confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
Q4.4 Does the SUD demonstration waiver reduce the rate of drug overdose deaths among Medicaid enrollees including opioid-related deaths?							
H4.4a. The SUD demonstration waiver will reduce the rate of drug overdose deaths among Medicaid beneficiaries, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.							
Purpose (Reduce drug overdose deaths including opioid-related deaths)	Rate of drug overdose death, and opioid-related drug overdose death [WIDHS - Technical Notes Annual Death Report, 2017, P-01170-19]	# of deaths due to any type of drug overdose; # of deaths due to opioid drug overdose	Medicaid non-elderly adult population for the measurement period; Estimated Wisconsin non-elderly adult population not enrolled in Medicaid for the measurement period; Estimated Wisconsin non-elderly population in the measurement period.	WI Death Records; Census Estimates; Medicaid Enrollment	For DD: Wisconsin non-elderly adult population not enrolled in Medicaid during the measurement period	Descriptive Analysis, ITS, DiD	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
Q4.5 What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver?							
	Total health care costs; SUD and Non-SUD costs; Category-specific costs (e.g., Inpatient, Pharmacy, Outpatient non-ED, outpatient ED, long-term care). [CMS SUD Evaluation Design TA Attachment A]	Medicaid amount paid for each outcome noted.	All member-months observed during the measurement period for the target population.	Medicaid claims and encounter data.	Non-elderly adult Medicaid beneficiaries enrolled during the 3 years before and/or after waiver implementation.	Descriptive analysis and ITS	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions.
TABLE NOTES							
MODRN refers to the Medicaid Outcomes Distributed Research Network's Opioid Use Disorder workgroup. https://www.academyhealth.org/MODRN							

D3.2. Target and Comparison Populations

The provisions in the SUD demonstration waiver affect the full Wisconsin Medicaid population. The evaluation focuses specifically on non-elderly adult Medicaid beneficiaries, ages 21-64, the Medicaid population in Wisconsin with the highest rates of SUD. We exclude adults who are dually enrolled in Medicaid and Medicare because we cannot observe all of their health care use in Medicaid claims and encounters. We will employ several comparison groups; these vary according to the research question as described below.

To address question 4.1, "*Does the SUD demonstration waiver increase the supply of SUD providers for Medicaid enrollees*?" we will construct two comparison groups. First, to estimate the causal effect of the demonstration waiver on the supply of clinicians who provide SUD services to enrollees, we will use Wisconsin Medicaid claims and encounter data to identify the clinicians who provided any service to an adult Medicaid beneficiary during the three years before implementation of the residential treatment benefit, and similarly, the clinicians who provided any service to an adult Medicaid beneficiary during the three years after its implementation. Using these two groups, and an ITS analyses, we will determine if the demonstration waiver increased the fraction of Medicaid providers that delivered at least one SUD service to an adult Medicaid beneficiary. As a placebo test, we will replicate this analysis for an outcome that we would not expect to change as a consequence of the SUD demonstration waiver (e.g., the fraction of Medicaid providers that delivered at least one diabetes-related service to an adult beneficiary.)

Second, to estimate the causal effect of the demonstration waiver on the supply of residential treatment facilities that accept Medicaid beneficiaries, we will use the National Survey of Substance Abuse Treatment Facilities to identify the facilities that provided residential treatment for adults during the three years before and after implementation of the residential treatment facility. We will construct this sample of facilities in Wisconsin, and a sample of facilities from a set of comparison states that did not implement a SUD waiver during the study period. We will use a DiD design to determine if any potential change in the likelihood that a residential treatment facility accepts Medicaid patients after implementation of the wavier relative to the pre-period was greater than the any potential change experienced in the comparison states. We will select the comparison states based on their similarity to Wisconsin in demographics, Medicaid program characteristics, and federal resources available for SUD prevention and treatment (e.g., Substance Abuse and Mental Health Services Administration funding).

To address question 4.2, "*Does the SUD demonstration waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees?"* we will construct several comparison groups. First, to determine the magnitude of increase in beneficiary awareness of SUD treatment services in the years following its implementation (H5.2a), we will compare respondents to the second survey of Medicaid beneficiaries that the team will field in CY2023 relative to respondents of the first survey of Medicaid beneficiaries that we will field in CY2020. Second, to test the effect of the demonstration waiver on the use of IMD-based SUD services (H4.2b), we will use the Treatment Episode Dataset (TEDS) to construct a sample of admissions to drug treatment facilities in Wisconsin and in a set of comparison

states for three years before and two years after implementation of the residential treatment benefit in Wisconsin. We will use a DiD design to determine if the change in use of IMD-based services after implementation of the wavier relative to the pre-period was greater than the any potential change experienced in the comparison states. We will select the comparison states for this analysis using the same criteria noted above in addition to consideration of the comparability of data submitted by each state to the TEDS.

To address the last hypothesis within question 4.2 pertaining to an expected increase in initiation and engagement in SUD treatment (H4.2c), we will use the state's all payer claims database to construct a comparison group of privately insured adults, and to construct a cohort of all non-elderly adult Medicaid beneficiaries enrolled at any point between February 2017 and January 2023. We will use a DiD design to compare the change in the likelihood of initiation and engagement in SUD treatment among Medicaid enrollees relative to privately insured adults in the three years after implementation of the residential treatment benefit relative to the pre-period, 2017-2019.

We will use the comparison strategies identified above for H4.2c to answer question 4.3, "*Does the SUD demonstration waiver change Medicaid enrollees' use of existing covered SUD services*?" To address question 4.4, "*Does the SUD demonstration waiver reduce the rate of drug overdose deaths among Medicaid enrollees including opioid-related deaths?*" we will use two comparison groups in addition to a statewide, population-level analysis. The first includes adult Medicaid enrollees in the three years before implementation of the residential treatment benefit which we will identify from Medicaid enrollment data.

We will implement a DiD design to compare the change in the drug overdose death rate three years after implementation of the waiver relative to the pre-period (2017-2019) for adult Medicaid enrollees relative to adult non-Medicaid enrollees in Wisconsin. We will estimate the size of the non-Medicaid group from census data and the Medicaid population from Medicaid enrollment data. Finally, to address question 4.5, "What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver?" We use the Medicaid enrollment data to construct a sample that includes all non-elderly adult Medicaid beneficiaries enrolled at any point between February 2017 and January 2023. We will use descriptive analysis to summarize and plot the trend in health care costs during the evaluation period beginning in 2017 through 2023. Originally planned as an ITS analysis, it is no longer viable given the pandemic-induced disruptions in health care use during the pre-waiver implementation period.

D3.3. Evaluation Period

The implementation of the residential treatment benefit and the implementation date for coverage of existing services within an IMD setting (i.e., inpatient services and medically supervised withdrawal services) took effect on February 1, 2021. The evaluation period for the SUD waiver is February 1, 2017 – January 31, 2023. This delay in implementation slightly alters the post-implementation time frame for observation, in that the waiver's planned time frame had allowed for up to 36 months of observation before and after implementation of specific SUD demonstration waiver provisions while

allowing for adequate time to complete the analyses and interpretation of analyses in the fourth and final year of the evaluation waiver. The specific duration of the evaluation period may vary according to the question and hypothesis.

D3.4. Data Sources

The outcome measures for this evaluation are defined in **Table 1**3. This evaluation will involve multiple data sources. They are noted in **Table 1**4, along with the hypotheses for which these data will be used. Section IID, above, provides a full description of these data sources.

Table 134. Provision 4 Data Sources

	Hypotheses
All Payer Claims Database, WHIO. Use the member file to identify both the Medicaid and privately insured samples to implement difference-in-difference analyses, and the claims files as the source of health care-use related outcomes. We will purchase the data for the evaluation years from the WHIO. We note that in 2019, the WHIO hired a new contractor to collect and construct the all-payer-claims database. We do not expect that the change in contractor will impede the use of these data longitudinally; however, we will confirm that there have been no changes in the methodology for data construction that would introduce bias into the study designs when technical information is available from the new contractor. In the evaluation of the SUD provision of the waiver, the WHIO provides a source for a within state comparison group of commercially insured individuals to complement the primary designs that estimate the effect of the SUD provision for the affected populations using ITS which does not rely upon a within-state comparator. Thus, in the unlikely event that the new WHIO data are not usable, our capacity to answer the research question will not be affected.	H4.2c H4.3a-d
American Community Survey. To estimate the annual size of the adult population in Wisconsin by age, an input into calculating age-adjusted rate of death due to drug overdose overall and opioid-related specifically. The ACS is a publicly available survey. As we have done for previous studies, we will obtain these data from IPUMS, https://usa.ipums.org/usa/.	H4.4a
Medicaid beneficiary survey. To assess enrollees' awareness of coverage for SUD treatment services under Medicaid, use of those services and self-reported treatment outcomes particularly among individuals who self-report harmful substance use. The Medicaid Beneficiary Survey will be designed and implemented by this evaluation team. We will obtain the data from within the project.	H4.2a H4.3a H4.3b

Data Sources	Hypotheses
Medicaid enrollment, claims, and encounter data. Construct all of the health-care-use-related outcome measures and cost outcomes shown in Table 13 for the target population. We obtain enrollment, claims and encounter data through regular extracts from the Department of Health Services. We use the fee-for-service allowable charges schedule to impute costs for encounter data. HMOs have a strong incentive to accurately and completely report encounter data to the WI DHS because these data are considered within the rate-setting process. The WI DHS contractually requires HMOs to provide at least 90% of adjudicated claims as encounters within 90 days and 99% within 150 days. Internal analyses conducted by the WI DHS from 2016-2018 show that missing data across HMOS is consistently modest ranging from 1.4% to 5.3%.	H4.1a H4.2c H4.3 H4.4a Q4.5
National Survey of Substance Abuse Treatment Services (N-SSATS). This N-SSATS is the key source of treatment facilities and facility characteristics in each state for our analysis of facility acceptance of Medicaid patients. We will compare the facilities identified in the N-SSATS for Wisconsin to the Wisconsin Division of Quality Assurance list to ensure that we have the most relevant sample in Wisconsin. The N-SSATS is a publicly available dataset. We will download these data from the following site, https://www.datafiles.samhsa.gov/study-series/national-survey-substance-abuse-treatment-services-n-ssats-nid13519	H4.1a
Treatment Episode Data Set – Admissions (TEDS-A). The TEDS-A is the source of outcome data to assess Medicaid enrollee use of SUD services within an IMD setting. This dataset is published approximately two-years after the close of the calendar year (e.g., May 2019 for the 2017 dataset), so we expect to use five datasets covering the years 2017 – 2021. The TEDS-A is a publicly available dataset. We will download these data from the following site, https://www.datafiles.samhsa.gov/study-series/treatment-episode-data-set-admissions-teds-nid13518	H4.2b
Wisconsin Death Records. To obtain deaths due to drug overdose overall and opioid-related specifically. We will obtain these data from the Wisconsin Department of Health Services Vital Records Services under the terms of the data use agreement for this evaluation.	H4.4a
Wisconsin Mental Health and Substance Use Needs Assessment. To use as a source of control variables. We will obtain this publicly available report from the Wisconsin Division of Care and Treatment Services. It is published biannually and provides county-specific indicators of SUD treatment needs and available resources.	H4.1a, H4.2c H4.3a-d

D3.5. Analytic Methods

In this section we describe the analytic methods we will implement to complete our descriptive and causal analyses. The hypotheses for which each method will be used are noted in brackets following a description of the approach.

Descriptive Analyses

We will implement descriptive analyses to achieve the following objectives: a) to characterize and compare the equivalence of characteristics and baseline outcomes across study groups; b) to describe, and test for change over time in study outcomes; and c) to quantify the association between study outcomes and factors that may influence those outcomes including beneficiary characteristics, the implementation of the SUD demonstration waiver, and county-level SUD prevention and treatment resources. We will use bivariate statistical tests (e.g., t-test, chi-square test) to determine the equivalence of unadjusted characteristics or outcomes across groups and over time, and regression methods to quantify the association between specific covariates and study outcomes while adjusting for other relevant covariates. The general forms of the regression models that we will use to execute our descriptive analyses are described below.

$$(1) \qquad Y_{it} = \beta_1 svy2_t + \varphi X_i + \varepsilon_{it}$$

Equation (1) describes the regression model that we will implement to test for an increase in beneficiary awareness and self-reported use of SUD services from the first to the second survey in the post-waiver implementation period. Specifically, Y is an outcome of interest for person *i* at time *t*, svy2 is an indicator that takes on a value of 1 for responses from the second beneficiary survey. We allow X to stand for control variables and ε represent a random error term. The coefficient of interest β_1, represents the difference in the outcome in the second beneficiary relative to the first survey. We will use ordinary least squares or logistic regression analysis as appropriate to the outcome. [H4.2a, H4.3a, H4.3b]

$$(2) \qquad Y_{it} = \varphi X_i + \gamma M_t + \tau P_t + \pi_t + \varepsilon_{it}$$

Equation (2) illustrates the general model we will implement to quantify the association between a given outcome, *Y* for unit *i* at time *t*, and select covariates: a vector, *X,* of beneficiary characteristics; a vector, *M,* of county-level SUD prevention and treatment resources; *P,* a vector of state or federal policies related to SUD prevention and treatment; and a time fixed effect, π_t. Observations are at the unit-time period that is appropriate to the outcome, and ε represent a random error term. We will select the specific type of regression analysis for each model according to the functional form relationship between the parameter of interest (e.g., conditional mean) and the key independent variable(s). We will adjust standard errors for multiple observations within person over time as appropriate to the outcome.

To describe potential differences in health care costs after implementation of the waiver relative to the prior period, we will implement a modified version of Equation (2) that includes an indicator variable for the post-waiver period (i.e., on or after Timeframe B). We will use two-part generalized linear models selecting the appropriate link and variance functions using a modified version of the Hosmer-Lemeshow test and the Park test respectively.[19,20] [H4.3a-H4.3d, H4.4a, Q4.5]

Causal Analyses

As noted above, the original evaluation plan included a combination of ITS and DiD approaches. We will no longer implement the ITS analysis, as it will be strongly confounded by COVID disruptions. We are still able to address all of the research questions. We will implement the DiD models excluding 2020 from the baseline period to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential residual confounding effects of the pandemic.

We will implement a DiD design[21] to test the equivalence of a change in an outcome after implementation of the SUD demonstration waiver relative to the pre-waiver period for the target group relative to a change in the outcome for a concurrent comparison group. A general description of this approach is provided in Section IIB.

The DiD design allows us to identify the causal effect of the SUD demonstration waiver by assuming that the outcomes for the target group would have evolved similarly over time as that of the comparison group(s) in the absence of the implementation of the waiver. While this assumption is not directly testable, we will assess its plausibility by comparing the pre-intervention outcome trends for the target and comparison groups. Our particular application of DiD regression analyses to the evaluation of the SUD demonstration waiver is described immediately below beginning with the general form of the model. [Q4.1a, Q4.2b, Q4.2c, Q4.3a-Q4.3d, Q4.4a]

$$(4) \qquad Y_{it} = \beta_1 TG_i + \beta_2 post_t + \beta_3 (TG_i * post_t) + \varphi X_i \ + \ \gamma M_t \ + \varepsilon_{it}$$

Y is an outcome of interest for unit *i* at time *t*, TG is an indicator for membership in the target group, and $post$ is an indicator for the post-waiver period, the period on or after the first implementation date for the SUD demonstration waiver. Observations are at the unit and time period (e.g., person-month, facility-year, etc.,) that is appropriate to the outcome. We allow X to stand for control variables. For models in which both the target and comparison groups are drawn from the State of Wisconsin, we will include a vector M that includes county-level control variables related to SUD treatment prevention and resources access from the Wisconsin Mental Health and Substance Use

[19] Manning WG, Basu A, Mullahy J. Generalized modeling approaches to risk adjustment of skewed outcomes data. Journal of Health Economics. 2005;24:465-488.

[20] Manning WG, Mullahy J. Estimating log models: to transform or not to transform? Journal of Health Economics. 2001;20:461-494.

[21] Wing C, Simon K, Bello-Gomez RA. 2018. Designing Difference-in-difference Studies: Best Practices for Public Health Policy Research. Annual Review of Public Health. 39:453-69.l

Needs Assessment data. Where feasible and appropriate, the set of control variables may include county by year fixed effects to address the potential for time-varying geographic differences to help isolate the demonstration impact. We will also include specifications that allow for heterogeneity in the effect by year (defining *post* as indicator variables for year) to observe the impact of the demonstration in years during and right after the COVID-19 pandemic and in later years when the pandemic has further subsided, where appropriate. The random error term is represented by ε. The coefficient of interest is the coefficient on the interaction term, β_3. Standard errors will be adjusted for multiple observations within person over time as needed.

We will select the specific type of regression analysis for each DiD model according to the functional form relationship between the parameter of interest (e.g., conditional mean) and the key independent variable(s). In cases where we implement non-linear regression analyses, we will report post-estimation average marginal effects to facilitate interpretation of the DiD results.[22]

D4. Methodological Limitations

Comparison strategies. Implementation of the SUD provision for all adult Medicaid beneficiaries at the same points in time precludes the inclusion of a concurrent, within-state Medicaid comparison group that is exposed to all other potential changes in Medicaid policies during the observation period except the SUD demonstration waiver provisions. However, we will assess the potential confounding influence of other demonstration waiver provisions that are implemented coincident with the SUD provisions (e.g., HRA/HNAs, premiums, etc.,) on the outcomes described in Table 13 by estimating separate models for adults with and without dependent children when feasible. Adults without dependent children are subject to all provisions in the demonstration waiver. By contrast, parents and caregivers are only subject to the SUD demonstration waiver provisions.

For outcomes that require health care claims for their construction, the proposed evaluation design for the SUD demonstration waiver lacks an out-of-state comparison group; thus, we cannot rule out the possibility that national secular events or trends may confound the relationship between implementation of the SUD provision and the study outcomes. As a member of the OUD workgroup in the multi-state Medicaid Outcomes Distributed Research Network (MODRN),[23] we considered the possibility of engaging another MODRN state(s) as a comparison state. However, after consultation with MODRN leadership, we concluded that it was not feasible due to resource constraints. Specifically, each state-university partnership within the MODRN employs a common data model, common measurement periods, common definitions of eligibility groups, and common measures to assess OUD prevalence, treatment and outcomes for purposes of the MODRN's research and learning objectives.

[22] Karaca-Mandic P, Norton EC, Dowd B. 2012. Interaction Terms in Nonlinear Models. Health Services Research.47(1, Part 1):255-274.

[23] A description of the Medicaid Outcomes Distributed Research Network is available at: https://www.academyhealth.org/MODRN

To participate as a comparator state for an 1115 waiver evaluation would require significant adaptation of this work including modification of the measurement periods to construct the measures and define the study population, potential revision to the definition of the eligibility groups, and a willingness to share aggregate data (at a minimum) with another state for a non-MODRN purpose. These revisions and activities would demand significant staff and investigator time from each potential comparison state that goes well beyond what is supported through the MODRN. At present, we are not aware of any CMS resources available to facilitate or incentivize states' participation as comparison states for 1115 waiver evaluations. If such resources are available, we would be happy to pursue further discussions with our MODRN colleagues about the possibility of serving in that role.

Compositional changes in population. Implementation of the SUD demonstration waiver may alter the composition of the adult beneficiary population in ways that are relevant to our outcomes to the extent that individuals newly enroll in Medicaid because of the availability of expanded SUD services. Such individuals, for example, may be more likely to have an SUD and a desire for treatment. It is important to distinguish the potential effects of the demonstration waiver on study outcomes, from changes in study outcomes that are attributable to compositional changes in the beneficiary population.

We will take two steps to assess and mitigate this possibility. First, in our evaluation of the change over time in drug overdose deaths, we include a population-level analysis that does not distinguish between Medicaid and non-Medicaid enrollees in the event that the risk-profile of these two groups changes over time. Second, as our data permit, we will execute sensitivity analyses that hold the analytic sample constant before and after implementation of the waiver as our data allow to rule out the potential confounding effects of changes in the characteristics of the beneficiary population.

IV. ATTACHMENTS

Attachment A: Waiver approval letter, waiver provisions, and Special Terms and Conditions (STCs)

Attachment B: CMS Comments and UW/DHS Responses

Attachment C: Independent Evaluator Assurance of No Conflict

Attachment D: Timelines of Major Evaluation Milestones

Attachment A: Waiver approval letter, waiver provisions, and STCs

DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

Administrator
Washington, DC 20201

OCT 31 2018

Casey Himebauch
Deputy Medicaid Director
Administrator, Division of Medicaid Services
Wisconsin Department of Health Services
1 West Wilson Street
Madison, WI 53703

Dear Mr. Himebauch:

Under Section 1115 of the Social Security Act (the Act), the Secretary of Health and Human Services (HHS) may approve any experimental, pilot or demonstration project that, in the judgment of the Secretary, is likely to assist in promoting the objectives of certain Act programs including Medicaid. Congress enacted section 1115 of the Act to ensure that federal requirements did not "stand in the way of experimental projects designed to test out new ideas and ways of dealing with the problems of public welfare recipients." S. Rep. No. 87-1589, at 19 (1962), *as reprinted in* 1962 U.S.C.C.A.N. 1943, 1961. As relevant here, section 1115 of the Act allows the Secretary to waive compliance with the Medicaid program requirements of section 1902 of the Act, to the extent and for the period he finds necessary to carry out the demonstration project. In addition, section 1115 of the Act allows the Secretary to provide federal financial participation for demonstration costs that would not otherwise be considered as federally matchable expenditures under section 1903 of the Act, to the extent and for the period prescribed by the Secretary.

For the reasons discussed below, the Centers for Medicare & Medicaid Services (CMS) is approving Wisconsin's request for extension and amendment of its Medicaid demonstration project entitled, "BadgerCare Reform" (Project No. 11-W-00293/5), in accordance with section 1115(a) of the Act.

This amendment and extension approval (the "approval"), among other things, extends the operation of Wisconsin's Medicaid demonstration past its current expiration of December 31, 2018. The approval is effective October 31, 2018 through December 31, 2023, upon which date, unless extended or otherwise amended, all authorities granted to operate this demonstration will expire. After December 31, 2018, the state will no longer have the authority to charge premiums to the Transitional Medical Assistance adults through the demonstration. CMS's approval is subject to the limitations specified in the attached expenditure authorities, waivers, and special terms and conditions (STC). The state may deviate from Medicaid state plan requirements only to the extent those requirements have been listed as waived or as not applicable to expenditures.

Objectives of the Medicaid Program

As noted above, the Secretary may approve a demonstration project under section 1115 if, in his judgment, the project is likely to assist in promoting the objectives of title XIX. The purposes of Medicaid include the appropriation of funds to "enabl[e] each State, as far as practicable under the conditions in such State, to furnish (1) medical assistance on behalf of families with dependent children and of aged, blind, or disabled individuals, whose income and resources are insufficient to meet the costs of necessary medical services, and (2) rehabilitation and other services to help such families and individuals attain or retain capability for independence or self-care." Act § 1901. This appropriations provision makes clear that an important objective of the Medicaid program is to furnish medical assistance and other services to vulnerable populations. But there is little intrinsic value in paying for services if those services are not advancing the health and wellness of the individual receiving them, or otherwise helping the individual attain independence. Therefore, we believe an objective of the Medicaid program, in addition to furnishing services, is to advance the health and wellness needs of its beneficiaries and that it is appropriate for the state to structure its demonstration program in a manner that prioritizes meeting those needs.

Section 1115 demonstration projects present an opportunity for states to experiment with reforms that go beyond just routine medical care, and focus on evidence-based interventions that drive better health outcomes and quality of life improvements, and may increase beneficiaries' financial independence. Such policies may include those designed to address certain health determinants and those that encourage beneficiaries to engage in health-promoting behaviors and to strengthen engagement by beneficiaries in their personal health care plans. These tests will necessarily mean a change to the status quo. They may have associated administrative costs, particularly at the initial stage, and section 1115 acknowledges that demonstrations may "result in an impact on eligibility, enrollment, benefits, cost-sharing, or financing." Act § 1115(d)(1). But in the long term they may create incentives and opportunities that help enable many beneficiaries to enjoy the numerous personal benefits that come with improved health and financial independence.

Section 1115 demonstration projects also provide an opportunity for states to test policies that ensure the fiscal sustainability of the Medicaid program, better "enabling each [s]tate, as far as practicable under the conditions in such [s]tate" to furnish medical assistance, Act § 1901, while making it more practicable for states to furnish medical assistance to a broader range of persons in need. For instance, measures designed to improve health and wellness may reduce the volume of services consumed, as healthier, more engaged beneficiaries tend to consume fewer medical services and are generally less costly to cover. Further, measures that have the effect of helping individuals secure employer-sponsored or other commercial coverage may decrease the number of individuals who need financial assistance from the state. Such measures may enable states to stretch their resources further and enhance their ability to provide medical assistance to a broader range of persons in need, including by expanding the services and populations they cover.[1] By

[1] States have considerable flexibility in the design of their Medicaid programs, within federal guidelines. Certain benefits are mandatory under federal law, but many benefits may be provided at state option, such as prescription drug benefits, vision benefits, and dental benefits. Similarly, states have considerable latitude to determine whom

the same token, such measures may also preserve states' ability to continue to provide the optional services and coverage they already have in place.

Our demonstration authority under section 1115 allows us to offer states more flexibility to experiment with different ways of improving health outcomes and strengthening the financial independence of beneficiaries. Demonstration projects that seek to improve beneficiary health and financial independence improve the well-being of Medicaid beneficiaries and at the same time, allow states to maintain the long-term fiscal sustainability of their Medicaid programs and to provide more medical services to more Medicaid beneficiaries. Accordingly, such demonstration projects advance the objectives of the Medicaid program.

Background on Medicaid Coverage in Wisconsin

Wisconsin has not adopted the Affordable Care Act (ACA) adult expansion population, but it implemented its BadgerCare Reform section 1115 demonstration on January 1, 2014, to expand coverage to a childless adult demonstration-only population using expenditure authority under section 1115(a)(2) of the Act. BadgerCare Reform primarily provides authority for the state to provide a robust benefit package which includes most state plan benefits to non-pregnant, non-disabled, non-elderly childless adults with incomes of up to and including 100 percent of the federal poverty level (FPL). As of June 30, 2018, more than 178,000 individuals receive coverage under this demonstration authority.

In addition to providing this coverage for the BadgerCare Reform population, Wisconsin's state plan provides coverage for other optional populations such as parents and caretaker relatives with income up to 100 percent of the FPL and pregnant women above 138 percent of the FPL. In addition, the Wisconsin state plan currently covers an array of optional services including prescription drugs, dental services, and occupational therapy.

Extent and Scope of Demonstration

The BadgerCare Reform demonstration primarily provides authority for the state to provide a robust benefit package to non-pregnant, non-disabled, non-elderly childless adults with incomes of up to and including 100 percent of the FPL. This demonstration approval continues coverage for this population for five years. It also allows Wisconsin to require these childless adult beneficiaries, ages 19 through 49, with certain exceptions, to participate in and timely document and report 80 hours per month of community engagement activities. Qualifying activities include employment, job training, community service, or enrollment in an allowable work

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their Medicaid programs will cover. Certain eligibility groups must be covered under a state's program, but many states opt to cover additional eligibility groups that are optional under the Medicaid statute. In addition to expanding Medicaid coverage by covering optional eligibility groups and benefits beyond what the Medicaid statute requires, many states also choose to offer Medicaid coverage to populations not specifically included in the statute by using expenditure authority under section 1115(a)(2) of the Act. This authority has been used to allow a number of states, including Wisconsin, to expand Medicaid eligibility beyond the allowable statutory categories. The same authority at section 1115(a)(2) of the Act can be used for states to cover benefits beyond what is authorized by statute as well. For example, recently, many states have been relying on this authority to expand the scope of services they offer to address substance use disorders beyond what the statute explicitly authorizes.

program. The community engagement incentive will not apply to beneficiaries ages 50 and older so as to ensure alignment and consistency with the state's Supplemental Nutrition Assistance Program (SNAP) requirements, which is intended to minimize confusion for beneficiaries who may receive both SNAP and Medicaid. To help ensure the success of these beneficiaries, CMS is allowing states to align the community engagement requirements in Medicaid with the work requirements in other federal programs.

Beneficiaries subject to the community engagement requirement who have been enrolled in the demonstration, but who have not met the community engagement requirements for 48 aggregate months (without qualifying for an exemption) will be disenrolled from the demonstration and unable to re-enroll as a childless adult for six months. However, if that individual reapplies for Medicaid during that six-month period of non-eligibility and is found eligible under another Medicaid eligibility group (MEG), the individual will be enrolled into Medicaid.

CMS also is providing authority to allow the state to implement additional features, including:

- Implementing premiums on childless adults with incomes from 50 percent up to and including 100 percent of the FPL as a condition of eligibility;
- Allowing termination and a period of non-eligibility as a childless adult for up to six months for childless adults who do not pay the required premium, with on-ramps to reactivate coverage during the non-eligibility period;
- Allowing the state to vary premiums for childless adults based on the responses on a health risk assessment (HRA) and avoiding health risk behaviors;
- Charging childless adults an $8 co-payment for non-emergency use of the emergency department (ED), consistent with 42 CFR § 447.54(b); and
- Requiring full completion of an HRA as a condition of eligibility, as a part of the application for childless adults, in order to identify healthy behaviors.

The eligibility conditions discussed above will apply only to the non-mandatory population receiving coverage through BadgerCare Reform. In addition, this demonstration will also include a substance use disorder (SUD) program (described in STCs 26–32) available to all Wisconsin Medicaid beneficiaries. The purpose of the program is to ensure that a broad continuum of care is available to Wisconsin Medicaid beneficiaries with a substance use disorder, which will help improve the quality, care, and health outcomes for those Medicaid beneficiaries. The SUD program contributes to a comprehensive statewide strategy to combat prescription drug abuse and opioid use disorders and expands the SUD benefits package to cover short-term residential services in facilities that qualify as institutions for mental diseases (IMDs) for all Medicaid enrollees.

Determination that the demonstration project is likely to assist in promoting Medicaid's objectives

For reasons discussed below, the Secretary has determined that BadgerCare Reform is likely to assist in promoting the objectives of the Medicaid program.

The demonstration provides coverage beyond what the state plan provides.

CMS has determined that BadgerCare Reform is likely to promote the objective of furnishing medical assistance because it gives the state the expenditure authority to continue, past the demonstration's expiration date at the end of 2018, to offer Medicaid coverage under section 1115(a)(2) of the Act to the population of non-pregnant, non-disabled, childless adults with incomes up to and including 100 percent of the FPL. While new features to the demonstration, like the addition of community engagement, requirement to complete the HRA, and premium requirements may impact overall coverage levels if the individuals subject to these demonstration provisions choose not to comply with them, the amended demonstration as a whole is expected to provide greater access to coverage for low-income individuals than would be available absent the demonstration. Should this demonstration not be approved, the amended BadgerCare demonstration would not continue past its current expiration of December 31, 2018, and the individuals currently covered by that demonstration would likely lack access to any source of affordable health coverage. In addition, Wisconsin expects that the demonstration will result in healthier, more financially independent beneficiaries and as a result, the demonstration will "improve health outcomes, reduce unnecessary services, and improve the cost-effectiveness of Medicaid services." Such goals are in furtherance of Wisconsin's broader stated objective of creating a program that is "sustainable" so Wisconsin's health care safety net is available to those who need it most. Implementing the new features discussed further below facilitate Wisconsin's ability to extend coverage to the demonstration population under BadgerCare from 2019 through 2023, thereby furthering Medicaid's purpose of enabling states to furnish medical assistance.

This approval will also allow the state to offer the SUD program. The SUD program will improve access to high-quality addiction services and is critical to addressing Wisconsin's substance use epidemic. Under this initiative, all Medicaid beneficiaries will continue to have access to all current mental health and SUD benefits. In addition, all beneficiaries ages 21 through 64 will have access to additional covered services, authorized under section 1115(a)(2) of the Act, including SUD treatment services provided to individuals with SUD who are short-term residents in residential treatment facilities that meet the definition of an Institution for Mental Diseases (IMD). These services would otherwise be excluded from federal reimbursement.

The demonstration promotes the objectives of helping beneficiaries attain or retain independence.

BadgerCare Reform, as amended, is likely to promote the objective of helping beneficiaries attain or retain independence, which would lead to higher quality care at a sustainable cost. For example, the community engagement provisions generally require adults in this demonstration-

only population to work, look for work, or engage in activities that enhance their employability such as job training, or community service. The demonstration will thus help the state and CMS evaluate whether the community engagement requirement helps adults in this population transition from Medicaid to financial independence and commercial insurance, including the federally subsidized coverage that is available through the Exchanges. To help prepare individuals in this group for the commercial insurance market, other provisions of BadgerCare Reform give them experience with premiums, including the opportunity to pay a reduced premium for not engaging in certain behaviors that increase health risks.

To the extent that the community engagement requirements help individuals achieve financial independence and transition into commercial coverage, the demonstration may reduce dependency on public assistance while still promoting Medicaid's purpose of helping enable states to furnish medical assistance. By helping people to transition to commercial coverage, community engagement will help Wisconsin stretch its limited Medicaid resources and will thus promote Medicaid's purpose of helping enable states to furnish medical assistance. As Wisconsin noted in its amendment application and as explained further below, such increases in beneficiary independence also help to ensure that Wisconsin's Medicaid program is sustainable so its health care safety net is available for those Wisconsin residents who need it most. The state of Wisconsin currently finances almost 60 percent of the cost of care for this demonstration group.

BadgerCare Reform, as amended, contains provisions that could result in some beneficiaries losing coverage, including having their eligibility terminated with a non-eligibility period for up to six months for failure to comply with the community engagement or premium requirements, or being denied coverage for failure to complete a HRA. While CMS and the state are testing the effectiveness of an incentive structure that attaches penalties to failure to take certain measures, the program is designed to make compliance with requirements achievable. As an initial matter, the community engagement requirement does not result in a loss of eligibility until a person has failed to comply for 48 months, and individuals who are determined to be unfit for employment (which can include mentally or physically unfit), experiencing chronic homelessness, or participating in SUD treatment, do not accrue months of noncompliance. Moreover, Wisconsin has taken steps to include adequate beneficiary protections to ensure that the demonstration program requirements apply only to those beneficiaries who can reasonably be expected to meet them and to notify beneficiaries of their responsibilities under the demonstration. Any individual whose coverage is terminated for failure to meet the requirements, or who experiences any other adverse action, will have the right to appeal the state's decision as with other types of coverage terminations, consistent with all existing appeal and fair hearing protections. Furthermore, the incentives to meet the requirements, if effective, may result in individuals becoming ineligible because they have attained financial independence – a positive result for the individual.

The demonstration tests reforms designed to strengthen beneficiary engagement, incentivize responsible decision-making, and promote better health outcomes.

The demonstration will evaluate the effectiveness of policies that are designed to improve the health of Medicaid beneficiaries and encourage them to make responsible decisions about their health and accessing health care. BadgerCare Reform's community engagement requirement is designed to encourage beneficiaries to obtain employment and/or undertake other community engagement activities that may lead to improved health and wellness, which ultimately helps to keep health care costs at sustainable levels.

Additionally, the demonstration is designed to improve health by increasing beneficiary awareness about healthy behaviors and encouraging demonstration participants to engage in such behaviors by: (1) requiring completion of an HRA; and (2) rewarding those who avoid or manage certain health risk behaviors with lower premiums. More specifically, BadgerCare Reform requires that beneficiaries complete an HRA as a condition of eligibility. As discussed below, this policy is expected to improve beneficiaries' engagement in their health care choices by increasing their awareness of behaviors that might be detrimental to their health, while also encouraging them to make healthier choices. The completion of the assessment will also help the beneficiary's managed care plan identify health risks and improve the plan's ability to provide effective care management and address beneficiary health care needs. The state will reduce premiums for individuals who do not engage in certain behaviors that increase health risks or attest to actively managing certain unhealthy behaviors. Premium reductions will be based on beneficiary behaviors, not on a beneficiary's health status or pre-existing condition. Furthermore, beneficiaries who engage in behaviors that increase certain health risks but do so as a result of a health condition will also still be eligible for reduced premiums. Consistent with privacy laws, the state will share this information with beneficiaries' managed care plans which may offer additional supports.

Wisconsin will also evaluate whether the use of the HRA and the opportunity for beneficiaries who avoid or manage certain health risk behaviors to pay a reduced premium will strengthen beneficiary engagement in their personal health care plan and provide an incentive structure to support responsible consumer decision-making about accessing care and services. A prior evaluation of one demonstration project with beneficiary engagement components has shown some promise that these strategies can have a positive impact on beneficiary behavior.[2] Overall the research findings on the effects of healthy behavior incentives in Medicaid have shown some promising results but require further study. Wisconsin will include evaluation of the outcomes associated with these requirements in its evaluation design to further enrich the evidence regarding beneficiary engagement strategies.

Taken together, the evidence tying certain beneficiary behaviors to improved health outcomes supports a determination that all of the above-mentioned features of the demonstration promote the objectives of the Medicaid program. Promoting beneficiary health and independence advances the objectives of the Medicaid program; indeed, in 2012, HHS specifically encouraged

[2] The Lewin Group, Indiana Healthy Indiana Plan 2.0 Interim Evaluation Report (2016), available at: https://www.in.gov/fssa/files/Lewin_IN%20HIP%202%200%20Interim%20Evaluation%20Report_FINAL.pdf

states to develop demonstration projects "aimed at promoting healthy behaviors" and "individual ownership in health care decisions" as well as "accountability tied to improvement in health outcomes."[3] And to the extent that greater beneficiary health and independence make these individuals less costly for Wisconsin to care for, this outcome further advances the objectives of the Medicaid program by helping Wisconsin stretch its limited Medicaid resources and ensure the long-term fiscal sustainability of the program.

The demonstration also promotes responsible decision making and improved health by encouraging appropriate use of health care services and behavior that is mindful of health care value. This demonstration will allow the state, consistent with 42 CFR § 447.54(b), to charge beneficiaries an $8 copayment for utilization of the ED for non-emergency services. Wisconsin believes this will help beneficiaries learn about the importance of choosing appropriate care in the appropriate setting—which is generally not the ED—by educating beneficiaries about the direct cost of health care services and the importance of seeking preventive services and similar care in the most appropriate setting. Receiving preventive and similar care in non-emergency settings can improve the health of beneficiaries, because they can build and maintain relationships with their regular treating providers. Over time, this may lead to the prevention of chronic disease, as prevention and health promotion are difficult to achieve and sustain through episodic ED visits. Additionally, this policy will improve the ability of beneficiaries who truly need emergency care to access it, by preserving ED resources for those who are truly in need of timely emergency care. Moreover, we expect that this copayment policy will decrease the use of inefficient and costly care in less appropriate settings, thereby making beneficiaries less costly to care for and Wisconsin's Medicaid program more sustainable—both in furtherance of the Medicaid program's objectives.

The demonstration will provide beneficiaries with coverage that more closely aligns with commercial coverage and promotes independence.

Coverage for the adult demonstration-only group under BadgerCare Reform is designed to work more like insurance products sold on the commercial market. Many individuals in this group are estimated to move between Medicaid eligibility and Marketplace coverage. This approval seeks to provide beneficiaries with the tools to successfully utilize commercial market health insurance, thereby removing potential obstacles to a successful transition from Medicaid to commercial coverage, removing incentives for remaining on Medicaid, and enhancing the sustainability of Wisconsin's medical assistance program.

For instance, BadgerCare Reform, as amended, includes premium payment requirements (with a non-eligibility period for certain beneficiaries for non-payment, similar to provisions CMS has approved in other states[4]) and varies premium amounts based on beneficiary health behaviors, all of which beneficiaries are likely to encounter should they transition off of Medicaid and into commercial coverage.

[3] CMS, Frequently Asked Questions on Exchanges, Market Reforms, and Medicaid at 15 (Dec. 10, 2012).
[4] Section 1115 demonstration, Healthy Indiana Plan, available at: https://www.medicaid.gov/medicaid/section-1115-demo/demonstration-and-waiver-list/?entry=25478

As described in the STCs, if monitoring or evaluation data indicates that demonstration features are not likely to assist in promoting the objectives of Medicaid, CMS reserves the right to require the state to submit a corrective action plan to CMS for approval. Further, CMS reserves the right to withdraw waivers or expenditure authorities at any time it determines that continuing the waivers or expenditure authorities would no longer be in the beneficiaries' interest or promote the objectives of Medicaid.

Consideration of public comments

To increase the transparency of demonstration projects, the ACA directed the Secretary to issue regulations providing for two periods of public comment on a state's application for a section 1115 project that would result in an impact on eligibility, enrollment, benefits, cost-sharing, or financing. Act § 1115(d)(1), (2). The first comment period occurs at the state level before submission of the section 1115 application, *id.* §1115(d)(2)(A), and the second occurs at the federal level after the application is received by the Secretary, *id*. §1115(d)(2)(C).

The ACA specified that comment periods should be "sufficient to ensure a meaningful level of public input," id. § 1115(d)(2)(A) & (C), but the statute imposes no additional requirement on the states or the Secretary to address those comments, as might otherwise be required under general rulemaking. Accordingly, the implementing regulations issued in 2012 provide that CMS will review and consider all comments received by the deadline, but will not provide written responses to public comments. 42 C.F.R. § 431.416(d)(2); *see also* Medicaid Program; Review and Approval Process for Section 1115 Demonstrations, 75 Fed. Reg. 56947, 56953 (Sept. 17, 2010) (proposed rule).

CMS received 652 comments during the federal comment periods on the amendment and extension requests to BadgerCare Reform. Although CMS is not legally required to provide written responses to comments, CMS is addressing some of the central issues raised by the comments and summarizing CMS' analysis of those issues for the benefit of stakeholders.

General comments

The vast majority of the comments CMS received were from self-identified Wisconsin citizens who opposed either the demonstration as a whole or certain features of it. Many of those comments expressed general concerns that the demonstration will result in many poor citizens losing Medicaid. CMS shares the commenters' concern that everyone who needs Medicaid and meets programmatic eligibility criteria has access to it. As previously stated, however, CMS believes the features of this demonstration are worth testing to determine whether there is a more effective way to furnish medical assistance to the extent practicable under the conditions in Wisconsin. That is why CMS has carefully reviewed the demonstration as a whole to ensure it is likely to further Medicaid's objectives.

Specifically, this demonstration does not simply cut off benefits for any beneficiaries. Instead, it is designed to extend coverage. Were CMS to decline to approve this application, the current demonstration would automatically terminate on December 31, 2018, leaving able-bodied applicants who meet the criteria without coverage. This extension permits the state to continue

to provide coverage to this broader group. Also, the demonstration is designed to improve health outcomes and reduce dependency on public assistance by incentivizing healthy behaviors and giving beneficiaries the choice to either engage in those behaviors or to no longer participate in Medicaid. CMS has worked together with Wisconsin to include guardrails that will protect beneficiaries. These guardrails, which are contained in a series of assurances in the STCs, include requirements that the state: screen beneficiaries and determine eligibility for other bases of Medicaid eligibility and review for eligibility for insurance affordability programs prior to suspension; provide full appeal rights prior to disenrollment; develop and implement an outreach strategy to inform beneficiaries how to report compliance with the community engagement requirements; provide beneficiaries with periodic updates on how many months have counted towards the 48 months of noncompliance necessary to lose eligibility; and maintain a system that provides reasonable modifications related to meeting the community engagement requirements to beneficiaries with disabilities, among other assurances. The STCs include a provision granting CMS the authority to discontinue the demonstration if the agency determines that it is not furthering Medicaid's objectives. Moreover, CMS will regularly monitor BadgerCare Reform and will work with the state to resolve any issues that arise as Wisconsin works to implement the demonstration.

Some comments argued that a demonstration cannot advance the Medicaid program's objectives if the project is expected to reduce Medicaid enrollment or Medicaid spending. We recognize that some individuals may choose not to comply with the conditions of eligibility imposed by the demonstration, and therefore may lose coverage, as may occur when individuals fail to comply with other requirements like participating in the redetermination process. But the goal of the demonstration is to incentivize compliance, not reduce coverage. Indeed, CMS has incorporated safeguards into the STCs intended to minimize coverage loss due to noncompliance, and CMS is committed to partnering with Wisconsin to ensure that the demonstration advances the objectives of Medicaid. Furthermore, we anticipate that beneficiaries will be connected with employment, and may disenroll from Medicaid if they obtain employer-sponsored or other commercial coverage and no longer qualify for the program. Finally, we note that in some cases, reductions in Medicaid costs can further the Medicaid program's objectives, such as when the reductions stem from reduced need for the safety net or reduced costs associated with healthier, more independent beneficiaries. These outcomes promote the best interests of the beneficiaries whose health and independence are improved, while also helping to support the long-term fiscal sustainability of Medicaid programs.

In a similar vein, some comments suggested that it is impermissible for a demonstration to rely on disenrollment and a non-eligibility period as incentives for compliance with the project's requirements. As noted above, section 1115 explicitly contemplates that demonstrations may "result in an impact on eligibility" and the amended demonstration as a whole is expected to provide greater access to coverage for low-income individuals than would be available absent the demonstration. Other comments predicted that BadgerCare Reform or its component parts will fail to achieve their objectives. For instance, some comments argued that beneficiaries subject to the community engagement requirement will be unable to comply. To some extent, these comments reflect a misunderstanding of the nature of the community engagement requirement, which the comments described as a work requirement. In fact, the community engagement requirement is designed to help beneficiaries achieve success, and CMS and the state have made

every effort to devise a requirement that beneficiaries should be able to meet. For example, the community engagement requirement may be satisfied through an array of activities including education, job training, job search activities, and community service.

More generally, these comments reflect a misunderstanding of the nature of a demonstration project. It is not necessary for a state to show in advance that a proposed demonstration will in fact achieve particular outcomes; the purpose of a demonstration is to test hypotheses and develop data that may inform future decision-making. As HHS previously explained, demonstrations can "influence policy making at the State and Federal level, by introducing new approaches that can be a model for other States and lead to programmatic changes nationwide." 75 Fed. Reg. at 56947. For example, the Temporary Assistance for Needy Families (TANF) work requirements that Congress enacted in 1996 were informed by prior demonstration projects. *See*, *e.g.*, *Aguayo v. Richardson*, 473 F.2d 1090 (2d Cir. 1973) (upholding a section 1115 demonstration project that imposed employment requirements as conditions of AFDC eligibility). Regardless of the degree to which Wisconsin's demonstration project succeeds in achieving the desired results, the information it yields will provide policymakers real-world data on the efficacy of such policies. That in itself promotes the objectives of the Medicaid statute.

Comments addressing coverage losses

Some comments argued that the demonstration will cause individuals to lose Medicaid coverage and, for that reason, the project cannot be consistent with the objectives of the Medicaid program. First, it is important to acknowledge that otherwise potentially eligible Medicaid beneficiaries lose coverage today for many reasons where they have failed to comply with program requirements, like completing their annual redetermination. Second, we note that the demonstration provides coverage to individuals that are not eligible under the state plan. Any potential loss of coverage that may result from a demonstration must be considered in the context of a state's substantial discretion to eliminate optional benefits, cease demonstration projects, or otherwise eliminate coverage for existing (but optional or demonstration) populations. Experiments designed to help able-bodied adults transition out of Medicaid are particularly appropriate in light of the fact that beneficiaries who receive coverage under an expansion under section 1115(a)(2) of the Act that is less generous than state plan coverage for categorically eligible beneficiaries are still better off than receiving no coverage at all. Finally, conditioning eligibility for Medicaid coverage on compliance with certain measures is an important element of the state's efforts, through experimentation, to improve beneficiaries' health and independence and enhance programmatic sustainability. To create an effective incentive for beneficiaries to take measures that promote health and independence, it may be necessary for states to attach penalties to failure to take those measures, including with conditions designed to promote health and financial independence. This may mean that beneficiaries who fail to comply will lose Medicaid coverage, at least temporarily. However, the demonstration is not designed to encourage this result; rather, the demonstration is intended to incorporate achievable conditions of continued coverage. And any loss of coverage as the result of noncompliance must be weighed against the benefits Wisconsin hopes to achieve through the demonstration project, including both the improved health and independence of the beneficiaries who comply and the state's enhanced ability to stretch its Medicaid resources and maintain the fiscal sustainability of the program.

Commenters expressed concern over the state disenrolling individuals from the demonstration who are non-compliant for 48 months of enrollment as a childless adult and then subjecting those individuals to a six month period of non-eligibility before they are able to enroll as a childless adult again. The state addressed these concerns by pointing out that for every month that a beneficiary engages in a qualifying community engagement activity or meets an exemption, beneficiaries are able to remain in the demonstration. Coverage loss would occur only if the individual chooses not to comply with the program's requirements for an aggregate period of 48 months; therefore, we anticipate that very few beneficiaries will be subject to the period of non-eligibility. In those cases, we note that individuals always are able to re-apply for Medicaid and have eligibility determined for other Medicaid groups for which they can be immediately enrolled. Additionally, we believe this feature of the demonstration provides an important incentive to ensure that beneficiaries are engaged with their communities.

It would be counterproductive to deny states the flexibility they need to implement demonstration projects designed to examine innovative ways to incentivize beneficiaries to engage in desired behaviors that improve outcomes and lower healthcare costs, given that states have the prerogative to terminate coverage for non-mandatory services and populations. Because a demonstration project, by its nature, is designed to test innovations, it is not possible to know in advance the actual impact that its policies will have on enrollment. That is one of the metrics to be measured. But even assuming that BadgerCare Reform would result in the loss of coverage for some individuals as commenters suggested, and even assuming that most of these individuals would not transition to commercial coverage, such losses are likely dwarfed by the 166,000 childless adults who would not otherwise have coverage if Wisconsin elects not to extend the demonstration.

Furthermore, the Wisconsin state plan covers other optional populations such as parents/caretakers with incomes up to 100 percent of the FPL as well as optional services such as prescription drug, dental, and occupational therapy benefits. As a matter of federal law, it is a state's prerogative to reduce or eliminate non-mandatory coverage. Such judgments are left to the policy preferences of the state government and its electorate, and states are to be given great latitude in making tradeoffs in how the state furnishes medical assistance "as far as practicable under the conditions" in the state. Act § 1901. In evaluating Wisconsin's demonstration project, it is appropriate to consider the possibility of coverage loss among the demonstration population against the benefits that may accrue to members of the childless adult demonstration-only population who comply with the conditions of eligibility and receive coverage they may not otherwise have received, as well as benefits that may accrue to the traditional Medicaid population as a result of the demonstration population growing more independent, healthier, and less expensive to cover. Wisconsin will measure actual effects on enrollment as part of the demonstration, and that information should be useful in informing future Medicaid policy.

Comments addressing the community engagement requirements

Many commenters also expressed concerns regarding the demonstration's community engagement requirements, including: (1) that the reporting requirement will cause beneficiaries to lose Medicaid coverage because of failure to report their hours, changes in circumstances, or

because of clerical errors by Wisconsin's Medicaid agency; (2) that the community engagement program will be an additional burden on beneficiaries, particularly those who have chronic illnesses, are homeless, or are domestic violence victims; (3) that many beneficiaries are already working, going to school, or engaging in some other employment and training activity; and (4) that allowing individuals to maintain health coverage better enables individuals to obtain and maintain employment. Some commenters suggested reducing the 80-hour per month requirement.

CMS has worked closely with Wisconsin to ensure there are substantial beneficiary protections in place. Beneficiaries already have a responsibility to report changes in income or circumstances to the state, and the state must maintain and process that information. The state also included exemptions for individuals who have been determined unfit for employment (which can include mentally or physically unfit), experiencing chronic homelessness, or participating in SUD treatment, so individuals that have additional burdens are not required to complete the requirements. Both CMS and the state acknowledge what commenters noted—many beneficiaries are already working or attending school; therefore, those activities are included as meeting the community engagement component and these beneficiaries' access to coverage should not be impacted.

The STCs provide for Wisconsin to educate and reach out to beneficiaries and contain assurances that Wisconsin will seek data from other sources, including SNAP, TANF, and other existing systems. This is expected to reduce the burden on beneficiaries and allow the state to efficiently verify community engagement hours and process beneficiary redeterminations. The STCs require the state to provide CMS with a community engagement implementation plan and assurances regarding timely and adequate notices to beneficiaries.

Other comments suggest that a community engagement requirement which many people will fulfill by working one or multiple part-time, minimum-wage jobs or through unpaid means (volunteering), will not directly lead to financial independence. CMS disagrees with that conclusion. While some of the activities that meet the community engagement requirement may not immediately cause all beneficiaries to be financially independent, those activities are nonetheless positive steps for beneficiaries to take on their path to financial independence. In addition, participation in these activities may reduce social isolation, which multiple studies have linked to higher rates of mortality.[5] At the very least, whether BadgerCare Reform's community-engagement requirement will lead to beneficiaries' financial independence is an open question, which is why this demonstration project is necessary to test whether the incentive structure will have the desired effect. That is also why CMS will regularly evaluate the effects of BadgerCare Reform on affected beneficiaries and reserves the right to discontinue specific waiver and expenditure authorities if CMS determines that it would no longer be in the beneficiaries' interest or promote Medicaid's objectives. Moreover, even if those activities do not cause beneficiaries to become financially independent, they are nevertheless linked to improved health outcomes, which itself furthers Medicaid's objectives.

[5] Holt-Lunstad J, Smith TB, Baker M, Harris T, Stephenson D. Loneliness and social isolation as risk factors for mortality: a meta-analytic review. Perspect Psychol Sci 2015;10:227–37. [PubMed]

Some commenters also suggest that suspending eligibility for beneficiaries that fail to comply with the community engagement requirement will make it harder for beneficiaries to find employment, and some cited research that shows that individuals' access to health coverage improves their ability to find employment. CMS has reviewed and considered the research cited by commenters and notes that other research shows a positive link between community engagement and improved health outcomes.[6,7,8,9,10,11] None of the existing research, however, definitively shows whether a community engagement requirement as a condition for continued Medicaid coverage will help beneficiaries attain financial independence and improve health outcomes. Thus, CMS has determined that it is appropriate to permit states to use section 1115 demonstration projects to determine whether they can achieve such an outcome using community-engagement requirements.

Comments addressing community engagement for American Indian/Alaska Native beneficiaries

During tribal consultation, the tribes informed the state that they were concerned that American Indian/Alaska Native beneficiaries are required to participate in the community engagement program or that cultural work programs are not included as qualifying activities. CMS understands the tribes' concerns and the state has committed to working with the tribes after approval on how to make community engagement a program in which American Indian/Alaska Native beneficiaries can succeed. The STCs require the state to submit a plan to CMS with a timeline for addressing any tribal concerns related to the impact of the community engagement requirements. The STCs also include, as an activity that counts toward meeting the community engagement requirement, participation in an allowable work, job training, or job search program, such as a tribal work program. The state also exempts from the community engagement requirement persons who are regularly participating in an alcohol or other drug abuse (AODA) treatment or rehabilitation program, including verified participation in cultural interventions specific to the Native American community, as well as other analogous programs.

Comments related to premiums

Many commenters agreed with Wisconsin's goal of encouraging beneficiaries to engage in their own health care; some acknowledge that requiring beneficiaries to pay a premium is a successful way to encourage such engagement. However, there were many concerns about whether beneficiaries living at poverty would be able to afford the premium and still pay for other basics,

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[6] Waddell, G. and Burton, AK. Is Work Good For Your Health And Well-Being? (2006) EurErg Centre for Health and Social Care Research, University of Huddersfield, UK.
[7] Van der Noordt, M, Jzelenberg, H, Droomers, M, and Proper,K. Health effects of employment: a systemic review of prospective studies. BMJournals. Occupational and Environmental Medicine. 2014: 71 (10).
[8] Crabtree, S. In U.S., Depression Rates Higher for Long-Term Unemployed. (2014). Gallup. http://news.gallup.com/poll/171044/depression-rates-higher-among-long-term-unemployed.aspx.
[9] United Health Group. Doing good is good for you. 2013 Health and Volunteering Study.
[10] Jenkins, C. Dickens, A. Jones, K. Thompson-Coon, J. Taylor, R. and Rogers, M.Is volunteering a public health intervention? A systematic review and meta-analysis of the health and survival of volunteersBMC Public Health 2013. 13 (773).
[11] Chetty R, Stepner M, Abraham S, et al. The association between income and life expectancy in the United States, 2001-2014. JAMA. 2016; 315(16):1750-1766.

such as food or housing, and whether or not beneficiaries will have a bank account or credit card to pay the premium. In addition, commenters were concerned about the administrative complexity of the premium structure and whether the state would spend more money trying to enforce the premium requirements. Wisconsin considered the state level comments and in response, restructured the multiple tiers in the draft proposal into two tiers so beneficiaries with incomes above 50 percent of the FPL up to and including 100 percent of the FPL will pay one flat rate premium, and those individuals with income at or below 50 percent of the FPL will not pay a premium. In addition, beneficiaries will receive benefits upon enrollment, regardless of when the first payment is made, and beneficiaries will only be disenrolled for failure to pay premiums if the individual has unpaid premiums at the annual redetermination. In addition to the potential benefits to beneficiaries of aligning with the commercial health insurance approach, establishing premiums may encourage members to place increased value on their health care and utilize it more effectively. Interim evaluation findings regarding premiums in one state found that beneficiaries who paid premiums are more likely to obtain primary care and preventive care, have better drug adherence, and rely less on the emergency room for treatment compared to those who do not.[12] Therefore, preventive care service utilization is expected to increase as members seek to utilize appropriate health care services. As a result, high costs related to emergency department usage may decline since health care needs will be met before conditions reach the level that require an emergency department visit. These trends would enhance program sustainability. As part of its demonstration, Wisconsin will test these hypotheses.

Comments related to the Health Risk Assessment (HRA)

Commenters were supportive of the use of an HRA to help beneficiaries understand their health care needs and to encourage avoidance of health risk behaviors, but some expressed concern about beneficiaries having to pay a higher premium for not "managing" risky behavior. The state acknowledged these responses and revised its proposal so that individuals with income at or below 50 percent of the FPL will not pay a premium.

All beneficiaries, however, will be required, as a condition of eligibility, to complete the HRA. This reflects the state's interest, not only in helping individuals identify their own health risks, but also to help managed care plans address health care needs, identify appropriate treatment plans, ensure provision of care management, and give individuals the opportunity to facilitate their access to treatment. As part of the state's initiative to tackle SUD, the state initially requested authority to require applicants and beneficiaries to complete a drug screening assessment, and if indicated from the assessment, a drug test. In response to concerns identified by CMS and commenters, Wisconsin revised its approach to include completion of the HRA as a condition of eligibility. Responses to questions on the HRA will result in a referral for treatment, as applicable, but not impact an applicant's Medicaid eligibility.

Comments related to non-emergency use of the emergency department

Commenters at the state level expressed concern with a high copayment amount for beneficiaries who visit the ED, because some beneficiaries might have no other avenue to seek acute care,

[12] The Lewin Group, Indiana Healthy Indiana Plan 2.0 Interim Evaluation Report (2016), available at: https://www.in.gov/fssa/files/Lewin_IN%20HIP%202%200%20Interim%20Evaluation%20Report_FINAL.pdf.

particularly those beneficiaries who suffer from chronic conditions. In response, the state lowered the copayment for non-emergency use of the ED to $8, which is the amount currently permitted in Medicaid regulations and has been imposed by other states. We do not believe this amount will be prohibitive, and we expect that this policy will result in improved health outcomes for both the beneficiaries who no longer visit the ED for non-emergency services and those who need emergency services and will now have greater access to the ED. Furthermore, as inefficient and costly care in less appropriate settings decreases, we expect that beneficiaries will become less costly to care for, thereby improving the sustainability of Wisconsin's Medicaid program and making available more program resources for those who need them most. Finally, we remind commenters that this copayment will not be imposed on beneficiaries who visit the emergency department because they are experiencing an emergency and need emergency department care. The copayment will only apply to beneficiaries who choose not to seek non-emergency care through a more appropriate avenue.

Other Information

CMS's approval is conditioned upon compliance with the enclosed list of waiver and expenditure authorities and the STCs defining the nature, character and extent of anticipated federal involvement in the project. The award is subject to our receiving your written acknowledgement of the award and acceptance of these STCs within 30 days of the date of this letter.

Your project officer for this demonstration is Ms. Shanna Janu. She is available to answer any questions concerning your section 1115 demonstration. Ms. Janu's contact information is as follows:

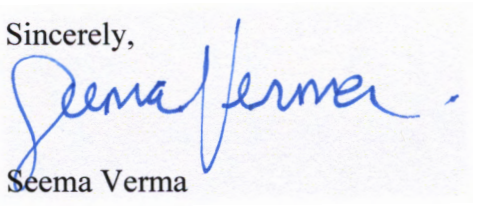
Centers for Medicare & Medicaid Services
Center for Medicaid and CHIP Services
Mail Stop: S2-25-26
7500 Security Boulevard
Baltimore, MD 21244-1850
Email: Shanna.Janu@cms.hhs.gov

Official communications regarding program matters should be sent simultaneously to your project officer and Ms. Ruth Hughes, Associate Regional Administrator in our Chicago Regional Office. Ms. Hughes's contact information is as follows:

Ms. Ruth Hughes
Associate Regional Administrator
Centers for Medicare & Medicaid Services
Division of Medicaid and Children Health Operations
233 N. Michigan Avenue, Suite 600
Chicago, IL 60601-5519
Email: Ruth.Hughes@cms.hhs.gov

If you have questions regarding this approval, please contact Ms. Judith Cash, Director, State Demonstrations Group, Center for Medicaid and CHIP Services, at (410) 786-9686.
Thank you for all your work with us, as well as stakeholders in Wisconsin, over the past months to reach approval.

Sincerely,



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Enclosures

CENTERS FOR MEDICARE & MEDICAID SERVICES
WAIVER LIST

NUMBER: **11-W-00293/5**

TITLE: **Wisconsin BadgerCare Reform**

AWARDEE: **Wisconsin Department of Health Services**

Title XIX Waiver Authority

All requirements of the Medicaid program expressed in law, regulation, and policy statement, not expressly waived in this list, shall apply to the affected populations, as described for the demonstration project from October 31, 2018 through December 31, 2018, as these two waivers will sunset on December 31, 2018.

Under the authority of section 1115(a)(1) of the Social Security Act (the Act), the following waivers of the state plan requirements contained in section 1902 of the Act are granted in order to enable Wisconsin to implement the Wisconsin BadgerCare Reform Medicaid section 1115 demonstration.

1. Provision of Medical Assistance Eligibility — **Section 1902 (a)(8)** **Section 1902(a)(10)**

To the extent needed to enable the state to enforce premium payment requirements under the demonstration by not providing medical assistance for a period of three months for adults that qualify for Medicaid only under section 1925, or sections 1902(e)(1) and 1931(c)(1), of the Act whose eligibility has been terminated as a result of not paying the required monthly premium.

2. Premiums — **Section 1902(a)(14) insofar as it incorporates section 1916** **Section 1902(a)(52)**

To the extent needed to permit the state to impose monthly premiums based on household income on individuals that qualify for Medicaid only under Transitional Medical Assistance (TMA). This waiver allows the state to apply premiums to TMA Adults with income above 133 percent of the federal poverty level (FPL) starting from the date of enrollment, and to TMA Adults with income from 100-133 percent of the FPL starting after the first six calendar months of TMA coverage.

CENTERS FOR MEDICARE & MEDICAID SERVICES
EXPENDITURE AUTHORITY

NUMBER: **11-W-00293/5**

TITLE: **Wisconsin BadgerCare Reform Section 1115 Demonstration**

AWARDEE: **Wisconsin Department of Health Services**

Under the authority of section 1115(a)(2) of the Social Security Act (the Act), expenditures made by the state for the items identified below, which are not otherwise included as expenditures under section 1903 of the Act, incurred during the period of this demonstration, shall be regarded as expenditures under the state's title XIX plan.

The following expenditure authority shall enable the state to operate its BadgerCare Reform section 1115 Medicaid demonstration beginning October 31, 2018 through December 31, 2023.

1. **Childless Adults Demonstration Population.** Expenditures for health care-related costs for eligible non-pregnant, uninsured adults ages 19 through 64 years who have family incomes up to 95 percent of the federal poverty level (FPL) (effectively 100 percent of the FPL including the five percent disregard), who are not otherwise eligible under the Medicaid State plan, other than for family planning services or for the treatment of Tuberculosis, and who are not otherwise eligible for Medicare, Medical Assistance, or the State Children's Health Insurance Program (CHIP).

2. **Former Foster Care Youth from Another State.** Expenditures to extend eligibility for full Medicaid state plan benefits to former foster care youth who are defined as individuals under age 26, that were in foster care under the responsibility of a state other than Wisconsin or tribe in such other state on the date of attaining 18 years of age (or such higher age as the state has elected for termination of federal foster care assistance under title IV-E of the Act), were enrolled in Medicaid on that date, and are now applying for Medicaid in Wisconsin.

3. **Residential and Inpatient Treatment Services for Individuals with Substance Use Disorder.** Expenditures for otherwise covered services furnished to otherwise eligible individuals who are primarily receiving treatment and withdrawal management services for substance use disorder (SUD) who are short-term residents in facilities that meet the definition of an institution for mental diseases (IMD).

All requirements of the Medicaid program expressed in law, regulation, and policy statement, not expressly identified as not applicable in the list below, shall apply to the Childless Adults Demonstration Population beginning October 31, 2018, through December 31, 2023.

Title XIX Requirements Not Applicable to the Demonstration Population:

1. Freedom of Choice **Section 1902(a)(23)(A)**

To the extent necessary to enable the state to require enrollment of eligible individuals in managed care organizations.

2. Premiums **Section 1902(a)(14) insofar as it incorporates 1916 and 1916A**

To the extent necessary to the state to charge an $8 monthly premium to the childless adult population with household incomes over 50 percent of the FPL, up to and including 100 percent of the FPL.

3. Comparability **Section 1902(a)(17)/Section 1902(a)(10)(B)**

To the extent necessary to enable the state to vary monthly premiums for the childless adult population based on health behaviors and health risk assessment completion.

To the extent necessary to enable the state to establish a non-emergency use of the emergency department copayment of $8 for the childless adult population.

4. Eligibility **Section 1902(a)(10) and 1902(a)(52)**

To the extent necessary to enable the state to deny eligibility and prohibit reenrollment for up to six months for beneficiaries, between the ages of 19 and 49 years old, who have been enrolled in Medicaid as childless adults for 48 months and who have not otherwise met the employment and training incentive or an exemption, as described in these special terms and conditions (STC).

To the extent necessary to enable the state to deny eligibility and prohibit reenrollment for up to six months for the childless adults population who are disenrolled for failure to pay premiums.

To the extent necessary to enable the state to deny eligibility for the childless adults population who does not complete a health risk assessment.

CENTERS FOR MEDICARE AND MEDICAID SERVICES
SPECIAL TERMS AND CONDITIONS

NUMBER: 11-W-00293/5

TITLE: Wisconsin BadgerCare Reform

AWARDEE: Wisconsin Department of Health Services

I. PREFACE

The following are the Special Terms and Conditions (STCs) to enable Wisconsin (state) to operate the Badger Care Reform section 1115(a) BadgerCare demonstration. The Centers for Medicare & Medicaid Services (CMS) has granted waivers of requirements under section 1902(a) of the Social Security Act (the Act), and expenditure authorities authorizing federal matching of demonstration costs not otherwise matchable, which are separately enumerated. These STCs set forth in detail the nature, character, and extent of federal involvement in the demonstration and amendments and the state's obligations to CMS related to this demonstration and amendments. The STCs are effective October 31, 2018 and the BadgerCare Reform demonstration is approved through December 31, 2023.

The STCs have been arranged into the following subject areas:

I. Preface
II. Program Description and Objectives
III. General Program Requirements
IV. Eligibility
V. Community Engagement Program
VI. Benefits
VII. Cost Sharing (Premiums, Copays, and Healthy Behavior Incentive)
VIII. Delivery System
IX. General Reporting Requirements
X. General Financial Requirements
XI. Monitoring Budget Neutrality for the Demonstration
XII. Evaluation of the Demonstration
XIII. Schedule of State Deliverables during the Demonstration

Additional attachments have been included to provide supplementary information and guidance for specific STCs.

Attachment A. Summary of Cost-sharing for TMA Adults Only
Attachment B. Substance Use Disorder Implementation Plan Protocol
Attachment C. Substance Use Disorder Monitoring Protocol
Attachment D. Developing the Evaluation Design
Attachment E Preparing the Evaluation Report
Attachment F. Evaluation Design
Attachment G. Community Engagement Implementation Plan
Attachment H. Monitoring Protocol

Attachment I. Tribal Consultation Plan

II. PROGRAM DESCRIPTION AND OBJECTIVES

With the implementation of the Affordable Care Act provisions, that will provide federally-funded subsidies to help individuals and families purchase private health insurance, Wisconsin saw the BadgerCare Reform amendment as an opportunity to reduce the uninsured rate and encourage beneficiaries to access coverage in the private market.
The Wisconsin BadgerCare Reform amendment provided state plan benefits, other than family planning services and tuberculosis-related services, to childless adults who had effective family incomes up to 100 percent of the Federal Poverty Level (FPL) (effective income is defined to include the five (5) percent disregard), and permitted the state to charge premiums to adults who were only eligible for Medicaid through the Transitional Medical Assistance eligibility group (hereinafter referred to as "TMA Adults") with incomes above 133 percent of the FPL starting from the first day of enrollment and to TMA Adults from 100-133 percent of the FPL after the first six (6) calendar months of TMA coverage.

The BadgerCare Reform amendment allowed the state to provide health care coverage for the childless adult population at or below an effective income of 100 percent of the FPL with a focus on improving health outcomes, reducing unnecessary services, and improving the cost-effectiveness of Medicaid services. Additionally, the amendment enabled the state to test the impact of providing TMA to individuals who were paying a premium that aligned with the insurance affordability program in the Marketplace based upon their household income when compared to the FPL.

In accordance with CMS' November 21, 2016 CMCS Informational Bulletin (CIB), *Section 1115 Demonstration Opportunity to Allow Medicaid Coverage to Former Foster Care Youth Who Have Moved to a Different State*, the BadgerCare Reform demonstration was amended in December 2017 to add coverage of former foster care youth defined as individuals under age 26 who were in foster care in another state or tribe of such other state when they turned 18 (or such higher age as the state has elected for termination of federal foster care assistance under title IV-E of the Act), were enrolled in Medicaid at that time or at some point while in such foster care, and are now applying for Medicaid in Wisconsin. With the addition of this population, Wisconsin has a new demonstration goal to increase and strengthen overall coverage of former foster care youth and improve health outcomes for this population.

The 2017 amendment request was prompted by the Wisconsin 2015-2017 Biennial Budget (Act 55), which required the Wisconsin Department of Health Services (DHS) to request an amendment to the BadgerCare Reform amendment in order to apply a number of new policies to the childless adult population. Act 55 requirements included: establishing monthly premiums, establishing lower premiums for members engaged in healthy behaviors, requiring completion of a health risk assessment, limiting a member's eligibility to no more than 48 months, and requiring as a condition of eligibility that an applicant or member complete a drug screening, and if indicated, a drug test and treatment; however, a drug test as a condition of eligibility and a 48-month limit are not part of this approval. Policies not required by Act 55, but included in the amendment request in order to meet the program objectives involve charging an increased copayment for non-emergent use of the emergency department utilization for childless adults, establishing a work or community engagement option for childless adults, and providing full

coverage of residential substance use disorder treatment for all BadgerCare Plus and Medicaid members.

III. GENERAL PROGRAM REQUIREMENTS

1. **Compliance with Federal Non-Discrimination Laws.** The state must comply with applicable federal civil rights laws relating to non-discrimination in services and benefits in its programs and activities. These include, but are not limited to, the Americans with Disabilities Act of 1990 (ADA), Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973 (Section 504), the Age Discrimination Act of 1975, and section 1557 of the Affordable Care Act (Section 1557). Such compliance includes providing reasonable modifications to individuals with disabilities under the ADA, Section 504, and Section 1557 with eligibility and documentation requirements, understanding program rules and notices, establishing eligibility for an exemption from community engagement requirements on the basis of disability, meeting and documenting community engagement requirements and meeting other program requirements necessary to obtain and maintain benefits.

2. **Compliance with Medicaid Law, Regulation, and Policy.** All requirements of the Medicaid program, expressed in law, regulation, and written policy, not expressly waived or identified as not applicable in the waiver and expenditure authority documents (of which these terms and conditions are part), apply to the demonstration.

3. **Changes in Medicaid Law, Regulation, and Policy.** The state must, within the timeframes specified in law, regulation, or policy statement, come into compliance with any changes in federal law, regulation, or policy affecting the Medicaid program that occur during this demonstration approval period, unless the provision being changed is expressly waived or identified as not applicable. In addition, CMS reserves the right to amend the STCs to reflect such changes and/or changes of an operational nature without requiring the state to submit an amendment to the demonstration under STC 7. CMS will notify the state 30 days in advance of the expected approval date of the amended STCs to allow the state to provide comment.

4. **Impact on Demonstration of Changes in Federal Law, Regulation, and Policy.**

    a. To the extent that a change in federal law, regulation, or policy requires either a reduction or an increase in federal financial participation (FFP) for expenditures made under this demonstration, the state must adopt, subject to CMS approval, a modified budget neutrality agreement for the demonstration, as well as a modified allotment neutrality worksheet as necessary to comply with such change. Further, the state may seek an amendment to the demonstration (as per STC 7 of this section) as a result of the change in FFP.

    b. If mandated changes in the federal law require state legislation, unless otherwise prescribed by the terms of the federal law, the changes must take effect on the day such state legislation becomes effective, or on the last day such legislation was required to be in effect under the law, whichever is sooner.

5. **State Plan Amendments.** The state will not be required to submit title XIX state plan amendments (SPA) for changes affecting any populations made eligible solely through the demonstration. If a population eligible through the Medicaid state plan is affected by a change to the demonstration, a conforming amendment to the appropriate state plan may be required, except as otherwise noted in these STCs. In all such instances, the Medicaid state plan governs.

6. **Changes Subject to the Amendment Process.** If not otherwise specified in these STCs, changes related to eligibility, enrollment, benefits, enrollee rights, delivery systems, cost sharing, evaluation design, sources of non-federal share of funding, budget neutrality, and other comparable program elements must be submitted to CMS as amendments to the demonstration. All amendment requests are subject to approval at the discretion of the Secretary in accordance with section 1115 of the Act. The state must not implement changes to these elements without prior approval by CMS either through an approved amendment to the Medicaid state plan or amendment to the demonstration. Amendments to the demonstration are not retroactive and FFP, whether administrative or service-based expenditures, will not be available for changes to the demonstration that have not been approved through the amendment process set forth in STC 7, except as provided in STC 3.

7. **Amendment Process.** Requests to amend the demonstration must be submitted to CMS for approval no later than 120 days prior to the planned date of implementation of the change and may not be implemented until approved. CMS reserves the right to deny or delay approval of a demonstration amendment based on non-compliance with these STCs, including but not limited to failure by the state to submit required elements of a viable amendment request as found in this STC, and failure by the state to submit reports required in the approved STCs and other deliverables in a timely fashion according to the deadlines specified herein. Amendment requests must include, but are not limited to, the following:

    a. A detailed description of the amendment including impact on beneficiaries, with sufficient supporting documentation;

    b. A data analysis worksheet which identifies the specific "with waiver" impact of the proposed amendment on the current budget neutrality agreement. Such analysis shall include total computable "with waiver" and "without waiver" status on both a summary and detailed level through the current approval period using the most recent actual expenditures, as well as summary and detail projections of the change in the "with waiver" expenditure total as a result of the proposed amendment, which isolates (by Eligibility Group) the impact of the amendment;

    c. An explanation of the public process used by the state consistent with the requirements of STC 13; and,

    d. If applicable, a description of how the evaluation design will be modified to incorporate the amendment provisions.

8. **Extension of the Demonstration.** States that intend to request a demonstration extension under sections 1115(e) or 1115(f) of the Act must submit extension applications in

accordance with the timelines contained in statute. Otherwise, no later than twelve months prior to the expiration date of the demonstration, the Governor or Chief Executive Officer of the state must submit to CMS either a demonstration extension request that meets federal requirements at 42 Code of Federal Regulations (CFR) 431.412(c) or a transition and phase-out plan consistent with the requirements of STC 9.

9. Demonstration Phase Out. The state may only suspend or terminate this demonstration in whole, or in part, consistent with the following requirements:

a. Notification of Suspension or Termination. The state must promptly notify CMS in writing of the reason(s) for the suspension or termination, together with the effective date and a transition and phase-out plan. The state must submit a notification letter and a draft transition and phase-out plan to CMS no less than six months before the effective date of the demonstration's suspension or termination. Prior to submitting the draft transition and phase-out plan to CMS, the state must publish on its website the draft transition and phase-oute plan for a 30-day public comment period. In addition, the state must conduct tribal consultation in accordance with STC 13, if applicable. Once the 30-day public comment period has ended, the state must provide a summary of each public comment received, the state's response to the comment, and how the state incorporated the received comment into the revised transition and phase-out plan.

b. Transition and Phase-out Plan Requirements. The state must include, at a minimum, in its transition and phase-out plan the process by which it will notify affected beneficiaries, the content of said notices (including information on the beneficiary's appeal rights), the process by which the state will conduct administrative reviews of Medicaid eligibility prior to the termination of the demonstration for the affected beneficiaries, and ensure ongoing coverage for those beneficiaries whether currently enrolled or determined to be eligible individuals, as well as any community outreach activities, including community resources that are available.

c. Transition and Phase-out Plan Approval. The state must obtain CMS approval of the transition and phase-out plan prior to the implementation of transition and phase-out activities. Implementation of transition and phase-out activities must be no sooner than 14 days after CMS approval of the transition and phase-out plan.

d. Transition and Phase-out Procedures. The state must comply with all applicable notice requirements found in 42 CFR, part 431 subpart E, including sections 431.206, 431.210, 431.211, and 431.213. In addition, the state must assure all applicable appeal and hearing rights afforded to demonstration beneficiaries as outlined in 42 CFR, part 431 subpart E, including sections 431.220 and 431.221. If a demonstration beneficiary requests a hearing before the date of action, the state must maintain benefits as required in 42 CFR 431.230. In addition, the state must conduct administrative renewals for all affected beneficiaries in order to determine if they qualify for Medicaid eligibility under a different eligibility category prior to termination as discussed in October 1, 2010, State Health Official Letter #10-008 and as required under 42 C.F.R. 435.916(f)(1). For individuals determined ineligible for Medicaid, the state must determine potential eligibility for other insurance affordability programs and comply with the procedures set forth in 42 CFR 435.1200(e).

e. Exemption from Public Notice Procedures, 42 CFR Section 431.416(g). CMS may expedite the federal and state public notice requirements under circumstances described in 42 CFR 431.416(g).

f. Enrollment Limitation during Demonstration Phase-Out. If the state elects to suspend, terminate, or not extend this demonstration, during the last six months of the demonstration, enrollment of new individuals into the demonstration must be suspended.

g. Federal Financial Participation (FFP). FFP will be limited to normal closeout costs associated with the termination or expiration of the demonstration including services, continued benefits as a result of beneficiaries' appeals, and administrative costs of disenrolling participants.

10. Expiring Demonstration Authority. For demonstration authority that expires prior to the demonstration's expiration date, the state must submit a demonstration authority expiration plan to CMS no later than six months prior to the applicable demonstration authority's expiration date, consistent with the following requirements:

a. Expiration Requirements. The state must include, at a minimum, in its demonstration authority expiration plan the process by which it will notify affected beneficiaries, the content of said notices (including information on the beneficiary's appeal rights), the process by which the state will conduct administrative reviews of Medicaid eligibility prior to the termination of the demonstration authority for the affected beneficiaries, and ensure ongoing coverage for eligible individuals, as well as any community outreach activities.

b. Expiration Procedures. The state must comply with all applicable notice requirements found in 42 CFR, part 431 subpart E, including sections 431.206, 431.210, 431.211, and 431.213. In addition, the state must assure all applicable appeal and hearing rights are afforded to demonstration beneficiaries as outlined in 42 CFR, part 431 subpart E, including sections 431.220 and 431.221. If a demonstration beneficiary requests a hearing before the date of action, the state must maintain benefits as required in 42 CFR 431.230. In addition, the state must conduct administrative renewals for all affected beneficiaries in order to determine if they qualify for Medicaid eligibility under a different eligibility category prior to termination as discussed in October 1, 2010, State Health Official Letter #10-008 and required under 42 C.F.R. 435.916(f)(1). For individuals determined ineligible for Medicaid, the state must determine potential eligibility for other insurance affordability programs and comply with the procedures set forth in 42 CFR 435.1200(e).

c. Federal Public Notice. CMS will conduct a 30-day federal public comment period consistent with the process outlined in 42 CFR 431.416 in order to solicit public input on the state's demonstration authority expiration plan. CMS will consider comments received during the 30-day period during its review and approval of the state's demonstration authority expiration plan. The state must obtain CMS approval of the demonstration authority expiration plan prior to the implementation of the expiration

activities. Implementation of expiration activities must be no sooner than fourteen (14) days after CMS approval of the demonstration authority expiration plan.

d. Federal Financial Participation (FFP). FFP will be limited to normal closeout costs associated with the expiration of the demonstration authority including services, continued benefits as a result of beneficiaries' appeals, and administrative costs of disenrolling participants.

11. Withdrawal of Waiver or Expenditure Authority. CMS reserves the right to withdraw waiver and/or expenditure authorities at any time it determines that continuing the waivers or expenditure authorities would no longer be in the beneficiaries' interest or promote the objectives of title XIX. CMS must promptly notify the state in writing of the determination and the reasons for the withdrawal, together with the effective date, and afford the state an opportunity to request a hearing to challenge CMS' determination prior to the effective date. If a waiver or expenditure authority is withdrawn, FFP is limited to normal closeout costs associated with terminating the waiver or expenditure authority, including services, continued benefits as a result of beneficiary appeals, and administrative costs of disenrolling participants.

12. Adequacy of Infrastructure. The state must ensure the availability of adequate resources for implementation and monitoring of the demonstration, including education, outreach, and enrollment; maintaining eligibility systems; compliance with cost sharing requirements; and reporting on financial and other demonstration components.

13. Public Notice, Tribal Consultation, and Consultation with Interested Parties. The state must comply with the state notice procedures as required in 42 CFR 431.408 prior to submitting an application to extend the demonstration. For applications to amend the demonstration, the state must comply with the state notice procedures set forth in 59 Fed. Reg. 49249 (September 27, 1994) prior to submitting such request.

The state must also comply with tribal and Indian Health Program/Urban Indian Health Organization consultation requirements at section 1902(a)(73) of the Act, 42 CFR 431.408(b), State Medicaid Director Letter #01-024, or as contained in the state's approved Medicaid State Plan, when any program changes to the demonstration, either through amendment as set out in STC 7 or extension, are proposed by the state.
The state must also comply with the Public Notice Procedures set forth in 42 CFR 447.205 for changes in statewide methods and standards for setting payment rates.

14. Federal Financial Participation (FFP). No federal matching for expenditures, both administrative and service, for this demonstration will take effect until the effective date identified in the demonstration approval letter, or if later, as expressly stated within these STCs.

15. Common Rule Exemption. The state shall ensure that the only involvement of human subjects in research activities that may be authorized and/or required by this demonstration is for projects which are conducted by or subject to the approval of CMS, and that are designed to study, evaluate, or otherwise examine the Medicaid or CHIP program – including procedures for obtaining Medicaid or CHIP benefits or services, possible changes in or

alternatives to Medicaid or CHIP programs and procedures, or possible changes in methods or levels of payment for Medicaid benefits or services. The Secretary has determined that this demonstration as represented in these approved STCs meets the requirements for exemption from the human subject research provisions of the Common Rule set forth in 45 CFR 46.101(b)(5).

IV. ELIGIBILITY

16. State Plan Eligibility Groups Affected By the Demonstration. The state plan populations affected by this demonstration are outlined in Table 1, which summarizes each specific group of individuals and specifies the authority under which they are eligible for coverage and the name of the eligibility and expenditure group under which expenditures are reported to CMS and the budget neutrality expenditure agreement is constructed.

17. Demonstration Expansion Eligibility Groups. Table 1 summarizes the specific groups of individuals, and specifies the authority under which they are eligible for coverage. Table 1 also specifies the name of the eligibility and expenditure group under which expenditures are reported to CMS and the budget neutrality expenditure agreement is constructed. Demonstration Population 2 in Table 1 is made eligible for the demonstration by virtue of the expenditure authorities expressly granted in this demonstration. Coverage of Demonstration Population 2 is subject to Medicaid laws and regulations (including all enrollment requirements described in paragraph b. below) unless otherwise specified in the "Title XIX Requirements Not Applicable to the Demonstration Population" section of the expenditure authorities document for this demonstration.

Table 1: Eligibility Groups Affected by the Demonstration			
Medicaid State Plan Mandatory Groups	Federal Poverty Level and/or Other Qualifying Criteria	Funding Stream	Expenditure and Eligibility Group Reporting
Population 1. Parents and caretaker relatives who are non-pregnant, those who do not qualify for Medicaid on the basis of disability, and whose effective family income is above 100 percent FPL and who qualify for TMA under section 1925 of the Act	Parents and caretaker relatives eligible for Medicaid under Wisconsin's Medicaid State plan under section 1925 of the Act or 1931(c)(1) of the Act.	Title XIX	TMA Adults
Demonstration Expansion Groups	Federal Poverty Level and/or Other Qualifying Criteria	Funding Stream	Expenditure and Eligibility Group Reporting

Population 2. Non-pregnant childless individuals Age 19 through 64 with an effective monthly income that does not exceed 100 percent FPL	• Ages 19 through 64 • Effective monthly income at or below 100 percent of the FPL • Not pregnant • Do not qualify for any other full-benefit Medicaid or CHIP eligibility group • Are not receiving Medicare • Childless adults may have children, but do not qualify as a parent or caretaker relative (e.g., either the children are not currently living with them or those children living with them are 19 years of age or older) • Fully complete a Health Risk Assessment (HRA)	Title XIX	BC Reform Adults
Population 3. Former Foster Care Youth ("FFCY") from Another State	• Individuals under age 26, who we were in foster care under the responsibility of a state other than Wisconsin or a tribe in such other state when they turned 18 or such higher age as the state has elected for termination of federal foster care assistance under title IV-E of the Act), were enrolled in Medicaid at that time or at some point while in such foster care, are now applying for Medicaid in Wisconsin, and are not otherwise eligible for Medicaid.	Title XIX	FFCY

V. Community Engagement Program

18. Overview. The state will implement a community engagement requirement, otherwise known as the Employment and Training Incentive, as a condition of continued eligibility for BadgerCare Reform beneficiaries, ages 19 through 49, in Demonstration Population 2, who are not otherwise exempt, as defined below. To maintain Medicaid eligibility, non-exempt beneficiaries will be required to participate in specified activities and report on those activities periodically. The activities may include employment, training, or education as specified in STC 20. Beneficiaries who do not meet the community engagement requirement for 48 consecutive or non-consecutive months will be disenrolled and lose eligibility for a period of six months and may not qualify to regain eligibility during this six month period unless they are found eligible for Medicaid under a different eligibility group.

19. Exempt Populations. Childless adults under Demonstration Population 2, ages 19 through 49, are exempt from the community engagement requirement for a given month if any of the following is true for that month:

a. The beneficiary is unable to work or participate in the workforce training activities, which includes someone who is:

    i. Receiving temporary or permanent disability benefits from the government or a private source (e.g., social security disability insurance (SSDI));

    ii. Mentally or physically unable to work, as determined by the state;

    iii. Verified as unable to work in a statement from a health care professional or a social worker; or

    iv. Experiencing chronic homelessness.

b. The beneficiary is a primary caregiver for a person who cannot care for himself or herself.

c. The beneficiary is receiving or has applied for unemployment compensation (UC) and is complying with the UC work requirements.

d. Exempt from Supplemental Nutrition Assistance Program (SNAP) work requirements.

e. The beneficiary is regularly participating in an alcohol or other drug abuse (AODA) treatment or rehabilitation program (excluding alcoholics anonymous/narcatics anonymous (AA/NA), but including verified participation in cultural interventions specific to the Native American community, as well as other analogous programs).

f. The beneficiary is enrolled in an institution of higher learning (including vocational programs or GED classes) at least half-time.

g. The beneficiary is attending high school at least half-time.

20. Qualifying Activities. Beneficiaries in Demonstration Population 2 who are not exempt may be considered active in community engagement through a variety of activities, including but not limited to:

a. Working in exchange for money;

b. Working in exchange for goods or services ("in-kind");

c. Unpaid work (e.g., volunteer work, community service);

d. Self-employment at any wage;

e. Taking part in an allowable work, job training, or job search program, such as:

    i. FoodShare Employment and Training (FSET), including FSET WorkFare component (the state's SNAP program);

ii. Wisconsin Works (W-2);

iii. Workforce Innovation and Opportunity Act (WIOWA) programs;

iv. Refugee Employment and Training;

v. Trial Employment Match Program (TEMP);

vi. Children First;

vii. Programs under section 236 of the Trade Act;

viii. Tribal work programs; or

ix. Other state-approved workforce programs.

21. Hour Requirements. Beneficiaries under Demonstration Population 2 must complete at least 80 hours per calendar month of one, or any combination, of the qualifying activities to meet the community engagement requirement and report these activities to the state, in a manner to be specified by the state in the community engagement implementation plan (STC 46). The months in which a beneficiary meets the community engagement requirement will not count towards the 48 month period, described in STC 22.

22. Limits on Eligibility While Not Meeting Community Engagement Requirements.

a. Overview. For the duration of this demonstration project, unless amended, beneficiaries under Demonstration Population 2, ages of 19 and 49, who are not participating in work, training, or other activities referenced in STC 20, unless they qualify for an exemption as described in STC 19, will have 48 (consecutive or non-consecutive) months of eligibility for coverage of Medicaid benefits before losing eligibility for a period of six months. The count of the 48-month period for current beneficiaries who are not participating in work, training or other activities as described in STC 20 will begin no sooner than 12 months after waiver approval, or not sooner than the first of the month when eligibility of a beneficiary is established, provided that all beneficiaries who will be subject to this requirement have been adequately notified. Once a beneficiary has been enrolled in Medicaid for a cumulative 48 months while not participating in the workforce initiative or meeting the community engagement requirement, the beneficiary will be disenrolled and become ineligible for BadgerCare under this demonstration authority for a period of six months, unless the beneficiary meets another category of Medicaid assistance. After completing the six month non-eligibility period, the beneficiary will be able to reapply and regain eligibility under Population 2 provided that all other eligibility criteria are satisfied.

b. Good Cause. Beneficiaries may request a temporary exemption from the community engagement/workforce training initiative for good cause. Circumstances that could give rise to a finding of good cause include, but are not limited to, at a minimum, the following verified circumstances:

i. The beneficiary has a disability as defined by the ADA, section 504 of the Rehabilitation Act, or section 1557 of the Patient Protection and Affordable Care Act and was unable to meet the requirement for reasons related to that disability; or has an immediate family member in the home with a disability under federal disability rights laws and was unable to meet the requirement for reasons related to the disability of that family member; or the beneficiary or an immediate family member who was living in the home with the beneficiary experiences a hospitalization or serious illness;

ii. The beneficiary experiences the birth, or death, of a family member living with the beneficiary;

iii. The beneficiary experiences severe inclement weather (including natural disaster) and therefore was unable to meet the requirement; or

iv. The beneficiary has a family emergency or other life-changing event (e.g., divorce or domestic violence).

23. Reasonable modifications. Wisconsin must provide reasonable accommodations for beneficiaries with disabilities protected by the ADA, Section 504 of the Rehabilitation Act, and Section 1557 of the Patient Protection and Affordable Care Act, when necessary, to enable them to have an equal opportunity to participate in and benefit from the program. The state must provide reasonable modifications for program protections and procedures, including but not limited to assistance with demonstrating eligibility for good cause exemptions; appealing disenrollment; documenting community engagement activities and other documentation requirements; understanding notices and program rules; and other types of reasonable modifications.

a. Reasonable modifications must include exemptions from participation where an individual is unable to participate for disability-related reasons, modification in the number of hours of participation required where an individual is unable to participate for the required number of hours, and provision of support services necessary to participate, where participation is possible with supports. In addition, the state must evaluate individuals' ability to participate and the types of reasonable modifications and supports needed.

24. State Assurances. Prior to implementation of community engagement requirements as a condition of eligibility, the state shall:

a. Maintain mechanisms to stop payments to a managed care organization when a beneficiary is terminated for failure to comply with program requirements.

b. Ensure that there are processes and procedures in place to seek data from other sources, including SNAP and TANF, and systems to permit beneficiaries to efficiently report community engagement hours or obtain an exemption, in accordance with 42 CFR 435.907(a), and 435.945, and to permit Wisconsin to monitor compliance.

c. If a beneficiary has requested a good cause, that the good cause has been approved or denied, with an explanation of the basis for the decision and how to appeal a denial.

d. Assure that termination, disenrollment, or denial of eligibility will only occur after an individual has been screened and determined ineligible for all other bases of Medicaid eligibility and reviewed for eligibility for insurance affordability programs in accordance with 435.916(f).

e. Ensure that there are timely and adequate beneficiary notices provided in writing, including but not limited to:

    i. When community engagement requirements will commence for that specific beneficiary;

    ii. Whether a beneficiary is exempt, and under what conditions the exemption would end;

    iii. A list of the specific activities that may be used to satisfy the community engagement requirements and a list of the specific activities that beneficiaries can engage in, as described in STC 20;

    iv. The specific number of community engagement hours per month that a beneficiary is required to complete to meet the requirement, and when and how the beneficiary must report participation or request an exemption;

    v. Information about resources that help connect beneficiaries to opportunities for activities that would meet the community engagement requirement, and information about the community supports that are available to assist beneficiaries in meeting the community engagement requirement;

    vi. Information about how community engagement hours will be counted and documented;

    vii. Periodic updates on how many months have counted towards the 48 months;

    viii. What gives rise to a termination of eligibility, what a termination would mean for the beneficiary, and how to avoid a termination, including how and when to apply for good cause and what kinds of circumstances might give rise to good cause;

    ix. How beneficiaries are expected to report the hours and exemptions and that this is communicated to the beneficiaries; and

    x. If a beneficiary's eligibility is terminated, how to appeal the termination.

f. Ensure application assistance is available to beneficiaries (in person and by phone).

g. Maintain an annual redetermination process, including systems to complete ex parte redeterminations and use of notices that contain prepopulated information known to the state, consistent with all applicable Medicaid requirements.

h. Maintain ability to report on and process applications in-person, via phone, via mail and electronically;

i. Provide full appeal rights as required under 42 CFR, Part 431, subpart E prior to termination of eligibility, and observe all requirements for due process for beneficiaries whose eligibility will be terminated for meeting 48 months of non-compliance with the community engagement requirement, including allowing beneficiaries the opportunity to raise additional issues in a hearing, including whether the beneficiary should be subject to the suspension or termination, and provide additional documentation through the appeals process.

j. Make good faith efforts to connect beneficiaries to existing community supports that are available to assist beneficiaries in meeting the community engagement requirement, including available non-Medicaid assistance with transportation, child care, language access services and other supports.

k. Ensure the state will assess areas within the state that experience high rates of unemployment, areas with limited economies and/or educational opportunities, and areas that lack public transportation to determine whether there should be further exemptions from the community engagement requirement and/or additional mitigation strategies, so that the community engagement requirement will not be impossible or unreasonably burdensome for beneficiaries to meet.

l. Provide each beneficiary who has been disenrolled from BadgerCare Reform with information on how to access primary care and preventative care services at low or no cost to the individual. This material will include information about free health clinics and community health centers including clinics that provide behavioral health and substance use disorder services. Wisconsin shall also maintain such information on its public-facing website and employ other broad outreach activities that are specifically targeted to beneficiaries who have lost coverage.

m. Makes the general assurance that it is in compliance with protections for beneficiaries with disabilities under ADA, section 504 of the Rehabilitation Act, or section 1557 of the Patient Protection and Affordable Care Act.

VI. BENEFITS

25. Wisconsin BadgerCare Demonstration. All enrollees in this demonstration (as described in Section IV) will receive benefits as specified in the Medicaid state plan, to the extent that such benefits apply to those individuals. Beneficiaries in Demonstration Population 2 will not receive family planning services or tuberculosis-related services. In addition, beneficiaries in the Demonstration Population 2 will not receive pregnancy related services, but instead must be administratively transferred to the pregnant women group in the state plan if they are

pregnant. Refer to the state plan for additional information on benefits. Former foster care youth from another state receive full Medicaid State Plan benefits.

26. Opioid Use Disorder (OUD)/Substance Use Disorder (SUD) Program. Effective upon CMS' approval of the SUD Implementation Protocol, the demonstration benefit package for all Wisconsin Medicaid recipients will include OUD/SUD treatment services, including short term residential services provided in residential and inpatient treatment settings that qualify as an Institution for Mental Diseases (IMD), which are not otherwise matched expenditures under section 1903 of the Act. The state will be eligible to receive FFP for Wisconsin Medicaid recipients residing in IMDs under the terms of this demonstration for coverage of medical assistance, including OUD/SUD benefits that would otherwise be matchable if the beneficiary were not residing in an IMD. Wisconsin will aim for a statewide average length of stay of 30 days in residential treatment settings, to be monitored pursuant to the SUD Monitoring Protocol as outlined in STC 28 below, to ensure short-term residential treatment stays. Under this demonstration, beneficiaries will have access to high quality, evidence-based OUD and other SUD treatment services ranging from medically supervised withdrawal management to on-going chronic care for these conditions in cost-effective settings while also improving care coordination and care for comorbid physical and mental health conditions.

The coverage of OUD/SUD treatment services and withdrawal management during short term residential and inpatient stays in IMDs will expand Wisconsin's current SUD benefit package available to all Wisconsin Medicaid recipients as outlined in Table 2. Room and board costs are not considered allowable costs for residential treatment service providers unless they qualify as impatient facilities under section 1905(a) of the Act.

Table 2: Wisconsin OUD/SUD Benefits Coverage with Expenditure Authority

SUD Benefits	Wisconsin Medicaid Authority	Expenditure Authority
Outpatient Services	State Plan	n/a
Intensive Outpatient Services	State Plan	n/a
Medication Assisted Treatment	State Plan (Individual services covered)	Services provided to individuals in IMDs
Residential Treatment Services	State Plan (Individual services covered)	Services provided to individuals in IMDs
Inpatient Services	State Plan (Individual services covered)	Services provided to individuals in IMDs
Medically Supervised Withdrawal Management	State Plan	Services provided to individuals in IMDs

27. SUD Implementation Plan Protocol. The state must submit a SUD Implementation Plan Protocol within ninety (90) days after approval of the SUD program under this demonstration approval. The state may not claim FFP for services provided in IMDs until CMS has approved the SUD Implementation Plan Protocol. Once approved, the Implementation Plan Protocol will be incorporated into the STCs, as Attachment B, and once incorporated, may be altered only with CMS approval. After approval of the Implementation Plan Protocol, FFP will be available prospectively, not retrospectively. Failure to submit an Implementation Plan Protocol or failure to obtain CMS approval will be considered a material failure to comply with the terms of the demonstration project as described in 42 CFR 431.420(d) and, as such,

would be grounds for termination or suspension of the SUD program under this demonstration. Failure to progress in meeting the milestone goals agreed upon by the state and CMS will result in funding deferral. At a minimum, the SUD Implementation Protocol will describe the strategic approach and detailed project implementation plan, including timetables and programmatic content where applicable, for meeting the following milestones which reflect the key goals and objectives of the SUD program in this demonstration:

a. Access to Critical Levels of Care for OUD and other SUDs: Service delivery for new benefits, including residential treatment and withdrawal management, within 12-24 months of OUD/SUD program demonstration approval;

b. Use of Evidence-based SUD-specific Patient Placement Criteria. Establishment of a requirement that providers assess treatment needs based on SUD-specific, multidimensional assessment tools, such as the American Society of Addiction Medicine (ASAM) Criteria or other assessment and placement tools that reflect evidence-based clinical treatment guidelines within 12-24 months of OUD/SUD program demonstration approval;

c. Patient Placement. Establishment of a utilization management approach such that beneficiaries have access to SUD services at the appropriate level of care and that the interventions are appropriate for the diagnosis and level of care, including an independent process for reviewing placement in residential treatment settings within 12-24 months of SUD program demonstration approval;

d. Use of Nationally Recognized SUD-specific Program Standards to set Provider Qualifications for Residential Treatment Facilities. Currently, residential treatment service providers must be a licensed organization, pursuant to the residential service provider qualifications described in Wisconsin administrative code. The state will establish residential treatment provider qualifications in licensure, policy or provider manuals, managed care contracts or credentialing, or other requirements or guidance that meet program standards in the ASAM Criteria or other nationally recognized, SUD-specific program standards regarding in particular the types of services, hours of clinical care, and credentials of staff for residential treatment settings within 12-24 months of OUD/SUD program demonstration approval;

e. Standards of Care. Establishment of a provider review process to ensure that residential treatment providers deliver care consistent with the specifications in the ASAM Criteria or other comparable, nationally recognized SUD program standards based on evidence-based clinical treatment guidelines for types of services, hours of clinical care, and credentials of staff for residential treatment settings within 12-24 months of SUD program demonstration approval;

f. Standards of Care. Establishment of a requirement that residential treatment providers offer MAT on-site or facilitate access to MAT off-site within 12-24 months of SUD program demonstration approval.

g. Sufficient Provider Capacity at each Level of Care, including Medication Assisted Treatment for OUD. An assessment of the availability of providers in the key levels of

care throughout the state, or in the regions of the state participating under this demonstration, including those that offer MAT within 12 months of SUD program demonstration approval.

h. Implementation of Comprehensive Treatment and Prevention Strategies to Address Opioid Abuse and OUD. Implementation of opioid prescribing guidelines along with other interventions to prevent prescription drug abuse and expand coverage of and access to naloxone for overdose reversal as well as implementation of strategies to increase utilization and improve functionality of prescription drug monitoring programs;

i. SUD Health IT Plan**.** Implementation of the milestones and metrics as detailed in STC 32.

j. Improved Care Coordination and Transitions between levels of care. Establishment and implementation of policies to ensure residential and inpatient facilities link beneficiaries with community-based services and supports following stays in these facilities within 24 months of SUD program demonstration approval.

28. SUD Monitoring Protocol. The state must submit a SUD Monitoring Protocol within 150 calendar days after approval of the SUD program under this demonstration. The SUD Monitoring Protocol must be developed in cooperation with CMS and is subject to CMS approval. Once approved, the SUD Monitoring Protocol will be incorporated into the STCs, as Attachment C. At a minimum, the SUD Monitoring Protocol will include reporting of the average length of stay for residential treatment and reporting relevant to each of the program implementation areas listed in STC 27. The protocol will also describe the data collection, reporting and analytic methodologies for performance measures identified by the state and CMS for inclusion. The SUD Monitoring Protocol will specify the methods of data collection and timeframes for reporting on the state's progress on required measures as part of the general reporting requirements described in STC 46 of the demonstration. In addition, for each performance measure, the SUD Monitoring Protocol will identify a baseline, a target to be achieved by the end of the demonstration and an annual goal for closing the gap between baseline and target expressed as percentage points. Where possible, baselines will be informed by state data, and targets will be benchmarked against performance in best practice settings. CMS will closely monitor demonstration spending on services in IMDs to ensure adherence to budget neutrality requirements. Progress on the performance measures identified in the SUD Monitoring Protocol will be reported via the quarterly and annual monitoring reports.

29. Mid-Point Assessment. The state must conduct an independent mid-point assessment of the demonstration. The assessor must collaborate with key stakeholders, including representatives of MCOs, SUD treatment providers, beneficiaries, and other key partners in the design, planning and conducting of the mid-point assessment. The assessment will include an examination of progress toward meeting each milestone and timeframe approved in the SUD Implementation Plan Protocol, and toward closing the gap between baseline and target each year in performance measures as approved in the SUD Monitoring Protocol. The assessment will also include a determination of factors that affected achievement on the milestones and performance measure gap closure percentage points to date, and a determination of selected factors likely to affect future performance in meeting milestones

and targets not yet met and about the risk of possibly missing those milestones and performance targets. For each milestone or measure target at medium to high risk of not being met, the assessor will provide, for consideration by the state, recommendations for adjustments in the state's implementation plan or to pertinent factors that the state can influence that will support improvement. The assessor will provide a report to the state that includes the methodologies used for examining progress and assessing risk, the limitations of the methodologies, its determinations and any recommendations. A copy of the report will be provided to CMS. CMS will be briefed on the report. For milestones and measure targets at medium to high risk of not being achieved, the state will submit to CMS modifications to the SUD Implementation Plan Protocol and SUD Monitoring Protocols for ameliorating these risks subject to CMS approval.

30. SUD Evaluation. The SUD Evaluation will be subject to the same requirements as the overall demonstration evaluation, as listed in sections VIII General Reporting Requirements and XII Evaluation of the Demonstration of the STCs.

31. SUD Evaluation Design. The state must submit, for CMS review and approval, a revision to the Evaluation Design to include the SUD program, no later than one-hundred-and-eighty (180) days after the effective date of these amended STCs. Failure to submit an acceptable and timely evaluation design along with any required monitoring, expenditure, or other evaluation reporting will subject the state to a $5 million deferral. The state must use an independent evaluator to design the evaluation.

a. Evaluation Design Approval and Updates. The state must submit a revised draft Evaluation Design within sixty (60) days after receipt of CMS' comments. Upon CMS approval of the draft Evaluation Design, the document will be included as an attachment to these STCs. Per 42 CFR 431.424(c), the state will publish the approved Evaluation Design within thirty (30) days of CMS approval. The state must implement the evaluation design and submit a description of its evaluation implementation progress in each of the Quarterly Reports and Annual Reports, including any required Rapid Cycle Assessments specified in these STCs. Once CMS approves the evaluation design, if the state wishes to make changes, the state must submit a revised evaluation design to CMS for approval.

b. Evaluation Questions and Hypotheses Specific to SUD Program. The state must follow the general evaluation questions and hypotheses requirements as specified in guidance provided in Attachment D of the STCs. In addition, hypotheses for the SUD program should include an assessment of the objectives of the SUD component of this section 1115 demonstration, to include, but is not limited to: initiation and compliance with treatment, utilization of health services (emergency department and inpatient hospital settings), and a reduction in key outcomes such as deaths due to overdose. The hypothesis testing should include, where possible, assessment of both process and outcome measures. Proposed measures should be selected from nationally-recognized sources and national measures sets, where possible. Measures sets could include CMS's Core Set of Health Care Quality Measures for Children in Medicaid and CHIP, Consumer Assessment of Health Care Providers and Systems (CAHPS), the Initial Core Set of

Health Care Quality Measures for Medicaid-Eligible Adults and/or measures endorsed by National Quality Forum (NQF).

32. SUD Health Information Technology (Health IT). The state will provide CMS with an assurance that it has a sufficient health IT infrastructure/"ecosystem" at every appropriate level (i.e. state, delivery system, health plan/MCO and individual provider) to achieve the goals of the demonstration—or it will submit to CMS a plan to develop the infrastructure/capabilities. This "SUD Health IT Plan," or assurance, will be submitted as a component of the State Medicaid Health IT Plan (SMHP), and included as a section of the state's "Implementation Plan" to be approved by CMS. The SUD Health IT Plan will detail the necessary health IT capabilities in place to support beneficiary health outcomes to address the SUD goals of the demonstration. The plan will also be used to identify areas of SUD health IT ecosystem improvement.

a. The SUD Health IT section of the Implementation plan will include implementation milestones and dates for achieving them (see Attachment B).

b. The SUD Health IT Plan must be aligned with the state's broader State Medicaid Health IT Plan (SMHP) and, if applicable, the state's Behavioral Health (BH) "Health IT" Plan.

c. The SUD Health IT Plan will describe the state's goals, each DY, to enhance the state's prescription drug monitoring program's (PDMP).[1]

d. The SUD Health IT Plan will address how the state's PDMP will enhance ease of use for prescribers and other state and federal stakeholders.[2] This will also include plans to include PDMP interoperability with a statewide, regional or local Health Information Exchange. Additionally, the SUD Health IT Plan will describe ways in which the state will support clinicians in consulting the PDMP prior to prescribing a controlled substance—and reviewing the patients' history of controlled substance prescriptions—prior to the issuance of a Controlled Substance Schedule II (CSII) opioid prescription.

e. The SUD Health IT Plan will, as applicable, describe the state's capabilities to leverage a master patient index (or master data management service, etc.) in support of SUD care delivery. Additionally, the SUD Health IT Plan must describe current and future capabilities regarding PDMP queries—and the state's ability to properly match patients receiving opioid prescriptions with patients in the PDMP. The state will also indicate current efforts or plans to develop and/or utilize current patient index capability that supports the programmatic objectives of the demonstration.

[1] Prescription drug monitoring programs (PDMP) are electronic databases that track controlled substance prescriptions in states. PDMPs can provide health authorities timely information about prescribing and patient behaviors that contribute to the "opioid" epidemic and facilitate a nimble and targeted response.
[2] *Ibid*.

f. The SUD Health IT Plan will describe how the activities described in (a) through (e) above will support broader state and federal efforts to diminish the likelihood of long-term opioid use directly correlated to clinician prescribing patterns.[3]

g. In developing the Health IT Plan, states should use the following resources.

   i. States may use resources at Health IT.Gov (https://www.healthit.gov/playbook/opioid-epidemic-and-health-it/) in "Section 4: Opioid Epidemic and Health IT."

   ii. States may also use the CMS 1115 Health IT resources available on "Medicaid Program Alignment with State Systems to Advance HIT, HIE and Interoperability" at https://www.medicaid.gov/medicaid/data-and-systems/hie/index.html. States should review the "1115 Health IT Toolkit" for health IT considerations in conducting an assessment and developing their Health IT Plans.

   iii. States may request from CMS technical assistance to conduct an assessment and develop plans to ensure they have the specific health IT infrastructure with regards to PDMP plans and, more generally, to meet the goals of the demonstration.

h. The state will include in its Monitoring Protocol (see STC 28) an approach to monitoring its SUD Health IT Plan which will include performance metrics provided by CMS or State defined metrics to be approved in advance by CMS.

i. The state will monitor progress, each DY, on the implementation of its SUD Health IT Plan in relationship to its milestones and timelines—and report on its progress to CMS in in an addendum to its Annual Reports (see STC 46).

j. As applicable, the state should advance the standards identified in the 'Interoperability Standards Advisory—Best Available Standards and Implementation Specifications' (ISA) in developing and implementing the state's SUD Health IT policies and in all related applicable State procurements (e.g., including managed care contracts) that are associated with this demonstration.

k. Where there are opportunities at the state- and provider-level (up to and including usage in MCO or ACO participation agreements) to leverage federal funds associated with a standard referenced in 45 CFR 170 Subpart B, the state should use the federally-recognized standards, barring another compelling state interest.

l. Where there are opportunities at the state- and provider-level to leverage federal funds associated with a standard not already referenced in 45 CFR 170 but included in the ISA, the state should use the federally-recognized ISA standards, barring no other compelling state interest.

[3] Shah, Anuj, Corey Hayes and Bradley Martin. *Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use — United States, 2006–2015*. MMWR Morb Mortal Wkly Rep 2017;66.

33. Deferral of Federal Financial Participation (FFP) from IMD claiming for Insufficient Progress Toward Milestones. Up to $5,000,000 in FFP for services in IMDs may be deferred if the state is not making adequate progress on meeting the milestones and goals as evidenced by reporting on the milestones in the Implementation Protocol and the required performance measures in the Monitoring Protocol agreed upon by the state and CMS. Once CMS determines the state has not made adequate progress, up to $5,000,000 will be deferred in the next calendar quarter and each calendar quarter thereafter until CMS has determined sufficient progress has been made.

VII. COST SHARING (PREMIUMS, COPAYS, AND HEALTHY BEHAVIOR INCENTIVE)

34. Cost sharing. For all enrollees in this demonstration, cost sharing must be in compliance with Medicaid requirements that are set forth in statute, regulation and policies and be reflected in the state plan, except for premiums for Demonstration Population 1 (TMA Adults), and except for copayments for non-emergency use of the ED for Demonstration Population 2.

a. Premiums for Demonstration Population 1 (TMA Adults). TMA Adults with income of 133 percent of the FPL or greater are subject to monthly premiums based on the sliding scale as outlined in Attachment A from the date of enrollment. TMA Adults with effective income over 100 percent but less than 133 percent of the FPL are subject to monthly premiums based on a sliding scale starting six calendar months after the date of enrollment. There will be a 30-day grace period for non-payment of the monthly premium before being disenrolled. Eligibility and enrollment for TMA will be terminated for a maximum period of three months for demonstration participants who fail to make a required premium payment before the end of the grace period. However, a participant may re-enroll at any point during this three -month period by paying owed premiums. After the three-month period of non-eligibility, TMA Adults must be reenrolled in TMA on request, even if they have an outstanding unpaid premiums, provided their respective 12-month TMA period has not yet expired. The three-month period of non-eligibility does not toll the 12-month TMA period. If section 1925 of the Act sunsets or is otherwise inapplicable and TMA is then available only for a four month extension, Demonstration Population 1 individuals may not re-enroll in TMA. No premium may be charged during the three-month period of non-eligibility, and nonpayment of premiums that remain unpaid from a prior TMA enrollment period may not be used as a basis for terminating a beneficiary's enrollment during a subsequent period of TMA enrollment after the three-month period of non-eligibility.

i. Premiums for TMA Adults whose income changes after time of application (i.e., decreases or increases, including an increase in which the individual's income increases to 200 percent of the FPL or more), but before his/her annual redetermination, will be recalculated after the individual has reported the change. Once the state has calculated an individual's new monthly premium amount based on the sliding scale outlined in Attachment A, the state will provide the individual with at least a 10-day notice prior to effectuating the new monthly premium amount. If income increases to 133 percent FPL or more for TMA demonstration

enrollees who had income under 133 percent FPL when their TMA began, premiums will be due immediately after the 10-day notice.

ii. Consistent with 42 CFR 447.56, American Indians and Alaska Natives (AI/AN) who are eligible to receive or who have received an item or services furnished by an Indian health care provider or through referral under contract health services are exempt from the premium amounts outlined above.

iii. TMA adults may be disenrolled for failure to pay premiums after a 30-day grace period. Once they are disenrolled, they will be restricted from re-enrollment during a three month period of non-eligibility. They may enroll in Medicaid under another eligibility group if they become eligible under such other eligibility group during the three-month non-eligibility period. At any point during this three-month period, they may pay the owed premiums to re-enroll in TMA for the remainder of the 12-month TMA extension period and be re-enrolled. After the three-month period, they may re-enroll for TMA for the remainder of the 12-month TMA extension period, if requested, even if they have an outstanding unpaid premiums from the prior TMA enrollment period. In this case, nonpayment of premiums that remain unpaid from the prior TMA enrollment period may not be used as a basis for terminating the beneficiary's enrollment during the subsequent period of TMA enrollment.

STC 34(a) will sunset on December 31, 2018 and demonstration premiums will no longer be charged to the TMA adults after this date.

b. Premiums for Demonstration Population 2. For individuals in demonstration population 2, a monthly premium payment is required for those with monthly household income above 50 percent of the FPL. Monthly premium amounts are divided into the following two income tiers:

Table 3: Income Tiers for Monthly Premiums for Demonstration Population 2	
Monthly Household Income	**Monthly Premium Amount**
0 to 50 percent of the FPL	No premium
Above 50 percent of the FPL	$8 per household

i. Beneficiaries with household income up to 50 percent of the FPL are exempt from paying monthly premiums. AI/AN who are eligible to receive or who have received an item or services furnished by an Indian health care provider or through referral under contract health services are also exempt from the monthly premiums outlined above, consistent with section 1916(j) of the Act and with 42 CFR 447.56.

ii. Beneficiaries in Demonstration Population 2 may be disenrolled for failure to pay premiums only at annual redetermination. The state will notify beneficiaries who have unpaid premium amounts for the coverage year and provide a reasonable opportunity for the beneficiary to pay before disenrolling the beneficiary for the next coverage year. If a beneficiary is disenrolled at annual redetermination for

failure to pay premiums who would have continued to have a premium requirement during the next coverage year if not disenrolled, the beneficiary will be subject to a period of non-eligibility for up to six months. Such a beneficiary may reenroll at any time prior to the end of the six-month period if he or she pays all owed premiums, or if his or her situation changes such that he or she would no longer be subject to a premium requirement. After the six-month period, the beneficiary may be re-enrolled in BadgerCare upon request, if he or she meets all program rules, even if he or she continues to have unpaid premiums from the prior period of enrollment.

c. The state will monitor and include in the quarterly report information related to disenrollments from the demonstration, including due to nonpayment of premiums.

35. Healthy Behavior Incentives. Beneficiaries enrolled in Demonstration Population 2 who are subject to a premium requirement will have their household premium requirement reduced by up to 50 percent if they demonstrate that they do not engage in behaviors that increase health risks ("health risk behaviors"). For beneficiaries who do not demonstrate that they do not engage in health risk behaviors, but attest to actively managing their behavior(s) and/or that they have a health condition that causes them to engage in one or more health risk behaviors, the premium will also be reduced by up to half. For beneficiaries who do not demonstrate that they do not engage in health risk behaviors and do not attest that they are actively managing their behavior(s) and/or that they have a health condition that causes them to engage in one or more health risk behaviors, the standard premium will apply. Beneficiaries will have the opportunity to update and self-attest to any changed health risk behavior or conditions that affect health risk behaviors at a minimum on an annual basis, when eligibility is re-determined. Health risk behaviors include, but are not limited to, excessive alcohol consumption, failure to engage in dietary, exercise, and other lifestyle (or "healthy") behaviors in attempt to attain or maintain a healthy body weight, illicit drug use, failure to use a seatbelt, and tobacco use. To identify beneficiaries who are engaging in health risk behaviors, individuals will be asked to complete a Health Risk Assessment (HRA) when applying for coverage under the demonstration or, for current beneficiaries, no sooner than 12 months after waiver approval. Beneficiaries will also use the HRA to self-attest to their active management of a health risk behavior and/or to having an underlying health condition that causes them to engage in one or more health risk behaviors, if either of these is applicable.

Because health risk is assessed at an individual level, a married couple may include one beneficiary who qualifies for a premium reduction and one beneficiary who does not. If this happens, the household premium would be reduced by 25 percent. If both beneficiaries qualify for a premium reduction, the household's premium would be reduced by 50 percent.

Beneficiaries enrolled in Demonstration Population 2 must fully complete a HRA to be determined eligible for coverage at application and renewal. If an individual fails to answer all questions on the HRA, eligibility for the demonstration will be denied, but there is no period of non-eligibility and that individual can re-apply at any time.

36. Copayments for Use of the Emergency Department. Individuals in Demonstration Population 2 are required to pay a copayment for each non-emergent use of the emergency

room (ER). This copayment shall be charged consistent with 1916A(e)(1) of the Act and 42 CFR 447.54.

a. Under the provisions of section 1916A(e) of the Act, the state has the authority to impose a copayment for services received at a hospital emergency room if the services are not emergency services.

b. As provided under 42 CFR 447.54, the amount of this co-pay will be $8 for each non-emergent use of the emergency department.

c. The individual must receive an appropriate medical screening examination under section 1867—the Emergency Medical Treatment and Labor Act, or EMTALA provision of the Act.

d. Providers cannot refuse treatment for nonpayment of the co-payment.

e. AI/AN who are currently receiving or who have ever received an item or services furnished by an Indian health care provider or through referral under contract health services are exempt from the copayment requirements outlined above, consistent with section 1916(j) of the Act and 42 CFR 447.56.

VIII. DELIVERY SYSTEM

37. General. Demonstration Populations 1 and 2 will be enrolled in the managed care organizations (MCO) that are currently contracted to provide health care services to the existing Medicaid and BadgerCare programs in most of the state to serve persons eligible under this demonstration. Demonstration enrollees will be required to join a MCO as a condition of eligibility, as long as there is at least one MCO available in their county of residence, and the county has been granted a rural exception under Medicaid State plan authority. The state may mandate enrollment into the single MCO in the counties that have been granted the rural exception by CMS. If the county has not been granted a rural exception, the state must offer the option of either MCO enrollment or Medicaid fee-for-service. All demonstration eligible beneficiaries must be provided a Medicaid card, regardless of MCO enrollment. MCOs may elect to provide a MCO specific card to MCO enrollees as well. The state must comply with the managed care regulations published at 42 CFR §438. Capitation rates shall be developed and certified as actuarially sound, in accordance with 42 CFR §438.6. No FFP is available for activities covered under contracts and/or modifications to existing contracts that are subject to 42 CFR §438 requirements prior to CMS approval of this demonstration authority as well as such contracts and/or contract amendments. The state shall submit any supporting documentation deemed necessary by CMS. The state must provide CMS with a minimum of sixty (60) days to review and approve changes. CMS reserves the right, as a corrective action, to withhold FFP (either partial or full) for the demonstration, until the contract compliance requirement is met.

IX. GENERAL REPORTING REQUIREMENTS

38. Deferral for Failure to Submit Timely Demonstration Deliverables. CMS may issue deferrals in the amount of $5,000,000 per deliverable (federal share) when items required by

these STCs (e.g., required data elements, analyses, reports, design documents, presentations, and other items specified in these STCs (hereafter singularly or collectively referred to as "deliverable(s)") are not submitted timely to CMS or found to not be consistent with the requirements approved by CMS. Specifically:

a. Thirty (30) days after the deliverable was due, CMS will issue a written notification to the state providing advance notification of a pending deferral for late or non-compliant submissions of required deliverables.

b. For each deliverable, the state may submit a written request for an extension to submit the required deliverable. Extension requests that extend beyond the current fiscal quarter must include a Corrective Action Plan (CAP).

    i. CMS may decline the extension request.

    ii. Should CMS agree in writing to the state's request, a corresponding extension of the deferral process described below can be provided.

    iii. If the state's request for an extension includes a CAP, CMS may agree to or further negotiate the CAP as an interim step before applying the deferral.

c. The deferral would be issued against the next quarterly expenditure report following the written deferral notification.

d. When the state submits the overdue deliverable(s) that are accepted by CMS, the deferral(s) will be released.

e. As the purpose of a section 1115 demonstration is to test new methods of operation or services, a state's failure to submit all required deliverables may preclude a state from renewing a demonstration or obtaining a new demonstration.

f. CMS will consider with the state an alternative set of operational steps for implementing the intended deferral to align the process with the state's existing deferral process, for example what quarter the deferral applies to, and how the deferral is released.

39. Submission of Post-approval Deliverables. The state must submit all deliverables as stipulated by CMS and within the timeframes outlined within these STCs.

40. Compliance with Federal Systems Updates. As federal systems continue to evolve and incorporate additional 1115 waiver reporting and analytics functions, the state will work with CMS to:

a. Revise the reporting templates and submission processes to accommodate timely compliance with the requirements of the new systems;

b. Ensure all 1115, T-MSIS, and other data elements that have been agreed to for reporting and analytics are provided by the state; and

c. Submit deliverables to the appropriate system as directed by CMS.

41. General Financial Requirements. The state must comply with all general financial requirements under title XIX, including reporting requirements related to monitoring budget neutrality, set forth in Section X of these STCs.

42. Reporting Requirements Related to Budget Neutrality. The state must comply with all reporting requirements for monitoring budget neutrality set forth in Section XI of these STCs.

43. Community Engagement Implementation Plan. The state must submit a Community Engagement Implementation Plan to CMS no later than 90 calendar days after approval of the demonstration. Once determined complete by CMS, the Implementation Plan will be incorporated into the STCs, as Attachment G. At a minimum, the Community Engagement Implementation Plan must include definitions and parameters of key policies, and describe the state's strategic approach and implementation plan for those policies, including timelines for meeting milestones associated with these key policies. Other topics to be discussed in the implementation plan include application assistance, reporting, and processing; notices; coordinated agency responsibilities; coordination with other insurance affordability programs; appeals; renewals; coordination with other state agencies; beneficiary protections; and outreach.

44. Monitoring Protocol. The state must submit to CMS a Monitoring Protocol no later than 150 calendar days after approval of the demonstration. Once approved, the Monitoring Protocol will be incorporated into the STCs, as Attachment H.

At a minimum, the Monitoring Protocol will affirm the state's commitment to conduct quarterly and annual monitoring in accordance with CMS' template. Any proposed deviations from CMS' template should be documented in the Monitoring Protocol. The Monitoring Protocol will describe the quantitative and qualitative elements on which the state will report through quarterly and annual monitoring reports. For quantitative metrics (e.g., performance metrics as described in STC 46(b)), CMS will provide the state with a set of required metrics, and technical specifications for data collection and analysis. The Monitoring Protocol will specify the methods of data collection and timeframes for reporting on the state's progress as part of the quarterly and annual monitoring reports. For the qualitative elements (e.g, operational updates as described in STC 46(a)), CMS will provide the state with guidance on narrative and descriptive information which will supplement the quantitative metrics on key aspects of the demonstration policies. The quantitative and qualitative elements will comprise the state's quarterly and annual monitoring reports.

45. Tribal Consultation Plan. The state must consult with federally recognized tribal governments and with Indian health care providers, and through consultation, identify any tribal concerns. The state must deliver to CMS a plan and timeline for addressing any tribal concerns related to the impact of the community engagement requirements. The plan and timeline are due to CMS within 60 calendar days after approval of this demonstration and will be incorporated into the STCs, as Attachment I. CMS will work with the state if we determine changes are necessary to the state's submission, or if issues are identified as part of the review.

46. Monitoring Reports. The state must submit three (3) Quarterly Reports and one (1) Annual Report each DY. The information for the fourth quarterly report should be reported as distinct information within the Annual Report. The Quarterly Reports are due no later than sixty (60) days following the end of each demonstration quarter. The Annual Report is due no later than ninety (90 days) following the end of the DY. The reports will include all required elements as per 42 CFR 431.428, and should not direct readers to links outside the report. Additional links not referenced in the document may be listed in a Reference/Bibliography section. The Monitoring Reports must follow the framework to be provided by CMS, which will be organized by milestones. The framework is subject to change as monitoring systems are developed/evolve, and be provided in a structured manner that supports federal tracking and analysis.

a. Operational Updates - The operational updates will focus on progress towards meeting the milestones identified in CMS' framework. Additionally, per 42 CFR 431.428, the Monitoring Reports must document any policy or administrative difficulties in operating the demonstration. The reports shall provide sufficient information to document key challenges, underlying causes of challenges, how challenges are being addressed, as well as key achievements and to what conditions and efforts successes can be attributed. The discussion should also include any issues or complaints identified by beneficiaries; lawsuits or legal actions; unusual or unanticipated trends; legislative updates; and descriptions of any public forums held. The Monitoring Report should also include a summary of all public comments received through post-award public forums regarding the progress of the demonstration.

b. Performance Metrics – The performance metrics will provide data to demonstrate how the state is progressing towards meeting the milestones identified in CMS' framework. The performance metrics will reflect all components of the state's demonstration, and may include, but are not limited to, measures associated with eligibility and coverage (including community engagement). Per 42 CFR 431.428, the Monitoring Reports must document the impact of the demonstration in providing insurance coverage to beneficiaries and the uninsured population, as well as outcomes of care, quality and cost of care, and access to care. This may also include the results of beneficiary satisfaction surveys, if conducted, grievances and appeals. The required monitoring and performance metrics must be included in the Monitoring Reports, and will follow the framework provided by CMS to support federal tracking and analysis.

c. Budget Neutrality and Financial Reporting Requirements – Per 42 CFR 431.428, the Monitoring Reports must document the financial performance of the demonstration. The state must provide an updated budget neutrality workbook with every Monitoring Report that meets all the reporting requirements for monitoring budget neutrality set forth in the General Financial Requirements section of these STCs, including the submission of corrected budget neutrality data upon request. In addition, the state must report quarterly and annual expenditures associated with the populations affected by this demonstration on the Form CMS-64. Administrative costs should be reported separately.

d. Evaluation Activities and Interim Findings. Per 42 CFR 431.428, the Monitoring Reports must document any results of the demonstration to date per the evaluation

hypotheses. Additionally, the state shall include a summary of the progress of evaluation activities, including key milestones accomplished, as well as challenges encountered and how they were addressed.

47. Corrective Action. If monitoring indicates that demonstration features are not likely to assist in promoting the objectives of Medicaid, CMS reserves the right to require the state to submit a corrective action plan to CMS for approval. This may be an interim step to withdrawing waivers or expenditure authorities, as outlined in STC 11.

48. Close-Out Report. Within 120 days after the expiration of the demonstration, the state must submit a draft Close-Out Report to CMS for comments.

a. The draft report must comply with the most current guidance from CMS.

b. The state will present to and participate in a discussion with CMS on the Close-Out report.

c. The state must take into consideration CMS' comments for incorporation into the final Close-Out Report.

d. The final Close-Out Report is due to CMS no later than thirty (30) days after receipt of CMS' comments.

e. A delay in submitting the draft or final version of the Close-Out Report may subject the state to penalties described in STC 38.

49. Monitoring Calls. CMS will convene periodic conference calls with the state.

a. The purpose of these calls is to discuss ongoing demonstration operation, to include (but not limited to), any significant actual or anticipated developments affecting the demonstration. Examples include implementation activities, enrollment and access, budget neutrality, and progress on evaluation activities.

b. CMS will provide updates on any pending actions, as well as federal policies and issues that may affect any aspect of the demonstration.

c. The state and CMS will jointly develop the agenda for the calls.

50. Post Award Forum. Pursuant to 42 CFR 431.420(c), within six (6) months of the demonstration's implementation, and annually thereafter, the state shall afford the public with an opportunity to provide meaningful comment on the progress of the demonstration. At least thirty (30) days prior to the date of the planned public forum, the state must publish the date, time and location of the forum in a prominent location on its website. The state must also post the most recent annual report on its website with the public forum announcement. Pursuant to 42 CFR 431.420(c), the state must include a summary of the comments in the Monitoring Report associated with the quarter in which the forum was held, as well as in its compiled Annual Report.

51. Transformed Medicaid Statistical Information Systems Requirements (T-MSIS). The state shall comply with all T-MSIS milestones and associated timelines indicated below. Failure to meet these milestones on the below timeline will result in a deferral, as described in STC 38:

a. By December 31, 2018 state will address and correct all post go-live corrective actions (except waiver population reporting).

b. By January 31, 2019, state will achieve and maintain currency in T-MSIS data reporting.

c. By June 30, 2019 state will implement corrective action for waiver reporting.

X. GENERAL FINANCIAL REQUIREMENTS. This project is approved for title XIX services rendered during the demonstration period. This section describes the general financial requirements for these expenditures.

52. Quarterly Financial Reports. The state must provide quarterly title XIX expenditure reports using Form CMS-64, to separately report total title XIX expenditures for services provided through this demonstration under section 1115 authority. CMS shall provide title XIX FFP for allowable demonstration expenditures, only as long as they do not exceed the pre-defined limits on the costs incurred, as specified in Section XI of the STCs.

53. Reporting Expenditures under the Demonstration. The following describes the reporting of expenditures subject to the budget neutrality agreement:

a. Tracking Expenditures. In order to track expenditures under this demonstration, the state will report demonstration expenditures through the Medicaid and state Children's Health Insurance Program Budget and Expenditure System (MBES/CBES), following routine CMS-64 reporting instructions outlined in section 2500 and Section 2115 of the state Medicaid Manual. All demonstration expenditures subject to the budget neutrality limit, including baseline data and member months, must be reported each quarter on separate Forms CMS-64.9 WAIVER and/or 64.9P WAIVER, identified by the demonstration project number assigned by CMS (including the project number extension, which indicates the DY in which services were rendered or for which capitation payments were made). For monitoring purposes, cost settlements must be recorded on the appropriate prior period adjustment schedules (Forms CMS-64.9 Waiver) for the Summary Line 10B, in lieu of Lines 9 or 10C. For any other cost settlements (i.e., those not attributable to this demonstration), the adjustments should be reported on lines 9 or 10C, as instructed in the State Medicaid Manual. The term, "expenditures subject to the budget neutrality limit," is defined below.

b. Cost Settlements. For monitoring purposes, cost settlements attributable to the demonstration must be recorded on the appropriate prior period adjustment schedules (Form CMS-64.9P Waiver) for the Summary Sheet Line 10B, in lieu of Lines 9 or 10C. For any cost settlement not attributable to this demonstration, the adjustments should be reported as otherwise instructed in the State Medicaid Manual.

c. Cost Sharing Contributions. Premiums and other applicable cost sharing contributions from enrollees that are collected by the state from enrollees under the demonstration must be reported to CMS each quarter on Form CMS-64 Summary Sheet line 9.D, columns A and B. In order to assure that these collections are properly credited to the demonstration, premium and cost-sharing collections (both total computable and federal share) should also be reported by DY on the Form CMS-64 Narrative. In the calculation of expenditures subject to the budget neutrality expenditure limit, premium collections applicable to demonstration populations will be offset against expenditures. These section 1115 premium collections will be included as a manual adjustment (decrease) to the demonstration's actual expenditures on a quarterly basis.

d. Pharmacy Rebates. Using specific medical status codes, the state has the capacity to use its MMIS system to stratify manufacturer's rebate revenue that should be assigned to net demonstration expenditures for BC Reform Adults. The state will generate a demonstration-specific rebate report to support the methodology used to assign rebates to the demonstration. The state will report the portion of rebate revenue assigned to BC Reform Adults on the appropriate Forms CMS-64.9 WAIVER. This revenue will be distributed as state and federal revenue consistent with the federal matching rates under which the claim was paid. Budget neutrality will reflect the net cost of prescriptions.

e. Federally Qualified Health Center Settlement Expenses. Using specific medical status codes, the state will assign FQHC settlement expenses to claims covered under the demonstration for BC Reform Adults and will report these costs on the appropriate Forms CMS-64.9 WAIVER. The state will be able to generate reports using MMIS data to show the assignment of these settlement payments to demonstration expenditures.

f. Mandated Increase in Physician Payment Rates in 2013 and 2014. Section 1202 of the Health Care and Education Reconciliation Act of 2010 (Pub. Law 110-152) requires state Medicaid programs to pay physicians for primary care services at rates that are no less than what Medicare pays, for services furnished in 2013 and 2014. The federal government provides a federal medical assistance percentage of 100 percent for the claimed amount by which the minimum payment exceeds the rates paid for those services as of July 1, 2009. The state will exclude from the budget neutrality test for this demonstration the portion of the mandated increase for which the federal government pays 100 percent. These amounts must be reported on the base forms CMS-64.9, 64.21, or 64.21U (or their "P" counterparts), and not on any waiver form.

g. Use of Waiver Forms for Medicaid. For each DY, separate Forms CMS-64.9 Waiver and/or 64.9P Waiver shall be submitted reporting expenditures for individuals enrolled in the demonstration (Section XI of these STCs). The state must complete separate waiver forms for the following Medicaid eligibility groups/waiver names:

    i. "BC Reform Adults"

    ii. "TMA Adults"

    iii. "FFCY"

iv. "SUD"

h. Demonstration Year Definition. The Demonstration Years (DYs) will be defined as follows:

January 1, 2014 through December 31, 2014	Demonstration Year 1 (DY1)
January 1, 2015 through December 31, 2015	Demonstration Year 2 (DY2)
January 1, 2016 through December 31, 2016	Demonstration Year 3 (DY3)
January 1, 2017 through December 31, 2017	Demonstration Year 4 (DY4)
January 1, 2018 through December 31, 2018	Demonstration Year 5 (DY5)
January 1, 2019 through December 31, 2019	Demonstration Year 6 (DY6)
January 1, 2020 through December 31, 2020	Demonstration Year 7 (DY7)
January 1, 2021 through December 31, 2021	Demonstration Year 8 (DY8)
January 1, 2022 through December 31, 2022	Demonstration Year 9 (DY9)
January 1, 2023 through December 31, 2022	Demonstration Year 10 (DY10)

54. Administrative Costs. The state must track administrative costs for state-approved workforce programs under Section V. Administrative costs, including state-approved workforce programs under Section V, will not be included in the budget neutrality limit, but the state must separately track and report additional administrative costs that are directly attributable to the demonstration, using Forms CMS-64.10 Waiver and/or 64.10P Waiver, with waiver name Local Administration Costs ("ADM").

55. Claiming Period. All claims for expenditures subject to the budget neutrality limit (including any cost settlements) must be made within two (2) years after the calendar quarter in which the state made the expenditures. Furthermore, all claims for services during the demonstration period (including any cost settlements) must be made within two (2) years after the conclusion or termination of the demonstration. During the latter two-year period, the state must continue to identify separately net expenditures related to dates of service during the operation of the section 1115 demonstration on the Form CMS-64 and Form CMS-21 in order to properly account for these expenditures in determining budget neutrality.

56. Reporting Member Months. The following describes the reporting of member months for demonstration populations:

a. For the purpose of calculating the budget neutrality expenditure cap and for other purposes, the state must provide to CMS, as part of the quarterly report required under STC 46, the actual number of eligible member months for BadgerCare Reform Demonstration adults and separately the actual number of eligible member months for former foster care youth (i.e. FFCY). The state must submit a statement accompanying the quarterly report, which certifies the accuracy of this information.

To permit full recognition of "in-process" eligibility, reported counts of member months may be subject to revisions after the end of each quarter. Member month counts may be revised retrospectively as needed.

b. The term "eligible member months" refers to the number of months in which persons are eligible to receive services. For example, a person who is eligible for three (3) months contributes three (3) eligible member months to the total. Two individuals who are eligible for two (2) months each contribute two (2) eligible member months to the total, for a total of four (4) eligible member months.

57. Standard Medicaid Funding Process. The standard Medicaid funding process must be used during the demonstration. The state must estimate matchable demonstration expenditures (total computable and federal share) subject to the budget neutrality expenditure cap and separately report these expenditures by quarter for each federal fiscal year on the Form CMS-37 for both the Medical Assistance Payments (MAP) and State and Local Administration Costs (ADM). CMS will make federal funds available based upon the state's estimate, as approved by CMS. Within thirty (30) days after the end of each quarter, the state must submit the Form CMS-64 quarterly Medicaid expenditure report, showing Medicaid expenditures made in the quarter just ended. The CMS will reconcile expenditures reported on the Form CMS-64 quarterly with federal funding previously made available to the state, and include the reconciling adjustment in the finalization of the grant award to the state.

58. Extent of FFP for the Demonstration. Subject to CMS approval of the source(s) of the non-Federal share of funding, CMS will provide FFP at the applicable federal matching rate for the demonstration as a whole as outlined below, subject to the limits described in Section X of these STCs:

a. Administrative costs, including those associated with the administration of the demonstration.

b. Net expenditures and prior period adjustments of the Medicaid program that are paid in accordance with the approved state plan.

c. Medical Assistance expenditures made under section 1115 demonstration authority, including those made in conjunction with the demonstration, net of enrollment fees, cost sharing, pharmacy rebates, and all other types of third party liability or CMS payment adjustments.

59. Sources of Non-Federal Share. The state must certify that the matching non-federal share of funds for the demonstration is state/local monies. The state further certifies that such funds shall not be used as the match for any other federal grant or contract, except as permitted by law. All sources of non-federal funding must be compliant with section 1903(w) of the Act and applicable regulations. In addition, all sources of the non-federal share of funding are subject to CMS approval.

a. CMS may review the sources of the non-federal share of funding for the demonstration at any time. The state agrees that all funding sources deemed unacceptable by CMS shall be

addressed within the time frames set by CMS.

b. Any amendments that impact the financial status of the program shall require the state to provide information to CMS regarding all sources of the non-federal share of funding, including up to date responses to the CMS standard funding questions

c. The state assures that all health care-related taxes comport with section 1903(w) of the Act and all other applicable federal statutory and regulatory provisions, as well as the approved Medicaid state plan.

60. State Certification of Funding Conditions. The state must certify that the following conditions for non-Federal share of demonstration expenditures are met:

a. Units of government, including governmentally operated health care providers, may certify that state or local tax dollars have been expended as the non-federal share of funds under the demonstration.

b. To the extent the state utilizes certified public expenditures (CPEs) as the funding mechanism for title XIX (or under section 1115 authority) payments, CMS must approve a cost reimbursement methodology. This methodology must include a detailed explanation of the process by which the state would identify those costs eligible under title XIX (or under section 1115 authority) for purposes of certifying public expenditures.

c. To the extent the state utilizes CPEs as the funding mechanism to claim federal match for payments under the demonstration, governmental entities to which general revenue funds are appropriated must certify to the state the amount of such tax revenue (state or local) used to satisfy demonstration expenditures. The entities that incurred the cost must also provide cost documentation to support the state's claim for federal match.

d. The state may use intergovernmental transfers to the extent that such funds are derived from state or local tax revenues and are transferred by units of government within the state. Any transfers from governmentally operated health care providers must be made in an amount not to exceed the non-federal share of title XIX payments.

e. Under all circumstances, health care providers must retain 100 percent of the reimbursement amounts claimed by the state as demonstration expenditures. Moreover, no pre-arranged agreements (contractual or otherwise) may exist between the health care providers and the state and/or local government to return and/or redirect any portion of the Medicaid payments. This confirmation of Medicaid payment retention is made with the understanding that payments that are the normal operating expenses of conducting business (such as payments related to taxes—including health care provider-related taxes—fees, and business relationships with governments that are unrelated to Medicaid and in which there is no connection to Medicaid payments) are not considered returning and/or redirecting a Medicaid payment.

XI. MONITORING BUDGET NEUTRALITY FOR THE DEMONSTRATION

61. Limit on Title XIX Funding. The state shall be subject to a limit on the amount of federal title XIX funding that the state may receive on selected Medicaid expenditures during the period of approval of the demonstration. The limit is determined by using the per capita cost method and budget neutrality expenditure limits are set on a yearly basis with a cumulative budget neutrality expenditure limit for the length of the entire demonstration. The data supplied by the state to CMS to set the annual caps is subject to review and audit, and if found to be inaccurate, will result in a modified budget neutrality expenditure limit. CMS' assessment of the state's compliance with these annual limits will be done using the Schedule C report from the CMS-64.

62. Risk. The state will be at risk for the per capita cost (as determined by the method described below) for demonstration populations as defined in Section IV, but not at risk for the number of participants in the demonstration population. By providing FFP without regard to enrollment in the demonstration populations, CMS will not place the state at risk for changing economic conditions that impact enrollment levels. However, by placing the state at risk for the per capita costs of current eligibles, CMS assures that the demonstration expenditures do not exceed the levels that would have been realized had there been no demonstration.

63. Calculation of the Budget Neutrality Limit. For the purpose of calculating the overall budget neutrality limit for the demonstration, an annual budget limit will be calculated for each DY on a total computable basis. The federal share of this limit will represent the maximum amount of FFP that the state may receive during the demonstration period for the types of demonstration expenditures described below. The federal share will be calculated by multiplying the total computable budget neutrality limit by the Composite Federal Share, which is defined in STC 64 below.

The demonstration expenditures subject to the budget neutrality limit related to Demonstration Population 2 as described in STC 17 are those reported under the following Waiver Name: BC Reform Adults. The demonstration expenditures subject to the budget neutrality limit related to Demonstration Population 3 as described in STC 17 are those reported under the following Waiver Name: FFCY. The demonstration expenditures subject to the budget neutrality limit related to SUD as those reported under the following Waiver Name: SUD.

For each DY, separate annual budget limits of demonstration service expenditures will be calculated based on projected PMPM expenditures for BC Reform Adults, Former Foster Care Youth, and SUD. The PMPM amounts for BC Reform Adults, Former Foster Care Youth, and SUD are shown on the table below.

MEG	TREND RATE	2018 DY 5 – PMPM	2019 DY 6 - PMPM	2020 DY 7 PMPM	2021 DY 8 – PMPM	2022 DY 9 – PMPM	2023 DY 10 PMPM
BC Reform Adults	4.7%	$710.95	$744.36	$779.35	$815.98	$854.33	$894.48

Former Foster Care Youth	3.7%	$2,538.20	$2,632.11	$2,729.50	$2,830.49	$2,935.22	$3,043.82
SUD	4.6%	$5,561	$5,816.81	$6,084.38	$6,364.26	$6,657.02	$6,963.24

64. Hypothetical Eligibility Group. BC Reform Adults (as related to Demonstration Population 2 defined under STC 17), SUD, and Former Foster Care Youth (Demonstration Population 3) are considered to be a hypothetical populations for budget neutrality. BC Reform Adults consist of individuals who could have been added to the Medicaid program through the state plan, but instead are covered through demonstration authority.

Former Foster Care Youth from Another State are individuals that were or would have been eligible for state plan coverage as described in the January 22, 2013 CMS notice of proposed rulemaking that permitted the option to cover formerly out-of-state former foster care youth up to age 26 pursuant to section 1902(a)(10)(A)(i)(IX) of the Act. This coverage is now only permissible under the authority of this section 1115 demonstration as outlined in the November 21, 2016 CIB on transition coverage for Former Foster Care Youth.

As part of the SUD initiative, the state may receive FFP for the continuum of services specified in Table 2 to treat OUD and other SUDs that are provided to Medicaid beneficiaries in an IMD. These are state plan services that would be eligible for reimbursement if not for the IMD exclusion. Therefore, they are being treated as hypothetical. The state may only claim FFP via demonstration authority for the services listed in Table 2 that will be provided in an IMD. However, the state will not be allowed to obtain budget neutrality "savings" from these services. Therefore, a separate expenditure cap is established for SUD services.

The budget neutrality expenditure limits for these populations reflect the expected costs for these populations and there is no requirement that the state produce savings from elsewhere in its Medicaid program to offset hypothetical population costs. States may not accrue budget neutrality "savings" from hypothetical populations.

65. Composite Federal Share Ratio. The Composite Federal Share is the ratio calculated by dividing the sum total of federal financial participation (FFP) received by the state on actual expenditures for BC Reform Adults during the approval period, as reported through the MBES/CBES and summarized on Schedule C (with consideration of additional allowable demonstration offsets such as, but not limited to, premium collections) by total computable demonstration expenditures for the same period as reported on the same forms. Should the demonstration be terminated prior to the end of the extension approval period, the Composite Federal Share will be determined based on actual expenditures for the period in which the demonstration was active. For the purpose of interim monitoring of budget neutrality, a reasonable estimate of Composite Federal Share may be developed and used through the same process or through an alternative mutually agreed upon method.

66. Future Adjustments to the Budget Neutrality Expenditure Limit. CMS reserves the right to adjust the budget neutrality expenditure limit to be consistent with enforcement of impermissible provider payments, health care related taxes, new federal statutes, or policy

interpretations implemented through letters, memoranda, or regulations with respect to the provision of services covered under the demonstration.

67. Enforcement of Budget Neutrality. CMS shall enforce budget neutrality over the life of the demonstration rather than on an annual basis. However, if the state's expenditures exceed the calculated cumulative budget neutrality expenditure cap on a PMPM basis by the percentage identified below for any of the demonstration years, the state must submit a corrective action plan to CMS for approval. The state will subsequently implement the approved corrective action plan.

Year	Cumulative target definition on a PMPM basis	Percentage
DY 1	Cumulative budget neutrality limit plus:	1 percent
DY 2	Cumulative budget neutrality limit plus:	0.75 percent
DY 3	Cumulative budget neutrality limit plus:	0.5 percent
DY 4	Cumulative budget neutrality limit plus:	0.25 percent
DY 5	Cumulative budget neutrality limit plus:	0 percent
DY 6	Cumulative budget neutrality limit plus:	0 percent
DY 7	Cumulative budget neutrality limit plus:	0 percent
DY 8	Cumulative budget neutrality limit plus:	0 percent
DY 9	Cumulative budget neutrality limit plus:	0 percent
DY 10	Cumulative budget neutrality limit plus:	0 percent

68. Exceeding Budget Neutrality. If at the end of the demonstration period the cumulative budget neutrality limit has been exceeded, the excess federal funds will be returned to CMS. If the demonstration is terminated prior to the end of the budget neutrality agreement, an evaluation of this provision will be based on the time elapsed through the termination date.

XII. EVALUATION OF THE DEMONSTRATION

69. Cooperation with Federal Evaluators. As required under 42 CFR 431.420(f), the state shall cooperate fully and timely with CMS and its contractors' in any federal evaluation of the demonstration or any component of the demonstration. This includes, but is not limited to, commenting on design and other federal evaluation documents and providing data and analytic files to CMS, including entering into a data use agreement that explains how the data

and data files will be exchanged, and providing a technical point of contact to support specification of the data and files to be disclosed, as well as relevant data dictionaries and record layouts. The state shall include in its contracts with entities who collect, produce or maintain data and files for the demonstration, that they shall make such data available for the federal evaluation as is required under 42 CFR 431.420(f) to support federal evaluation. The state may claim administrative match for these activities. Failure to comply with this STC may result in a deferral being issued as outlined in STC 38.

70. Independent Evaluator. Upon approval of the demonstration, the state must begin to arrange with an independent party to conduct an evaluation of the demonstration to ensure that the necessary data is collected at the level of detail needed to research the approved hypotheses. The independent party must sign an agreement to conduct the demonstration evaluation in an independent manner in accord with the CMS-approved, draft Evaluation Design. When conducting analyses and developing the evaluation reports, every effort should be made to follow the approved methodology. However, the state may request, and CMS may agree to, changes in the methodology in appropriate circumstances.

71. Draft Evaluation Design. The state must submit, for CMS comment and approval, a draft Evaluation Design, no later than 180 days after approval of the demonstration. Any modifications to an existing approved Evaluation Design will not affect previously established requirements and timelines for report submission for the demonstration, if applicable.

The draft Evaluation Design must be developed in accordance with the following CMS guidance (including but not limited to):

a. All applicable Community Engagement evaluation design guidance provided by CMS.

b. Attachment D (Developing the Evaluation Design) of these STCs, technical assistance for developing SUD evaluation designs (as applicable, and as provided by CMS), and all applicable technical assistance on how to establish comparison groups to develop a draft evaluation design.

72. Evaluation Design Approval and Updates. The state must submit a revised draft Evaluation Design within sixty (60) days after receipt of CMS' comments. Upon CMS approval of the draft Evaluation Design, the document will be included as an attachment to these STCs. Per 42 CFR 431.424(c), the state will publish the approved Evaluation Design within thirty (30) days of CMS approval. The state must implement the evaluation design and submit a description of its evaluation implementation progress in each of the Monitoring Reports, including any required Rapid Cycle Assessments specified in these STCs. Once CMS approves the evaluation design, if the state wishes to make changes, the state must submit a revised evaluation design to CMS for approval.

73. Evaluation Questions and Hypotheses. Consistent with Attachments D and E (Developing the Evaluation Design and Preparing the Evaluation Report) of these STCs, the evaluation documents must include a discussion of the evaluation questions and hypotheses that the state intends to test. Each demonstration component should have at least one evaluation question and hypothesis. The hypothesis testing should include, where possible, assessment

of both process and outcome measures. Proposed measures should be selected from nationally-recognized sources and national measures sets, where possible. Measures sets could include CMS's Core Set of Health Care Quality Measures for Children in Medicaid and CHIP, CMS' measure sets for eligibility and coverage (including community engagement), Consumer Assessment of Health Care Providers and Systems (CAHPS), the Initial Core Set of Health Care Quality Measures for Medicaid-Eligible Adults and/or measures endorsed by National Quality Forum (NQF).

74. **Evaluation Budget.** A budget for the evaluation shall be provided with the draft Evaluation Design. It will include the total estimated cost, as well as a breakdown of estimated staff, administrative, and other costs for all aspects of the evaluation such as any survey and measurement development, quantitative and qualitative data collection and cleaning, analyses, and report generation. A justification of the costs may be required by CMS if the estimates provided do not appear to sufficiently cover the costs of the design or if CMS finds that the design is not sufficiently developed, or if the estimates appear to be excessive.

75. **Interim Evaluation Report.** The state must submit an Interim Evaluation Report for the completed years of the demonstration, and for each subsequent renewal or extension of the demonstration, as outlined in 42 CFR 431.412(c)(2)(vi). When submitting an application for renewal, the Evaluation Report should be posted to the state's website with the application for public comment.

    a. The interim evaluation report will discuss evaluation progress and present findings to date as per the approved evaluation design.

    b. For demonstration authority that expires prior to the overall demonstration's expiration date, the Interim Evaluation Report must include an evaluation of the authority as approved by CMS.

    c. If the state is seeking to renew or extend the demonstration, the draft Interim Evaluation Report is due when the application for renewal is submitted. If the state made changes to the demonstration in its application for renewal, the research questions and hypotheses, and how the design was adapted should be included. If the state is not requesting a renewal for a demonstration, an Interim Evaluation report is due one (1) year prior to the end of the demonstration. For demonstration phase outs prior to the expiration of the approval period, the draft Interim Evaluation Report is due to CMS on the date that will be specified in the notice of termination or suspension.

    d. The state must submit the final Interim Evaluation Report 60 days after receiving CMS comments on the draft Interim Evaluation Report and post the document to the state's website.

    e. The Interim Evaluation Report must comply with Attachment E (Preparing the Evaluation Report) of these STCs.

76. **Summative Evaluation Report.** The draft Summative Evaluation Report must be developed in accordance with Attachment E (Preparing the Evaluation Report) of these STCs. The state must submit a draft Summative Evaluation Report for the demonstration's

current approval period within 18 months of the end of the approval period represented by these STCs. The Summative Evaluation Report must include the information in the approved Evaluation Design.

a. Unless otherwise agreed upon in writing by CMS, the state shall submit the final Summative Evaluation Report within 60 days of receiving comments from CMS on the draft.

b. The final Summative Evaluation Report must be posted to the state's Medicaid website within 30 days of approval by CMS.

77. Corrective Action Plan Related to Evaluation. If evaluation findings indicate that demonstration features are not likely to assist in promoting the objectives of Medicaid, CMS reserves the right to require the state to submit a corrective action plan to CMS for approval. These discussions may also occur as part of a renewal process when associated with the state's interim evaluation report. This may be an interim step to withdrawing waivers or expenditure authorities, as outlined in STC 11.

78. State Presentations for CMS. CMS reserves the right to request that the state present and participate in a discussion with CMS on the Evaluation Design, the interim evaluation, and/or the summative evaluation.

79. Public Access. The state shall post the final documents (e.g., Monitoring Reports, Close Out Report, Approved Evaluation Design, Interim Evaluation Report, and Summative Evaluation Report) on the state's Medicaid website within 30 days of approval by CMS.

80. Additional Publications and Presentations. For a period of twelve (12) months following CMS approval of the final reports, CMS will be notified prior to presentation of these reports or their findings, including in related publications (including, for example, journal articles), by the state, contractor, or any other third party directly connected to the demonstration over which the state has control. Prior to release of these reports, articles, or other publications, CMS will be provided a copy including any associated press materials. CMS will be given ten (10) business days to review and comment on publications before they are released. CMS may choose to decline to comment or review some or all of these notifications and reviews. This requirement does not apply to the release or presentation of these materials to state or local government officials.

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services

Administrator
Washington, DC 20201

April 6, 2021

Jim Jones
Medicaid Director
Division of Medicaid Services, Department of Health Services
1 West Wilson Street, Room 350
Madison, WI 53702

Dear Mr. Jones:

On February 12, 2021, the Centers for Medicare & Medicaid Services (CMS) sent you a letter regarding the October 31, 2018 extension of the section 1115 demonstration project entitled "BadgerCare Reform" (Project Number 11-W-00293/5). The letter advised that CMS would commence a process of determining whether or not to withdraw the authorities previously approved in the BadgerCare Reform demonstration that permit the state to require work and other community engagement activities as a condition of continued Medicaid eligibility through the demonstration. It explained that in light of the ongoing disruptions caused by the COVID-19 pandemic, Wisconsin's community engagement requirement risks significant coverage losses and harm to beneficiaries. For the reasons discussed below, CMS is now withdrawing approval of the community engagement requirement in the October 31, 2018 extension of the BadgerCare Reform demonstration, which is not currently in effect and which would have expired by its terms on December 31, 2023.

Section 1115 of the Social Security Act (the Act) provides that the Secretary of Health and Human Services (HHS) may approve any experimental, pilot, or demonstration project that, in the judgment of the Secretary, is likely to assist in promoting the objectives of certain programs under the Act. In so doing, the Secretary may waive Medicaid program requirements of section 1902 of the Act, and approve federal matching funds per section 1115(a)(2) for state spending on costs not otherwise matchable under section 1903 of the Act, which permits federal matching payments only for "medical assistance" and specified administrative expenses.[1] Under section 1115 authority, the Secretary can allow states to undertake projects to test changes in Medicaid eligibility, benefits, delivery systems, and other areas across their Medicaid programs that the Secretary determines are likely to promote the statutory objectives of Medicaid.

As stated in the above referenced letter sent on February 12, 2021, under section 1115 and its implementing regulations, CMS has the authority and responsibility to maintain continued oversight of demonstration projects in order to ensure that they are currently likely to assist in promoting the objectives of Medicaid. CMS may withdraw waivers or expenditure authorities if it "find[s] that [a] demonstration project is not likely to achieve the statutory purposes." 42 C.F.R. § 431.420(d); see 42 U.S.C. § 1315(d)(2)(D).

As the February 12, 2021 letter explained, the BadgerCare Reform community engagement requirement is not in effect. Although the amendment and extension was approved in October

[1] 42 U.S.C. § 1315.

2018, the state has not yet implemented the community engagement requirement. Since that time, the COVID-19 pandemic and its expected aftermath have made the BadgerCare Reform community engagement requirement infeasible. In addition, implementation of the community engagement requirement is currently prohibited by the Families First Coronavirus Response Act (FFCRA), Pub. L. No. 116-127, Div. F, § 6008(a) and (b), 134 Stat. 208 (2020), which conditioned a state's receipt of an increase in federal Medicaid funding during the pandemic on the state's maintenance of certain existing Medicaid parameters. Wisconsin has chosen to claim the 6.2 percentage point FFCRA Federal Medical Assistance Percentage (FMAP) increase, and therefore, while it does so, must maintain the enrollment of beneficiaries who were enrolled as of, or after, March 18, 2020.

The February 12, 2021 letter noted that, although the FFCRA's bar on disenrolling such beneficiaries will expire after the COVID-19 public health emergency ends, CMS still has serious concerns about testing policies that create a risk of substantial loss of health care coverage and harm to beneficiaries even after the expiration of the bar on disenrolling beneficiaries. The COVID-19 pandemic has had a significant impact on the health of Medicaid beneficiaries. Uncertainty regarding the current crisis and the pandemic's aftermath, and the potential impact on economic opportunities (including job skills training, work and other activities used to satisfy the community engagement requirement, i.e., work and other similar activities), and access to transportation and affordable child care, have greatly increased the risk that implementation of the community engagement requirement approved in this demonstration will result in substantial coverage loss. In addition, the uncertainty regarding the lingering health consequences of COVID-19 infections further exacerbates the harms of coverage loss for Medicaid beneficiaries.

Accordingly, the February 12, 2021 letter indicated that, taking into account the totality of circumstances, CMS had preliminarily determined that allowing the community engagement requirement to take effect in Wisconsin would not promote the objectives of the Medicaid program. Therefore, CMS provided the state notice that we were commencing a process of determining whether to withdraw the authorities approved in the BadgerCare Reform demonstration that permit the state to require work and other community engagement activities as a condition of Medicaid eligibility through the demonstration. See Special Terms and Conditions ¶ 11. The letter explained that if CMS ultimately determined to withdraw those authorities, it would "promptly notify the state in writing of the determination and the reasons for the amendment and withdrawal, together with the effective date, and afford the state an opportunity to request a hearing to challenge CMS's determination prior to the effective date." *Id*. The February 12, 2021 letter indicated that, if the state wished to submit to CMS any additional information that in the state's view may warrant not withdrawing those authorities, such information should be submitted to CMS within 30 days. We have not received any additional information from Wisconsin in response to the February 12, 2021 letter.

In light of these concerns, for the reasons set forth below, CMS has determined that, on balance, the authorities that permit Wisconsin to require work and community engagement as a condition of eligibility are not likely to promote the objectives of the Medicaid statute. Therefore, we are withdrawing the community engagement authorities that were added in the Secretary's October 31, 2018 extension approval of the BadgerCare Reform demonstration.

Background of Wisconsin's Demonstration

The BadgerCare Reform demonstration was originally approved by CMS on December 30, 2013. Wisconsin has not adopted the Affordable Care Act (ACA) new adult group population (beneficiaries authorized under 1902(a)(10)(a)(i)(VIII) of the Act), but the 2014 approval of the BadgerCare Reform section 1115 demonstration expanded coverage to a childless adult population through expenditure authority under section 1115(a)(2) of the Act. The BadgerCare Reform demonstration primarily provides authority for the state to provide most Medicaid state plan benefits to non-pregnant, non-disabled, non-elderly childless adults with incomes of up to and including 100 percent of the federal poverty level (FPL).

On October 31, 2018, CMS approved an amendment as part of the demonstration extension requiring most of the childless adult beneficiaries, ages 19 to 49, with certain exceptions, to participate in and timely document and report 80 hours per month of community engagement activities, such as employment, job skills training, or community service, as a condition of continued Medicaid eligibility. Failure to comply with the requirement for 48 cumulative months (or qualify for an exemption) would result in disenrollment from the demonstration and the individual would be locked out of re-enrollment for six months (unless eligible during the six-month period under a different Medicaid eligibility group). After completing the six-month lockout period, the individual would be eligible to reapply for coverage in the childless adult demonstration population, if otherwise still eligible.

Early Experience from the Implementation of Community Engagement Requirements through Medicaid Section 1115 Demonstrations in Other States

The community engagement requirement under the BadgerCare Reform demonstration has never been implemented due to delays initiated by the state prior to the COVID-19 pandemic,[2,3] and subsequently because of the pandemic. A Medicaid and CHIP Payment and Access Commission (MACPAC) Issue Brief from June 2020 indicated that Wisconsin had not yet specified how it would track and verify beneficiary compliance with the community engagement requirement, or exemptions from it, in any public documents,[4] and this information was not provided in the state's preliminary draft implementation plan submitted to CMS.

Although the demonstration's community engagement requirement was never implemented, data suggest that there is a relatively small minority of beneficiaries who would have been subjected to the community engagement requirement. According to research from the Kaiser Family Foundation using the Current Population Survey (CPS) data,[5] in Wisconsin, 75 percent (63

[2] The Associated Press. (2020). Wisconsin seeks to delay Medicaid work requirement again. Retrieved from https://apnews.com/article/39766cea4e958a8845738b729a850186

[3] State of Wisconsin Joint Committee on Finance. (2019). 14-Day Passive Review Approval – DHS. Retrieved from https://docs.legis.wisconsin.gov/misc/lfb/jfc/100_section_16_505_16_515_passive_review_requests/2019_10_08_health_services_badgercare_reform_demonstration_project.pdf

[4] MACPAC Issue Brief. (2020). Medicaid Work and Community Engagement Requirements. Medicaid and CHIP Payment and Access Commission. Retrieved from https://www.macpac.gov/wp-content/uploads/2019/10/Medicaid-Work-and-Community-Engagement-Requirements.pdf

[5] Garfield, R., Rudowitz, R., Guth, M. Orgera, K. & Hinton, E. (2021). Work Among Medicaid Adults: Implications of Economic Downturn and Work Requirements. Issue Brief. Kaiser Family Foundation. Retrieved from

percent nationally) of Medicaid beneficiaries aged 19 to 64 without Supplemental Security Income (SSI) in 2019 were working, and of those who were not working in Wisconsin, 32 percent (27 percent nationally) indicated that their reason for not working was due to illness or disability. While data for Wisconsin were too limited to be conclusive, more than half of Medicaid beneficiaries not working nationally indicated they were caretaking or attending school. Under Wisconsin's community engagement requirement, illness, disability, educational activities, and caregiving are qualifying exemptions. Accordingly, these data suggest that the vast majority of beneficiaries who could be subject to Wisconsin's community engagement requirement but were not working would have been otherwise exempt from the requirement. Thus, if implemented, there would be little margin for the program to increase work or community engagement in Wisconsin.

This is consistent with research indicating more generally that most Medicaid beneficiaries are already working or are likely to be exempt from a potential community engagement requirement.[6,7,8,9] For example, the Kaiser Family Foundation found that 81 percent of adults with Medicaid coverage live in families with a working adult, and 6 in 10 are working themselves.[10] Similarly, a study published in 2017 reported that, out of the 22 million adults covered by Medicaid nationwide (representing 58 percent of all adults on Medicaid) who could be subject to a community engagement requirement designed like that in the BadgerCare Reform demonstration, 50 percent were already working, 14 percent were looking for work, and 36 percent were neither working nor looking for work.[11] For those beneficiaries not working or looking for work, 29 percent indicated that they were caring for a family member, 17 percent were in school, and 33 percent noted that they could not work because of a disability (despite excluding from analysis those qualifying for Medicaid on the basis of disability, highlighting the difficulty with disability determination), with the remainder citing layoff, retirement, or a temporary health problem.

Thus, overall, prior to the pandemic, the available data indicated that the substantial majority of the population that would be targeted by a community engagement requirement in Wisconsin's

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https://www.kff.org/coronavirus-covid-19/issue-brief/work-among-medicaid-adults-implications-of-economic-downturn-and-work-requirements/

[6] Garfield, R., Rudowitz, R., Guth, M. Orgera, K. & Hinton, E. (2021). Work Among Medicaid Adults: Implications of Economic Downturn and Work Requirements. Issue Brief. Kaiser Family Foundation. Retrieved from https://www.kff.org/coronavirus-covid-19/issue-brief/work-among-medicaid-adults-implications-of-economic-downturn-and-work-requirements/

[7] Huberfeld, N. (2018). Can work be required in the Medicaid program? N Engl J Med;378:788-791. DOI: 10.1056/NEJMp1800549

[8] Goldman, A.L., Woolhandler, S, Himmelstein, D.U., Bor, D.H. & McCormick, D. (2018). Analysis of work requirement exemptions and Medicaid spending. JAMA Intern Med, 178:1549-1552. DOI:10.1001/jamainternmed.2018.4194

[9] Solomon, J. (2019). Medicaid Work Requirements Can't Be Fixed: Unintended Consequences are Inevitable Result. Center of Budget and Policy Priorities. Retrieved from https://www.cbpp.org/research/health/medicaid-work-requirements-cant-be-fixed

[10] Garfield, R., Rudowitz, R., Guth, M. Orgera, K. & Hinton, E. (2021). Work Among Medicaid Adults: Implications of Economic Downturn and Work Requirements. Issue Brief. Kaiser Family Foundation. Retrieved from https://www.kff.org/coronavirus-covid-19/issue-brief/work-among-medicaid-adults-implications-of-economic-downturn-and-work-requirements/

[11] Leighton Ku, L & Brantley, E. (2017). Medicaid Work Requirements: Who's At Risk? Health Affairs Blog. Retrieved from https://www.healthaffairs.org/do/10.1377/hblog20170412.059575/full/

demonstration were already meeting the terms of the community engagement requirement or would qualify for an exemption from it. This makes it challenging for community engagement requirements to produce any meaningful impact on employment outcomes by incentivizing behavioral changes in a small fraction of beneficiaries, all the while risking substantial coverage losses among those subject to the requirements.

Arkansas, Michigan, and New Hampshire, three states where a community engagement requirement as a condition of Medicaid eligibility was in effect, provide some early evidence on potential enrollment impacts.[12,13] Experience from these states indicates that large portions of the beneficiaries subjected to these states' community engagement requirements failed to comply with the community engagement reporting requirements or became disenrolled once the requirements were implemented. In Arkansas, for instance, before the court halted the community engagement requirement, the state reported that from August 2018 through December 2018, 18,164 individuals were disenrolled from coverage for "noncompliance with the work requirement."[14] During these five months, the monthly rate of coverage loss as a percentage of those who were required to report work and community engagement activities fluctuated between 20 and 47 percent.[15] In New Hampshire, almost 17,000 beneficiaries (about 40 percent of those subject to the requirement) were set to be suspended for non-compliance with the requirement and lose Medicaid coverage within the span of just over a month when that state's community engagement requirement was in effect.[16,17,18] Based on that early data, another study projected that between 30 and 45 percent of New Hampshire beneficiaries subject to the community engagement requirement would have been disenrolled within the first year of implementation.[19] And in Michigan, before the policy was vacated by the courts, 80,000

[12] Utah and Indiana also briefly implemented the community engagement requirement that was part of these states' section 1115 demonstrations, but the program designs in these states did not require beneficiaries subject to the community engagement requirement to comply with reporting minimum-hours requirement within the period the requirement was in effect in each state.

[13] Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, Washington, DC. (2021). Issue Brief No. HP-2021-03, Medicaid Demonstrations and Impacts on Health Coverage: A Review of the Evidence. Retrieved from https://aspe.hhs.gov/pdf-report/medicaid-demonstrations-andimpacts

[14] Arkansas Department of Human Services (DHS). (2018 & 2019). Arkansas Works Section 1115 Demonstration Annual Reports. Retrieved from https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ar/Health-Care-Independence-Program-Private-Option/ar-works-annl-rpt-jan-dec-2018.pdf; https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/ar-works-annl-rpt-jan-dec-2019.pdf

[15] Arkansas Department of Human Services (DHS). (2018). Arkansas Works Section 1115 Demonstration Annual Report: January 1, 2018 – December 31, 2018. Retrieved from https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ar/Health-Care-Independence-Program-Private-Option/ar-works-annl-rpt-jan-dec-2018.pdf

[16] Wagner, J., & Schubel, J. (2020). States' experiences confirming harmful effects of Medicaid work requirements. Center on Budget and Policy Priorities. Retrieved from https://www.cbpp.org/research/health/states-experiences-confirm-harmful-effects-of-medicaid-work-requirements

[17] New Hampshire Department of Health and Human Services. (2019). DHHS Community Engagement Report: June 2019. Retrieved from https://www.dhhs.nh.gov/medicaid/granite/documents/ga-ce-report-062019.pdf

[18] Hill, I., Burroughs, E., & Adams, G. (2020). New Hampshire's Experience with Medicaid Work Requirements: New Strategies, Similar Results. Urban Institute. Retrieved from https://www.urban.org/research/publication/new-hampshires-experiences-medicaid-work-requirements-new-strategies-similar-results

[19] The Commonwealth Fund Blog. (2019). New Hampshire's Medicaid Work Requirements Could Cause More Than 15,000 to Lose Coverage. Retrieved from https://www.commonwealthfund.org/blog/2019/new-hampshires-medicaid-work-requirements-could-cause-coverage-loss

beneficiaries—representing nearly 33 percent of individuals subject to the community engagement requirement—were at risk of suspension, if not loss of coverage, for failing to report compliance with the community engagement requirement.[20]

Despite state assurances in the demonstration's Special Terms and Conditions that Wisconsin would provide the necessary outreach to Medicaid beneficiaries, experience from other states with similar community engagement requirements shows that despite similar assurances, lack of awareness of and administrative barriers associated with community engagement requirements create serious challenges for beneficiaries, which could result in significant coverage losses.[21] In fact, there was evidence of widespread confusion and lack of awareness among demonstration beneficiaries regarding the community engagement requirements[22] in the states where the requirements were implemented. For example, many beneficiaries in New Hampshire reportedly did not know about the community engagement reporting requirement or received confusing and often contradictory notices about whether they were subject to the requirement.[23,24] Moreover, in Arkansas, Michigan, and New Hampshire, evidence suggests that even individuals who were working or those who had serious health needs, and therefore should have been eligible for exemptions, lost coverage or were at risk of losing coverage because of complicated administrative and paperwork requirements.[25] Beneficiaries also reported barriers to obtaining exemptions from the community engagement requirement. For example, beneficiaries with physical and behavioral health conditions reported that their providers were resistant to signing forms needed to establish that the beneficiary was unable to work so that the beneficiary could qualify for an exemption.[26]

Losing health care coverage undoubtedly has negative consequences for affected beneficiaries down the road. For example, according to Sommers et al. (2020), in Arkansas, those ages 30–49 who had lost Medicaid or Marketplace coverage in the prior year experienced significantly higher medical debt and financial barriers to care, compared to similar Arkansans who

[20] Wagner, J., & Schubel, J. (2020). States' Experiences Confirm Harmful Effects of Medicaid Work Requirements. Center on Budget and Policy Priorities. Retrieved from https://www.cbpp.org/research/health/states-experiences-confirm-harmful-effects-of-medicaid-work-requirements

[21] Margo Sanger-Katz. (2018). Hate Paperwork? Medicaid Recipients Will Be Drowning in It. New York Times. Retrieved from https://www.nytimes.com/2018/01/18/upshot/medicaid-enrollment-obstacles-kentucky-work-requirement.html.

[22] Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, Washington, DC. (2021). Issue Brief No. HP-2021-03, Medicaid Demonstrations and Impacts on Health Coverage: A Review of the Evidence. Retrieved from https://aspe.hhs.gov/pdf-report/medicaid-demonstrations-andimpacts.

[23] Solomon, D. (2019). Spreading the Word on Medicaid Work Requirement Proves Challenging. Union Leader. Retrieved from https://www.unionleader.com/news/health/spreading-the-word-on-medicaid-work-requirement-proves-challenging/article_740b99e7-9f48-52d4-b2d8-030167e66af8.html

[24] Moon, J. (2019). Confusing Letters, Frustrated Members: N.H.'s Medicaid Work Requirement Takes Effect. New Hampshire Public Radio. Retrieved from https://www.nhpr.org/post/confusing-letters-frustrated-members-nhs-medicaid-work-requirement-takes-effect#stream/0

[25] Wagner, J., & Schubel, J. (2020). States' Experiences Confirm Harmful Effects of Medicaid Work Requirements. Center on Budget and Policy Priorities. Retrieved from https://www.cbpp.org/research/health/states-experiences-confirm-harmful-effects-of-medicaid-work-requirements

[26] Hill, I., Burroughs, E., & Adams, G. (2020). New Hampshire's Experience with Medicaid Work Requirements: New Strategies, Similar Results. Urban Institute. Retrieved from https://www.urban.org/research/publication/new-hampshires-experiences-medicaid-work-requirements-new-strategies-similar-results

maintained coverage.[27] Specifically, 50 percent of Arkansans affected by disenrollment in that age group reported serious problems paying off medical bills; 56 percent delayed seeking health care and 64 percent delayed taking medications because of cost considerations.[28] These rates were all significantly higher than among individuals who retained coverage in Medicaid or Marketplace all year. Evidence also indicates that those with chronic conditions were more likely to lose coverage,[29] which could lead to worse health outcomes in the future.

In all states, consistent and stable employment is often out of reach for beneficiaries who might be subject to a community engagement requirement. Many low-income beneficiaries face a challenging job market, which often offers only unstable or low-paying jobs with unpredictable or irregular hours, sometimes resulting in spells of unemployment, particularly in seasonal work.[30,31,32] The Wisconsin BadgerCare Reform demonstration's rigid requirement for reporting 80 or more hours every month is a concern even for low-income adults who are working. For example, 46 percent of this group nationally, as well as 25 percent of those working as many as 1,000 hours during a year (which would be sufficient for meeting the 80-hour monthly requirement) could be at risk of losing coverage for one or more months because they would not meet the 80-hour minimum requirement in every month.[33,34]

Furthermore, research examining the outcomes of statutorily authorized work requirements in other public assistance programs, such as Temporary Assistance for Needy Families (TANF) and Supplemental Nutrition Assistance Program (SNAP) indicates that such requirements generally have only modest and temporary effects on employment, failing to increase long-term

[27] Sommers, B.D., Chen, L., Blendon, R.J., Orav, E.J., & Epstein, A.M. (2020). Medicaid Work Requirements in Arkansas: Two-Year Impacts on Coverage, Employment, and Affordability of Care. Health Affairs, 39(9), 1522-1530. Retrieved from https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2020.00538

[28] Sommers, B.D., Chen, L., Blendon, R.J., Orav, E.J., & Epstein, A.M. (2020). Medicaid Work Requirements in Arkansas: Two-Year Impacts on Coverage, Employment, and Affordability of Care. Health Affairs, 39(9), 1522-1530. Retrieved from https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2020.00538

[29] Chen, L. & Sommers, B.D. (2020). Work Requirements and Medicaid Disenrollment in Arkansas, Kentucky, Louisiana, and Texas, 2018. American Journal of Public Health, 110, 1208-1210. DOI https://doi.org/10.2105/AJPH.2020.305697

[30] Butcher, K. & Schanzenbach, D. (2018). Most Workers in Low-Wage Labor Market Work Substantial Hours, in Volatile Jobs. Center on Budget and Policy Priorities. Retrieved from https://www.cbpp.org/research/poverty-and-inequality/most-workers-in-low-wage-labor-market-work-substantial-hours-in

[31] Center on Budget and Policy Priorities. (2020). Taking Away Medicaid for Not Meeting Work Requirements Harms Low-Wage Workers. Retrieved from https://www.cbpp.org/research/health/taking-away-medicaid-for-not-meeting-work-requirements-harms-low-wage-workers

[32] Gangopadhyaya, A., Johnston, E., Kenney, G. & Zuckerman, S. (2018). Kentucky Medicaid Work Requirements: What Are the Coverage Risks for Working Enrollees? Urban Institute. Retrieved from https://www.urban.org/sites/default/files/publication/98893/2001948_kentucky-medicaid-work-requirements-what-are-the-coverage-risks-for-working-enrollees.pdf

[33] Solomon, J. (2019). Medicaid Work Requirements Can't Be Fixed: Unintended Consequences are Inevitable Result. Center of Budget and Policy Priorities. Retrieved from https://www.cbpp.org/research/health/medicaid-work-requirements-cant-be-fixed

[34] Aron-Dine, A., Chaudhry, R. & Broaddus, M. (2018). Many Working People Could Lose Health Coverage Due to Medicaid Work Requirements. Retrieved from https://www.cbpp.org/research/health/many-working-people-could-lose-health-coverage-due-to-medicaid-work-requirements

employment or reduce poverty.[35,36,37] Additionally, studies have found that imposing work requirements in the SNAP program led to substantial reductions in enrollment, even after controlling for changes in unemployment and poverty levels.[38] In fact, evidence suggests that there were large and rapid caseload losses in selected areas after SNAP work requirements went into effect, similar to what early data from Arkansas show, and what appeared would likely to happen in New Hampshire and Michigan after these states began implementing community engagement requirements, if those states' community engagement requirements had been implemented long enough to reach the scheduled suspensions or disenrollments.

Therefore, existing evidence from states that have implemented community engagement requirements through Medicaid demonstrations, evidence from other public programs with work requirements, and the overall work patterns and job market opportunities for the low-income adults who would be subject to such requirements all highlight the potential ineffectiveness of community engagement requirements at impacting employment outcomes for the target population. And while there are variations in the design and implementation of community engagement requirements in each state that has implemented such a requirement, as well as differences in employment and economic opportunities, findings from the states that implemented community engagement requirements point in the general direction of coverage losses among individuals subject to such requirements.

Thus, CMS is not aware of any reason to expect that the community engagement requirement as a condition of eligibility in Wisconsin's Medicaid demonstration project would have a different outcome in the future than what was observed during the initial implementation of such a requirement in other states. Accordingly, there is risk that Wisconsin's demonstration project, as extended and amended in October 2018, will lead to substantial coverage losses, a risk that is exacerbated by the ongoing COVID-19 public health emergency and its likely aftermath.

Impact of COVID-19 and its Aftermath

The COVID-19 pandemic and the uncertainty surrounding the long-term effects on economic activity and opportunities across the nation exacerbate the risks associated with tying a community engagement requirement to eligibility, making Wisconsin's community engagement requirement infeasible under the current circumstances. There is a substantial risk that the COVID-19 pandemic and its aftermath will have a negative impact on economic opportunities

[35] Katch, H., Wagner, J. & Aron-Dine, A. (2018). Taking Medicaid Coverage Away From People Not Meeting Work Requirements Will Reduce Low-Income Families' Access to Care and Worsen Health Outcomes. Center on Budget and Policy Priorities. Retrieved from https://www.cbpp.org/research/health/taking-medicaid-coverage-away-from-people-not-meeting-work-requirements-will-reduce

[36] Danziger, S.K., Danziger, S., Seefeldt, K.S. & Shaefer, H.L. (2016). From Welfare to a Work-Based Safety Net: An Incomplete Transition. Journal of Policy Analysis & Management, 35(1), 231-238. DOI: https://doi.org/10.1002/pam.21880

[37] Pavetti, L. (2016). Work Requirements Don't Cut Poverty, Evidence Shows. Center on Budget and Policy Priorities. Retrieved from https://www.cbpp.org/research/poverty-and-inequality/work-requirements-dont-cut-poverty-evidence-shows

[38] Ku, L., Brantley, E. & Pillai, D. (2019). The Effects of SNAP Work Requirements in Reducing Participation and Benefits From 2013 to 2017. American Journal of Public Health 109(10), 1446-1451. DOI: https://doi.org/10.2105/AJPH.2019.305232. Retrieved from https://ajph.aphapublications.org/doi/10.2105/AJPH.2019.305232

for Medicaid beneficiaries. If employment opportunities are limited, Medicaid beneficiaries may find it difficult to obtain paid work in the aftermath of the COVID-19 pandemic.[39,40] As discussed above, prior to the pandemic, most adult Medicaid beneficiaries who did not face a barrier to work were working full or part-time.[41] However, one in three working adult Medicaid beneficiaries was doing only part-time work prior to the COVID-19 public health emergency, often due to fewer opportunities for full-time employment. The pandemic is expected to only have aggravated the challenges of finding full-time employment, along with causing greater obstacles from lack of childcare options or increased caregiving responsibilities.[42]

Moreover, during the pandemic, the different sectors of the economy have seen disparate levels of disruption, which has affected labor market outcomes for certain populations more than the others. While the national employment rate[43] declined by 10.2 percent from January 2020 to January 2021, employment rates for workers in the bottom wage quartile decreased by a larger percentage than for workers in the highest wage quartile across that time period (28.7 percent vs. 1.7 percent).[44] In Wisconsin, employment rates for low-wage earners (i.e., annual wages under $27,000) declined by 25 percent, compared to virtually no change in employment rates for high-wage earners (i.e., wages above $60,000 per year) from January 2020 to January 2021.[45]

Further, declines in employment have been much higher for Black and Hispanic women and for workers in several low-wage service sectors, such as hospitality and leisure, while workers in other sectors, such as financial services, have seen virtually no change.[46] In April 2020, the estimated unemployment rates (including individuals who were employed but absent from work and those not in the workforce but who wanted employment) for the Black and Hispanic populations were as high as 32 and 31 percent, respectively, compared to 24 percent for the White population.[47] Hispanic populations specifically are more likely to be affected due to their

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[39] Garfield, R., Rudowitz, R., Guth, M., Orgera, K. & Hinton, E. (2021). Work Among Medicaid Adults: Implications of Economic Downturn and Work Requirements. Kaiser Family Foundation. Retrieved from https://www.kff.org/report-section/work-among-medicaid-adults-implications-of-economic-downturn-and-work-requirements-issue-brief/

[40] Gangopadhyaya, A. & Garrett, B. (2020). Unemployment, Health Insurance, and the COVID-19 Recession. Urban Institute. Retrieved from https://www.urban.org/sites/default/files/publication/101946/unemployment-health-insurance-and-the-covid-19-recession_1.pdf

[41] Garfield, R., Rudowitz, R., Guth, M., Orgera, K. & Hinton, E. (2021). Work Among Medicaid Adults: Implications of Economic Downturn and Work Requirements. Kaiser Family Foundation. Retrieved from https://www.kff.org/report-section/work-among-medicaid-adults-implications-of-economic-downturn-and-work-requirements-issue-brief/

[42] Garfield, R., Rudowitz, R., Guth, M., Orgera, K. & Hinton, E. (2021). Work Among Medicaid Adults: Implications of Economic Downturn and Work Requirements. Kaiser Family Foundation. Retrieved from https://www.kff.org/report-section/work-among-medicaid-adults-implications-of-economic-downturn-and-work-requirements-issue-brief/

[43] Not seasonally adjusted.

[44] Opportunity Insights: Economic Tracker. (2021). Percent Change in Employment. Retrieved from www.tracktherecovery.org

[45] Opportunity Insights: Economic Tracker. (2021). Percent Change in Employment. Retrieved from www.tracktherecovery.org

[46] Rouse, C. (2021). The Employment Situation in February. The White House Briefing Room. Retrieved from https://www.whitehouse.gov/briefing-room/blog/2021/03/05/the-employment-situation-in-february/

[47] Fairlie, R., Couch, K. & Xu, H. (2020). The Impacts of COVID-19 on Minority Unemployment: First Evidence from April 2020 CPS Microdata. National Bureau of Economic Research. Retrieved from https://www.nber.org/system/files/working_papers/w27246/w27246.pdf

disproportionate representation in industries such as hospitality and construction, which have been most affected by the pandemic-related layoffs.[48,49,50]

Moreover, pandemic-related job and income losses have been more acute among the low-income population—those with the least wherewithal to withstand economic shocks, and who are disproportionately enrolled in Medicaid.[51] In fact, 52 percent of lower income adults (annual income below $37,500) live in households where someone has lost a job or taken a pay cut due to the pandemic.[52] Understandably, households with a job or income loss were two–to-three times more likely to experience economic hardship than those who did not experience such a loss.[53,54] Fifty-nine percent of lower-income adults said they worry every day or almost every day about paying their bills.[55] There are also racial and ethnic disparities in the likelihood of reporting hardships; for example, compared to White households, Black households reported significantly higher chances of putting off filling prescriptions and difficulties making housing and other bill payments. Also, Hispanic households were more likely to experience food insecurity compared to White households.[56,57]

Existing disparities in access to computers and reliable internet may also exacerbate issues in finding and maintaining employment during the pandemic. For example, 29 percent of adults in households with annual incomes below $30,000 did not own a smartphone, and 44 percent did

[48] Garfield, R., Rudowitz, R., Guth, M., Orgera, K. & Hinton, E. (2021). Work Among Medicaid Adults: Implications of Economic Downturn and Work Requirements. Kaiser Family Foundation. Retrieved from https://www.kff.org/report-section/work-among-medicaid-adults-implications-of-economic-downturn-and-work-requirements-issue-brief/

[49] Industries like health care and transportation have been less affected by the pandemic, and that has provided some cushion for black workers. See Despard et al. (2020).

[50] Krogstad, J.M., Gonzalez-Barrera, A. & Noe-Bustamante, L. (2020). U.S. Latinos among hardest hit by pay cuts, job losses due to coronavirus. Pew Research Center. Retrieved from https://www.pewresearch.org/fact-tank/2020/04/03/u-s-latinos-among-hardest-hit-by-pay-cuts-job-losses-due-to-coronavirus/

[51] Despard, M., Weiss-Grinstein, M., Chun, Y. & Roll, S. (2020). COVID-19 Job and Income Loss Leading to More Hunger and Financial Hardship. Brookings Institution. Retrieved from https://www.brookings.edu/blog/up-front/2020/07/13/covid-19-job-and-income-loss-leading-to-more-hunger-and-financial-hardship/

[52] Parker, K., Horowitz, J.M., & Brown, A. (2020). About Half of Lower-Income Americans Report Household Job or Wage Loss Due to COVID-19. Pew Research Center. Retrieved from https://www.pewresearch.org/social-trends/2020/04/21/about-half-of-lower-income-americans-report-household-job-or-wage-loss-due-to-covid-19/

[53] Despard, M., Weiss-Grinstein, M., Chun, Y. & Roll, S. (2020). COVID-19 Job and Income Loss Leading to More Hunger and Financial Hardship. Brookings Institution. Retrieved from https://www.brookings.edu/blog/up-front/2020/07/13/covid-19-job-and-income-loss-leading-to-more-hunger-and-financial-hardship/

[54] Gangopadhyaya, A. & Garrett, B. (2020). Unemployment, Health Insurance, and the COVID-19 Recession. Urban Institute. Retrieved from https://www.urban.org/sites/default/files/publication/101946/unemployment-health-insurance-and-the-covid-19-recession_1.pdf

[55] Parker, K., Horowitz, J.M., & Brown, A. (2020). About Half of Lower-Income Americans Report Household Job or Wage Loss Due to COVID-19. Pew Research Center. Retrieved from https://www.pewresearch.org/social-trends/2020/04/21/about-half-of-lower-income-americans-report-household-job-or-wage-loss-due-to-covid-19/

[56] Despard, M., Weiss-Grinstein, M., Chun, Y. & Roll, S. (2020). COVID-19 Job and Income Loss Leading to More Hunger and Financial Hardship. Brookings Institution. Retrieved from https://www.brookings.edu/blog/up-front/2020/07/13/covid-19-job-and-income-loss-leading-to-more-hunger-and-financial-hardship/

[57] Gangopadhyaya, A. & Garrett, B. (2020). Unemployment, Health Insurance, and the COVID-19 Recession. Urban Institute. Retrieved from https://www.urban.org/sites/default/files/publication/101946/unemployment-health-insurance-and-the-covid-19-recession_1.pdf

not have home broadband services in 2019.[58] Moreover, fewer than 8 percent of Americans with earnings below the 25th percentile have the capabilities to work remotely.[59] These disparities will result in fewer opportunities for beneficiaries to satisfy a community engagement requirement, particularly as more jobs have shifted to telework or "work from home" during the public health emergency. Therefore, implementation of the community engagement requirement approved in this demonstration increases the risk of coverage loss for these low-income individuals.[60,61]

The pandemic also has disproportionately impacted the physical and mental health of racial and ethnic minority groups, who already experience disparities in health outcomes. Racial minorities and people living in low-income households are more likely to work in industries that are considered "essential services," which have remained open during the pandemic.[62] Additionally, occupations with more frequent exposure to COVID-19 infections, and that require close proximity to others (such as personal care aides and bus drivers) employ Black individuals at higher rates than White individuals.[63] As a result, Black people may be at higher risk of contracting COVID-19 through their employment. The pandemic's mental health impact also has been pronounced among populations experiencing disproportionately high rates of COVID-19 cases and deaths. Specifically, Black and Hispanic adults have been more likely than White adults to report symptoms of anxiety and/or depressive disorder during the pandemic.[64]

Since the start of the pandemic, individuals have delayed or postponed seeking care, either due to concerns with out-of-pocket expenses or to avoid risk of contact with infected individuals in health care settings. For example, one study showed that screenings for breast, colon, prostate, and lung cancers were between 56 and 85 percent lower in April 2020 than in the previous year.[65] Results of another survey-based study show that 40 percent of respondents canceled

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[58] Anderson, M. & Kumar, M. (2019). Digital Divide Persists Even as Lower-Income Americans Make Gains in Tech Adoption. Pew Research Center. Retrieved from https://www.pewresearch.org/fact-tank/2019/05/07/digital-divide-persists-even-as-lower-income-americans-make-gains-in-tech-adoption/

[59] Maani, N., Galea, S. (2020). COVID-19 and Underinvestment in the Health of the US Population. The Milbank Quarterly. Retrieved from https://www.milbank.org/quarterly/articles/covid-19-and-underinvestment-in-the-health-of-the-us-population/

[60] Garfield, R., Rudowitz, R., Guth, M., Orgera, K. & Hinton, E. (2021). Work Among Medicaid Adults: Implications of Economic Downturn and Work Requirements. Kaiser Family Foundation. Retrieved from https://www.kff.org/report-section/work-among-medicaid-adults-implications-of-economic-downturn-and-work-requirements-issue-brief/

[61] Gangopadhyaya, A. & Garrett, B. (2020). Unemployment, Health Insurance, and the COVID-19 Recession. Urban Institute. Retrieved from https://www.urban.org/sites/default/files/publication/101946/unemployment-health-insurance-and-the-covid-19-recession_1.pdf

[62] Raifman, M.A., & Raifman, J.R. (2020). Disparities in the Population at Risk of Severe Illness From COVID-19 by Race/Ethnicity and Income. American Journal of Preventive Medicine, 59(1), 137–139. https://doi.org/10.1016/j.amepre.2020.04.003

[63] Hawkins, D. (2020). Differential Occupational Risk for COVID-19 and Other Infection Exposure According to Race and Ethnicity. American Journal of Industrial Medicine, 63(9):817-820. DOI: 10.1002/ajim.23145

[64] Panchal, N., Kamal, R., Cox, C. & Garfield, R. (2021). The Implications of COVID-19 for Mental Health and Substance Use. Kaiser Family Foundation. Retrieved from https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/

[65] Patt, D., Gordan, L., Diaz, M., Okon, T., Grady, L., Harmison, M., Markward, N., Sullivan, M., Peng, J., Zhau, A. (2020). Impact of COVID-19 on Cancer Care: How the Pandemic Is Delaying Cancer Diagnosis and Treatment for American Seniors. JCO Clinical Cancer Informatics, 4, 1059-1071. DOI: 10.1200/CCI.20.00134. Retrieved from https://ascopubs.org/doi/full/10.1200/CCI.20.00134

upcoming health care appointments due to the pandemic, and another 12 percent reported they needed care but did not schedule or receive services.[66] These unmet health care needs may lead to substantial increases in subsequent mortality and morbidity.[67] In addition to the health consequences associated with delaying care, pandemic-related delays in seeking care are estimated to increase annual health care costs nationwide by a range of $30 to $65 billion.[68]

The impact of the COVID-19 public health emergency on the economy has been significant, and, importantly, experience with previous recessions suggests the impact is likely to persist for an extended period of time. The unemployment rate went up from 3.5 percent in February 2020, prior to when the pandemic hit, to 14.8 percent in April 2020, and has subsequently fallen to 6.2 percent in February 2021.[69] The labor force participation rate (i.e., the percentage of the civilian noninstitutional population age 16 or older who are working or actively seeking work during the prior month) likewise dipped from 63.3 percent in February 2020 to 60.2 percent in April 2020 only to recover somewhat to 61.4 percent in February 2021.[70] Compared to pre-pandemic conditions, these data suggest that the labor force is still down by approximately 4.24 million individuals.[71]

Evidence shows that losing a job can have significant long term effects on an individual's future earnings. Studies have found that workers who lose their jobs in mass layoffs still earn 20 percent less than similar workers who kept their jobs, 15 to 20 years after the layoff, and the impacts are greater for individuals who lose their jobs during a recession. On average, men lost 2.8 years of pre-layoff earnings when the mass layoff occurred in a time when the unemployment rate was above eight percent.[72] Further, workers who enter the labor market during a recession also face long-term consequences for their earnings.[73] Additionally, non-White individuals and individuals with lower educational attainment have experienced larger and more persistent earning losses than other groups who enter the labor market during recessions.[74]

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[66] McKinsey & Company (2020). Understanding the Hidden Costs of COVID-19's Potential on U.S. Healthcare. Retrieved from https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/understanding-the-hidden-costs-of-covid-19s-potential-impact-on-us-healthcare#

[67] Chen, J. & McGeorge, R. (2020). Spillover Effects Of The COVID-19 Pandemic Could Drive Long-Term Health Consequences For Non-COVID-19 Patients. Health Affairs Blog, DOI: 10.1377/hblog20201020.566558. Retrieved from https://www.healthaffairs.org/do/10.1377/hblog20201020.566558/full/

[68] McKinsey & Company (2020). Understanding the Hidden Costs of COVID-19's Potential on U.S. Healthcare. Retrieved from https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/understanding-the-hidden-costs-of-covid-19s-potential-impact-on-us-healthcare#

[69] U.S. Bureau of Labor Statistics. (2021). Labor Force Statistics from the Current Population Survey. Retrieved from https://www.bls.gov/cps/

[70] U.S. Bureau of Labor Statistics. (2021). Labor Force Statistics from the Current Population Survey. Retrieved from https://www.bls.gov/cps/

[71] U.S. Bureau of Labor Statistics. (2021). Labor Force Statistics from the Current Population Survey. Retrieved from https://www.bls.gov/web/empsit/cpseea08b.pdf

[72] Davis, S.J. & von Wachter, T. (2011). Recessions and the Costs of Job Loss. Brookings Papers on Economic Activity. Retrieved from https://www.brookings.edu/wp-content/uploads/2011/09/2011b_bpea_davis.pdf

[73] Schwandt, H. & von Wachter, T.M. (2018). Unlucky Cohorts: Estimating the Long-term Effects of Entering the Labor Market in a Recession in Large Cross-sectional Data Sets. NBER Working Paper 25141. Retrieved from https://www.nber.org/papers/w25141

[74] Schwandt, H. & von Wachter, T.M. (2018). Unlucky Cohorts: Estimating the Long-term Effects of Entering the Labor Market in a Recession in Large Cross-sectional Data Sets. NBER Working Paper 25141. Retrieved from https://www.nber.org/papers/w25141

Layoffs can also impact an individual's mortality and morbidity risks.[75] For example, workers experienced mortality rates that were 50-100 percent higher than expected in the year after a layoff occurred, and 20 years later, mortality rates remained 10-15 percent higher for these individuals.[76] Furthermore, workers experiencing layoff have reductions in health care utilization, especially among those who lose coverage, which suggests that access to coverage, and continuity of care, could be important in alleviating the long-term ill effects of layoffs on mortality.[77]

In summary, the short-to-long-term adverse implications of the COVID-19 pandemic on the economic opportunities for Medicaid beneficiaries, which have been aggravated further by challenges around shifting childcare and caregiving responsibilities as well as constraints on public transportation during the pandemic, heightens the risks of attaching a community engagement requirement to Medicaid eligibility for continued coverage. In addition, the uncertainty regarding the lingering health complications of COVID-19 infections exacerbates the risk of potential coverage losses for Medicaid beneficiaries. The likely ramifications of losing timely access to necessary health care also can be long lasting. As such, CMS believes that the potential for coverage loss among Medicaid beneficiaries—especially from a requirement that is difficult for beneficiaries to understand and administratively complex for states to implement—would be particularly harmful in the aftermath of the pandemic, and makes the community engagement requirement impracticable.

Withdrawal of Community Engagement Requirement in the October 31, 2018 Extension of the BadgerCare Reform Demonstration

Based on the foregoing, and pursuant to our obligation under section 1115 of the Act to review demonstration projects and ensure they remain likely to promote the objectives of Medicaid, CMS has determined that, on balance, the extension approval authorizing Wisconsin to implement a community engagement requirement as a condition of eligibility is not likely to promote the objectives of the Medicaid program. At a minimum, in light of the significant risks and uncertainties described above about the adverse effects of the pandemic and its aftermath, the information available to CMS does not provide an adequate basis to support an affirmative judgment that the community engagement requirement is likely to assist in promoting the objectives of Medicaid. Accordingly, pursuant to our authority and responsibility under applicable statutes and regulations to maintain ongoing oversight of whether demonstration projects are currently likely to promote those objectives, we are hereby withdrawing approval of that portion of the October 31, 2018 extension that permits the state to require work and community engagement as a condition of eligibility under the BadgerCare Reform

[75] Banks, J., Karjalainen, H. & Propper, C. (2020). Recessions and Health: The Long-Term Health Consequences of Responses to the Coronavirus. Journal of Applied Public Economics. DOI: 10.1111/1475-5890.12230. Retrieved from https://onlinelibrary.wiley.com/doi/full/10.1111/1475-5890.12230

[76] Sullivan, D. & von Wachter, T. (2009). Job Displacement and Mortality: An Analysis Using Administrative Data. Quarterly Journal of Economics. Retrieved from http://www.econ.ucla.edu/tvwachter/papers/sullivan_vonwachter_qje.pdf

[77] Schaller, J., Stevens, A. (2015). Short-Run Effects of Job Loss on Health Conditions, Health Insurance, and Health Care Utilization. Journal of Health Economics, 43, 190-203. DOI: 0.1016/j.jhealeco.2015.07.003. Retrieved from https://www.sciencedirect.com/science/article/pii/S0167629615000788

demonstration. The provisions of our letter approving the October 31, 2018 extension and the corresponding provisions of the expenditure authorities and Special Terms and Conditions that authorize the community engagement requirement are withdrawn.

The withdrawal of these authorities is effective on the date that is thirty days after the date of this letter, unless the state timely appeals, as discussed below. The waivers, expenditure authorities, and Special Terms and Conditions reflecting this change are attached to this letter and will govern the BadgeCare Reform demonstration from the effective date of the withdrawal of the community engagement authorities until the demonstration expires on December 31, 2023.

As indicated in CMS's February 12, 2021 letter, CMS is also reviewing the other authorities that CMS previously approved in the Wisconsin BadgerCare Reform demonstration. That review remains ongoing. The state and CMS will work together to update the evaluation design, as needed, to reflect all the key policies that are implemented during the approval period. The current established timeline for the interim and summative evaluation reports will remain in effect. CMS looks forward to continuing to work with the state on the evaluation design, interim and summative evaluation reports.

Procedure to Appeal This Decision

In accordance with Special Terms and Conditions ¶ 11 and 42 C.F.R. § 430.3, the state may request a hearing to challenge CMS's determination prior to the above-referenced effective date by appealing this decision to the Departmental Appeals Board (DAB or Board), following the procedures set forth at 45 C.F.R. part 16. This decision shall be the final decision of the Department unless, within 30 calendar days after the state receives this decision, the state delivers or mails (the state should use registered or certified mail to establish the date) a written notice of appeal to the DAB.

A notice of appeal may be submitted to the DAB by mail, by facsimile (fax) if under 10 pages, or electronically using the DAB's electronic filing system (DAB E-File). Submissions are considered made on the date they are postmarked, sent by certified or registered mail, deposited with a commercial mail delivery service, faxed (where permitted), or successfully submitted via DAB E-File. The Board will notify the state of further procedures. If the state faxes its notice of appeal (permitted only if the notice of appeal is under 10 pages), the state should use the Appellate Division's fax number, (202) 565-0238.

To use DAB E-File to submit your notice of appeal, the state's Medicaid Director or its representative must first become a registered user by clicking "Register" at the bottom of the DAB E-File homepage, https://dab/efile.hhs.gov/; entering the information requested on the "Register New Account" form; and clicking the "Register Account" button. Once registered, the state's Medicaid Director or its representative should login to DAB E-File using the e-mail address and password provided during registration; click "File New Appeal" on the menu; click the "Appellate" button; and provide and upload the requested information and documents on the "File New Appeal-Appellate Division" form. Detailed instructions can be found on the DAB E-File homepage.

Due to the COVID-19 public health emergency, the DAB is experiencing delays in processing documents received by mail. To avoid delay, the DAB strongly encourages the filing of materials through the DAB E-File system. However, should the state so choose, written requests for appeal should be delivered or mailed to U.S. Department of Health and Human Services, Departmental Appeals Board MS 6127, Appellate Division, 330 Independence Ave., S.W., Cohen Building Room G-644, Washington, DC 20201. Refer to 45 C.F.R. Part 16 for procedures of the Departmental Appeals Board.

The state must attach to the appeal request, a copy of this decision, note its intention to appeal the decision, a statement that there is no dollar amount in dispute but that the state disputes CMS's withdrawal of certain section 1115 demonstration authorities, and a brief statement of why the decision is wrong. The Board will notify the state of further procedures. If the state chooses to appeal this decision, a copy of the notice of appeal should be mailed or delivered (the state should use registered or certified mail to establish the date) to Judith Cash, Acting Deputy Director, Center for Medicaid and CHIP Services at 7500 Security Blvd, Baltimore, MD 21244.

If you have any questions, please contact Judith Cash at (410) 786-9686.

Sincerely,

Elizabeth Richter
Acting Administrator

CENTERS FOR MEDICARE & MEDICAID SERVICES
WAIVER LIST

NUMBER: **11-W-00293/5**

TITLE: **Wisconsin BadgerCare Reform**

AWARDEE: **Wisconsin Department of Health Services**

Title XIX Waiver Authority

All requirements of the Medicaid program expressed in law, regulation, and policy statement, not expressly waived in this list, shall apply to the affected populations, as described for the demonstration project from October 31, 2018 through December 31, 2018, as these two waivers will sunset on December 31, 2018.

Under the authority of section 1115(a)(1) of the Social Security Act (the Act), the following waivers of the state plan requirements contained in section 1902 of the Act are granted in order to enable Wisconsin to implement the Wisconsin BadgerCare Reform Medicaid section 1115 demonstration.

1. Provision of Medical Assistance Eligibility — **Section 1902 (a)(8)** **Section 1902(a)(10)**

To the extent needed to enable the state to enforce premium payment requirements under the demonstration by not providing medical assistance for a period of three months for adults that qualify for Medicaid only under section 1925, or sections 1902(e)(1) and 1931(c)(1), of the Act whose eligibility has been terminated as a result of not paying the required monthly premium.

2. Premiums — **Section 1902(a)(14) insofar as it incorporates section 1916** **Section 1902(a)(52)**

To the extent needed to permit the state to impose monthly premiums based on household income on individuals that qualify for Medicaid only under Transitional Medical Assistance (TMA). This waiver allows the state to apply premiums to TMA Adults with income above 133 percent of the federal poverty level (FPL) starting from the date of enrollment, and to TMA Adults with income from 100-133 percent of the FPL starting after the first six calendar months of TMA coverage.

CENTERS FOR MEDICARE & MEDICAID SERVICES
EXPENDITURE AUTHORITY

NUMBER: **11-W-00293/5**

TITLE: **Wisconsin BadgerCare Reform Section 1115 Demonstration**

AWARDEE: **Wisconsin Department of Health Services**

Under the authority of section 1115(a)(2) of the Social Security Act (the Act), expenditures made by the state for the items identified below, which are not otherwise included as expenditures under section 1903 of the Act, incurred during the period of this demonstration, shall be regarded as expenditures under the state's title XIX plan.

The following expenditure authority shall enable the state to operate its BadgerCare Reform section 1115 Medicaid demonstration beginning October 31, 2018 through December 31, 2023.

1. **Childless Adults Demonstration Population.** Expenditures for health care-related costs for eligible non-pregnant, uninsured adults ages 19 through 64 years who have family incomes up to 95 percent of the federal poverty level (FPL) (effectively 100 percent of the FPL including the five percent disregard), who are not otherwise eligible under the Medicaid State plan, other than for family planning services or for the treatment of Tuberculosis, and who are not otherwise eligible for Medicare, Medical Assistance, or the State Children's Health Insurance Program (CHIP).

2. **Former Foster Care Youth from Another State.** Expenditures to extend eligibility for full Medicaid state plan benefits to former foster care youth who are defined as individuals under age 26, that were in foster care under the responsibility of a state other than Wisconsin or tribe in such other state on the date of attaining 18 years of age (or such higher age as the state has elected for termination of federal foster care assistance under title IV-E of the Act), were enrolled in Medicaid on that date, and are now applying for Medicaid in Wisconsin.

3. **Residential and Inpatient Treatment Services for Individuals with Substance Use Disorder.** Expenditures for otherwise covered services furnished to otherwise eligible individuals who are primarily receiving treatment and withdrawal management services for substance use disorder (SUD) who are short-term residents in facilities that meet the definition of an institution for mental diseases (IMD).

All requirements of the Medicaid program expressed in law, regulation, and policy statement, not expressly identified as not applicable in the list below, shall apply to the Childless Adults Demonstration Population beginning October 31, 2018, through December 31, 2023.

Title XIX Requirements Not Applicable to the Demonstration Population:

1. Freedom of Choice **Section 1902(a)(23)(A)**

To the extent necessary to enable the state to require enrollment of eligible individuals in managed care organizations.

2. Premiums **Section 1902(a)(14) insofar as it incorporates 1916 and 1916A**

To the extent necessary to the state to charge an $8 monthly premium to the childless adult population with household incomes over 50 percent of the FPL, up to and including 100 percent of the FPL.

3. Comparability **Section 1902(a)(17)/Section 1902(a)(10)(B)**

To the extent necessary to enable the state to vary monthly premiums for the childless adult population based on health behaviors and health risk assessment completion.

To the extent necessary to enable the state to establish a non-emergency use of the emergency department copayment of $8 for the childless adult population.

4. Eligibility **Section 1902(a)(10) and 1902(a)(52)**

To the extent necessary to enable the state to deny eligibility and prohibit reenrollment for up to six months for the childless adults population who are disenrolled for failure to pay premiums.

To the extent necessary to enable the state to deny eligibility for the childless adults population who does not complete a health risk assessment.

CENTERS FOR MEDICARE AND MEDICAID SERVICES
SPECIAL TERMS AND CONDITIONS

NUMBER: 11-W-00293/5

TITLE: Wisconsin BadgerCare Reform

AWARDEE: Wisconsin Department of Health Services

I. PREFACE

The following are the Special Terms and Conditions (STCs) to enable Wisconsin (state) to operate the Badger Care Reform section 1115(a) BadgerCare demonstration. The Centers for Medicare & Medicaid Services (CMS) has granted waivers of requirements under section 1902(a) of the Social Security Act (the Act), and expenditure authorities authorizing federal matching of demonstration costs not otherwise matchable, which are separately enumerated. These STCs set forth in detail the nature, character, and extent of federal involvement in the demonstration and amendments and the state's obligations to CMS related to this demonstration and amendments. The STCs are effective October 31, 2018 and the BadgerCare Reform demonstration is approved through December 31, 2023.

The STCs have been arranged into the following subject areas:

I. Preface
II. Program Description and Objectives
III. General Program Requirements
IV. Eligibility
V. Benefits
VI. Cost Sharing (Premiums, Copays, and Healthy Behavior Incentive)
VII. Delivery System
VIII. General Reporting Requirements
IX. General Financial Requirements
X. Monitoring Budget Neutrality for the Demonstration
XI. Evaluation of the Demonstration

Additional attachments have been included to provide supplementary information and guidance for specific STCs.

Attachment A. Summary of Cost-sharing for TMA Adults Only
Attachment B. Substance Use Disorder Implementation Plan Protocol
Attachment C. Substance Use Disorder Monitoring Protocol
Attachment D. Developing the Evaluation Design
Attachment E Preparing the Interim and Summative Evaluation Reports
Attachment F. Evaluation Design
Attachment G. Monitoring Protocol

Attachment H. Tribal Consultation Plan

II. PROGRAM DESCRIPTION AND OBJECTIVES

With the implementation of the Affordable Care Act provisions, that will provide federally-funded subsidies to help individuals and families purchase private health insurance, Wisconsin saw the BadgerCare Reform amendment as an opportunity to reduce the uninsured rate and encourage beneficiaries to access coverage in the private market.
The Wisconsin BadgerCare Reform amendment provided state plan benefits, other than family planning services and tuberculosis-related services, to childless adults who had effective family incomes up to 100 percent of the Federal Poverty Level (FPL) (effective income is defined to include the five (5) percent disregard), and permitted the state to charge premiums to adults who were only eligible for Medicaid through the Transitional Medical Assistance eligibility group (hereinafter referred to as "TMA Adults") with incomes above 133 percent of the FPL starting from the first day of enrollment and to TMA Adults from 100-133 percent of the FPL after the first six (6) calendar months of TMA coverage.

The BadgerCare Reform amendment allowed the state to provide health care coverage for the childless adult population at or below an effective income of 100 percent of the FPL with a focus on improving health outcomes, reducing unnecessary services, and improving the cost-effectiveness of Medicaid services. Additionally, the amendment enabled the state to test the impact of providing TMA to individuals who were paying a premium that aligned with the insurance affordability program in the Marketplace based upon their household income when compared to the FPL.

In accordance with CMS' November 21, 2016 CMCS Informational Bulletin (CIB), *Section 1115 Demonstration Opportunity to Allow Medicaid Coverage to Former Foster Care Youth Who Have Moved to a Different State*, the BadgerCare Reform demonstration was amended in December 2017 to add coverage of former foster care youth defined as individuals under age 26 who were in foster care in another state or tribe of such other state when they turned 18 (or such higher age as the state has elected for termination of federal foster care assistance under title IV-E of the Act), were enrolled in Medicaid at that time or at some point while in such foster care, and are now applying for Medicaid in Wisconsin. With the addition of this population, Wisconsin has a new demonstration goal to increase and strengthen overall coverage of former foster care youth and improve health outcomes for this population.

The 2017 amendment request was prompted by the Wisconsin 2015-2017 Biennial Budget (Act 55), which required the Wisconsin Department of Health Services (DHS) to request an amendment to the BadgerCare Reform amendment in order to apply a number of new policies to the childless adult population. Act 55 requirements included: establishing monthly premiums, establishing lower premiums for members engaged in healthy behaviors, requiring completion of a health risk assessment, limiting a member's eligibility to no more than 48 months, and requiring as a condition of eligibility that an applicant or member complete a drug screening, and if indicated, a drug test and treatment; however, a drug test as a condition of eligibility and a 48-month limit are not part of this approval. Policies not required by Act 55, but included in the amendment request in order to meet the program objectives involve charging an increased copayment for non-emergent use of the emergency department utilization for childless adults, and providing full

coverage of residential substance use disorder treatment for all BadgerCare Plus and Medicaid members.

III. GENERAL PROGRAM REQUIREMENTS

1. **Compliance with Federal Non-Discrimination Laws.** The state must comply with applicable federal civil rights laws relating to non-discrimination in services and benefits in its programs and activities. These include, but are not limited to, the Americans with Disabilities Act of 1990 (ADA), Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973 (Section 504), the Age Discrimination Act of 1975, and section 1557 of the Affordable Care Act (Section 1557). Such compliance includes providing reasonable modifications to individuals with disabilities under the ADA, Section 504, and Section 1557 with eligibility and documentation requirements, understanding program rules and notices, and meeting other program requirements necessary to obtain and maintain benefits.

2. **Compliance with Medicaid Law, Regulation, and Policy.** All requirements of the Medicaid program, expressed in law, regulation, and written policy, not expressly waived or identified as not applicable in the waiver and expenditure authority documents (of which these terms and conditions are part), apply to the demonstration.

3. **Changes in Medicaid Law, Regulation, and Policy.** The state must, within the timeframes specified in law, regulation, or policy statement, come into compliance with any changes in federal law, regulation, or policy affecting the Medicaid program that occur during this demonstration approval period, unless the provision being changed is expressly waived or identified as not applicable. In addition, CMS reserves the right to amend the STCs to reflect such changes and/or changes of an operational nature without requiring the state to submit an amendment to the demonstration under STC 7. CMS will notify the state 30 days in advance of the expected approval date of the amended STCs to allow the state to provide comment.

4. **Impact on Demonstration of Changes in Federal Law, Regulation, and Policy.**

    a. To the extent that a change in federal law, regulation, or policy requires either a reduction or an increase in federal financial participation (FFP) for expenditures made under this demonstration, the state must adopt, subject to CMS approval, a modified budget neutrality agreement for the demonstration, as well as a modified allotment neutrality worksheet as necessary to comply with such change. Further, the state may seek an amendment to the demonstration (as per STC 7 of this section) as a result of the change in FFP.

    b. If mandated changes in the federal law require state legislation, unless otherwise prescribed by the terms of the federal law, the changes must take effect on the day such state legislation becomes effective, or on the last day such legislation was required to be in effect under the law, whichever is sooner.

5. **State Plan Amendments.** The state will not be required to submit title XIX state plan amendments (SPA) for changes affecting any populations made eligible solely through the demonstration. If a population eligible through the Medicaid state plan is affected by a change to the demonstration, a conforming amendment to the appropriate state plan may be required, except as otherwise noted in these STCs. In all such instances, the Medicaid state plan governs.

6. **Changes Subject to the Amendment Process.** If not otherwise specified in these STCs, changes related to eligibility, enrollment, benefits, enrollee rights, delivery systems, cost sharing, Evaluation Design, sources of non-federal share of funding, budget neutrality, and other comparable program elements must be submitted to CMS as amendments to the demonstration. All amendment requests are subject to approval at the discretion of the Secretary in accordance with section 1115 of the Act. The state must not implement changes to these elements without prior approval by CMS either through an approved amendment to the Medicaid state plan or amendment to the demonstration. Amendments to the demonstration are not retroactive and FFP, whether administrative or service-based expenditures, will not be available for changes to the demonstration that have not been approved through the amendment process set forth in STC 7, except as provided in STC 3.

7. **Amendment Process.** Requests to amend the demonstration must be submitted to CMS for approval no later than 120 days prior to the planned date of implementation of the change and may not be implemented until approved. CMS reserves the right to deny or delay approval of a demonstration amendment based on non-compliance with these STCs, including but not limited to failure by the state to submit required elements of a viable amendment request as found in this STC, and failure by the state to submit reports required in the approved STCs and other deliverables in a timely fashion according to the deadlines specified herein. Amendment requests must include, but are not limited to, the following:

    a. A detailed description of the amendment including impact on beneficiaries, with sufficient supporting documentation;

    b. A data analysis worksheet which identifies the specific "with waiver" impact of the proposed amendment on the current budget neutrality agreement. Such analysis shall include total computable "with waiver" and "without waiver" status on both a summary and detailed level through the current approval period using the most recent actual expenditures, as well as summary and detail projections of the change in the "with waiver" expenditure total as a result of the proposed amendment, which isolates (by Eligibility Group) the impact of the amendment;

    c. An explanation of the public process used by the state consistent with the requirements of STC 13; and,

    d. If applicable, a description of how the Evaluation Design will be modified to incorporate the amendment provisions.

8. **Extension of the Demonstration.** States that intend to request a demonstration extension under sections 1115(e) or 1115(f) of the Act must submit extension applications in

accordance with the timelines contained in statute. Otherwise, no later than twelve months prior to the expiration date of the demonstration, the Governor or Chief Executive Officer of the state must submit to CMS either a demonstration extension request that meets federal requirements at 42 Code of Federal Regulations (CFR) 431.412(c) or a transition and phase-out plan consistent with the requirements of STC 9.

9. **Demonstration Phase Out.** The state may only suspend or terminate this demonstration in whole, or in part, consistent with the following requirements:

   a. Notification of Suspension or Termination. The state must promptly notify CMS in writing of the reason(s) for the suspension or termination, together with the effective date and a transition and phase-out plan. The state must submit a notification letter and a draft transition and phase-out plan to CMS no less than six months before the effective date of the demonstration's suspension or termination. Prior to submitting the draft transition and phase-out plan to CMS, the state must publish on its website the draft transition and phase-out plan for a 30-day public comment period. In addition, the state must conduct tribal consultation in accordance with STC 13, if applicable. Once the 30-day public comment period has ended, the state must provide a summary of each public comment received, the state's response to the comment, and how the state incorporated the received comment into the revised transition and phase-out plan.

   b. Transition and Phase-out Plan Requirements. The state must include, at a minimum, in its transition and phase-out plan the process by which it will notify affected beneficiaries, the content of said notices (including information on the beneficiary's appeal rights), the process by which the state will conduct administrative reviews of Medicaid eligibility prior to the termination of the demonstration for the affected beneficiaries, and ensure ongoing coverage for those beneficiaries whether currently enrolled or determined to be eligible individuals, as well as any community outreach activities, including community resources that are available.

   c. Transition and Phase-out Plan Approval. The state must obtain CMS approval of the transition and phase-out plan prior to the implementation of transition and phase-out activities. Implementation of transition and phase-out activities must be no sooner than 14 days after CMS approval of the transition and phase-out plan.

   d. Transition and Phase-out Procedures. The state must comply with all applicable notice requirements found in 42 CFR, part 431 subpart E, including sections 431.206, 431.210, 431.211, and 431.213. In addition, the state must assure all applicable appeal and hearing rights afforded to demonstration beneficiaries as outlined in 42 CFR, part 431 subpart E, including sections 431.220 and 431.221. If a demonstration beneficiary requests a hearing before the date of action, the state must maintain benefits as required in 42 CFR 431.230. In addition, the state must conduct administrative renewals for all affected beneficiaries in order to determine if they qualify for Medicaid eligibility under a different eligibility category prior to termination as discussed in October 1, 2010, State Health Official Letter #10-008 and as required under 42 C.F.R. 435.916(f)(1). For individuals determined ineligible for Medicaid, the state must determine potential eligibility for other insurance affordability programs and comply with the procedures set forth in 42 CFR 435.1200(e).

e. Exemption from Public Notice Procedures, 42 CFR Section 431.416(g). CMS may expedite the federal and state public notice requirements under circumstances described in 42 CFR 431.416(g).

f. Enrollment Limitation during Demonstration Phase-Out. If the state elects to suspend, terminate, or not extend this demonstration, during the last six months of the demonstration, enrollment of new individuals into the demonstration must be suspended.

g. Federal Financial Participation (FFP). FFP will be limited to normal closeout costs associated with the termination or expiration of the demonstration including services, continued benefits as a result of beneficiaries' appeals, and administrative costs of disenrolling participants.

10. Expiring Demonstration Authority. For demonstration authority that expires prior to the demonstration's expiration date, the state must submit a demonstration authority expiration plan to CMS no later than six months prior to the applicable demonstration authority's expiration date, consistent with the following requirements:

a. Expiration Requirements. The state must include, at a minimum, in its demonstration authority expiration plan the process by which it will notify affected beneficiaries, the content of said notices (including information on the beneficiary's appeal rights), the process by which the state will conduct administrative reviews of Medicaid eligibility prior to the termination of the demonstration authority for the affected beneficiaries, and ensure ongoing coverage for eligible individuals, as well as any community outreach activities.

b. Expiration Procedures. The state must comply with all applicable notice requirements found in 42 CFR, part 431 subpart E, including sections 431.206, 431.210, 431.211, and 431.213. In addition, the state must assure all applicable appeal and hearing rights are afforded to demonstration beneficiaries as outlined in 42 CFR, part 431 subpart E, including sections 431.220 and 431.221. If a demonstration beneficiary requests a hearing before the date of action, the state must maintain benefits as required in 42 CFR 431.230. In addition, the state must conduct administrative renewals for all affected beneficiaries in order to determine if they qualify for Medicaid eligibility under a different eligibility category prior to termination as discussed in October 1, 2010, State Health Official Letter #10-008 and required under 42 C.F.R. 435.916(f)(1). For individuals determined ineligible for Medicaid, the state must determine potential eligibility for other insurance affordability programs and comply with the procedures set forth in 42 CFR 435.1200(e).

c. Federal Public Notice. CMS will conduct a 30-day federal public comment period consistent with the process outlined in 42 CFR 431.416 in order to solicit public input on the state's demonstration authority expiration plan. CMS will consider comments received during the 30-day period during its review and approval of the state's demonstration authority expiration plan. The state must obtain CMS approval of the demonstration authority expiration plan prior to the implementation of the expiration

activities. Implementation of expiration activities must be no sooner than fourteen (14) days after CMS approval of the demonstration authority expiration plan.

d. Federal Financial Participation (FFP). FFP will be limited to normal closeout costs associated with the expiration of the demonstration authority including services, continued benefits as a result of beneficiaries' appeals, and administrative costs of disenrolling participants.

11. **Withdrawal of Waiver or Expenditure Authority.** CMS reserves the right to withdraw waiver and/or expenditure authorities at any time it determines that continuing the waivers or expenditure authorities would no longer be in the beneficiaries' interest or promote the objectives of title XIX. CMS must promptly notify the state in writing of the determination and the reasons for the withdrawal, together with the effective date, and afford the state an opportunity to request a hearing to challenge CMS' determination prior to the effective date. If a waiver or expenditure authority is withdrawn, FFP is limited to normal closeout costs associated with terminating the waiver or expenditure authority, including services, continued benefits as a result of beneficiary appeals, and administrative costs of disenrolling participants.

12. **Adequacy of Infrastructure.** The state must ensure the availability of adequate resources for implementation and monitoring of the demonstration, including education, outreach, and enrollment; maintaining eligibility systems; compliance with cost sharing requirements; and reporting on financial and other demonstration components.

13. **Public Notice, Tribal Consultation, and Consultation with Interested Parties.** The state must comply with the state notice procedures as required in 42 CFR 431.408 prior to submitting an application to extend the demonstration. For applications to amend the demonstration, the state must comply with the state notice procedures set forth in 59 Fed. Reg. 49249 (September 27, 1994) prior to submitting such request.

    The state must also comply with tribal and Indian Health Program/Urban Indian Health Organization consultation requirements at section 1902(a)(73) of the Act, 42 CFR 431.408(b), State Medicaid Director Letter #01-024, or as contained in the state's approved Medicaid State Plan, when any program changes to the demonstration, either through amendment as set out in STC 7 or extension, are proposed by the state.
    The state must also comply with the Public Notice Procedures set forth in 42 CFR 447.205 for changes in statewide methods and standards for setting payment rates.

14. **Federal Financial Participation (FFP).** No federal matching for expenditures, both administrative and service, for this demonstration will take effect until the effective date identified in the demonstration approval letter, or if later, as expressly stated within these STCs.

15. **Common Rule Exemption.** The state shall ensure that the only involvement of human subjects in research activities that may be authorized and/or required by this demonstration is for projects which are conducted by or subject to the approval of CMS, and that are designed to study, evaluate, or otherwise examine the Medicaid or CHIP program – including procedures for obtaining Medicaid or CHIP benefits or services, possible changes in or

alternatives to Medicaid or CHIP programs and procedures, or possible changes in methods or levels of payment for Medicaid benefits or services. The Secretary has determined that this demonstration as represented in these approved STCs meets the requirements for exemption from the human subject research provisions of the Common Rule set forth in 45 CFR 46.101(b)(5).

IV. ELIGIBILITY

16. **State Plan Eligibility Groups Affected By the Demonstration.** The state plan populations affected by this demonstration are outlined in Table 1, which summarizes each specific group of individuals and specifies the authority under which they are eligible for coverage and the name of the eligibility and expenditure group under which expenditures are reported to CMS and the budget neutrality expenditure agreement is constructed.

17. **Demonstration Expansion Eligibility Groups.** Table 1 summarizes the specific groups of individuals, and specifies the authority under which they are eligible for coverage. Table 1 also specifies the name of the eligibility and expenditure group under which expenditures are reported to CMS and the budget neutrality expenditure agreement is constructed. Demonstration Population 2 in Table 1 is made eligible for the demonstration by virtue of the expenditure authorities expressly granted in this demonstration. Coverage of Demonstration Population 2 is subject to Medicaid laws and regulations (including all enrollment requirements described in paragraph b. below) unless otherwise specified in the "Title XIX Requirements Not Applicable to the Demonstration Population" section of the expenditure authorities document for this demonstration.

Table 1: Eligibility Groups Affected by the Demonstration			
Medicaid State Plan Mandatory Groups	Federal Poverty Level and/or Other Qualifying Criteria	Funding Stream	Expenditure and Eligibility Group Reporting
Population 1. Parents and caretaker relatives who are non-pregnant, those who do not qualify for Medicaid on the basis of disability, and whose effective family income is above 100 percent FPL and who qualify for TMA under section 1925 of the Act	Parents and caretaker relatives eligible for Medicaid under Wisconsin's Medicaid State plan under section 1925 of the Act or 1931(c)(1) of the Act.	Title XIX	TMA Adults
Demonstration Expansion Groups	Federal Poverty Level and/or Other Qualifying Criteria	Funding Stream	Expenditure and Eligibility Group Reporting

Population 2. Non-pregnant childless individuals Age 19 through 64 with an effective monthly income that does not exceed 100 percent FPL	• Ages 19 through 64 • Effective monthly income at or below 100 percent of the FPL • Not pregnant • Do not qualify for any other full-benefit Medicaid or CHIP eligibility group • Are not receiving Medicare • Childless adults may have children, but do not qualify as a parent or caretaker relative (e.g., either the children are not currently living with them or those children living with them are 19 years of age or older) • Fully complete a Health Risk Assessment (HRA)	Title XIX	BC Reform Adults
Population 3. Former Foster Care Youth ("FFCY") from Another State	• Individuals under age 26, who we were in foster care under the responsibility of a state other than Wisconsin or a tribe in such other state when they turned 18 or such higher age as the state has elected for termination of federal foster care assistance under title IV-E of the Act), were enrolled in Medicaid at that time or at some point while in such foster care, are now applying for Medicaid in Wisconsin, and are not otherwise eligible for Medicaid.	Title XIX	FFCY

V. BENEFITS

18. Wisconsin BadgerCare Demonstration. All enrollees in this demonstration (as described in Section IV) will receive benefits as specified in the Medicaid state plan, to the extent that such benefits apply to those individuals. Beneficiaries in Demonstration Population 2 will not receive family planning services or tuberculosis-related services. In addition, beneficiaries in the Demonstration Population 2 will not receive pregnancy related services, but instead must be administratively transferred to the pregnant women group in the state plan if they are

pregnant. Refer to the state plan for additional information on benefits. Former foster care youth from another state receive full Medicaid State Plan benefits.

19. **Opioid Use Disorder (OUD)/Substance Use Disorder (SUD) Program**. Effective upon CMS' approval of the SUD Implementation Protocol, the demonstration benefit package for all Wisconsin Medicaid recipients will include OUD/SUD treatment services, including short term residential services provided in residential and inpatient treatment settings that qualify as an Institution for Mental Diseases (IMD), which are not otherwise matched expenditures under section 1903 of the Act. The state will be eligible to receive FFP for Wisconsin Medicaid recipients residing in IMDs under the terms of this demonstration for coverage of medical assistance, including OUD/SUD benefits that would otherwise be matchable if the beneficiary were not residing in an IMD. Wisconsin will aim for a statewide average length of stay of 30 days in residential treatment settings, to be monitored pursuant to the SUD Monitoring Protocol as outlined in STC 21 below, to ensure short-term residential treatment stays. Under this demonstration, beneficiaries will have access to high quality, evidence-based OUD and other SUD treatment services ranging from medically supervised withdrawal management to on-going chronic care for these conditions in cost-effective settings while also improving care coordination and care for comorbid physical and mental health conditions.

    The coverage of OUD/SUD treatment services and withdrawal management during short term residential and inpatient stays in IMDs will expand Wisconsin's current SUD benefit package available to all Wisconsin Medicaid recipients as outlined in Table 2. Room and board costs are not considered allowable costs for residential treatment service providers unless they qualify as impatient facilities under section 1905(a) of the Act.

Table 2: Wisconsin OUD/SUD Benefits Coverage with Expenditure Authority

SUD Benefits	Wisconsin Medicaid Authority	Expenditure Authority
Outpatient Services	State Plan	n/a
Intensive Outpatient Services	State Plan	n/a
Medication Assisted Treatment	State Plan (Individual services covered)	Services provided to individuals in IMDs
Residential Treatment Services	State Plan (Individual services covered)	Services provided to individuals in IMDs
Inpatient Services	State Plan (Individual services covered)	Services provided to individuals in IMDs
Medically Supervised Withdrawal Management	State Plan	Services provided to individuals in IMDs

20. **SUD Implementation Plan Protocol.** The state must submit a SUD Implementation Plan Protocol within ninety (90) days after approval of the SUD program under this demonstration approval. The state may not claim FFP for services provided in IMDs until CMS has approved the SUD Implementation Plan Protocol. Once approved, the Implementation Plan Protocol will be incorporated into the STCs, as Attachment B, and once incorporated, may be altered only with CMS approval. After approval of the Implementation Plan Protocol, FFP will be available prospectively, not retrospectively. Failure to submit an Implementation Plan Protocol or failure to obtain CMS approval will be considered a material failure to comply with the terms of the demonstration project as described in 42 CFR 431.420(d) and, as such,

would be grounds for termination or suspension of the SUD program under this demonstration. Failure to progress in meeting the milestone goals agreed upon by the state and CMS will result in funding deferral. At a minimum, the SUD Implementation Protocol will describe the strategic approach and detailed project implementation plan, including timetables and programmatic content where applicable, for meeting the following milestones which reflect the key goals and objectives of the SUD program in this demonstration:

a. Access to Critical Levels of Care for OUD and other SUDs: Service delivery for new benefits, including residential treatment and withdrawal management, within 12-24 months of OUD/SUD program demonstration approval;

b. Use of Evidence-based SUD-specific Patient Placement Criteria. Establishment of a requirement that providers assess treatment needs based on SUD-specific, multidimensional assessment tools, such as the American Society of Addiction Medicine (ASAM) Criteria or other assessment and placement tools that reflect evidence-based clinical treatment guidelines within 12-24 months of OUD/SUD program demonstration approval;

c. Patient Placement. Establishment of a utilization management approach such that beneficiaries have access to SUD services at the appropriate level of care and that the interventions are appropriate for the diagnosis and level of care, including an independent process for reviewing placement in residential treatment settings within 12-24 months of SUD program demonstration approval;

d. Use of Nationally Recognized SUD-specific Program Standards to set Provider Qualifications for Residential Treatment Facilities. Currently, residential treatment service providers must be a licensed organization, pursuant to the residential service provider qualifications described in Wisconsin administrative code. The state will establish residential treatment provider qualifications in licensure, policy or provider manuals, managed care contracts or credentialing, or other requirements or guidance that meet program standards in the ASAM Criteria or other nationally recognized, SUD-specific program standards regarding in particular the types of services, hours of clinical care, and credentials of staff for residential treatment settings within 12-24 months of OUD/SUD program demonstration approval;

e. Standards of Care. Establishment of a provider review process to ensure that residential treatment providers deliver care consistent with the specifications in the ASAM Criteria or other comparable, nationally recognized SUD program standards based on evidence-based clinical treatment guidelines for types of services, hours of clinical care, and credentials of staff for residential treatment settings within 12-24 months of SUD program demonstration approval;

f. Standards of Care. Establishment of a requirement that residential treatment providers offer MAT on-site or facilitate access to MAT off-site within 12-24 months of SUD program demonstration approval.

g. Sufficient Provider Capacity at each Level of Care, including Medication Assisted Treatment for OUD. An assessment of the availability of providers in the key levels of

care throughout the state, or in the regions of the state participating under this demonstration, including those that offer MAT within 12 months of SUD program demonstration approval.

h. Implementation of Comprehensive Treatment and Prevention Strategies to Address Opioid Abuse and OUD. Implementation of opioid prescribing guidelines along with other interventions to prevent prescription drug abuse and expand coverage of and access to naloxone for overdose reversal as well as implementation of strategies to increase utilization and improve functionality of prescription drug monitoring programs;

i. SUD Health IT Plan**.** Implementation of the milestones and metrics as detailed in STC 32.

j. Improved Care Coordination and Transitions between levels of care. Establishment and implementation of policies to ensure residential and inpatient facilities link beneficiaries with community-based services and supports following stays in these facilities within 24 months of SUD program demonstration approval.

21. SUD Monitoring Protocol. The state must submit a SUD Monitoring Protocol within one hundred fifty (150) calendar days after approval of the SUD program under this demonstration. The SUD Monitoring Protocol must be developed in cooperation with CMS and is subject to CMS approval. Once approved, the SUD Monitoring Protocol will be incorporated into the STCs, as Attachment C. At a minimum, the SUD Monitoring Protocol will include reporting of the average length of stay for residential treatment and reporting relevant to each of the program implementation areas listed in STC 20. The protocol will also describe the data collection, reporting and analytic methodologies for performance measures identified by the state and CMS for inclusion. The SUD Monitoring Protocol will specify the methods of data collection and timeframes for reporting on the state's progress on required measures as part of the general reporting requirements described in STC 38 of the demonstration. In addition, for each performance measure, the SUD Monitoring Protocol will identify a baseline, a target to be achieved by the end of the demonstration and an annual goal for closing the gap between baseline and target expressed as percentage points. Where possible, baselines will be informed by state data, and targets will be benchmarked against performance in best practice settings. CMS will closely monitor demonstration spending on services in IMDs to ensure adherence to budget neutrality requirements. Progress on the performance measures identified in the SUD Monitoring Protocol will be reported via the quarterly and annual monitoring reports.

22. Mid-Point Assessment. The state must conduct an independent mid-point assessment of the demonstration. The assessor must collaborate with key stakeholders, including representatives of MCOs, SUD treatment providers, beneficiaries, and other key partners in the design, planning and conducting of the mid-point assessment. The assessment will include an examination of progress toward meeting each milestone and timeframe approved in the SUD Implementation Plan Protocol, and toward closing the gap between baseline and target each year in performance measures as approved in the SUD Monitoring Protocol. The assessment will also include a determination of factors that affected achievement on the milestones and performance measure gap closure percentage points to date, and a determination of selected factors likely to affect future performance in meeting milestones

and targets not yet met and about the risk of possibly missing those milestones and performance targets. For each milestone or measure target at medium to high risk of not being met, the assessor will provide, for consideration by the state, recommendations for adjustments in the state's implementation plan or to pertinent factors that the state can influence that will support improvement. The assessor will provide a report to the state that includes the methodologies used for examining progress and assessing risk, the limitations of the methodologies, its determinations and any recommendations. A copy of the report will be provided to CMS. CMS will be briefed on the report. For milestones and measure targets at medium to high risk of not being achieved, the state will submit to CMS modifications to the SUD Implementation Plan Protocol and SUD Monitoring Protocols for ameliorating these risks subject to CMS approval.

23. **SUD Evaluation.** The SUD Evaluation will be subject to the same requirements as the overall demonstration evaluation, as listed in sections VIII General Reporting Requirements and XII Evaluation of the Demonstration of the STCs.

24. **SUD Evaluation Design.** The state must submit, for CMS review and approval, a revision to the Evaluation Design to include the SUD program, no later than one-hundred-and-eighty (180) calendar days after the effective date of these amended STCs. Failure to submit an acceptable and timely Evaluation Design along with any required monitoring, expenditure, or other evaluation reporting will subject the state to a $5 million deferral. The state must use an independent evaluator to design the evaluation.

    a. Evaluation Design Approval and Updates. The state must submit a revised draft Evaluation Design within sixty (60) calendar days after receipt of CMS' comments. Upon CMS approval of the draft Evaluation Design, the document will be included as an attachment to these STCs. Per 42 CFR 431.424(c), the state will publish the approved Evaluation Design within thirty (30) calendar days of CMS approval. The state must implement the Evaluation Design and submit a description of its evaluation implementation progress in each of the Quarterly Reports and Annual Reports, including any required Rapid Cycle Assessments specified in these STCs. Once CMS approves the Evaluation Design, if the state wishes to make changes, the state must submit a revised Evaluation Design to CMS for approval.

    b. Evaluation Questions and Hypotheses Specific to SUD Program. The state must follow the general evaluation questions and hypotheses requirements as specified in guidance provided in Attachment D (Developing the Evaluation Design) of the STCs. In addition, hypotheses for the SUD program should include an assessment of the objectives of the SUD component of this section 1115 demonstration, to include, but is not limited to: initiation and compliance with treatment, utilization of health services (emergency department and inpatient hospital settings), and a reduction in key outcomes such as deaths due to overdose. The hypothesis testing should include, where possible, assessment of both process and outcome measures. Proposed measures should be selected from nationally-recognized sources and national measures sets, where possible. Measures sets could include CMS's Core Set of Health Care Quality Measures for Children in Medicaid and CHIP, Consumer Assessment of Health Care Providers and Systems (CAHPS), the Initial Core Set of

Health Care Quality Measures for Medicaid-Eligible Adults and/or measures endorsed by National Quality Forum (NQF).

25. **SUD Health Information Technology (Health IT).** The state will provide CMS with an assurance that it has a sufficient health IT infrastructure/"ecosystem" at every appropriate level (i.e. state, delivery system, health plan/MCO and individual provider) to achieve the goals of the demonstration—or it will submit to CMS a plan to develop the infrastructure/capabilities. This "SUD Health IT Plan," or assurance, will be submitted as a component of the State Medicaid Health IT Plan (SMHP), and included as a section of the state's "Implementation Plan" to be approved by CMS. The SUD Health IT Plan will detail the necessary health IT capabilities in place to support beneficiary health outcomes to address the SUD goals of the demonstration. The plan will also be used to identify areas of SUD health IT ecosystem improvement.

    a. The SUD Health IT section of the Implementation plan will include implementation milestones and dates for achieving them (see Attachment B).

    b. The SUD Health IT Plan must be aligned with the state's broader State Medicaid Health IT Plan (SMHP) and, if applicable, the state's Behavioral Health (BH) "Health IT" Plan.

    c. The SUD Health IT Plan will describe the state's goals, each DY, to enhance the state's prescription drug monitoring program's (PDMP).[1]

    d. The SUD Health IT Plan will address how the state's PDMP will enhance ease of use for prescribers and other state and federal stakeholders.[2] This will also include plans to include PDMP interoperability with a statewide, regional or local Health Information Exchange. Additionally, the SUD Health IT Plan will describe ways in which the state will support clinicians in consulting the PDMP prior to prescribing a controlled substance—and reviewing the patients' history of controlled substance prescriptions—prior to the issuance of a Controlled Substance Schedule II (CSII) opioid prescription.

    e. The SUD Health IT Plan will, as applicable, describe the state's capabilities to leverage a master patient index (or master data management service, etc.) in support of SUD care delivery. Additionally, the SUD Health IT Plan must describe current and future capabilities regarding PDMP queries—and the state's ability to properly match patients receiving opioid prescriptions with patients in the PDMP. The state will also indicate current efforts or plans to develop and/or utilize current patient index capability that supports the programmatic objectives of the demonstration.

[1] Prescription drug monitoring programs (PDMP) are electronic databases that track controlled substance prescriptions in states. PDMPs can provide health authorities timely information about prescribing and patient behaviors that contribute to the "opioid" epidemic and facilitate a nimble and targeted response.
[2] *Ibid*.

f. The SUD Health IT Plan will describe how the activities described in (a) through (e) above will support broader state and federal efforts to diminish the likelihood of long-term opioid use directly correlated to clinician prescribing patterns.[3]

g. In developing the Health IT Plan, states should use the following resources.

   i. States may use resources at Health IT.Gov (https://www.healthit.gov/playbook/opioid-epidemic-and-health-it/) in "Section 4: Opioid Epidemic and Health IT."

   ii. States may also use the CMS 1115 Health IT resources available on "Medicaid Program Alignment with State Systems to Advance HIT, HIE and Interoperability" at https://www.medicaid.gov/medicaid/data-and-systems/hie/index.html. States should review the "1115 Health IT Toolkit" for health IT considerations in conducting an assessment and developing their Health IT Plans.

   iii. States may request from CMS technical assistance to conduct an assessment and develop plans to ensure they have the specific health IT infrastructure with regards to PDMP plans and, more generally, to meet the goals of the demonstration.

h. The state will include in its Monitoring Protocol (see STC 21) an approach to monitoring its SUD Health IT Plan which will include performance metrics provided by CMS or State defined metrics to be approved in advance by CMS.

i. The state will monitor progress, each DY, on the implementation of its SUD Health IT Plan in relationship to its milestones and timelines—and report on its progress to CMS in in an addendum to its Annual Reports (see STC 38).

j. As applicable, the state should advance the standards identified in the 'Interoperability Standards Advisory—Best Available Standards and Implementation Specifications' (ISA) in developing and implementing the state's SUD Health IT policies and in all related applicable State procurements (e.g., including managed care contracts) that are associated with this demonstration.

k. Where there are opportunities at the state- and provider-level (up to and including usage in MCO or ACO participation agreements) to leverage federal funds associated with a standard referenced in 45 CFR 170 Subpart B, the state should use the federally-recognized standards, barring another compelling state interest.

l. Where there are opportunities at the state- and provider-level to leverage federal funds associated with a standard not already referenced in 45 CFR 170 but included in the ISA, the state should use the federally-recognized ISA standards, barring no other compelling state interest.

[3] Shah, Anuj, Corey Hayes and Bradley Martin. *Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use — United States, 2006–2015*. MMWR Morb Mortal Wkly Rep 2017;66.

26. Deferral of Federal Financial Participation (FFP) from IMD claiming for Insufficient Progress Toward Milestones. Up to $5,000,000 in FFP for services in IMDs may be deferred if the state is not making adequate progress on meeting the milestones and goals as evidenced by reporting on the milestones in the Implementation Protocol and the required performance measures in the Monitoring Protocol agreed upon by the state and CMS. Once CMS determines the state has not made adequate progress, up to $5,000,000 will be deferred in the next calendar quarter and each calendar quarter thereafter until CMS has determined sufficient progress has been made.

VI. COST SHARING (PREMIUMS, COPAYS, AND HEALTHY BEHAVIOR INCENTIVE)

27. Cost sharing. For all enrollees in this demonstration, cost sharing must be in compliance with Medicaid requirements that are set forth in statute, regulation and policies and be reflected in the state plan, except for premiums for Demonstration Population 1 (TMA Adults), and except for copayments for non-emergency use of the ED for Demonstration Population 2.

a. Premiums for Demonstration Population 1 (TMA Adults). TMA Adults with income of 133 percent of the FPL or greater are subject to monthly premiums based on the sliding scale as outlined in Attachment A from the date of enrollment. TMA Adults with effective income over 100 percent but less than 133 percent of the FPL are subject to monthly premiums based on a sliding scale starting six calendar months after the date of enrollment. There will be a 30-day grace period for non-payment of the monthly premium before being disenrolled. Eligibility and enrollment for TMA will be terminated for a maximum period of three months for demonstration participants who fail to make a required premium payment before the end of the grace period. However, a participant may re-enroll at any point during this three -month period by paying owed premiums. After the three-month period of non-eligibility, TMA Adults must be reenrolled in TMA on request, even if they have an outstanding unpaid premiums, provided their respective 12-month TMA period has not yet expired. The three-month period of non-eligibility does not toll the 12-month TMA period. If section 1925 of the Act sunsets or is otherwise inapplicable and TMA is then available only for a four month extension, Demonstration Population 1 individuals may not re-enroll in TMA. No premium may be charged during the three-month period of non-eligibility, and nonpayment of premiums that remain unpaid from a prior TMA enrollment period may not be used as a basis for terminating a beneficiary's enrollment during a subsequent period of TMA enrollment after the three-month period of non-eligibility.

i. Premiums for TMA Adults whose income changes after time of application (i.e., decreases or increases, including an increase in which the individual's income increases to 200 percent of the FPL or more), but before his/her annual redetermination, will be recalculated after the individual has reported the change. Once the state has calculated an individual's new monthly premium amount based on the sliding scale outlined in Attachment A, the state will provide the individual with at least a 10-day notice prior to effectuating the new monthly premium amount. If income increases to 133 percent FPL or more for TMA demonstration

enrollees who had income under 133 percent FPL when their TMA began, premiums will be due immediately after the 10-day notice.

ii. Consistent with 42 CFR 447.56, American Indians and Alaska Natives (AI/AN) who are eligible to receive or who have received an item or services furnished by an Indian health care provider or through referral under contract health services are exempt from the premium amounts outlined above.

iii. TMA adults may be disenrolled for failure to pay premiums after a 30-day grace period. Once they are disenrolled, they will be restricted from re-enrollment during a three month period of non-eligibility. They may enroll in Medicaid under another eligibility group if they become eligible under such other eligibility group during the three-month non-eligibility period. At any point during this three-month period, they may pay the owed premiums to re-enroll in TMA for the remainder of the 12-month TMA extension period and be re-enrolled. After the three-month period, they may re-enroll for TMA for the remainder of the 12-month TMA extension period, if requested, even if they have an outstanding unpaid premiums from the prior TMA enrollment period. In this case, nonpayment of premiums that remain unpaid from the prior TMA enrollment period may not be used as a basis for terminating the beneficiary's enrollment during the subsequent period of TMA enrollment.

STC 27(a) will sunset on December 31, 2018 and demonstration premiums will no longer be charged to the TMA adults after this date.

b. Premiums for Demonstration Population 2. For individuals in demonstration population 2, a monthly premium payment is required for those with monthly household income above 50 percent of the FPL. Monthly premium amounts are divided into the following two income tiers:

Table 3: Income Tiers for Monthly Premiums for Demonstration Population 2	
Monthly Household Income	**Monthly Premium Amount**
0 to 50 percent of the FPL	No premium
Above 50 percent of the FPL	$8 per household

i. Beneficiaries with household income up to 50 percent of the FPL are exempt from paying monthly premiums. AI/AN who are eligible to receive or who have received an item or services furnished by an Indian health care provider or through referral under contract health services are also exempt from the monthly premiums outlined above, consistent with section 1916(j) of the Act and with 42 CFR 447.56.

ii. Beneficiaries in Demonstration Population 2 may be disenrolled for failure to pay premiums only at annual redetermination. The state will notify beneficiaries who have unpaid premium amounts for the coverage year and provide a reasonable opportunity for the beneficiary to pay before disenrolling the beneficiary for the next coverage year. If a beneficiary is disenrolled at annual redetermination for

failure to pay premiums who would have continued to have a premium requirement during the next coverage year if not disenrolled, the beneficiary will be subject to a period of non-eligibility for up to six months. Such a beneficiary may reenroll at any time prior to the end of the six-month period if he or she pays all owed premiums, or if his or her situation changes such that he or she would no longer be subject to a premium requirement. After the six-month period, the beneficiary may be re-enrolled in BadgerCare upon request, if he or she meets all program rules, even if he or she continues to have unpaid premiums from the prior period of enrollment.

c. The state will monitor and include in the quarterly report information related to disenrollments from the demonstration, including due to nonpayment of premiums.

28. **Healthy Behavior Incentives.** Beneficiaries enrolled in Demonstration Population 2 who are subject to a premium requirement will have their household premium requirement reduced by up to 50 percent if they demonstrate that they do not engage in behaviors that increase health risks ("health risk behaviors"). For beneficiaries who do not demonstrate that they do not engage in health risk behaviors, but attest to actively managing their behavior(s) and/or that they have a health condition that causes them to engage in one or more health risk behaviors, the premium will also be reduced by up to half. For beneficiaries who do not demonstrate that they do not engage in health risk behaviors and do not attest that they are actively managing their behavior(s) and/or that they have a health condition that causes them to engage in one or more health risk behaviors, the standard premium will apply. Beneficiaries will have the opportunity to update and self-attest to any changed health risk behavior or conditions that affect health risk behaviors at a minimum on an annual basis, when eligibility is re-determined. Health risk behaviors include, but are not limited to, excessive alcohol consumption, failure to engage in dietary, exercise, and other lifestyle (or "healthy") behaviors in attempt to attain or maintain a healthy body weight, illicit drug use, failure to use a seatbelt, and tobacco use. To identify beneficiaries who are engaging in health risk behaviors, individuals will be asked to complete a Health Risk Assessment (HRA) when applying for coverage under the demonstration or, for current beneficiaries, no sooner than 12 months after waiver approval. Beneficiaries will also use the HRA to self-attest to their active management of a health risk behavior and/or to having an underlying health condition that causes them to engage in one or more health risk behaviors, if either of these is applicable.

    Because health risk is assessed at an individual level, a married couple may include one beneficiary who qualifies for a premium reduction and one beneficiary who does not. If this happens, the household premium would be reduced by 25 percent. If both beneficiaries qualify for a premium reduction, the household's premium would be reduced by 50 percent.

    Beneficiaries enrolled in Demonstration Population 2 must fully complete a HRA to be determined eligible for coverage at application and renewal. If an individual fails to answer all questions on the HRA, eligibility for the demonstration will be denied, but there is no period of non-eligibility and that individual can re-apply at any time.

29. **Copayments for Use of the Emergency Department.** Individuals in Demonstration Population 2 are required to pay a copayment for each non-emergent use of the emergency

room (ER). This copayment shall be charged consistent with 1916A(e)(1) of the Act and 42 CFR 447.54.

a. Under the provisions of section 1916A(e) of the Act, the state has the authority to impose a copayment for services received at a hospital emergency room if the services are not emergency services.

b. As provided under 42 CFR 447.54, the amount of this co-pay will be $8 for each non-emergent use of the emergency department.

c. The individual must receive an appropriate medical screening examination under section 1867—the Emergency Medical Treatment and Labor Act, or EMTALA provision of the Act.

d. Providers cannot refuse treatment for nonpayment of the co-payment.

e. AI/AN who are currently receiving or who have ever received an item or services furnished by an Indian health care provider or through referral under contract health services are exempt from the copayment requirements outlined above, consistent with section 1916(j) of the Act and 42 CFR 447.56.

VII. DELIVERY SYSTEM

30. General. Demonstration Populations 1 and 2 will be enrolled in the managed care organizations (MCO) that are currently contracted to provide health care services to the existing Medicaid and BadgerCare programs in most of the state to serve persons eligible under this demonstration. Demonstration enrollees will be required to join a MCO as a condition of eligibility, as long as there is at least one MCO available in their county of residence, and the county has been granted a rural exception under Medicaid State plan authority. The state may mandate enrollment into the single MCO in the counties that have been granted the rural exception by CMS. If the county has not been granted a rural exception, the state must offer the option of either MCO enrollment or Medicaid fee-for-service. All demonstration eligible beneficiaries must be provided a Medicaid card, regardless of MCO enrollment. MCOs may elect to provide a MCO specific card to MCO enrollees as well. The state must comply with the managed care regulations published at 42 CFR §438. Capitation rates shall be developed and certified as actuarially sound, in accordance with 42 CFR §438.6. No FFP is available for activities covered under contracts and/or modifications to existing contracts that are subject to 42 CFR §438 requirements prior to CMS approval of this demonstration authority as well as such contracts and/or contract amendments. The state shall submit any supporting documentation deemed necessary by CMS. The state must provide CMS with a minimum of sixty (60) days to review and approve changes. CMS reserves the right, as a corrective action, to withhold FFP (either partial or full) for the demonstration, until the contract compliance requirement is met.

VIII. GENERAL REPORTING REQUIREMENTS

31. Deferral for Failure to Submit Timely Demonstration Deliverables. CMS may issue deferrals in the amount of $5,000,000 per deliverable (federal share) when items required by

these STCs (e.g., required data elements, analyses, reports, design documents, presentations, and other items specified in these STCs (hereafter singularly or collectively referred to as "deliverable(s)") are not submitted timely to CMS or found to not be consistent with the requirements approved by CMS. Specifically:

a. Thirty (30) days after the deliverable was due, CMS will issue a written notification to the state providing advance notification of a pending deferral for late or non-compliant submissions of required deliverables.

b. For each deliverable, the state may submit a written request for an extension to submit the required deliverable. Extension requests that extend beyond the current fiscal quarter must include a Corrective Action Plan (CAP).

    i. CMS may decline the extension request.

    ii. Should CMS agree in writing to the state's request, a corresponding extension of the deferral process described below can be provided.

    iii. If the state's request for an extension includes a CAP, CMS may agree to or further negotiate the CAP as an interim step before applying the deferral.

c. The deferral would be issued against the next quarterly expenditure report following the written deferral notification.

d. When the state submits the overdue deliverable(s) that are accepted by CMS, the deferral(s) will be released.

e. As the purpose of a section 1115 demonstration is to test new methods of operation or services, a state's failure to submit all required deliverables may preclude a state from renewing a demonstration or obtaining a new demonstration.

f. CMS will consider with the state an alternative set of operational steps for implementing the intended deferral to align the process with the state's existing deferral process, for example what quarter the deferral applies to, and how the deferral is released.

32. Submission of Post-approval Deliverables. The state must submit all deliverables as stipulated by CMS and within the timeframes outlined within these STCs.

33. Compliance with Federal Systems Updates. As federal systems continue to evolve and incorporate additional 1115 waiver reporting and analytics functions, the state will work with CMS to:

a. Revise the reporting templates and submission processes to accommodate timely compliance with the requirements of the new systems;

b. Ensure all 1115, T-MSIS, and other data elements that have been agreed to for reporting and analytics are provided by the state; and

c. Submit deliverables to the appropriate system as directed by CMS.

34. **General Financial Requirements.** The state must comply with all general financial requirements under title XIX, including reporting requirements related to monitoring budget neutrality, set forth in Section X of these STCs.

35. **Reporting Requirements Related to Budget Neutrality.** The state must comply with all reporting requirements for monitoring budget neutrality set forth in Section XI of these STCs.

36. **Monitoring Protocol.** The state must submit to CMS a Monitoring Protocol no later than one hundred fifty (150) calendar days after approval of the demonstration. Once approved, the Monitoring Protocol will be incorporated into the STCs, as Attachment G.

    At a minimum, the Monitoring Protocol will affirm the state's commitment to conduct quarterly and annual monitoring in accordance with CMS' template. Any proposed deviations from CMS' template should be documented in the Monitoring Protocol. The Monitoring Protocol will describe the quantitative and qualitative elements on which the state will report through quarterly and annual monitoring reports. For quantitative metrics (e.g., performance metrics as described in STC 38(b)), CMS will provide the state with a set of required metrics, and technical specifications for data collection and analysis. The Monitoring Protocol will specify the methods of data collection and timeframes for reporting on the state's progress as part of the quarterly and annual monitoring reports. For the qualitative elements (e.g, operational updates as described in STC 38(a)), CMS will provide the state with guidance on narrative and descriptive information which will supplement the quantitative metrics on key aspects of the demonstration policies. The quantitative and qualitative elements will comprise the state's quarterly and annual monitoring reports.

37. **Tribal Consultation Plan.** The state must consult with federally recognized tribal governments and with Indian health care providers, and through consultation, identify any tribal concerns. The plan and timeline are due to CMS within 60 calendar days after approval of this demonstration and will be incorporated into the STCs, as Attachment I. CMS will work with the state if we determine changes are necessary to the state's submission, or if issues are identified as part of the review.

38. Monitoring Reports. The state must submit three (3) Quarterly Reports and one (1) Annual Report each DY. The information for the fourth quarterly report should be reported as distinct information within the Annual Report. The Quarterly Reports are due no later than sixty (60) calendar days following the end of each demonstration quarter. The Annual Report is due no later than ninety (90) calendar days following the end of the DY. The reports will include all required elements as per 42 CFR 431.428, and should not direct readers to links outside the report. Additional links not referenced in the document may be listed in a Reference/Bibliography section. The Monitoring Reports must follow the framework to be provided by CMS, which will be organized by milestones. The framework is subject to change as monitoring systems are developed/evolve, and be provided in a structured manner that supports federal tracking and analysis.

a. Operational Updates - The operational updates will focus on progress towards meeting the milestones identified in CMS' framework. Additionally, per 42 CFR 431.428, the Monitoring Reports must document any policy or administrative difficulties in operating the demonstration. The reports shall provide sufficient information to document key challenges, underlying causes of challenges, how challenges are being addressed, as well as key achievements and to what conditions and efforts successes can be attributed. The discussion should also include any issues or complaints identified by beneficiaries; lawsuits or legal actions; unusual or unanticipated trends; legislative updates; and descriptions of any public forums held. The Monitoring Report should also include a summary of all public comments received through post-award public forums regarding the progress of the demonstration.

b. Performance Metrics – The performance metrics will provide data to demonstrate how the state is progressing towards meeting the milestones identified in CMS's framework. The performance metrics will reflect all components of the state's demonstration, and may include, but are not limited to, measures associated with eligibility and coverage. Per 42 CFR 431.428, the Monitoring Reports must document the impact of the demonstration in providing insurance coverage to beneficiaries and the uninsured population, as well as outcomes of care, quality and cost of care, and access to care. This may also include the results of beneficiary satisfaction surveys, if conducted, and grievances and appeals. The required monitoring and performance metrics must be included in the Monitoring Reports, and will follow the framework provided by CMS to support federal tracking and analysis.

c. Budget Neutrality and Financial Reporting Requirements – Per 42 CFR 431.428, the Monitoring Reports must document the financial performance of the demonstration. The state must provide an updated budget neutrality workbook with every Monitoring Report that meets all the reporting requirements for monitoring budget neutrality set forth in the General Financial Requirements section of these STCs, including the submission of corrected budget neutrality data upon request. In addition, the state must report quarterly and annual expenditures associated with the populations affected by this demonstration on the Form CMS-64. Administrative costs should be reported separately.

d. Evaluation Activities and Interim Findings. Per 42 CFR 431.428, the Monitoring Reports must document any results of the demonstration to date per the evaluation

hypotheses. Additionally, the state shall include a summary of the progress of evaluation activities, including key milestones accomplished, as well as challenges encountered and how they were addressed.

39. **Corrective Action.** If monitoring indicates that demonstration features are not likely to assist in promoting the objectives of Medicaid, CMS reserves the right to require the state to submit a corrective action plan to CMS for approval. This may be an interim step to withdrawing waivers or expenditure authorities, as outlined in STC 11.

40. **Close-Out Report.** Within 120 days after the expiration of the demonstration, the state must submit a draft Close-Out Report to CMS for comments.

    a. The draft report must comply with the most current guidance from CMS.

    b. The state will present to and participate in a discussion with CMS on the Close-Out report.

    c. The state must take into consideration CMS' comments for incorporation into the final Close-Out Report.

    d. The final Close-Out Report is due to CMS no later than thirty (30) days after receipt of CMS' comments.

    e. A delay in submitting the draft or final version of the Close-Out Report may subject the state to penalties described in STC 31.

41. **Monitoring Calls.** CMS will convene periodic conference calls with the state.

    a. The purpose of these calls is to discuss ongoing demonstration operation, to include (but not limited to), any significant actual or anticipated developments affecting the demonstration. Examples include implementation activities, enrollment and access, budget neutrality, and progress on evaluation activities.

    b. CMS will provide updates on any pending actions, as well as federal policies and issues that may affect any aspect of the demonstration.

    c. The state and CMS will jointly develop the agenda for the calls.

42. **Post Award Forum.** Pursuant to 42 CFR 431.420(c), within six (6) months of the demonstration's implementation, and annually thereafter, the state shall afford the public with an opportunity to provide meaningful comment on the progress of the demonstration. At least thirty (30) days prior to the date of the planned public forum, the state must publish the date, time and location of the forum in a prominent location on its website. The state must also post the most recent annual report on its website with the public forum announcement. Pursuant to 42 CFR 431.420(c), the state must include a summary of the comments in the Monitoring Report associated with the quarter in which the forum was held, as well as in its compiled Annual Report.

43. Transformed Medicaid Statistical Information Systems Requirements (T-MSIS). The state shall comply with all T-MSIS milestones and associated timelines indicated below. Failure to meet these milestones on the below timeline will result in a deferral, as described in STC 31:

a. By December 31, 2018 state will address and correct all post go-live corrective actions (except waiver population reporting).

b. By January 31, 2019, state will achieve and maintain currency in T-MSIS data reporting.

c. By June 30, 2019 state will implement corrective action for waiver reporting.

IX. GENERAL FINANCIAL REQUIREMENTS.

This project is approved for title XIX services rendered during the demonstration period. This section describes the general financial requirements for these expenditures.

44. Quarterly Financial Reports. The state must provide quarterly title XIX expenditure reports using Form CMS-64, to separately report total title XIX expenditures for services provided through this demonstration under section 1115 authority. CMS shall provide title XIX FFP for allowable demonstration expenditures, only as long as they do not exceed the pre-defined limits on the costs incurred, as specified in Section XI of the STCs.

45. Reporting Expenditures under the Demonstration. The following describes the reporting of expenditures subject to the budget neutrality agreement:

a. Tracking Expenditures. In order to track expenditures under this demonstration, the state will report demonstration expenditures through the Medicaid and state Children's Health Insurance Program Budget and Expenditure System (MBES/CBES), following routine CMS-64 reporting instructions outlined in section 2500 and Section 2115 of the state Medicaid Manual. All demonstration expenditures subject to the budget neutrality limit, including baseline data and member months, must be reported each quarter on separate Forms CMS-64.9 WAIVER and/or 64.9P WAIVER, identified by the demonstration project number assigned by CMS (including the project number extension, which indicates the DY in which services were rendered or for which capitation payments were made). For monitoring purposes, cost settlements must be recorded on the appropriate prior period adjustment schedules (Forms CMS-64.9 Waiver) for the Summary Line 10B, in lieu of Lines 9 or 10C. For any other cost settlements (i.e., those not attributable to this demonstration), the adjustments should be reported on lines 9 or 10C, as instructed in the State Medicaid Manual. The term, "expenditures subject to the budget neutrality limit," is defined below.

b. Cost Settlements. For monitoring purposes, cost settlements attributable to the demonstration must be recorded on the appropriate prior period adjustment schedules (Form CMS-64.9P Waiver) for the Summary Sheet Line 10B, in lieu of Lines 9 or 10C. For any cost settlement not attributable to this demonstration, the adjustments should be reported as otherwise instructed in the State Medicaid Manual.

c. Cost Sharing Contributions. Premiums and other applicable cost sharing contributions from enrollees that are collected by the state from enrollees under the demonstration must be reported to CMS each quarter on Form CMS-64 Summary Sheet line 9.D, columns A and B. In order to assure that these collections are properly credited to the demonstration, premium and cost-sharing collections (both total computable and federal share) should also be reported by DY on the Form CMS-64 Narrative. In the calculation of expenditures subject to the budget neutrality expenditure limit, premium collections applicable to demonstration populations will be offset against expenditures. These section 1115 premium collections will be included as a manual adjustment (decrease) to the demonstration's actual expenditures on a quarterly basis.

d. Pharmacy Rebates. Using specific medical status codes, the state has the capacity to use its MMIS system to stratify manufacturer's rebate revenue that should be assigned to net demonstration expenditures for BC Reform Adults. The state will generate a demonstration-specific rebate report to support the methodology used to assign rebates to the demonstration. The state will report the portion of rebate revenue assigned to BC Reform Adults on the appropriate Forms CMS-64.9 WAIVER. This revenue will be distributed as state and federal revenue consistent with the federal matching rates under which the claim was paid. Budget neutrality will reflect the net cost of prescriptions.

e. Federally Qualified Health Center Settlement Expenses. Using specific medical status codes, the state will assign FQHC settlement expenses to claims covered under the demonstration for BC Reform Adults and will report these costs on the appropriate Forms CMS-64.9 WAIVER. The state will be able to generate reports using MMIS data to show the assignment of these settlement payments to demonstration expenditures.

f. Mandated Increase in Physician Payment Rates in 2013 and 2014. Section 1202 of the Health Care and Education Reconciliation Act of 2010 (Pub. Law 110-152) requires state Medicaid programs to pay physicians for primary care services at rates that are no less than what Medicare pays, for services furnished in 2013 and 2014. The federal government provides a federal medical assistance percentage of 100 percent for the claimed amount by which the minimum payment exceeds the rates paid for those services as of July 1, 2009. The state will exclude from the budget neutrality test for this demonstration the portion of the mandated increase for which the federal government pays 100 percent. These amounts must be reported on the base forms CMS-64.9, 64.21, or 64.21U (or their "P" counterparts), and not on any waiver form.

g. Use of Waiver Forms for Medicaid. For each DY, separate Forms CMS-64.9 Waiver and/or 64.9P Waiver shall be submitted reporting expenditures for individuals enrolled in the demonstration (Section XI of these STCs). The state must complete separate waiver forms for the following Medicaid eligibility groups/waiver names:

    i. "BC Reform Adults"

    ii. "TMA Adults"

    iii. "FFCY"

iv. "SUD"

h. Demonstration Year Definition. The Demonstration Years (DYs) will be defined as follows:

January 1, 2014 through December 31, 2014	Demonstration Year 1 (DY1)
January 1, 2015 through December 31, 2015	Demonstration Year 2 (DY2)
January 1, 2016 through December 31, 2016	Demonstration Year 3 (DY3)
January 1, 2017 through December 31, 2017	Demonstration Year 4 (DY4)
January 1, 2018 through December 31, 2018	Demonstration Year 5 (DY5)
January 1, 2019 through December 31, 2019	Demonstration Year 6 (DY6)
January 1, 2020 through December 31, 2020	Demonstration Year 7 (DY7)
January 1, 2021 through December 31, 2021	Demonstration Year 8 (DY8)
January 1, 2022 through December 31, 2022	Demonstration Year 9 (DY9)
January 1, 2023 through December 31, 2022	Demonstration Year 10 (DY10)

46. Administrative Costs. The state must track administrative costs for state-approved workforce programs under Section V. Administrative costs, including state-approved workforce programs under Section V, will not be included in the budget neutrality limit, but the state must separately track and report additional administrative costs that are directly attributable to the demonstration, using Forms CMS-64.10 Waiver and/or 64.10P Waiver, with waiver name Local Administration Costs ("ADM").

47. Claiming Period. All claims for expenditures subject to the budget neutrality limit (including any cost settlements) must be made within two (2) years after the calendar quarter in which the state made the expenditures. Furthermore, all claims for services during the demonstration period (including any cost settlements) must be made within two (2) years after the conclusion or termination of the demonstration. During the latter two-year period, the state must continue to identify separately net expenditures related to dates of service during the operation of the section 1115 demonstration on the Form CMS-64 and Form CMS-21 in order to properly account for these expenditures in determining budget neutrality.

48. Reporting Member Months. The following describes the reporting of member months for demonstration populations:

a. For the purpose of calculating the budget neutrality expenditure cap and for other purposes, the state must provide to CMS, as part of the quarterly report required under STC 38, the actual number of eligible member months for BadgerCare Reform Demonstration adults and separately the actual number of eligible member months for former foster care youth (i.e. FFCY). The state must submit a statement accompanying the quarterly report, which certifies the accuracy of this information.

To permit full recognition of "in-process" eligibility, reported counts of member months may be subject to revisions after the end of each quarter. Member month counts may be revised retrospectively as needed.

b. The term "eligible member months" refers to the number of months in which persons are eligible to receive services. For example, a person who is eligible for three (3) months contributes three (3) eligible member months to the total. Two individuals who are eligible for two (2) months each contribute two (2) eligible member months to the total, for a total of four (4) eligible member months.

49. Standard Medicaid Funding Process. The standard Medicaid funding process must be used during the demonstration. The state must estimate matchable demonstration expenditures (total computable and federal share) subject to the budget neutrality expenditure cap and separately report these expenditures by quarter for each federal fiscal year on the Form CMS-37 for both the Medical Assistance Payments (MAP) and State and Local Administration Costs (ADM). CMS will make federal funds available based upon the state's estimate, as approved by CMS. Within thirty (30) days after the end of each quarter, the state must submit the Form CMS-64 quarterly Medicaid expenditure report, showing Medicaid expenditures made in the quarter just ended. The CMS will reconcile expenditures reported on the Form CMS-64 quarterly with federal funding previously made available to the state, and include the reconciling adjustment in the finalization of the grant award to the state.

50. Extent of FFP for the Demonstration. Subject to CMS approval of the source(s) of the non-Federal share of funding, CMS will provide FFP at the applicable federal matching rate for the demonstration as a whole as outlined below, subject to the limits described in Section X of these STCs:

a. Administrative costs, including those associated with the administration of the demonstration.

b. Net expenditures and prior period adjustments of the Medicaid program that are paid in accordance with the approved state plan.

c. Medical Assistance expenditures made under section 1115 demonstration authority, including those made in conjunction with the demonstration, net of enrollment fees, cost sharing, pharmacy rebates, and all other types of third party liability or CMS payment adjustments.

51. Sources of Non-Federal Share. The state must certify that the matching non-federal share of funds for the demonstration is state/local monies. The state further certifies that such funds shall not be used as the match for any other federal grant or contract, except as permitted by law. All sources of non-federal funding must be compliant with section 1903(w) of the Act and applicable regulations. In addition, all sources of the non-federal share of funding are subject to CMS approval.

a. CMS may review the sources of the non-federal share of funding for the demonstration at any time. The state agrees that all funding sources deemed unacceptable by CMS shall be

addressed within the time frames set by CMS.

b. Any amendments that impact the financial status of the program shall require the state to provide information to CMS regarding all sources of the non-federal share of funding, including up to date responses to the CMS standard funding questions

c. The state assures that all health care-related taxes comport with section 1903(w) of the Act and all other applicable federal statutory and regulatory provisions, as well as the approved Medicaid state plan.

52. State Certification of Funding Conditions. The state must certify that the following conditions for non-Federal share of demonstration expenditures are met:

a. Units of government, including governmentally operated health care providers, may certify that state or local tax dollars have been expended as the non-federal share of funds under the demonstration.

b. To the extent the state utilizes certified public expenditures (CPEs) as the funding mechanism for title XIX (or under section 1115 authority) payments, CMS must approve a cost reimbursement methodology. This methodology must include a detailed explanation of the process by which the state would identify those costs eligible under title XIX (or under section 1115 authority) for purposes of certifying public expenditures.

c. To the extent the state utilizes CPEs as the funding mechanism to claim federal match for payments under the demonstration, governmental entities to which general revenue funds are appropriated must certify to the state the amount of such tax revenue (state or local) used to satisfy demonstration expenditures. The entities that incurred the cost must also provide cost documentation to support the state's claim for federal match.

d. The state may use intergovernmental transfers to the extent that such funds are derived from state or local tax revenues and are transferred by units of government within the state. Any transfers from governmentally operated health care providers must be made in an amount not to exceed the non-federal share of title XIX payments.

e. Under all circumstances, health care providers must retain 100 percent of the reimbursement amounts claimed by the state as demonstration expenditures. Moreover, no pre-arranged agreements (contractual or otherwise) may exist between the health care providers and the state and/or local government to return and/or redirect any portion of the Medicaid payments. This confirmation of Medicaid payment retention is made with the understanding that payments that are the normal operating expenses of conducting business (such as payments related to taxes—including health care provider-related taxes—fees, and business relationships with governments that are unrelated to Medicaid and in which there is no connection to Medicaid payments) are not considered returning and/or redirecting a Medicaid payment.

X. MONITORING BUDGET NEUTRALITY FOR THE DEMONSTRATION

53. **Limit on Title XIX Funding.** The state shall be subject to a limit on the amount of federal title XIX funding that the state may receive on selected Medicaid expenditures during the period of approval of the demonstration. The limit is determined by using the per capita cost method and budget neutrality expenditure limits are set on a yearly basis with a cumulative budget neutrality expenditure limit for the length of the entire demonstration. The data supplied by the state to CMS to set the annual caps is subject to review and audit, and if found to be inaccurate, will result in a modified budget neutrality expenditure limit. CMS' assessment of the state's compliance with these annual limits will be done using the Schedule C report from the CMS-64.

54. **Risk.** The state will be at risk for the per capita cost (as determined by the method described below) for demonstration populations as defined in Section IV, but not at risk for the number of participants in the demonstration population. By providing FFP without regard to enrollment in the demonstration populations, CMS will not place the state at risk for changing economic conditions that impact enrollment levels. However, by placing the state at risk for the per capita costs of current eligibles, CMS assures that the demonstration expenditures do not exceed the levels that would have been realized had there been no demonstration.

55. **Calculation of the Budget Neutrality Limit.** For the purpose of calculating the overall budget neutrality limit for the demonstration, an annual budget limit will be calculated for each DY on a total computable basis. The federal share of this limit will represent the maximum amount of FFP that the state may receive during the demonstration period for the types of demonstration expenditures described below. The federal share will be calculated by multiplying the total computable budget neutrality limit by the Composite Federal Share, which is defined in STC 56 below.

    The demonstration expenditures subject to the budget neutrality limit related to Demonstration Population 2 as described in STC 17 are those reported under the following Waiver Name: BC Reform Adults. The demonstration expenditures subject to the budget neutrality limit related to Demonstration Population 3 as described in STC 17 are those reported under the following Waiver Name: FFCY. The demonstration expenditures subject to the budget neutrality limit related to SUD as those reported under the following Waiver Name: SUD.

    For each DY, separate annual budget limits of demonstration service expenditures will be calculated based on projected PMPM expenditures for BC Reform Adults, Former Foster Care Youth, and SUD. The PMPM amounts for BC Reform Adults, Former Foster Care Youth, and SUD are shown on the table below.

MEG	TREND RATE	2018 DY 5 – PMPM	2019 DY 6 - PMPM	2020 DY 7 PMPM	2021 DY 8 – PMPM	2022 DY 9 – PMPM	2023 DY 10 PMPM
BC Reform Adults	4.7%	$710.95	$744.36	$779.35	$815.98	$854.33	$894.48

Former Foster Care Youth	3.7%	$2,538.20	$2,632.11	$2,729.50	$2,830.49	$2,935.22	$3,043.82
SUD	4.6%	$5,561	$5,816.81	$6,084.38	$6,364.26	$6,657.02	$6,963.24

56. **Hypothetical Eligibility Group.** BC Reform Adults (as related to Demonstration Population 2 defined under STC 17), SUD, and Former Foster Care Youth (Demonstration Population 3) are considered to be a hypothetical populations for budget neutrality. BC Reform Adults consist of individuals who could have been added to the Medicaid program through the state plan, but instead are covered through demonstration authority.

    Former Foster Care Youth from Another State are individuals that were or would have been eligible for state plan coverage as described in the January 22, 2013 CMS notice of proposed rulemaking that permitted the option to cover formerly out-of-state former foster care youth up to age 26 pursuant to section 1902(a)(10)(A)(i)(IX) of the Act. This coverage is now only permissible under the authority of this section 1115 demonstration as outlined in the November 21, 2016 CIB on transition coverage for Former Foster Care Youth.

    As part of the SUD initiative, the state may receive FFP for the continuum of services specified in Table 2 to treat OUD and other SUDs that are provided to Medicaid beneficiaries in an IMD. These are state plan services that would be eligible for reimbursement if not for the IMD exclusion. Therefore, they are being treated as hypothetical. The state may only claim FFP via demonstration authority for the services listed in Table 2 that will be provided in an IMD. However, the state will not be allowed to obtain budget neutrality "savings" from these services. Therefore, a separate expenditure cap is established for SUD services.

    The budget neutrality expenditure limits for these populations reflect the expected costs for these populations and there is no requirement that the state produce savings from elsewhere in its Medicaid program to offset hypothetical population costs. States may not accrue budget neutrality "savings" from hypothetical populations.

57. **Composite Federal Share Ratio.** The Composite Federal Share is the ratio calculated by dividing the sum total of federal financial participation (FFP) received by the state on actual expenditures for BC Reform Adults during the approval period, as reported through the MBES/CBES and summarized on Schedule C (with consideration of additional allowable demonstration offsets such as, but not limited to, premium collections) by total computable demonstration expenditures for the same period as reported on the same forms. Should the demonstration be terminated prior to the end of the extension approval period, the Composite Federal Share will be determined based on actual expenditures for the period in which the demonstration was active. For the purpose of interim monitoring of budget neutrality, a reasonable estimate of Composite Federal Share may be developed and used through the same process or through an alternative mutually agreed upon method.

58. **Future Adjustments to the Budget Neutrality Expenditure Limit.** CMS reserves the right to adjust the budget neutrality expenditure limit to be consistent with enforcement of impermissible provider payments, health care related taxes, new federal statutes, or policy

interpretations implemented through letters, memoranda, or regulations with respect to the provision of services covered under the demonstration.

59. **Enforcement of Budget Neutrality.** CMS shall enforce budget neutrality over the life of the demonstration rather than on an annual basis. However, if the state's expenditures exceed the calculated cumulative budget neutrality expenditure cap on a PMPM basis by the percentage identified below for any of the demonstration years, the state must submit a corrective action plan to CMS for approval. The state will subsequently implement the approved corrective action plan.

Year	Cumulative target definition on a PMPM basis	Percentage
DY 1	Cumulative budget neutrality limit plus:	1 percent
DY 2	Cumulative budget neutrality limit plus:	0.75 percent
DY 3	Cumulative budget neutrality limit plus:	0.5 percent
DY 4	Cumulative budget neutrality limit plus:	0.25 percent
DY 5	Cumulative budget neutrality limit plus:	0 percent
DY 6	Cumulative budget neutrality limit plus:	0 percent
DY 7	Cumulative budget neutrality limit plus:	0 percent
DY 8	Cumulative budget neutrality limit plus:	0 percent
DY 9	Cumulative budget neutrality limit plus:	0 percent
DY 10	Cumulative budget neutrality limit plus:	0 percent

60. **Exceeding Budget Neutrality.** If at the end of the demonstration period the cumulative budget neutrality limit has been exceeded, the excess federal funds will be returned to CMS. If the demonstration is terminated prior to the end of the budget neutrality agreement, an evaluation of this provision will be based on the time elapsed through the termination date.

XI. EVALUATION OF THE DEMONSTRATION

61. **Cooperation with Federal Evaluators.** As required under 42 CFR 431.420(f), the state shall cooperate fully and timely with CMS and its contractors in any federal evaluation of the demonstration or any component of the demonstration. This includes, but is not limited to, commenting on design and other federal evaluation documents and providing data and analytic files to CMS, including entering into a data use agreement that explains how the data

and data files will be exchanged, and providing a technical point of contact to support specification of the data and files to be disclosed, as well as relevant data dictionaries and record layouts. The state shall include in its contracts with entities who collect, produce or maintain data and files for the demonstration, that they shall make such data available for the federal evaluation as is required under 42 CFR 431.420(f) to support federal evaluation. The state may claim administrative match for these activities. Failure to comply with this STC may result in a deferral being issued as outlined in STC 31.

62. **Independent Evaluator.** Upon approval of the demonstration, the state must begin to arrange with an independent party to conduct an evaluation of the demonstration to ensure that the necessary data is collected at the level of detail needed to research the approved hypotheses. The independent party must sign an agreement to conduct the demonstration evaluation in an independent manner in accord with the CMS-approved, draft Evaluation Design. When conducting analyses and developing the evaluation reports, every effort should be made to follow the approved methodology. However, the state may request, and CMS may agree to, changes in the methodology in appropriate circumstances.

63. **Draft Evaluation Design.** The state must submit, for CMS comment and approval, a draft Evaluation Design, no later than one hundred eighty (180) calendar days after approval of the demonstration. Any modifications to an existing approved Evaluation Design will not affect previously established requirements and timelines for report submission for the demonstration, if applicable.

    The draft Evaluation Design must be developed in accordance with the following CMS guidance (including but not limited to):

    a. Attachment D (Developing the Evaluation Design) of these STCs, technical assistance for developing SUD Evaluation Designs (as applicable, and as provided by CMS), and all applicable technical assistance on how to establish comparison groups to develop a draft Evaluation Design.

64. **Evaluation Design Approval and Updates.** The state must submit a revised draft Evaluation Design within sixty (60) calendar days after receipt of CMS' comments. Upon CMS approval, the approved Evaluation Design will be included as an attachment to these STCs. Per 42 CFR 431.424(c), the state will publish the approved Evaluation Design within thirty (30) calendar days of CMS approval. The state must implement the Evaluation Design and submit a description of its evaluation progress in each of the Monitoring Reports. Once CMS approves the Evaluation Design, if the state wishes to make changes, the state must submit a revised Evaluation Design to CMS for approval if the changes are substantial in scope; otherwise, in consultation with CMS, the state may include updates to the evaluation design in monitoring reports.

65. **Evaluation Questions and Hypotheses.** Consistent with Attachments D and E (Developing the Evaluation Design and Preparing the Interim and Summative Evaluation Reports) of these STCs, the evaluation documents must include a discussion of the evaluation questions and hypotheses that the state intends to test. Each demonstration component should have at least one evaluation question and hypothesis. The hypothesis testing should include, where possible, assessment of both process and outcome measures. Proposed measures should be selected from nationally-recognized sources and national measures sets, where possible. Measures sets could

include CMS's Core Set of Health Care Quality Measures for Children in Medicaid and CHIP, CMS' measure sets for eligibility and coverage, Consumer Assessment of Health Care Providers and Systems (CAHPS), the Initial Core Set of Health Care Quality Measures for Medicaid-Eligible Adults and/or measures endorsed by National Quality Forum (NQF).

66. **Evaluation Budget.** A budget for the evaluation shall be provided with the draft Evaluation Design. It will include the total estimated cost, as well as a breakdown of estimated staff, administrative, and other costs for all aspects of the evaluation such as any survey and measurement development, quantitative and qualitative data collection and cleaning, analyses, and report generation. A justification of the costs may be required by CMS if the estimates provided do not appear to sufficiently cover the costs of the design or if CMS finds that the design is not sufficiently developed, or if the estimates appear to be excessive.

67. **Interim Evaluation Report.** The state must submit an Interim Evaluation Report for the completed years of the demonstration, and for each subsequent renewal or extension of the demonstration, as outlined in 42 CFR 431.412(c)(2)(vi). When submitting an application for renewal, the Interim Evaluation Report should be posted to the state's website with the application for public comment.

    a. The Interim Evaluation Report will discuss evaluation progress and present findings to date as per the approved Evaluation Design.

    b. For demonstration authority that expires prior to the overall demonstration's expiration date, the Interim Evaluation Report must include an evaluation of the authority as approved by CMS.

    c. If the state is seeking to renew or extend the demonstration, the draft Interim Evaluation Report is due when the application for renewal is submitted. If the state made changes to the demonstration in its application for renewal, the research questions and hypotheses, and how the design was adapted should be included. If the state is not requesting a renewal for a demonstration, an Interim Evaluation Report is due one (1) year prior to the end of the demonstration. For demonstration phase outs prior to the expiration of the approval period, the draft Interim Evaluation Report is due to CMS on the date that will be specified in the notice of termination or suspension.

    d. The state must submit a revised Interim Evaluation Report sixty (60) calendar days after receiving CMS comments on the draft Interim Evaluation Report. Once approved by CMS, the state must post the final Interim Evaluation Report to the state's website.

    e. The Interim Evaluation Report must comply with Attachment E (Preparing the Interim and Summative Evaluation Reports) of these STCs.

68. **Summative Evaluation Report.** The draft Summative Evaluation Report must be developed in accordance with Attachment E (Preparing the Interim and Summative Evaluation Reports) of these STCs. The state must submit a draft Summative Evaluation Report for the demonstration's current approval period within eighteen (18) months of the end of the approval period represented by these STCs. The Summative Evaluation Report must include the information in the approved Evaluation Design.

a. Unless otherwise agreed upon in writing by CMS, the state shall submit a revised Summative Evaluation Report within sixty (60) calendar days of receiving comments from CMS on the draft.

b. Upon approval from CMS, the final Summative Evaluation Report must be posted to the state's Medicaid website within thirty (30) calendar days of approval by CMS.

69. Corrective Action Plan Related to Evaluation. If evaluation findings indicate that demonstration features are not likely to assist in promoting the objectives of Medicaid, CMS reserves the right to require the state to submit a corrective action plan to CMS for approval. These discussions may also occur as part of a renewal process when associated with the state's Interim Evaluation Report. A state corrective action plan could include a temporary suspension of implementation of demonstration programs, in circumstances where evaluation findings indicate substantial and sustained directional change inconsistent with demonstration goals, such as substantial and sustained trends indicating increased difficulty accessing services. This may be an interim step to withdrawing waivers or expenditure authorities, as outlined in STC 11. CMS further has the ability to suspend implementation of the demonstration should corrective actions not effectively resolve these concerns in a timely manner.

70. State Presentations for CMS. CMS reserves the right to request that the state present and participate in a discussion with CMS on the Evaluation Design, the Interim Evaluation Report, and/or the summative evaluation.

71. Public Access. The state shall post the final documents (e.g., Monitoring Reports, Close Out Report, Approved Evaluation Design, Interim Evaluation Report, and Summative Evaluation Report) on the state's Medicaid website within thirty (30) calendar days of approval by CMS.

72. Additional Publications and Presentations. For a period of twelve (12) months following CMS approval of the final reports, CMS will be notified prior to presentation of these reports or their findings, including in related publications (including, for example, journal articles), by the state, contractor, or any other third party directly connected to the demonstration over which the state has control. Prior to release of these reports, articles, or other publications, CMS will be provided a copy including any associated press materials. CMS will be given ten (10) business days to review and comment on publications before they are released. CMS may choose to decline to comment or review some or all of these notifications and reviews. This requirement does not apply to the release or presentation of these materials to state or local government officials.

Attachment B: CMS Comments and UW/DHS Responses

Wisconsin's BadgerCare Reform Section 1115 Demonstration
CMS COMMENTS ON THE REVISED EVALUATION DESIGN

June 22, 2021

I. Introduction

The Centers for Medicare & Medicaid Services (CMS) has reviewed the revised evaluation design resubmitted on February 22, 2021 for Wisconsin's section 1115 BadgerCare Reform demonstration extension against CMS's comments on the state's earlier draft evaluation design, provided in March and September 2020, the demonstration's Special Terms and Conditions (STC) (Number 11-W-00293/5), as updated on April 6, 2021,[1] and CMS's evaluation design guidance for eligibility and coverage and substance use disorder (SUD) demonstrations.

CMS is sincerely appreciative of the state's commitment to a comprehensive and rigorous evaluation of the BadgerCare Reform demonstration. The revisions to the evaluation design were responsive to most of CMS's comments and the state has increased the strength of its design. In particular, CMS appreciates more detailed information on survey and data collection activities, the survey instrument, and the groups of beneficiaries to be surveyed. The state also plans to field an additional wave of the beneficiary survey and provided more information about their power calculations in response to CMS comments from March 2020. Finally, the state has addressed most of CMS's comments related to the COVID-19 pandemic through adjustments to its empirical approach.

In the recommendations below, we provide a few areas for the state to further strengthen the evaluation design as the state finalizes the document per the current set of STCs, dated April 6, 2021. In consultation with the state, CMS would like to establish a feasible timeline for the state to update the evaluation design to address the recommendations outlined below and preferably, in accordance with STC #64, receive from the state the revised evaluation design no later than 60 days after the state receives these comments.

II. Updated CMS recommendations

1. Update evaluation design components to reflect the currently authorized STCs.

On April 6, 2021, CMS sent a letter[2] to the state updating the STCs for this demonstration. Please update the list of provisions, hypotheses, and research questions—and commensurate design elements—to reflect these changes.

2. Estimate annual demonstration impacts for each year in the intervention period in difference-in-differences analyses.

In the state's difference-in-differences specification (p. 7), the demonstration impact is estimated across all years in the intervention period. The state should consider a difference-in-differences

[1] https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/wi-badgercare-reform-ca2.pdf
[2] https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/wi-badgercare-reform-ca2.pdf

specification that allows for a different impact for each year in the intervention period. For example, if the baseline period is 2019 and the intervention period is 2021–2023 (and 2020 is excluded from the analysis), the state could estimate separate treatment effects for 2021, 2022 and 2023. This would allow the state and CMS to observe the impact of the demonstration in years during or right after COVID-19 and in later years when the pandemic has further subsided.

3. Control for local area time trends in difference-in-differences analyses.

As CMS noted in its comments from September 23, 2020, demonstration impacts could be confounded by the pandemic even in 2021 and beyond. To control for these and other factors, the state could consider adding county-by-year fixed effects to beneficiary-level difference-in-differences models. This can account for the fact that COVID-19 severity and recovery may vary across areas and over time and help isolate the demonstration impact from the confounding effects of COVID-19 and other potential confounding factors.

4. Add sensitivity analyses using a constant analytic sample.

In its comments, CMS noted that the pandemic may affect the pool of beneficiaries who enter Medicaid, making it difficult to isolate the demonstration impact from changing characteristics of Medicaid beneficiaries. The state should consider sensitivity analyses that keep the analytic sample constant before and after the start of the pandemic. This approach is similar to the sensitivity check the state proposed to account for a changing Medicaid population due to the availability of SUD services when evaluating provision 5.

5. Clarify how 2020 will be treated as part of the baseline period under the evaluation of provision 3.

For most hypotheses that will be examined using a difference-in-differences approach, the state will exclude 2020 from the baseline period. However, for the evaluation of provision 3, the baseline period for the difference-in-difference analyses is set to "prior to March 2020" (p. 57) and it is unclear whether the remainder of 2020 is excluded from the analysis or is part of the intervention period. The state should clarify why the approach for provision 3 differs from the other provisions and ensure that the evaluation results for provision 3 are robust to excluding all of 2020 from the analysis.

6. Ensure that the supporting text aligns with tables for changed and excluded research questions.

In its revised evaluation design, the state changed question 4.6.a, included an additional primary research question 4.7, and excluded research question 3.1.b. However, the surrounding text occasionally refers to the previous numbering and questions. For example, the Hypothesis & Research Questions section for provision 4 still refers to question 4.6a from the previous version of the evaluation design and question 4.7 is not mentioned (pp. 65–66). Under provision 3, the Data Sources & Outcomes Measures (p. 62), Analytic Methods (p. 63) and Methodological Limitations (p. 64) sections have not been updated to reflect that research question 3.1.b from the previous version of the evaluation design has been dropped and the research questions have been

re-numbered. The state should ensure that the surrounding text and tables are fully updated to reflect the updated list of primary research questions.

Institute for Research on Poverty
UNIVERSITY OF WISCONSIN-MADISON

Wisconsin's Medicaid CMS § Waiver 2019-2023
CMS Review and Recommendations and UW Evaluation Team Response

CMS recommendation in Times New Roman font
UW Evaluation Team response in Calibri font

The UW Evaluation Team appreciates the feedback received from CMS on the most recent version of the design report. We have summarized our responses below.

In addition, CMS has previously indicated that they welcome all opportunities to provide feedback on data collection instruments. Given the tight timelines we typically face between instrument development and implementation, and the desire for flexibility in the face of uncertainty, we would welcome a streamlined way to conduct this conversation. For example, planning for the second beneficiary survey will begin Q4 2021 and data collection will begin Q2 2022. We would be glad to engage the CMS team for a consultation conversation on the survey concepts if given the opportunity, including through a direct connection between the evaluation team and CMS's designated representative as appropriate.

I. Updated CMS recommendations

1. Update evaluation design components to reflect the currently authorized STCs.

On April 6, 2021, CMS sent a letter[1] to the state updating the STCs for this demonstration. Please update the list of provisions, hypotheses, and research questions—and commensurate design elements—to reflect these changes.

The updated STCs mean that further evaluation of what was Provision 2, the community engagement requirements, will no longer be required, thus Hypotheses 2.1-2.4 along with Primary Research Questions (and related subquestions) 2.1-2.4 will be eliminated. A few survey questions intended to measure the effects of Provision 2 can be excised from future surveys, although some questions in the employment domain are still relevant to other provisions. In addition, administrative data on beneficiaries' community engagement activities will not be collected and thus no longer utilized. Because many design elements and data sources were common to multiple hypotheses, these are the only elements of the evaluation design that have been eliminated. We have made these edits accordingly in the document. Because the community engagement requirement did exist, even though it was never implemented, and part of the waiver population received communications referring to it and/or were exposed to news coverage about it, we have retained a description of it and its fate in the narrative portion of the design report.

[1] https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/wi-badgercare-reform-ca2.pdf

2. Estimate annual demonstration impacts for each year in the intervention period in difference-in-differences analyses.

In the state's difference-in-differences specification (p. 7), the demonstration impact is estimated across all years in the intervention period. The state should consider a difference-in-differences specification that allows for a different impact for each year in the intervention period. For example, if the baseline period is 2019 and the intervention period is 2021–2023 (and 2020 is excluded from the analysis), the state could estimate separate treatment effects for 2021, 2022 and 2023. This would allow the state and CMS to observe the impact of the demonstration in years during or right after COVID-19 and in later years when the pandemic has further subsided.

We agree that allowing for treatment effect heterogeneity is appropriate. We have edited the text to reflect this as an additional specification.

3. Control for local area time trends in difference-in-differences analyses.

As CMS noted in its comments from September 23, 2020, demonstration impacts could be confounded by the pandemic even in 2021 and beyond. To control for these and other factors, the state could consider adding county-by-year fixed effects to beneficiary-level difference-in-differences models. This can account for the fact that COVID-19 severity and recovery may vary across areas and over time and help isolate the demonstration impact from the confounding effects of COVID-19 and other potential confounding factors.

We agree that studying robustness to geographic differences may be appropriate in some cases. The feasibility of this suggestion generally depends on the underlying data used for analysis; for example, whether the analytic sample is constant, whether the data include county information, and whether the sample size is sufficient to support the inclusion of a large number of fixed effects. We have added language to reflect this.

4. Add sensitivity analyses using a constant analytic sample.

In its comments, CMS noted that the pandemic may affect the pool of beneficiaries who enter Medicaid, making it difficult to isolate the demonstration impact from changing characteristics of Medicaid beneficiaries. The state should consider sensitivity analyses that keep the analytic sample constant before and after the start of the pandemic. This approach is similar to the sensitivity check the state proposed to account for a changing Medicaid population due to the availability of SUD services when evaluating provision 5.

We agree that this may be appropriate depending on the analysis and the time of implementation for the provisions. We have added language reflecting this.

5. Clarify how 2020 will be treated as part of the baseline period under the evaluation of provision 3.

For most hypotheses that will be examined using a difference-in-differences approach, the state will exclude 2020 from the baseline period. However, for the evaluation of provision 3, the baseline period for the difference-in-difference analyses is set to "prior to March 2020" (p. 57) and it is unclear whether the remainder of 2020 is excluded from the analysis or is part of the intervention period. The state should clarify why the approach for provision 3 differs from the other provisions and ensure that the evaluation results for provision 3 are robust to excluding all of 2020 from the analysis.

We have changed the wording in the description for this provision to mirror that used for other provisions. The intent was not for the approach to differ.

6. Ensure that the supporting text aligns with tables for changed and excluded research questions.

In its revised evaluation design, the state changed question 4.6.a, included an additional primary research question 4.7, and excluded research question 3.1.b. However, the surrounding text occasionally refers to the previous numbering and questions. For example, the Hypothesis & Research Questions section for provision 4 still refers to question 4.6a from the previous version of the evaluation design and question 4.7 is not mentioned (pp. 65–66). Under provision 3, the Data Sources & Outcomes Measures (p. 62), Analytic Methods (p. 63) and Methodological Limitations (p. 64) sections have not been updated to reflect that research question 3.1.b from the previous version of the evaluation design has been dropped and the research questions have been re-numbered. The state should ensure that the surrounding text and tables are fully updated to reflect the updated list of primary research questions.

We have made these edits. Please note that due to the elimination of provision 2, all hypotheses have been re-numbered.

Attachment C: Independent Evaluator Assurance of No Conflict

INDEPENDENT EVALUATOR: ASSURANCE AND "NO CONFLICT" STATEMENT

The Wisconsin Department of Health Services assures that the independent evaluator, the University of Wisconsin Institute for Research on Poverty and its subcontracting investigators, will conduct a fair and impartial evaluation, prepare an objective and robust evaluation report, and there will be no conflict of interest.

The selected independent evaluator has a record of providing high-quality, independent evaluations for multiple organizations across Wisconsin. The independent evaluator also conducted the independent evaluation of the previous 1115 waiver approved in 2008, 2012, and 2014 as well as numerous other Medicaid initiatives in Wisconsin. Key research staff who participated in the 2014 BadgerCare Reform waiver evaluation and who are familiar with the state's Medicaid Eligibility Groups and data sources will be continuing their research efforts on this waiver evaluation.

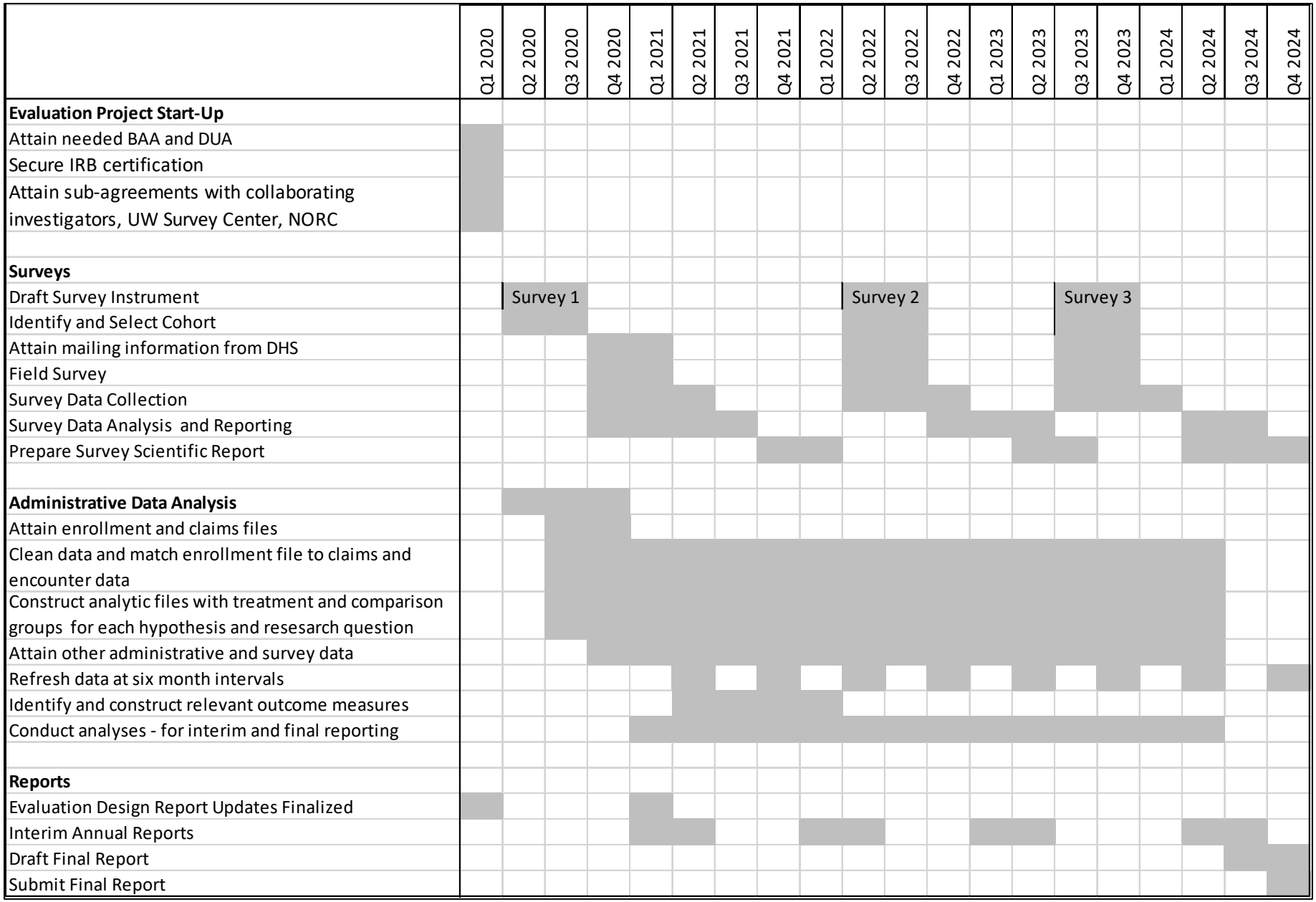
The independent evaluator was screened to assure independence and freedom from conflict of interest. A series of interviews with the independent evaluator revealed that the entity has no conflicts of interest or preconceived notions about what they might find in terms of outcomes related to the new waiver provisions for childless adults. The state assures that the independent evaluator will be able to conduct the evaluation freely and without interference from the state or other outside parties connected to the state.

The state encourages the independent evaluator to address any potential conflict of interest in an open and honest manner at any stage of the evaluation process at which it may arise so that it does not diminish its capacity for impartiality and undermine the evaluation outcome. The state also encourages the independent evaluator to report on any pressures or interferences encountered during the evaluation process that did affect, or could have affected, the evaluator's independence or objectivity. The state is committed to fostering transparency throughout the evaluation process by ensuring that necessary data is easily accessible to the independent evaluator.

Any conflicts of interest that may arise during the evaluation process will be required to be disclosed in the evaluation report. In reviewing draft evaluation reports, the state and independent evaluator will agree to follow procedures designed to improve the probability of organizational independence and protection from interference.

Confirmation Statement: The evaluator, the University of Wisconsin Institute for Research on Poverty submits this evaluation design report under its institutional letterhead and, in doing so, confirms no conflict of interest in serving as an independent evaluator on this project.

Attachment D: Timelines of Major Evaluation Milestones


Q1 2020
Q2 2020
Q3 2020
Q4 2020
Q1 2021
Q2 2021
Q3 2021
Q4 2021
Q1 2022
Q2 2022
Q3 2022
Q4 2022
Q1 2023
Q2 2023
Q3 2023
Q4 2023
Q1 2024
Q2 2024
Q3 2024
Q4 2024
Evaluation Project Start-Up
Attain needed BAA and DUA
Secure IRB certification
Attain sub-agreements with collaborating investigators, UW Survey Center, NORC
Surveys
Draft Survey Instrument
Survey 1
Survey 2
Survey 3
Identify and Select Cohort
Attain mailing information from DHS
Field Survey
Survey Data Collection
Survey Data Analysis and Reporting
Prepare Survey Scientific Report
Administrative Data Analysis
Attain enrollment and claims files
Clean data and match enrollment file to claims and encounter data
Construct analytic files with treatment and comparison groups for each hypothesis and resesarch question
Attain other administrative and survey data
Refresh data at six month intervals
Identify and construct relevant outcome measures
Conduct analyses - for interim and final reporting
Reports
Evaluation Design Report Updates Finalized
Interim Annual Reports
Draft Final Report
Submit Final Report

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Current and Former BadgerCare Member Survey

Thank you for taking the time to answer the questions on the following pages. This survey is about your health care coverage through Wisconsin Medicaid or BadgerCare. Your answers will help the Wisconsin Department of Health Services understand how changes to these programs affect your health and health care.

Taking part in this survey is voluntary. You can skip questions that you do not want to answer. If you choose not to take this survey, it will not affect any health care benefits you are getting right now or might get in the future. All information is private and confidential. You will not be individually identified with your responses.

For each question, please fill in the circle next to the answer you choose, or write your answer in the box provided. When you are finished, please place the completed survey into the postage-paid envelope provided, and put it in the mail.

If you have questions about the survey, you can call or email the Respondent Care Center at NORC at the University of Chicago.

Respondent Care Center at NORC at the University of Chicago
1 (866) 856-6672 (NORC)
surveyhelp@norc.org

Thank you again for your help!

ForwardHealth
Wisconsin serving you

If you have Medicaid/BadgerCare, you likely have a card that looks like the example below.

YOUR HEALTH CARE COVERAGE

1. In the past 12 months, how many months did you have some kind of health care coverage? *Select one answer only.*

[1] ☐ No health care coverage during the last 12 months
[2] ☐ 1 to 2 months of health care coverage
[3] ☐ 3 to 5 months of health care coverage
[4] ☐ 6 to 8 months of health care coverage
[5] ☐ 9 to 11 months of health care coverage
[6] ☐ Covered for all of the last 12 months
→ *Go to question #3*

2. If you did not have health care coverage in some or all of the past 12 months, what are the reasons you did not have coverage? *Select all that apply.*

[1] ☐ I did not qualify for Medicaid/ BadgerCare anymore
[2] ☐ I could not afford payments to remain on Medicaid/ BadgerCare
[3] ☐ I was not offered health care coverage from an employer
[4] ☐ I was not able to afford the health care coverage an employer offered
[5] ☐ I did not have access to any health care coverage
[6] ☐ I did not want health care coverage
[7] ☐ I did not know how to find information on available health care coverage options
[8] ☐ I did not have the time to get health care coverage
[9] ☐ I lost health care coverage due to the COVID-19 pandemic

3. What type of health care coverage do you currently have? *Select all that apply.*

[1] ☐ Wisconsin Medicaid/BadgerCare
→ *Go to question #5 if selected*
[2] ☐ Employer or family member's employer
[3] ☐ A private plan I pay for myself
[4] ☐ A health plan from Healthcare.gov, the federal Affordable Care Act (ACA/Obamacare) Marketplace
[5] ☐ Other coverage
[6] ☐ I do not have health care coverage

4. What are the reasons you no longer have Wisconsin Medicaid/BadgerCare? *Select all that apply.*

[1] ☐ I am not eligible anymore because I have access to other health care coverage
[2] ☐ I am not eligible anymore because my income has changed
[3] ☐ I am not eligible anymore for other reasons
[4] ☐ The premiums increased and so I dropped my Medicaid/BadgerCare coverage
[5] ☐ I missed a premium payment, so the Medicaid/BadgerCare program temporarily removed me from coverage
[6] ☐ I switched to a different type of health care coverage
[7] ☐ Other reason, please describe ↓

YOUR HEALTH CARE

5. Is there a place you usually go for your health care? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No

6. If you needed health care in the past 12 months, did you get all the care you needed? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No
[3] ☐ I did not need care in the last 12 months

7. Was there a time in the last 12 months when you needed prescription medication? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No → ***Go to question #9***

8. If you needed prescription medications in the past 12 months, did you get all the medications you needed? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No
[3] ☐ I did not need medications in the last 12 months

The next set of questions are about health care during the COVID-19/coronavirus outbreak. Please focus on the months since February 2020.

9. At any time since February 2020, did you need medical care for something other than COVID-19, but did not get it because of the COVID-19 outbreak? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No → ***Go to question #11***
[3] ☐ I have not needed medical care → ***Go to question #11***

10. Which types of health care did you need, but could not get due to the COVID-19 outbreak? *Select one answer only.*

	Yes (1)	No (2)	Not applicable (88)
a. Urgent Care for an Accident or Illness	[1] ☐	[2] ☐	[88] ☐
b. Counseling or Mental Health Therapy	[1] ☐	[2] ☐	[88] ☐
c. A Surgical Procedure	[1] ☐	[2] ☐	[88] ☐
d. Diagnostic or Medical Screening Test	[1] ☐	[2] ☐	[88] ☐
e. Treatment for an Ongoing Condition	[1] ☐	[2] ☐	[88] ☐
f. A Regular Check-up	[1] ☐	[2] ☐	[88] ☐
g. Prescription Drugs or Medications	[1] ☐	[2] ☐	[88] ☐
h. Dental Care	[1] ☐	[2] ☐	[88] ☐
i. Vision Care	[1] ☐	[2] ☐	[88] ☐
j. Hearing Care	[1] ☐	[2] ☐	[88] ☐
k. Drug or Alcohol Treatment	[1] ☐	[2] ☐	[88] ☐

11. Have you had symptoms that you think were from being sick with COVID-19? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No → ***Go to question #14***

12. Did you get tested at least once for COVID-19? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No → ***Go to question #14***

13. Did any of your test results show that you were positive (i.e., had the infection) for COVID-19? *Select one answer only.*

[1] ☐ Yes, the test was positive
[2] ☐ No, the test was negative
[3] ☐ I never received the test results
[4] ☐ I am still waiting for the test results

14. If the United States were to develop a vaccine for COVID-19 that was available to Americans at no cost, how quickly would you get vaccinated, if you were to get vaccinated at all?
Select one answer only.

[1] ☐ I would be among the first to get vaccinated
[2] ☐ I would be in the middle to get vaccinated
[3] ☐ I would be among the last to get vaccinated
[4] ☐ I would not get vaccinated
[77] ☐ I Don't know

15. How long has it been since you last visited a dentist or a dental care provider for any reason? Include visits to dental specialists, such as orthodontists. *Select one answer only.*

[1] ☐ Less than 12 months ago
[2] ☐ Between 1 and 5 years ago
[3] ☐ More than 5 years ago
[4] ☐ I have never visited a dentist or dental care provider
[5] ☐ Not sure

16. In the last 12 months, how many times did you visit a doctor's office, an urgent care or walk-in clinic, or other health care provider in-person to get care for yourself? Do not include hospital and emergency room visits or dental care. Please give your best guess. *Select one answer only.*

[1] ☐ 0 times
[2] ☐ 1-3 times
[3] ☐ 4-8 times
[4] ☐ 9 or more times

17. Do any of your health care providers offer telephone or video appointments, so that you don't need to visit the office or building in person? Telephone or video visits are sometimes referred to as "telehealth visits", "virtual check-ins", or "e-visits". *Select one answer only.*

[1] ☐ Yes
[2] ☐ No
[77] ☐ Don't know

18. Have any of your health care providers offered you a telephone or video appointment to replace a regularly scheduled appointment since the COVID-19 outbreak?
Select one answer only.

[1] ☐ Yes
[2] ☐ No

19. In the last 12 months, how many times did you go to an emergency room to get care for yourself? Please give your best guess.
Select one answer only.

[1] ☐ 0 times → ***Go to question #21***
[2] ☐ 1-3 times
[3] ☐ 4 or more times

20. Which of these apply to your last emergency room visit?
Select all that apply.

[1] ☐ I didn't have another place to go
[2] ☐ My health provider advised me to go
[3] ☐ The problem was too serious for the doctor's office or clinic
[4] ☐ I get most of my care at the emergency room
[5] ☐ I was trying to get tested for COVID-19
[6] ☐ Some other reason

21. Have you avoided going to the emergency room since February 2020 because you were worried about getting sick with COVID-19?
Select one answer only.

[1] ☐ Yes
[2] ☐ No

22. In the last 12 months, were you a patient in a hospital for at least one overnight? Do not include hospital stays to deliver a baby.
Select one answer only.

[1] ☐ Yes
[2] ☐ No

YOUR HEALTH CARE COSTS

23. In the past 12 months, did you have problems paying any medical bills, including bills for doctors, dentists, hospitals, therapists, medical equipment, nursing home, or home care? *Select one answer only*

[1] ☐ Yes
[2] ☐ No

24. In the last 12 months, has a doctor, clinic, or medical service refused to treat you because you owed money to them for past treatment? *Select one answer only*

[1] ☐ Yes
[2] ☐ No
[77] ☐ Don't know

ONLY ANSWER THIS QUESTION IF YOU CURRENTLY HAVE WISCONSIN MEDICAID/BADGERCARE.

25. A health insurance premium is the amount you or a member of your household pays each month for health care coverage. To your knowledge will you or your family be charged a premium for Medicaid/ BadgerCare? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No → *Go to question #29*

ONLY ANSWER THIS QUESTION IF YOU CURRENTLY HAVE WISCONSIN MEDICAID/BADGERCARE.

26. Do you know how much your monthly premium will be for Medicaid/ BadgerCare? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No

ONLY ANSWER THIS QUESTION IF YOU CURRENTLY HAVE WISCONSIN MEDICAID/BADGERCARE.

27. To your knowledge will someone else, such as Wisconsin's Health Insurance Premium Payment Program, a charity, or another organization pay any of your premiums for Medicaid/ BadgerCare? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No

ONLY ANSWER THIS QUESTION IF YOU CURRENTLY HAVE WISCONSIN MEDICAID/BADGERCARE.

28. Do you know what will happen to your Medicaid/BadgerCare coverage if you or someone else does not pay your premium? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No

ONLY ANSWER THIS QUESTION IF YOU CURRENTLY HAVE WISCONSIN MEDICAID/BADGERCARE.

29. A health insurance co-pay is the amount you or a family member pays each time you receive health care (for example, if Medicaid/BadgerCare requires you to pay anything for a doctor visit or prescription drugs). In the past 12 months, did you or your family ever pay a co-pay for services covered by Medicaid/BadgerCare? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No

30. To the best of your knowledge, which of these is true for visits to the emergency room? *Select one answer only.*

[1] ☐ I never need to pay a co-pay
[2] ☐ I only need to pay a co-pay for care that the doctor determines was not an emergency
[3] ☐ I always need to pay a co-pay

31. In the last 12 months, have you been too worried about paying a co-pay that you have not gone to the emergency room? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No

32. In the last 12 months, have you had to borrow money, skip paying other bills, or pay other bills late in order to pay premiums or co-pays? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No

33. How satisfied or dissatisfied are you with the following aspects of your current health care coverage?

	Very Satisfied (1)	Somewhat Satisfied (2)	Somewhat Dissatisfied (3)	Very Dissatisfied (4)
a. The range of health care services available	1 ☐	2 ☐	3 ☐	4 ☐
b. The choice of doctors and other providers	1 ☐	2 ☐	3 ☐	4 ☐
c. My health care costs	1 ☐	2 ☐	3 ☐	4 ☐
d. My current or most recent health care coverage	1 ☐	2 ☐	3 ☐	4 ☐

AWARENESS

The next few questions are about the Medicaid/BadgerCare program.

ONLY ANSWER THIS QUESTION IF YOU CURRENTLY HAVE WISCONSIN MEDICAID/BADGERCARE.

34. Many people find information about health care coverage confusing. Please respond if you agree or disagree with the following statements.

	Agree (1)	Disagree (2)
a. I understand the letters I receive from the Medicaid/BadgerCare program	1 ☐	2 ☐
b. I understand what payments are required	1 ☐	2 ☐
c. I understand who is eligible	1 ☐	2 ☐
d. I understand how changes to the program might affect me	1 ☐	2 ☐

ONLY ANSWER THIS QUESTION IF YOU CURRENTLY HAVE WISCONSIN MEDICAID/BADGERCARE.

35. The Wisconsin Medicaid/BadgerCare program plans to require that some adults work or engage in other activities like job training or school in order to qualify for coverage. This new requirement is sometimes referred to as "work requirements."

How much have you heard or read about this new requirement?
Select one answer only.

1 ☐ A lot
2 ☐ A little
3 ☐ Nothing at all

ONLY ANSWER THIS QUESTION IF YOU CURRENTLY HAVE WISCONSIN MEDICAID/BADGERCARE.

36. To your knowledge, will this requirement apply to you in order to keep your health care coverage?
Select one answer only.

1 ☐ Yes, this requirement applies to me
2 ☐ No, this requirement does not apply to me
3 ☐ I don't know if this requirement applies to me

ONLY ANSWER THIS QUESTION IF YOU CURRENTLY HAVE WISCONSIN MEDICAID/BADGERCARE.

37. Do you know how to report information about work, job trainings, or school in order to keep your health care coverage? *Select one answer only.*

1 ☐ Yes, I know how, where, and when to report
2 ☐ No, I don't know how, where, or when to report
3 ☐ I'm not sure

ONLY ANSWER THIS QUESTION IF YOU CURRENTLY HAVE WISCONSIN MEDICAID/BADGERCARE.

38. Starting in January 2020, Wisconsin began giving certain adults an optional health survey called the Health Needs Assessment when they enroll or renew their Medicaid/ BadgerCare coverage. How much have you heard or read about the Health Needs Assessment? *Select one answer only.*

1 ☐ A lot
2 ☐ A little
3 ☐ Nothing at all

ONLY ANSWER THIS QUESTION IF YOU CURRENTLY HAVE WISCONSIN MEDICAID/BADGERCARE.

39. To your knowledge, can taking the Health Needs Assessment affect your monthly premiums? *Select one answer only.*

1 ☐ Yes, it does affect my premiums
2 ☐ No, it doesn't affect my premiums
3 ☐ I don't know if it affects my premiums

ONLY ANSWER THIS QUESTION IF YOU CURRENTLY HAVE WISCONSIN MEDICAID/BADGERCARE.

40. In the past 12 months have you taken the Health Needs Assessment from Medicaid/BadgerCare? *Select one answer only.*

1 ☐ Yes
2 ☐ No

WORK ACTIVITIES

41. Are you currently employed or self-employed? *Select one answer only.*

1 ☐ Yes, employed by someone else
2 ☐ Yes, self-employed → ***Go to question #43***
3 ☐ Not currently employed → ***Go to question #47***
4 ☐ Retired → ***Go to question #49***

42. Does your employer provide sick leave?

1 ☐ Yes
2 ☐ No

43. Which of the following categories best describes the work you do? *Select one answer only.*

1 ☐ Service/retail/restaurant
2 ☐ Administrative/office
3 ☐ Accounting/bookkeeping/financial
4 ☐ Cleaning/janitorial/housekeeping/sanitation
5 ☐ Agriculture/farm/forestry/landscaping
6 ☐ Construction
7 ☐ Education/teaching/child-development
8 ☐ Health services/health care/dental
9 ☐ Technical/IT/computing
10 ☐ Mechanical/plumbing/electrical
11 ☐ Manufacturing
12 ☐ Public safety/police/fire/ambulance
13 ☐ Community services
14 ☐ Other, please describe ↓

44. How concerned are you that you might be laid-off or unable to work due to the impacts of COVID-19?

1 ☐ Extremely concerned
2 ☐ Very concerned
3 ☐ Somewhat concerned
4 ☐ Not very concerned
5 ☐ Not at all concerned
77 ☐ Don't know

45. About how many hours per week, on average, do you work at your current job(s)? *Select one answer only.*

1 ☐ I work less than 20 hours per week
2 ☐ I work 20 to 29 hours per week
3 ☐ I work 30 or more hours per week → ***Go to question #49***

46. Some people work part time because they cannot find full time work or because business is poor. Others work part time because of family obligations or other personal reasons. Select all of the reasons why you are working part-time.

- [1] ☐ Slack work / business conditions
- [2] ☐ Could only find part-time work
- [3] ☐ Seasonal work
- [4] ☐ Child care problems
- [5] ☐ Other family/personal obligations
- [6] ☐ Health/medical limitations
- [7] ☐ School/training
- [8] ☐ Retired/Social Security limit on earnings
- [9] ☐ My hours were decreased due to the COVID-19 pandemic
- [10] ☐ Other, please describe ↓

If you selected any response,
→ ***Go to question #49***

47. What are the reasons that you are currently not employed?
Select all that apply.

- [1] ☐ Looking for work
- [2] ☐ No work is available in my line of work or area
- [3] ☐ Childcare or family responsibilities
- [4] ☐ Childcare costs too much
- [5] ☐ I am ill, disabled, or unable to work due to a health problem
- [6] ☐ Taking care of a disabled or sick person
- [7] ☐ Retired
- [8] ☐ In school
- [9] ☐ In a training program
- [10] ☐ Recently released from jail or prison
- [11] ☐ Transportation problems
- [12] ☐ Don't have the necessary schooling, training, skills, or experience
- [13] ☐ Currently experiencing homelessness
- [14] ☐ Participating in a drug or alcohol rehabilitation program
- [15] ☐ Furloughed or laid off because of the COVID-19 pandemic
- [16] ☐ Don't want to work
- [17] ☐ Another reason

48. Have you been actively looking for work during the last 4 weeks?
Select <u>one</u> answer only.

- [1] ☐ Yes
- [2] ☐ No

49. In the year before the COVID-19 pandemic, how much did you spend in a typical week on childcare costs?
Select <u>one</u> answer only.

- [1] ☐ I did not have any childcare costs during that time ($0)
- [2] ☐ $1 - $150 per week
- [3] ☐ $151 - $250 per week
- [4] ☐ $251 - $400 per week
- [5] ☐ $401 or more per week

50. In the year before the COVID-19 pandemic, how much did you spend in a typical week on transportation costs including gas or fares for public transportation (like bus, taxi, and Uber)? *Select one answer only.*

[1] ☐ I did not have any transportation costs during that time ($0)
[2] ☐ $1-9 per week
[3] ☐ $10-24 per week
[4] ☐ $25-49 per week
[5] ☐ $50 or more per week

51. During the COVID-19 pandemic, was your job considered an essential job? *Select one answer only.*

[1] ☐ Yes, my job was considered essential
[2] ☐ My job was not considered essential
[3] ☐ I was not employed
[77] ☐ Not Sure

52. Have you ever had to go to work when you were sick with a contagious illness like the flu or a viral infection? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No

53. In the year before the COVID-19 pandemic, how many days per month would you volunteer for an organization such as a church, youth group, or community service organization? Please provide your best estimate.

[1] ☐ Number of days_____
➔ ***If 0 days, go question #55***
[77] ☐ Don't know

54. In the year before the COVID-19 pandemic, about how many hours per week, on average, did you participate in volunteer activities? *Select one answer only.*

[1] ☐ 1 to 4 hours per week
[2] ☐ 5 to 9 hours per week
[3] ☐ 10 to 14 hours per week
[4] ☐ 15 to 19 hours per week
[5] ☐ 20 to 24 hours per week
[6] ☐ 25 to 29 hours per week
[7] ☐ 30 to 34 hours per week
[8] ☐ 35 or more hours per week
[77] ☐ Don't know

YOUR HEALTH

55. How often do you use seatbelts when you drive or ride in a car? *Select one answer only.*

[1] ☐ Always
[2] ☐ Nearly always
[3] ☐ Sometimes
[4] ☐ Seldom
[5] ☐ Never
[6] ☐ Never drive or ride in a car
[77] ☐ Don't know

56. How often, if at all, do you wear a protective mask when you leave your house and might be in contact with other people? *Select one answer only.*

[1] ☐ Every time
[2] ☐ Most of the time
[3] ☐ Some of the time
[4] ☐ Never

57. Thinking back over the past 4 weeks, in how many weeks did you do physical activity (such as walking, dancing, running, strenuous work or sports) on at least 2 days and were physically active for at least 3 hours during the week? *Select one answer only.*

[1] ☐ 0 weeks
[1] ☐ 1 week
[2] ☐ 2 weeks
[3] ☐ 3 weeks
[4] ☐ 4 weeks
[77] ☐ Don't know

58. How would you rate your overall habits of eating healthy foods?
Select one answer only.

[1] ☐ Excellent
[2] ☐ Very good
[3] ☐ Good
[4] ☐ Fair
[5] ☐ Poor

The next questions are about your physical health. Physical health includes physical illness and injury.

59. In general, would you say your physical health is... *Select one answer only.*

[1] ☐ Excellent
[2] ☐ Very good
[3] ☐ Good
[4] ☐ Fair
[5] ☐ Poor

60. How has your physical health changed in the last 12 months?
Select one answer only.

[1] ☐ My health has gotten better
[2] ☐ My health is about the same
[3] ☐ My health has gotten worse

The next questions are about your mental health. Mental health includes stress, depression, and problems with emotions.

61. In general, would you say your mental health is... *Select one answer only.*

[1] ☐ Excellent
[2] ☐ Very good
[3] ☐ Good
[4] ☐ Fair
[5] ☐ Poor

62. How has your mental health changed in the last 12 months?
Select one answer only.

[1] ☐ My mental health has gotten better
[2] ☐ My mental health is about the same
[3] ☐ My mental health has gotten worse

63. Have you had your blood cholesterol checked? *Select one answer only.*

[1] ☐ Yes, within the last 12 months
[2] ☐ Yes, but it's been more than 12 months
[3] ☐ Never

64. During the past 12 months, have you had either a flu vaccine that was sprayed in your nose or a flu shot injected in your arm?
Select one answer only.

[1] ☐ Yes
[2] ☐ No

65. Do you currently smoke cigarettes every day, some days, or not at all?
Select one answer only.

[1] ☐ Every day
[2] ☐ Some days
[3] ☐ Not at all → ***Go to question #68***

66. During the past 12 months, have you stopped smoking for more than one day because you were trying to quit smoking? *Select one answer only.*

[1] ☐ Yes
[2] ☐ No

67. In the past 12 months, has a doctor, dentist or other health professional ADVISED you about ways to stop smoking or prescribed medication to help you quit?

[1] ☐ Yes
[2] ☐ No

68. Do you use e-cigarettes or other electronic vaping products every day, some days, or not at all?

[1] ☐ Every day
[2] ☐ Some days
[3] ☐ Not at all

69. In the last six months have you done more, less, or about the same of the following activities?

	A lot less (1)	A little less (2)	About the same (3)	A little more (4)	A lot more (5)	Not applicable (88)
a. Seeing friends and family in person	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	88 ☐
b. Talking to friends and family on video/ phone	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	88 ☐
c. Using social media such as Facebook or Twitter	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	88 ☐
d. Drinking alcohol	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	88 ☐
e. Smoking cigarettes or vaping other nicotine products	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	88 ☐
f. Using non-prescribed drugs like marijuana, pills, cocaine, methamphetamine or heroin	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	88 ☐
g. Eating unhealthy food	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	88 ☐
h. Physical exercise	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	88 ☐

70. Does a physical, mental, or emotional condition now limit your ability to work at a job? *Select one answer only.*

1 ☐ Yes
2 ☐ No

71. Over the past two weeks, how often have you been bothered by having little interest or pleasure in doing things? *Select one answer only.*

1 ☐ Not at all
2 ☐ A few times
3 ☐ More than half the days
4 ☐ Nearly every day
77 ☐ Don't know

72. Over the past two weeks, how often have you been bothered by feeling down, depressed, or hopeless? *Select one answer only.*

1 ☐ Not at all
2 ☐ A few times
3 ☐ More than half the days
4 ☐ Nearly every day
77 ☐ Don't know

73. In the last year, have you ever drank or used drugs more than you meant to? *Select one answer only.*

1 ☐ Yes
2 ☐ No

74. Have you felt you wanted or needed to cut down on your drinking or drug use in the last year? *Select one answer only.*

1 ☐ Yes
2 ☐ No

IF YOU ANSWERED "NO" TO #73 AND #74, GO TO #79, OTHERWISE GO TO #75.

75. During the past 12 months, did you want or need treatment or counseling for your alcohol or drug use? *Select one answer only.*

1 ☐ Yes
2 ☐ No → *Go to question #78*

76. During the past 12 months, did you receive treatment or counseling for alcohol or drug use? *Select one answer only.*

1 ☐ Yes → *Go to question #78*
2 ☐ No

77. Which of these statements explain why you did not get the treatment or counseling you needed or wanted for your alcohol or drug use?
Select all that apply.

- [1] ☐ I had no health care coverage and I couldn't afford the cost
- [2] ☐ I did have health care coverage, but it didn't cover treatment for alcohol or drug use, or didn't cover the full cost
- [3] ☐ I had no transportation to treatment or counseling, or the treatments or counseling were too far away, or the hours were not convenient
- [4] ☐ I didn't find the type of treatment or counseling I wanted
- [5] ☐ There were no appointments available for the treatment or counseling provider I wanted to see
- [6] ☐ I was not ready to stop using alcohol or drugs
- [7] ☐ There were no openings in the treatment or counseling programs
- [8] ☐ I did not know where to go to get treatment or counseling
- [9] ☐ I was concerned that getting treatment or counseling might cause my neighbors or community to have a negative opinion of me
- [10] ☐ I was concerned that getting treatment or counseling might have a negative effect on my job
- [11] ☐ Services were not available because of the COVID-19 pandemic
- [12] ☐ Some other reason or reasons

78. Residential treatment is a place where people stay overnight to receive alcohol or drug treatment. To your knowledge, does your insurance provide coverage for residential treatment for alcohol or drug use? *Select one answer only.*

- [1] ☐ Yes
- [2] ☐ No
- [3] ☐ Don't Know

ABOUT YOU

79. How would you describe your gender?
Select one answer only.

- [1] ☐ Male (including transgender men)
- [2] ☐ Female (including transgender women)
- [3] ☐ Prefer to describe self as (non-binary, gender-fluid, agender) Please specify ↓

  _____
- [4] ☐ Prefer not to say

80. What is your current age?
Select one answer only.

- [1] ☐ Younger than age 18
- [2] ☐ Age 18 to 29
- [3] ☐ Age 30 to 39
- [4] ☐ Age 40 to 49
- [5] ☐ Age 50 to 59
- [6] ☐ Age 60 to 64
- [7] ☐ Age 65 or older

81. What was your household's gross income (before taxes and deductions were taken out) for 2019? Include any cash assistance or unemployment benefits you may have received, and include the income of all members of your household. If you do not know, give your best guess.
Select one answer only.

- [1] ☐ Less than $4,999
- [2] ☐ $5,000 to $9,999
- [3] ☐ $10,000 to $14,999
- [4] ☐ $15,000 to $19,999
- [5] ☐ $20,000 to $29,999
- [6] ☐ $30,000 to $39,999
- [7] ☐ $40,000 to $49,999
- [8] ☐ $50,000 to $59,999
- [9] ☐ $60,000 to $69,999
- [10] ☐ $70,000 to $79,999
- [11] ☐ $80,000 to $89,999
- [12] ☐ $90,000 to $99,999
- [13] ☐ $100,000 or more

82. In the past 12 months, did you or any member of your household receive benefits from FoodShare or SNAP (the Supplemental Nutrition Assistance Program)? Do NOT include WIC, the School Lunch Program, or assistance from food banks. Select one answer only. *Select <u>one</u> answer only.*

[1] ☐ Yes
[2] ☐ No

83. In the past 12 months, did you or any member of your household receive benefits from Wisconsin's Temporary Assistance for Needy Families Program, also known as Wisconsin Works, or W-2? *Select <u>one</u> answer only.*

[1] ☐ Yes
[2] ☐ No

84. Are you of Hispanic, Latino, or Spanish origin? *Select <u>one</u> answer only.*

[1] ☐ Yes
[2] ☐ No

85. How would you describe your race? *Select all that apply.*

[1] ☐ White
[2] ☐ Black or African American
[3] ☐ American Indian or Alaska Native
[4] ☐ Asian
[5] ☐ Native Hawaiian or Pacific Islander
[6] ☐ Other, please describe ↓

86. What is the highest level of education you have completed? *Select <u>one</u> answer only.*

[1] ☐ Less than high school
[2] ☐ High school diploma or General Education Development (GED) certificaten
[3] ☐ Vocational training or 2-year degree
[4] ☐ Some college but no degree
[5] ☐ A 4-year college degree or more

87. What is your current living arrangement? *Select all that apply.*

[1] ☐ I live alone
[2] ☐ I live with my partner or spouse
[3] ☐ I live with my parents
[4] ☐ I live with other relatives (including children).
[5] ☐ I live with friends or roommates
[6] ☐ Other, please describe ↓

88. Of the family members living in your home, how many are under age 19?

[1] ☐ family member(s) in my home are under age 19

89. Do you have any children under age 19 who you financially support but that do not live in your home? *Select <u>one</u> answer only.*

[1] ☐ Yes
[2] ☐ No

Thank you for your participation.

When you have finished your survey, please place it in the included postage-paid envelope, and drop it in the mail.

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Initials	Date	Initials	Date	Initials	Date	Initials	Date	Initials	Date

ATTACHMENT 3: MEDICAID BENEFICIARY SURVEY, 2020: SUMMARY FINDINGS

All respondents were grouped into three primary categories reflecting their enrollment status at the time of survey completion and, among the enrolled, their eligibility category at the time the sample was drawn: childless adult (CLA) members, parent/caretaker members, and disenrolled members. Statistically significant differences are noted with a p-value for the t-test (for binary measures) or chi-squared test (for categorical measures) between groups. All p-values represent differences compared to CLA.

Box 2: Note for interpreting tables

Tables display weighted percentages for each group in the column. The n represents the weighted number of individuals who responded "yes" to the category and N represents the weighted denominator. The denominator shifts across questions because of both skip patterns in the survey and because some individuals opted to not respond to certain questions or responded "don't know." Some questions related to Medicaid do not apply to disenrolled individuals, and these items are blank for this group. The two-sided p-value is shown to 3 decimal places ($p<0.05$ was the critical value for statistical significance).

Demographics

Table 1: Demographics of the Study Population

	CLA			Parents/Caregivers				Disenrolled			
Measure	**Percent**	**n**	**N**	**Percent**	**n**	**N**	**p-value**	**Percent**	**n**	**N**	**p-value**
Gender:											
Male	53.8%	1017	1889	29.0%	138	476	<0.001	48.9%	177	362	0.053
Female	45.3%	855	1889	70.8%	337	476		48.6%	176	362	
Prefer to describe myself as non-binary, gender-fluid, or agender	0.9%	17	1889	0.2%	1	476		2.5%	9	362	
Age:											
Age 18 to 29	27.1%	519	1918	42.4%	202	476	<0.001	39.7%	148	373	0.001
Age 30 to 39	20.6%	396	1918	35.9%	171	476		17.4%	65	373	
Age 40 to 49	16.5%	316	1918	15.1%	72	476		12.3%	46	373	
Age 50 to 59	22.5%	431	1918	5.3%	25	476		17.4%	65	373	
Age 60 to 64	11.8%	227	1918	1.3%	6	476		11.3%	42	373	
Age 65 or older	1.5%	29	1918	0.0%	0	476		1.9%	7	373	
Ethnicity:											
Hispanic	19.7%	377	1912	12.5%	60	479	0.004	17.9%	66	368	0.596
Race:											
Native American / Alaskan Native	3.5%	66	1910	5.2%	25	477	0.127	2.2%	8	368	0.186
Asian	2.7%	52	1910	2.1%	10	477	0.482	3.5%	13	368	0.441
Black	13.7%	262	1910	21.0%	100	477	0.001	19.2%	71	369	0.026
Native Hawaiian / Pacific Islander	0.6%	12	1910	1.0%	5	478	0.595	2.2%	8	369	0.148
White	70.9%	1353	1909	68.1%	325	477	0.344	66.3%	244	368	0.170
Other	12.5%	238	1910	7.5%	36	477	0.017	9.5%	35	369	0.209
Income:											
Less than $4,999	30.3%	510	1682	25.6%	109	425	<0.001	16.9%	56	332	<0.001
$5,000 to $9,999	16.5%	277	1682	15.8%	67	425		12.0%	40	332	
$10,000 to $14,999	19.4%	326	1682	10.8%	46	425		16.6%	55	332	
$15,000 to $19,999	9.5%	159	1682	11.8%	50	425		12.0%	40	332	
$20,000 to $29,999	11.4%	192	1682	16.0%	68	425		18.7%	62	332	
$30,000 to $39,999	4.0%	67	1682	9.4%	40	425		8.7%	29	332	

	CLA			Parents/Caregivers				Disenrolled			
Measure	**Percent**	**n**	**N**	**Percent**	**n**	**N**	**p-value**	**Percent**	**n**	**N**	**p-value**
$40,000 to $49,999	3.3%	55	1682	6.4%	27	425		4.5%	15	332	
$50,000 to $59,999	2.5%	42	1682	1.4%	6	425		4.5%	15	332	
$60,000 or more	3.2%	54	1682	2.8%	12	425		6.0%	20	332	
SNAP	59.5%	1133	1903	82.6%	394	477	<0.001	41.2%	153	371	<0.001
TANF/W2	2.8%	52	1882	12.6%	60	477	<0.001	3.8%	14	370	0.592
Living Situation:											
Alone	24.9%	476	1908	8.8%	42	478	<0.001	25.9%	96	370	0.712
With friends or roommates	10.5%	201	1908	5.4%	26	478	0.001	11.9%	44	370	0.577
With a partner or spouse	24.4%	466	1908	39.7%	190	478	<0.001	30.8%	114	370	0.041
With relatives including children	15.1%	289	1908	43.3%	207	478	<0.001	18.1%	67	370	0.256
With parents	22.9%	437	1908	8.4%	40	478	<0.001	16.2%	60	370	0.012
Other	8.9%	170	1908	10.3%	49	478	0.612	7.9%	29	369	0.517
Any children under 19 in home	18.3%	330	1800	92.2%	437	474	<0.001	21.3%	74	348	0.311
Support any children under 19 outside home	9.2%	176	1920	20.6%	99	480	<0.001	8.3%	31	372	0.712

There were significant demographic differences across groups. Among CLAs, 53.8% identified as male, 45.3% as female, and 0.9% said that they were non-binary, gender fluid, or agender. Parents and caretakers were significantly different from CLAs by gender ($p<0.001$), with a higher proportion female (29.0% male, 70.8% female, and 0.2% non-binary). Disenrolled beneficiaries were not significantly different from CLAs with respect to gender. CLAs also tended to skew older than other groups: 27.1% were age 18–29, 20.6% age 30–39, 16.5% age 40–49, 22.5% age 50– 59, 11.8% age 60–64, and 1.5% age 65 and older. By contrast, 42.4% of parents/caretakers were age 18–29 and only 1.3% were age 60–64 ($p<0.001$ for age differences). Disenrolled were also significantly different by age, with 39.7% age 18–29, but a large segment of disenrolled age 60–64 (11.3%). Hispanic ethnicity was affirmed by 19.7% of all CLAs, 12.5% of parents/caretakers ($p=0.004$), and 17.9% of disenrolled individuals ($p=0.596$). Individuals could select multiple racial categories, and the most commonly selected racial category for CLAs was White (70.9%), followed by Black (13.7%), Other (12.5%), Native American (3.5%), Asian (2.7%), and Native Hawaiian/Pacific Islander (0.6%). Similar percentages were observed for parents/caretakers, except that individuals in both parent/caretaker and disenrolled groups were more likely to identify as Black (21.0% for parents/caretakers, $p=0.001$; 19.2% for disenrolled, $p=0.026$).

CLA individuals reported lower household income than parents/caretakers ($p<0.001$) and disenrolled beneficiaries ($p<0.001$). For example, 30.3% of CLAs had incomes less than $5,000, compared to 25.6% for parents/caretakers and 16.9% of disenrolled. By comparison, $40,000 or higher was identified by 8.9% of CLAs, 10.6% of parents/caretakers, and 15.3% of disenrolled. SNAP was reportedly received by 59.5% of CLAs, lower than parents/caretakers (82.6%, $p<0.001$), but higher than disenrolled (41.2%, $p<0.001$). TANF/W2 was reportedly received by 2.8% of CLAs, but 12.6% of parents/caretakers ($p<0.001$). The most commonly reported living situation for CLAs was living alone (24.9%), with a partner or spouse (24.4%), with parents (22.9%), and with relatives including children (15.1%). For parents/caretakers there was a much higher percentage living with relatives, including children (43.3%). Disenrolled generally had similar proportions to CLAs, but fewer lived with parents and more lived with a partner or spouse. Having children under age 19 in the home was reported by 18.3% of CLAs and 21.3% of disenrolled, versus 92.2% of parents/caretakers ($p<0.001$).

Health Insurance Coverage Experiences

Table 2: Health Insurance Coverage in the Last Year

	CLA			Parents/Caregivers				Disenrolled			
Measure	**Percent**	**n**	**N**	**Percent**	**n**	**N**	**p-value**	**Percent**	**n**	**N**	**p-value**
One or more months without coverage	12.9%	246	1900	12.0%	57	476	0.614	47.2%	170	360	<0.001
Reasons no coverage in the last 12 months											
Did not qualify anymore	42.9%	82	191	33.3%	16	48	0.284	65.6%	101	154	<0.001
Was not offered coverage from employer	14.6%	28	192	4.3%	2	47	0.017	22.6%	35	155	0.095
Did not have access to any coverage	14.1%	27	191	18.8%	9	48	0.514	9.1%	14	154	0.179
Could not afford payments (Medicaid/BadgerCare)	8.3%	16	192	12.8%	6	47	0.472	12.9%	20	155	0.243
Did not know how to find information	12.0%	23	191	20.8%	10	48	0.241	8.4%	13	154	0.327
Did not have the time	13.0%	25	192	6.4%	3	47	0.217	5.8%	9	155	0.035
Could not afford payments (Employer)	10.4%	20	192	6.4%	3	47	0.576	11.7%	18	154	0.689
Lost health care coverage due to the COVID-19	8.3%	16	192	6.2%	3	48	0.605	6.5%	10	154	0.629
Did not want health care coverage	1.6%	3	192	8.5%	4	47	0.143	0.6%	1	154	0.588

Any individual who said that they had left Medicaid/BadgerCare at the time of the survey was defined as being disenrolled and, by definition, all individuals in the CLA and parent/caretaker groups identified as being enrolled at the time of the survey. CLAs and parent/caretakers reported far lower rates of one or more months without coverage in the prior year. Across the three groups, 12.9% of CLA individuals experienced one or more months in the prior year without coverage, similar to 12.0% for parents/caretakers, but significantly less than currently disenrolled individuals (47.2%, $p<.001$). Because the survey was fielded in late 2020 through early 2021, a time when the program was suspending automatic disenrollment, overall disenrollment was likely to be lower than normal.

Among people who experienced one or more months without coverage, 42.9% in the CLA group reported they were without coverage because they did not qualify anymore; this was not statistically different for parents/caretakers (33.3%) but was significantly less than the 65.6% reported in the disenrollment group ($p<0.001$). Other commonly reported reasons among CLAs included not receiving an offer of coverage from an employer (14.6%), not being able to afford payments for Medicaid (8.3%), not being able to afford employer coverage (10.4%), and not having enough information (12.0%), or enough time (13.0%). Relatively less commonly reported was loss of coverage due to COVID-19: 8.3% of CLAs, 6.2% of parents/caretakers, and 6.5% of the disenrollment group (differences not statistically significant).

Table 3: Current Coverage Type and Reason for No Longer Having Medicaid

	CLA			Parents/Caregivers			Disenrolled		
Measure	**Percent**	**n**	**N**	**Percent**	**n**	**N**	**Percent**	**n**	**N**
Current Coverage Type									
Wisconsin Medicaid/BadgerCare	100.0%	1921	1921	100.0%	480	480	0.0%	0	342
Employer or family member employer	0.0%	0	1921	0.0%	0	480	32.7%	112	342
Private plan	0.0%	0	1921	0.0%	0	480	4.7%	16	342
ACA exchanges	0.0%	0	1921	0.0%	0	480	21.3%	73	342
Other	0.0%	0	1921	0.0%	0	480	14.6%	50	342
Don’t have healthcare	0.0%	0	1921	0.0%	0	480	26.6%	91	342
Reasons No Longer Have Medicaid									
Have access to other coverage	0.0%	0	0	0.0%	0	0	27.8%	92	331
Not eligible for other reasons	0.0%	0	0	0.0%	0	0	9.7%	32	331
Income has changed	0.0%	0	0	0.0%	0	0	44.4%	147	331
Missed a premium payment	0.0%	0	0	0.0%	0	0	0.9%	3	331
Other reason	0.0%	0	0	0.0%	0	0	22.1%	73	331
Switched to a different type of coverage	0.0%	0	0	0.0%	0	0	9.7%	32	331
Premiums increased	0.0%	0	0	0.0%	0	0	0.3%	1	331

For the disenrolled group, reported coverage types were employer/family coverage (32.7%), ACA exchanges (21.3%), private plan (4.7%), and “other” (14.6%); 26.6% reported having no coverage (i.e., uninsured). Among people in the disenrolled group, the most frequently cited reasons for no longer having Medicaid were that their income had changed (44.4%) and that they had access to other coverage (27.8%). Less frequently cited was the reason of non-income eligibility (9.7%). Very few reported loss of eligibility due to missing premium payments (0.9%) or premium increases (0.3%).

Overall Access to Care

Table 4: Health Care Access

	CLA			Parents/Caregivers				Disenrolled			
Measure	Percent	n	N	Percent	n	N	p-value	Percent	n	N	p-value
Have a usual source of care	90.5%	1734	1916	89.3%	426	477	0.507	76.2%	279	366	<0.001
Got all care needed	91.4%	1623	1776	91.9%	431	469	0.724	79.4%	262	330	<0.001
Got all prescription meds, of those needing prescriptions	93.2%	1405	1507	90.6%	348	384	0.139	78.6%	209	266	<0.001
Dental visit in last 12 months	43.4%	815	1876	46.0%	214	465	0.362	37.6%	138	367	0.070
Doctor visit in last 12 months	81.9%	1557	1902	84.8%	406	479	0.181	70.6%	262	371	<0.001
ER visit in last 12 months	38.4%	735	1914	44.7%	214	479	0.027	33.5%	124	370	0.134
Overnight hospitalization in last 12 months	14.4%	276	1919	11.5%	55	480	0.106	10.5%	39	373	0.066
Problems paying bills in last 12 months	17.2%	329	1916	19.9%	95	478	0.230	36.2%	133	367	<0.001
Refused care because of owed money	1.7%	33	1892	3.6%	17	471	0.064	2.0%	7	352	0.728
Had flu vaccine	43.6%	834	1915	37.0%	176	476	0.020	42.3%	156	369	0.718

Access to care was generally high in the CLA and parents/caretaker groups, but less so in the disenrolled group. Having a usual source of care was reported by 90.5% of CLAs, 89.3% of parents/caretakers, but only 76.2% of disenrolled individuals ($p<.001$). Similarly, getting all needed care was reported by 91.4% of CLAs and 91.9% of parents/caretakers (difference not significant), but only 79.4% of disenrolled individuals ($p<.001$). Doctor visits in the last year were reported by 81.9% of CLAs, 84.8% of parents/caretakers, but only 70.6% of disenrolled ($p<.001$). Among those needing prescription medications, 93.2% of CLAs received all needed medications and 90.6% of parents/caretakers, but only 78.6% of disenrolled ($p<.001$). There were also notable disparities in problems paying medical bills, reported by 17.2% of CLAs and 19.9% of parents/caretakers, but significantly more disenrolled (36.2%, $p<.001$). Visits to the emergency department were less commonly reported by CLAs (38.4%) than parents/caretakers (44.7%, $p=0.027$), but not significantly different for disenrolled (33.5%). There were no significant differences across groups in overnight hospitalization or being refused care because of cost.

Table 5: Impact of COVID-19 on Health and Health Care Use

	CLA			Parents/Caregivers				Disenrolled			
Measure	**Percent**	**n**	**N**	**Percent**	**n**	**N**	**p-value**	**Percent**	**n**	**N**	**p-value**
How quickly would you get vaccinated, if at all?											
Don't know	25.0%	478	1915	25.4%	122	480	<0.001	24.9%	92	369	0.361
I would be among the first to get vaccinated	24.5%	470	1915	14.8%	71	480		21.7%	80	369	
I would be in the middle to get vaccinated	22.0%	422	1915	17.1%	82	480		21.4%	79	369	
I would be among the last to get vaccinated	11.1%	213	1915	11.5%	55	480		10.3%	38	369	
I would not get vaccinated	17.3%	331	1915	31.0%	149	480		21.7%	80	369	
Prefer not to share	0.1%	1	1915	0.2%	1	480		0.0%	0	369	
Avoided Care											
Needed care, but didn't get it because of COVID	19.3%	334	1727	25.6%	113	442	0.012	19.9%	65	327	0.829
Type of Care											
Urgent care	23.8%	48	202	42.1%	32	76	0.007	30.8%	12	39	0.466
Counseling or mental health therapy	37.9%	88	232	50.6%	43	85	0.058	46.8%	22	47	0.319
Surgical procedure	28.4%	59	208	32.1%	25	78	0.587	25.0%	10	40	0.729
Treatment for an ongoing condition	41.6%	69	166	55.9%	33	59	0.070	43.8%	14	32	0.917
Regular checkup	56.4%	137	243	55.4%	51	92	0.911	66.0%	33	50	0.244
Prescriptions	32.8%	75	229	34.9%	30	86	0.760	40.0%	18	45	0.387
Dental care	60.3%	149	247	64.9%	61	94	0.463	61.2%	30	49	0.953
Vision care	42.4%	98	231	38.3%	31	81	0.588	37.8%	17	45	0.594
Hearing care	11.5%	21	183	11.4%	8	70	0.948	0.0%	0	35	<0.001
Drug or alcohol treatment	14.4%	26	180	15.3%	11	72	0.797	15.2%	5	33	0.932
Telemedicine											
Providers offer telephone/video appointment	76.2%	1126	1478	77.4%	302	390	0.679	71.6%	197	275	0.221
Provider offered to replace visit with telephone/video appointment	47.1%	893	1895	51.1%	245	479	0.161	43.6%	160	367	0.289
Avoided ED											
Avoided ED due to COVID	22.4%	427	1908	34.4%	165	480	<0.001	23.9%	89	372	0.584

Interest in a potential COVID-19 vaccine varied across the three groups. (During the survey period vaccines were under development but there was no known information about safety or effectiveness of a vaccine). While 24.5% of CLAs and 21.7% of disenrolled said that they would be among the first to get vaccinated, only 14.8% of parents/caretakers said the same ($p<0.001$). By contrast, 17.3% of CLAs and 21.7% of disenrolled said that they would not get vaccinated compared to 31.0% of parents/caretakers.

One fifth (19.3%) of CLA individuals reported that COVID-19 had an impact on their health care access. The rate was significantly higher for parents/caretakers (25.6%, $p=0.012$), but not disenrolled (19.9%). Among those with care affected by COVID-19, there were generally similar patterns among the three groups. Focusing on the CLAs, the most commonly reported type of care affected by COVID-19 was dental (60.3%), followed by regular checkup (56.4%), vision care (42.4%), ongoing care for a health condition (41.4%), and counseling or mental health therapy (37.9%); proportions were similar for the other groups. Three quarters (76.2%) of CLAs said that providers had the capability to do telephone and video visits and 47.1% said that providers offered to replace in-person visits with telephone or video visits; proportions were similar for parents/caretakers and disenrolled. Avoidance of the emergency department due to COVID-19 was reported by 22.4% of CLAs and was significantly higher for parents/caretakers (34.4%, $p<.001$), but not different for disenrolled (23.9%). Receipt of a past year flu vaccine was reported by 43.6% of CLAs, 37.0% of parents/caretakers ($p=0.022$), and 42.3% of disenrolled ($p=0.718$).

Table 6: COVID-19 Symptoms and Testing

	CLA			Parents/Caregivers				Disenrolled			
Measure	Percent	n	N	Percent	n	N	p-value	Percent	n	N	p-value
Had any COVID symptoms?	19.1%	365	1911	25.5%	122	479	0.009	26.4%	98	371	0.013
If yes, got tested at least once?	79.3%	288	363	80.0%	96	120	0.926	78.6%	77	98	0.834
If tested, any positive test results?	41.5%	115	277	40.2%	37	92	0.863	42.5%	31	73	0.913

Impact of COVID-19 on health at the time of the survey varied across the groups: 19.1% of CLAs said they had experienced any COVID-19 symptoms since the start of the pandemic, compared to 25.5% of parents/caretakers ($p<0.009$) and 26.4% of disenrolled ($p<0.013$). Among those reporting COVID-19 symptoms, the percentage who received at least one test was 79.3% for CLAs, and similar for parents/caretakers (80.0%) and disenrolled (78.6%). Among those tested, the percent reporting a positive result was 41.5% for CLAs, and similar for other groups (40.2% for parents/caretakers) and 42.5% for disenrolled.

Cost-Sharing, Program Rules, and Waiver Provisions

The survey was fielded at a time when major waiver provisions had been suspended and program requirements to pay premiums were not being enforced. Of the waiver provisions involving cost-sharing, the only one in place during the fielding timeline involved emergency department copayments.

Table 7: Premiums and Copayments

	CLA			Parents/Caregivers			
Measure	**Percent**	**n**	**N**	**Percent**	**n**	**N**	**p-value**
Pay Medicaid premium							
Pay Medicaid premium	7.4%	143	1921	7.7%	37	480	0.973
If yes:							
Know amount	45.5%	65	143	36.1%	13	36	0.314
Someone else will pay premium	8.4%	12	143	10.8%	4	37	0.672
Know what will happen if you don't pay	28.0%	40	143	37.8%	14	37	0.393
Pay Medicaid Co-Pay							
Ever pay a Medicaid co-pay in past 12 months	36.2%	696	1921	30.0%	144	480	0.008
If yes:							
Always need to pay a co-pay for ED	17.1%	106	619	18.8%	26	138	0.446
Only pay co-pay for ED when doctor determines not emergency	16.2%	100	618	12.9%	18	139	0.002
Avoided ED due to worry about co-pay	10.1%	70	696	11.9%	17	143	0.287
Needed to borrow money to pay premiums/co-pay	14.2%	108	759	17.3%	29	168	0.442

Self-reported experience with Medicaid premiums was generally low for CLAs (7.4%) and parents/caretakers (7.7%). Among those saying that they were required to pay a premium, less than half of CLAs (45.5%) and parents/caretakers (36.1%) said they knew the amount. A small share said that someone else will pay the premium (8.4% of CLAs and 10.8% of parents/caretakers). A minority said that they know what will happen if they don't pay premiums (28.0% of CLAs and 37.8% of parents/caretakers). Only about a third said that they had ever paid a Medicaid co-pay in the past 12 months (36.2% of CLAs and 30.0% of parents/caretakers). Among those saying they had paid co-pays, minorities of both groups endorsed that they always need to pay a co-pay for the emergency department (ED) or only when the doctor determines that the visit was not an emergency. Relatively few avoided the emergency department due to a worry about co-pays (e.g., 10.1% of CLAs) and few said that they needed to borrow money to pay for premiums or copayments (e.g., 14.2% of CLAs).

Table 8: Satisfaction with Health Care and Coverage

	CLA			Parents/Caregivers				Disenrolled			
Measure	**Percent**	**n**	**N**	**Percent**	**n**	**N**	**p-value**	**Percent**	**n**	**N**	**p-value**
Range of Health Care Services Available											
Very Satisfied	66.1%	1261	1908	60.3%	286	474	0.011	41.9%	145	346	<.001
Somewhat Satisfied	28.2%	538	1908	30.4%	144	474		36.7%	127	346	
Somewhat Dissatisfied	3.7%	70	1908	7.2%	34	474		11.6%	40	346	
Very Dissatisfied	2.0%	39	1908	2.1%	10	474		9.8%	34	346	
Choice of Doctors and Other Providers											
Very Satisfied	65.0%	1229	1892	62.9%	298	474	0.85	48.2%	164	340	<.001
Somewhat Satisfied	27.4%	518	1892	28.5%	135	474		34.4%	117	340	
Somewhat Dissatisfied	5.3%	101	1892	6.3%	30	474		9.7%	33	340	
Very Dissatisfied	2.3%	44	1892	2.3%	11	474		7.6%	26	340	
My Health Care Costs											
Very Satisfied	75.0%	1417	1890	75.9%	359	473	0.714	30.9%	105	340	<.001
Somewhat Satisfied	19.3%	365	1890	19.0%	90	473		33.8%	115	340	
Somewhat Dissatisfied	3.1%	58	1890	3.4%	16	473		14.1%	48	340	
Very Dissatisfied	2.6%	50	1890	1.7%	8	473		21.2%	72	340	
Current or Most Recent Health Care Coverage											
Very Satisfied	73.3%	1393	1900	70.4%	333	473	0.663	39.0%	133	341	<.001
Somewhat Satisfied	22.3%	423	1900	24.9%	118	473		35.5%	121	341	
Somewhat Dissatisfied	2.8%	54	1900	2.7%	13	473		10.9%	37	341	
Very Dissatisfied	1.6%	30	1900	1.9%	9	473		14.7%	50	341	

CLAs and parents/caretakers were consistently more likely to report satisfaction with care than disenrolled. The proportion of CLAs reporting “very satisfied” with range of health services was 66.1%, choice of doctors and other providers 65.0%, with health care costs 75.0%, and with current or most recent health care coverage 73.3%. Parents/caretakers were less satisfied with range of health services (60.3%) but were otherwise not statistically different from CLAs. By contrast, disenrolled individuals reported significantly lower ($p<0.001$) percentages for every outcome: range of health services was 41.9%, choice of doctors and other providers 48.2%, with health care costs 30.9%, and with current or most recent health care coverage 39.0%. The full range of response categories that also included “somewhat satisfied,” “somewhat dissatisfied,” and “very dissatisfied” is shown in Table 8.

Table 9: Awareness of Program Requirements

	CLA			Parents/Caregivers				Disenrolled			
Measure	**Percent**	**n**	**N**	**Percent**	**n**	**N**	**p-value**	**Percent**	**n**	**N**	**p-value**
Understand letters received from Medicaid/BadgerCare program	85.2%	1604	1882	90.5%	430	475	0.002				
Understand what payments are required	82.6%	1545	1871	88.1%	416	472	0.005				
Understand who is eligible	87.2%	1634	1874	93.4%	442	473	<.001				
Understand how changes to program might affect me	71.3%	1332	1868	80.0%	376	470	<.001				
Heard a lot about work requirements	9.0%	172	1908	13.2%	63	479	0.025				
Work requirements will apply to you	18.8%	353	1880	17.6%	83	471	0.489				
Know how to report info about work, job trainings	61.9%	857	1384	78.4%	316	403	<.001				
Heard a lot about HNA	4.1%	78	1899	5.9%	28	478	0.150				
Taking HNA can affect your premium	4.7%	89	1901	4.4%	21	478	0.232				
Taken the HNA	18.7%	339	1809	13.4%	60	449	0.024				
Insurance plan covers residential drug treatment	23.7%	100	422	24.5%	24	98	0.854	15.1%	14	93	0.107

Knowledge of program rules and requirements was generally higher for parents/caretakers versus CLAs. “Understand letters received from Medicaid/BadgerCare program” was reported by 85.2% of CLAs versus 90.5% of parents/caretakers (p=0.002). “Understand what payments are required” was reported by 82.6% of CLAs versus 88.1% of parents/caretakers (p=0.005). “Understand who is eligible for the program” was reported by 87.2% of CLAs and 93.4% of parents/caretakers (p<0.001). “Understand how changes to program might affect me” was reported by 71.3% of CLAs and 80.0% of parents/caretakers (p<0.001).

Few individuals had knowledge of proposed waiver provisions: 9.0% of CLAs had “heard a lot about work requirements” versus 13.2% of parents/caretakers (p=0.025). Few said that the work requirements would apply to them (the denominator includes people who said that they didn’t know): 18.8% of CLAs and 17.6% of parents/caretakers. However, most said that they “knew how to report information about work or job trainings”: 61.9% of CLAs and 78.4% of parents/caretakers (p<0.001). There was also very low awareness of the health needs assessment (HNA): 4.1% of CLAs said that they had “heard a lot about HNA,” 4.7% said that taking the HNA could affect their premiums, and 18.7% reported that they had taken the HNA (similar proportions were reported by parents/caretakers). Finally, 23.7% of CLAs said that their insurance plan covers substance use disorder treatment compared to 24.5% of parents/caretakers and 15.1% of disenrolled.

Employment and Work-Related Costs

Table 10: Employment and Workplace Conditions

	CLA			Parents/Caregivers				Disenrolled			
Measure	Percent	n	N	Percent	n	N	p-value	Percent	n	N	p-value
Employment Status											
Currently employed by someone else	30.2%	572	1897	42.1%	200	475	<.001	61.5%	227	369	<.001
Self-employed	11.2%	212	1897	8.4%	40	475		5.7%	21	369	
Retired	6.6%	125	1897	0.6%	3	475		4.3%	16	369	
Not currently employed	52.1%	988	1897	48.8%	232	475		28.5%	105	369	
Limiting Factor											
Physical, mental, emotional condition limits ability to work	47.9%	900	1880	31.9%	151	473	<.001	28.2%	103	365	<.001
Sick Leave											
Employer provides sick leave	26.8%	142	529	33.9%	64	189	0.104	39.5%	87	220	0.006
Category of Employment											
Accounting/bookkeeping/financial	1.2%	9	772	0.0%	0	229		0.4%	1	244	
Administrative/office	1.8%	14	772	4.8%	11	229		9.4%	23	244	
Agriculture/farm/forestry/ landscaping	5.7%	44	772	3.1%	7	229		1.2%	3	244	
Cleaning/Janitorial/Housekeeping/ Sanitation	7.6%	59	772	7.4%	17	229		5.7%	14	244	
Community service	1.2%	9	772	0.9%	2	229		2.5%	6	244	
Construction	4.5%	35	772	3.1%	7	229		3.3%	8	244	
Education/teaching/child-development	3.8%	29	772	4.4%	10	229		7.4%	18	244	
Health services/health care/dental	10.2%	79	772	13.5%	31	229		13.1%	32	244	
Manufacturing	3.4%	26	772	5.7%	13	229		9.0%	22	244	
Mechanical/plumbing/electrical	1.3%	10	772	0.0%	0	229		2.9%	7	244	
Other	27.5%	212	772	25.3%	58	229		20.9%	51	244	
Public safety/police/fire/ambulance	0.6%	5	772	1.7%	4	229		2.0%	5	244	
Service/Retail/Restaurant	29.4%	227	772	29.7%	68	229		21.3%	52	244	
Technical/IT/computing	1.8%	14	772	0.4%	1	229		0.8%	2	244	

Measure	CLA			Parents/Caregivers				Disenrolled			
	Percent	n	N	Percent	n	N	p-value	Percent	n	N	p-value
Workplace Conditions											
Concerned about COVID layoff	79.2%	602	760	75.8%	175	231	0.371	71.7%	170	237	0.058
Considered essential worker (if working)	58.3%	522	895	66.1%	199	301	0.035	76.2%	195	256	<.001
Hours Worked Per Week											
I work less than 20 hours per week	33.6%	257	766	26.9%	64	238	0.126	10.2%	25	246	<.001
I work 20 to 29 hours per week	26.1%	200	766	24.8%	59	238		25.6%	63	246	
I work 30 or more hours per week	40.3%	309	766	48.3%	115	238		64.2%	158	246	

Current employment status differed significantly across groups ($p<0.001$ for CLAs versus each group). CLAs were most likely to report not currently being employed (52.1%), currently employed by someone else (30.2%), self-employed (11.2%), and retired (6.6%). The ordering was the same for parents/caretakers, but a lower proportion were not currently employed (48.8%) and a higher proportion were employed by someone else (42.1%). A lower proportion of parents/caretakers were self-employed (8.4%) or retired (0.6%). For disenrolled, most individuals said they were currently employed by someone else (61.5%), followed by not currently employed (28.5%), self-employed (5.7%), and retired (4.3%). Having a work-limiting disability was reported by 47.9% of CLAs, 31.9% of parents/caretakers ($p<0.001$), and 28.2% of disenrolled ($p<0.001$). Among people employed by someone else in each group, a minority said employer provided sick leave, and the proportion was lowest for CLAs (26.8%), followed by parents/caretakers (33.9%, $p=0.104$) and disenrolled (39.5%, $p=0.006$).

Respondents who worked were presented with 14 potential categories for employment. The most commonly selected sectors for employment were service/retail/restaurant (29.4% for CLAs) and health care/health services (10.2% for CLAs). Sizeable proportions of the disenrolled also reported administrative/office (9.4%) and education/child development (7.4%). Concern about COVID layoff was frequently reported among all groups and not significantly different (79.2% in CLAs, 75.8% parents/caretakers, and 71.7% among disenrolled). Among those working, being considered an essential worker was reported by 58.3% of all CLAs, 66.1% of parents/caretakers ($p=0.035$), and 76.2% of disenrolled ($p<0.001$). Among workers, disenrolled individuals worked more hours compared to CLAs ($p<0.001$), but there were no significant differences between CLAs and parents/caretakers ($p=0.126$). For example, 40.3% of CLAs worked more than 30 hours per week, compared to 48.3% of parents/caretakers and 64.2% of disenrolled.

Table 11: Child Care and Transportation Expenses

	CLA			Parents/Caregivers				Disenrolled			
Measure	**Percent**	**n**	**N**	**Percent**	**n**	**N**	**p-value**	**Percent**	**n**	**N**	**p-value**
Spent on Child Care											
I did not have any child care costs during that time ($0)	95.9%	1796	1872	73.4%	339	462	<.001	93.0%	333	358	0.244
$1–$150 per week	2.2%	41	1872	14.7%	68	462		3.4%	12	358	
$151–$250 per week	1.1%	20	1872	6.5%	30	462		2.5%	9	358	
$251–$400 per week	0.2%	4	1872	3.7%	17	462		0.6%	2	358	
$401 or more per week	0.6%	11	1872	1.7%	8	462		0.6%	2	358	
Spent on Transport											
I did not have any transportation costs during that time ($0)	29.9%	554	1853	17.9%	84	469	<.001	20.1%	72	358	0.131
$1–9 per week	7.4%	137	1853	2.6%	12	469		5.3%	19	358	
$10–$24 per week	22.9%	425	1853	18.1%	85	469		23.2%	83	358	
$25–49 per week	22.9%	424	1853	32.4%	152	469		28.5%	102	358	
$50 or more per week	16.9%	313	1853	29.0%	136	469		22.9%	82	358	

Zero child care costs were reported by 95.9% of CLAs compared to 73.4% of parents/caretakers ($p<0.001$) and 93.0% of disenrolled (not significantly different to CLAs). Among those reporting any child care costs, most costs were below $150 per week in each category. Most individuals reported transportation costs, especially in the parents and caretaker group ($p<0.001$ for difference with CLAs). For example, 29.9% of CLAs reported no transportation costs, compared to 17.9% of parents/caretakers, and 20.1% of disenrolled. On the other hand, transportation costs of more than $50 per week were reported by 16.9% of CLAs, 29.0% of parents/caretakers, and 22.9% of disenrolled.

Table 12: Health Behaviors

	CLA			Parents/Caregivers				Disenrolled			
Measure	**Percent**	**n**	**N**	**Percent**	**n**	**N**	**p-value**	**Percent**	**n**	**N**	**p-value**
How Often Wear Seatbelt											
Always	86.4%	1645	1905	78.5%	375	478	0.001	81.2%	303	373	0.175
Nearly always	5.8%	110	1905	10.3%	49	478		9.9%	37	373	
Sometimes	3.8%	73	1905	6.7%	32	478		4.6%	17	373	
Seldom	1.7%	32	1905	1.0%	5	478		1.3%	5	373	
Never	1.7%	32	1905	2.9%	14	478		2.1%	8	373	
Never drive or ride in a car	0.7%	13	1905	0.6%	3	478		0.8%	3	373	
How Often Wear Mask											
Every time	74.1%	1417	1911	64.9%	309	476	0.003	74.0%	276	373	0.783
Most of the time	15.7%	300	1911	20.8%	99	476		17.2%	64	373	
Some of the time	7.5%	143	1911	10.9%	52	476		6.2%	23	373	
Never	2.7%	51	1911	3.4%	16	476		2.7%	10	373	
Weeks Exercised At Least 3 Hours Per Week in Last Month											
0 weeks	23.4%	395	1685	14.5%	62	429	0.011	21.9%	73	334	0.978
1 week	10.0%	169	1685	11.9%	51	429		10.8%	36	334	
2 weeks	9.8%	165	1685	10.5%	45	429		10.2%	34	334	
3 weeks	7.7%	129	1685	8.2%	35	429		8.4%	28	334	
4 weeks	49.1%	827	1685	55.0%	236	429		48.8%	163	334	
Rate Overall Food Habits											
Excellent	10.2%	194	1910	9.6%	46	477	0.286	5.9%	22	371	0.110
Very good	16.1%	308	1910	18.2%	87	477		21.0%	78	371	
Good	34.9%	666	1910	29.8%	142	477		34.5%	128	371	
Fair	30.3%	579	1910	31.4%	150	477		30.7%	114	371	
Poor	8.5%	163	1910	10.9%	52	477		7.8%	29	371	
Currently Smoke											
Every day	26.2%	503	1917	28.6%	136	475	0.295	20.5%	76	370	0.034
Some days	10.9%	209	1917	11.4%	54	475		10.0%	37	370	
Advised to Quit Smoking											
Yes	64.6%	457	707	52.6%	100	190	0.008	48.2%	54	112	0.003
Currently Vape											
Every day	3.7%	71	1910	5.9%	28	478	0.063	5.7%	21	367	0.157
Some days	6.2%	119	1910	10.5%	50	478		8.2%	30	367	

Most individuals reported engaging in positive health behaviors, though differences existed across groups and specific measures. Always wearing a seatbelt was reported by 86.4% of CLAs, 78.5% of parents/caretakers (p=0.001), and 81.2% of disenrolled (p=0.175). Always wearing a mask outside of the house was reported by 74.1% of CLAs, 64.9% of parents/caretakers (p=0.003), and 74.0% of disenrolled (p=0.783). Almost half (49.1%) of CLA individuals reported weekly exercise of 3 or more hours (including physically demanding work) in all four weeks of the last month, compared to 55.0% of parents/caretakers (p=0.011), and 48.8% of disenrolled (difference not significantly different). Among CLAs, everyday smoking was reported by 26.2% and some days smoking was reported by 10.9%. Similar proportions were reported by other groups. Among smokers, 64.6% of CLAs said that they had been advised to quit smoking, significantly more than parents/caretakers (52.6%, p=0.008) and disenrolled (48.2%, p=0.003). Currently vaping every day was reported by 3.7%, and some days by 6.2% of CLAs. Similar proportions were reported in other groups.

Table 13: Health Status

	CLA			Parents/Caregivers				Disenrolled			
Measure	**Percent**	**n**	**N**	**Percent**	**n**	**N**	**p-value**	**Percent**	**n**	**N**	**p-value**
Rate Physical Health											
Excellent	6.7%	127	1902	10.1%	48	473	<.001	8.1%	30	371	0.003
Very good	17.8%	338	1902	19.5%	92	473		20.2%	75	371	
Good	29.4%	559	1902	40.0%	189	473		38.5%	143	371	
Fair	32.9%	626	1902	21.6%	102	473		22.4%	83	371	
Poor	13.2%	252	1902	8.9%	42	473		10.8%	40	371	
Change in Physical Health											
My health has gotten better	14.7%	279	1903	14.5%	69	475	0.871	14.6%	54	371	0.606
My health is about the same	59.4%	1131	1903	60.8%	289	475		56.6%	210	371	
My health has gotten worse	25.9%	493	1903	24.6%	117	475		28.8%	107	371	
Rate Mental Health											
Excellent	9.0%	172	1908	11.6%	55	473	0.498	9.2%	34	370	0.667
Very good	17.8%	339	1908	15.4%	73	473		16.8%	62	370	
Good	30.5%	581	1908	29.0%	137	473		33.5%	124	370	
Fair	28.2%	539	1908	29.6%	140	473		29.2%	108	370	
Poor	14.5%	277	1908	14.4%	68	473		11.4%	42	370	
Probable Mental Health Condition											
Yes	36.2%	649	1792	38.1%	172	452	0.503	30.6%	106	346	0.082
Change in Mental Health											
My mental health has gotten better	14.6%	277	1895	15.2%	72	474	0.027	14.5%	53	366	0.275
My mental health is about the same	58.6%	1111	1895	51.3%	243	474		53.8%	197	366	
My mental health has gotten worse	26.8%	507	1895	33.5%	159	474		31.7%	116	366	
Had Blood Cholesterol Checked											
Yes, within the last 12 months	52.0%	974	1873	44.8%	206	460	0.001	40.4%	147	364	<.001
Yes, but it's been more than 12 months	26.6%	498	1873	24.8%	114	460		27.5%	100	364	
Never	21.4%	401	1873	30.4%	140	460		32.1%	117	364	

Self-rated health status was rated significantly more poorly by CLA individuals than parents/caretakers ($p<0.001$) and disenrolled ($p=0.003$). For example, 6.7% of CLAs rated their health as “excellent” compared to 10.1% of parents/caretakers and 8.1% of disenrolled; whereas 13.2% of CLAs rated their health as poor, compared to 8.9% of parents/caretakers and 10.8% of disenrolled. For all three groups, individuals were more likely to report their health was worse over the last 12 months than better. For example, among CLAs, 14.7% selected “better,” 59.4% selected “about the same,” and 25.9% selected “worse.” Self-rated mental health was similar across the three groups and was more likely to be rated poor than excellent. For example, among CLAs, 9.0% said that their mental health was excellent and 14.5% said it was poor. In all three groups, individuals were more likely to say that their mental health had gotten worse over the last year than better. For example, 26.8% of CLAs said that their mental health had gotten worse versus 14.6% who said that it had gotten better. Receipt of a blood cholesterol check in the last year was reported by 52.0% of CLAs, versus 44.8% of parents/caretakers ($p=0.001$), and 40.4% of disenrolled ($p<0.001$).

Table 14: Changes in Activities Due to COVID-19

	CLA			Parents/Caregivers				Disenrolled			
Measure	**Percent**	**n**	**N**	**Percent**	**n**	**N**	**p-value**	**Percent**	**n**	**N**	**p-value**
Seeing Friends/Family in Person											
Less	68.0%	1233	1813	68.6%	314	458	0.737	72.3%	253	350	0.438
About the same	25.4%	461	1813	24.0%	110	458		22.6%	79	350	
More	6.6%	119	1813	7.4%	34	458		5.1%	18	350	
Talking to Friends/Family on Video/Phone											
Less	19.0%	323	1701	14.9%	67	449	0.001	18.0%	61	339	0.939
About the same	39.8%	677	1701	33.4%	150	449		40.1%	136	339	
More	41.2%	701	1701	51.7%	232	449		41.9%	142	339	
Using Social Media											
Less	21.9%	316	1444	16.7%	72	432	<.001	25.6%	77	301	0.206
About the same	45.0%	650	1444	35.9%	155	432		38.2%	115	301	
More	33.1%	478	1444	47.5%	205	432		36.2%	109	301	
Drinking Alcohol											
Less	42.0%	401	955	42.1%	102	242	0.110	41.9%	93	222	0.815
About the same	42.2%	403	955	36.4%	88	242		40.1%	89	222	
More	15.8%	151	955	21.5%	52	242		18.0%	40	222	
Smoking Cigarettes/Vaping Nicotine											
Less	30.4%	251	825	24.1%	57	237	<.001	36.2%	54	149	0.101
About the same	49.2%	406	825	40.9%	97	237		37.6%	56	149	
More	20.4%	168	825	35.0%	83	237		26.2%	39	149	
Using Non-Prescription Drugs											
Less	34.1%	108	317	35.3%	36	102	0.869	43.5%	30	69	0.447
About the same	41.3%	131	317	43.1%	44	102		37.7%	26	69	
More	24.6%	78	317	21.6%	22	102		18.8%	13	69	
Eating Unhealthy Food											
Less	22.9%	394	1720	21.0%	94	447	0.003	21.8%	74	340	0.279
About the same	49.1%	844	1720	41.4%	185	447		45.0%	153	340	
More	28.0%	482	1720	37.6%	168	447		33.2%	113	340	
Physical Exercise											
Less	34.1%	608	1781	34.7%	158	455	0.050	36.6%	126	344	0.571
About the same	42.5%	757	1781	36.5%	166	455		39.0%	134	344	
More	23.4%	416	1781	28.8%	131	455		24.4%	84	344	

Individuals reported substantial changes in their social interactions and health-related behaviors (among those who ever engaged in each behavior) since the start of the COVID-19 pandemic. For example, 68.0% of CLA individuals said that they were seeing family less in person, versus 6.6% who said more (proportions were similar for other groups). Talking to family and friends on video or phone was reported to be less frequent by 19.0% of CLAs and more frequent by 41.2% of CLAs. This shift toward more frequent talking to family and friends was even higher for parents/caretakers, 51.7% ($p=0.001$). In all groups, a higher proportion said that they were using social media more frequently. For example, “more” was reported by 33.1% of CLAs and 47.5% of parents/caretakers ($p<0.001$). Drinking alcohol, on the other hand, was reported as decreasing overall: 42.0% of CLA individuals said that they were drinking less alcohol, compared to 15.8% who said they were drinking more (similar proportions were reported for other groups). For tobacco and vaping, more CLA and disenrolled individuals said that they were doing this less, whereas more parents/and caretakers said they were smoking and vaping more often. Eating unhealthy food was reported more frequently among all groups, and especially among parents/caretakers. All groups said that they were doing less physical exercise.

Table 15: Substance Use Treatment Need and Utilization

	CLA			Parents/Caregivers				Disenrolled			
Measure	**Percent**	**n**	**N**	**Percent**	**n**	**N**	**p-value**	**Percent**	**n**	**N**	**p-value**
In past year, ever drank or used drugs more than wanted to	15.3%	293	1913	13.6%	65	479	0.382	19.4%	72	371	0.108
In past year, wanted to cut down on drinking or drug use	19.2%	361	1880	17.4%	83	478	0.410	20.7%	75	363	0.579
If Yes to Either of the Above											
Wanted/Needed counseling for alcohol/drugs	36.4%	153	420	28.6%	28	98	0.189	27.2%	25	92	0.130
Received treatment	36.8%	131	356	34.6%	28	81	0.756	18.5%	15	81	0.004
Reasons for Not Getting Treatment											
Other	63.8%	134	210	72.3%	34	47	0.335	57.1%	32	56	0.499
Not ready to stop	15.6%	33	211	21.3%	10	47	0.484	17.9%	10	56	0.732
Did not know where to go	12.8%	27	211	8.5%	4	47	0.464	8.9%	5	56	0.473
Didn’t find the type of treatment I wanted	10.4%	22	211	8.7%	4	46	0.833	5.4%	3	56	0.355
Services not available due to COVID	10.0%	21	211	4.3%	2	46	0.287	19.6%	11	56	0.150
Had coverage, but didn’t cover treatment	6.2%	13	211	4.3%	2	46	0.829	5.4%	3	56	0.732
Had no transportation	5.2%	11	210	8.5%	4	47	0.508	5.4%	3	56	0.894
No appointments available	4.7%	10	211	4.3%	2	46	0.970	1.8%	1	56	0.145
Did not qualify anymore	2.4%	5	211	8.5%	4	47	0.162	5.4%	3	56	0.480
Concerned that treatment might have negative affect on job	2.4%	5	211	10.6%	5	47	0.123	5.4%	3	56	0.456
No openings	2.4%	5	211	2.1%	1	47	0.614	1.8%	1	56	0.941
Couldn’t afford cost	1.9%	4	211	8.5%	4	47	0.194	16.1%	9	56	0.018

The survey included two questions to screen for a potential substance use disorder (SUD). Among CLAs, 15.3% said that in the past year they drank or used drugs more than they wanted to while 19.2% said that in the past year they wanted to cut down on drinking or drug use. The proportions were similar for parents/caretakers and disenrolled. Among CLAs who said yes to one or both of the screening questions, 36.4% said that they wanted or needed counseling for alcohol or drugs and 36.8% said that they had received treatment. The proportion receiving treatment was significantly lower among disenrolled people (18.5%, p=0.004). People not receiving treatment were asked to endorse possible reasons (and could select multiple reasons). The list included common barriers such as “not ready to stop,” “didn’t know where to go,” and “didn’t find the type of treatment I wanted.” Each of these options were endorsed by about 10–15% of respondents. However, most commonly (63.8%), individuals checked “other.” There were no significant differences between CLA and other groups, except that only 1.9% of CLAs said “couldn’t afford cost” compared to 16.1% of disenrolled.

Next Steps

Analysis of the findings from the baseline survey data described in this report are underway. Current analyses are focused on creating cross-sectional comparisons to examine differences across more detailed subgroups that relate to the waiver provisions (for example, comparing CLAs below 50% of the poverty level versus 50–100%, and looking specifically at people meeting screening criteria for a SUD). An additional future step may link survey data with administrative data to conduct mixed claims and survey analyses. An example is a potential analysis that would examine the relationship between endorsing a need for SUD treatment and receiving any type of screening or treatment (as measured with claims data).

The survey team will go back into the field for two additional rounds of data collection. A small-scale, mixed-methods data collection will take place in calendar year 2022/2023 to examine ongoing issues related to access, enrollment, and changing program requirements in the context of restored waiver provisions after the end of the federal public health emergency. (As noted, the provisions are suspended until the emergency is rescinded). Planned data collection will include closed-ended surveys sent to 1,500 individuals and follow-up qualitative, semi-structured interviews with approximately 20 individuals. Because the end date for the public health emergency is unknown, our team is on standby to finalize the timeline for this survey and begin data collection (likely fielding 3 months after the end of the public health emergency). The team will also mount a large-scale survey at the end of the waiver period in 2024. The questions and sampling strategy are likely to closely resemble the baseline survey described in this report.

Survey Next Steps

Interim Data Collection

We will field a small survey of beneficiaries with a qualitative follow-up in late 2022. The survey will be sent to 1,500 randomly sampled, currently enrolled beneficiaries, of whom half (750) will be childless adults and half (750) will be parents/caretakers. The team is working with the UW Survey Center to field the survey. The survey instrument will be 8 pages in length and sent to the listed mailing address of members along with a pre-paid return envelope and a $2 incentive payment. The survey will only be offered in English. Individuals who do not return the survey will be contacted by telephone interviewers who will attempt to complete the interview by phone.

Using similar questions to the 2020 survey, the 2022 survey will include questions on current and prior insurance coverage, access to care, health care costs, health status and health

behaviors, work activities, knowledge of current waiver provisions and state policies, and demographics. Because implementation is one focus of the survey, and the requirement to pay copayments for the emergency department has been implemented, the survey will also ask detailed questions about experiences using the emergency department, beneficiary knowledge of the policies that the state is enforcing, and any potential avoidance of care due to copayments.

We will also conduct a follow-up qualitative study. The qualitative study will recruit people who complete the 2022 survey and indicate that they are willing to be contacted again to participate in a follow-up study. The qualitative study will provide $50 incentive payments and participants will take part in an hourlong semi-structured interview that will focus on recent experiences with care, with a focus on issues relevant to provisions of the waiver including how individuals navigate use of the emergency department and their knowledge and understanding of when it is appropriate to seek emergency care versus other settings of care, and access to care for substance use disorders. Interviews will be transcribed, coded, and systematically analyzed to identify major themes. Approximately twenty individuals will be recruited for the qualitative study, a number of respondents that is likely to achieve thematic saturation (i.e., the coverage of all major themes). A report describing the major lessons will be produced based on the interim survey. The survey will be fielded as a joint effort between the UW evaluation team and the UW Survey Center.

Final Survey

The final survey will be fielded between Q3 of 2023 and Q2 of 2024. The design and implementation will mirror the 2020 survey. It will be sent to approximately 15,000 current and former members and will be offered in English and Spanish. The sampling plan will include oversamples of groups that may be of particular relevance to waiver provisions, similar to 2020. For example, we will likely oversample people with a history of diagnosed substance use disorders to study the provisions related to residential drug and alcohol treatment. The survey domains will include health insurance coverage, eligibility and enrollment in Medicaid, health care needs, access and use of care, health status and health behaviors, employment and workforce activities, awareness and exposure to waiver provisions, and demographics. The final set of domains will be determined in consultation with the state and CMS based on the implementation status of waiver provisions that were placed in suspension with the COVID-19 public health emergency.

JAMA Health Forum™

Original Investigation

Trends in Medicaid Enrollment and Disenrollment During the Early Phase of the COVID-19 Pandemic in Wisconsin

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Abstract

IMPORTANCE After the federal public health emergency was declared in March 2020, states could qualify for increased federal Medicaid funding if they agreed to maintenance of eligibility (MOE) provisions, including a continuous coverage provision. The implications of MOE provisions for total Medicaid enrollment are unknown.

OBJECTIVE To examine observed increases in Medicaid enrollment and identify the underlying roots of that growth during the first 7 months of the COVID-19 public health emergency in Wisconsin.

DESIGN, SETTING, AND PARTICIPANTS This population-based cohort study compared changes in Wisconsin Medicaid enrollment from March through September 2020 with predicted changes based on previous enrollment patterns (January 2015-September 2019) and early pandemic employment shocks. The participants included enrollees in full-benefit Medicaid programs for nonelderly, nondisabled beneficiaries in Wisconsin from March through September 2020. Individuals were followed up monthly as they enrolled in, continued in, and disenrolled from Medicaid. Participants were considered to be newly enrolled if they enrolled in the program after being not enrolled for at least 1 month, and they were considered disenrolled if they left and were not reenrolled within the next month.

EXPOSURES Continuous coverage provision beginning in March 2020; economic disruption from pandemic between first and second quarters of 2020.

MAIN OUTCOMES AND MEASURES Actual vs predicted Medicaid enrollment, new enrollment, disenrollment, and reenrollment. Three models were created (Medicaid enrollment with no pandemic, Medicaid enrollment with pandemic economic circumstances, and longer Medicaid enrollment with a pandemic-induced recession), and a 95% prediction interval was used to express uncertainty in enrollment predictions.

RESULTS The study estimated ongoing Medicaid enrollment in March 2020 for 792 777 enrollees (mean [SD] age, 20.6 [16.5] years; 431 054 [54.4%] women; 213 904 [27.0%] experiencing an employment shock) and compared that estimate with actual enrollment totals. Compared with a model of enrollment based on past data and incorporating the role of recent employment shocks, most ongoing excess enrollment was associated with MOE provisions rather than enrollment of newly eligible beneficiaries owing to employment shocks. After 7 months, overall enrollment had increased to 894 619, 11.1% higher than predicted (predicted enrollment 805 130; 95% prediction interval 767 991-843 086). Decomposing higher-than-predicted retention, most enrollment was among beneficiaries who, before the pandemic, likely would have disenrolled within 6 months, although a substantial fraction (30.4%) was from reduced short-term disenrollment.

(continued)

Key Points

Question Are increases in Medicaid enrollment during the COVID-19 pandemic associated more with maintenance of eligibility (MOE) policy or employment shocks?

Findings In this cohort study of 792 777 Wisconsin Medicaid enrollees, a 13.5% increase in overall enrollment vs predicted enrollment during the pandemic was largely associated with MOE rather than novel increases in enrollment owing to employment shocks. Most increased enrollment was among beneficiaries otherwise unlikely to remain enrolled 6 months later.

Meaning The findings suggest that expiration of MOE may leave many Medicaid beneficiaries without insurance coverage.

+ Invited Commentary

+ Multimedia

+ Supplemental content

Author affiliations and article information are listed at the end of this article.

Abstract (continued)

CONCLUSIONS AND RELEVANCE In this cohort study, observed increases in Medicaid enrollment were largely associated with MOE rather than new enrollment after employment shocks. Expiration of MOE may leave many beneficiaries without insurance coverage.

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Introduction

Since the federal declaration of the public health emergency related to the COVID-19 pandemic in the US in March 2020, enrollment in Medicaid has increased 16% nationally,[1] an increase of more than 11 million individuals.[2] Enrollment growth occurred in every state, ranging from 10% to 31%.[3] Although new enrollment and disenrollment is a normal feature of Medicaid enrollment dynamics, the public health emergency brought a key change to Medicaid policy: maintenance of eligibility (MOE) provisions authorized under the Families First Coronavirus Recovery Act.[4] Specifically, the act increased the federal share of Medicaid funding to states by 6.2% through the end of the month that the public health emergency expires, providing that states maintain continuous coverage for Medicaid beneficiaries—unless the beneficiary requests voluntary termination, is no longer a resident, or dies.[5] All states participated. Consequently, since March 18, 2020, Medicaid members have not been subject to eligibility redetermination or disenrollment regardless of whether circumstances might normally have rendered them ineligible. Beneficiaries would normally be required to complete eligibility renewals, report changes in income and other circumstances, and otherwise respond to requests for eligibility-related information when the Medicaid agency identifies a need.

In this study, we used administrative data to examine increases in Medicaid enrollment and identify the underlying roots of that growth during the first 7 months of the public health emergency. We examined 2 channels: the MOE continuous coverage provisions during the public health emergency and the COVID-19 pandemic-related economic downturn. We assessed the degree to which these factors contributed to observed growth in Medicaid enrollment during the public health emergency.

Alongside MOE provisions enabling expanded enrollment, the early months of the pandemic brought substantial employment disruptions and expectations that many workers would lose employer-sponsored insurance and seek Medicaid or marketplace coverage.[6] Although some decreases in employer-sponsored coverage have occurred,[7] research to date has not shown a direct association between Medicaid enrollment and the unemployment rate during the public health emergency.[8-10] Moreover, early data suggest that there are large enrollment increases in some safety-net programs but small increases in Medicaid or marketplace coverage.[11] These findings contradict trends in Medicaid enrollment nationally[1,2] and raise questions about the role of MOE provisions and employment shocks in changes in Medicaid enrollment.

Disentangling the factors behind enrollment has implications for state budgets and Medicaid administrative workflows, particularly when the enhanced federal Medicaid share ceases with the expiration of the public health emergency. A substantial number of current Medicaid enrollees may no longer be eligible when the public health emergency declaration expires. The Centers for Medicare & Medicaid Services is working with states to prepare for the "unwinding" of the public health emergency in 2022, focusing on redeterminations, transitions to marketplace plans, and avoidance of coverage losses.[12] This process and the role of MOE can also inform future policy in states considering strategies to reduce disruptions in Medicaid coverage.[13]

Methods

In this cohort study, we constructed an individual-level panel data set of all nonelderly, nondisabled Medicaid beneficiaries by month from January 2015 through September 2020 using administrative data from Wisconsin's online eligibility and enrollment portal for public benefits. Wisconsin has a unique partial expansion Medicaid program that covers adults up to 100% of the federal poverty level.[14] The data contain individual monthly level information on eligibility (including income, income sources, and household composition) along with demographic information including age, sex, educational level, race and ethnicity, and county of residence. Participant race and ethnicity are generally self-identified but occasionally may be reported by caseworkers; participants in this study identified as American Indian, Asian, Black, Hispanic, Pacific Islander, and White. Individuals were followed up monthly as they enrolled in, continued in, and disenrolled from Medicaid. We defined someone as newly enrolled if they enrolled in the program after being not enrolled for at least 1 month and as disenrolled if they left and were not reenrolled within the next month. This study was deemed exempt from review and informed consent by the University of Wisconsin's Institutional Review Board (Common Rule, Category 5). The study followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) reporting guideline.

Statistical Analysis

To assess how much of the increase in Medicaid enrollment was associated with MOE, we estimated what Medicaid enrollment would have been between March and September 2020 in a counterfactual scenario in which there was no MOE. We then ascertained whether increased enrollment was associated with reduced disenrollment and churn vs new enrollment. This assessment required estimating the rates of remaining enrolled for those enrolled as of March 2020, reenrollment for those who disenrolled, and new enrollment in the absence of MOE. Using data from individuals enrolled in Wisconsin Medicaid from 2015 through 2017, we estimated a model of enrollment in each month as the sum of people who remained continuously enrolled from a benchmark date, people who disenrolled since then and reenrolled, and new enrollees not observed at the benchmark date. We assessed how well estimates matched the observed data from 2018 and 2019 and then applied them to 2020.

Additional model details are in the eAppendix in the Supplement. We describe them here in brief. To adjust for changes in composition between our testing and prediction cohorts (those enrolled as of March 2018, 2019, and 2020) and our estimation cohort (those enrolled as of March 2017), we estimated a propensity score for each cohort relative to the 2017 cohort and implemented nearest-neighbor matching to create versions of the 2017 cohort that aligned with each of the 2018, 2019, and 2020 cohorts. We estimated counterfactual enrollment for each cohort in 5 steps. First, we estimated the probability of continued enrollment in each cohort by applying the nonparametric survival curve for each corresponding matched version of the 2017 cohort. Second, to account for reenrollment after disenrollment, we estimated the probability someone was reenrolled in each month in each cohort after a disenrollment (conditional on disenrollment) using a logit model in each matched cohort. Applying these probabilities yielded the number of individuals disenrolling each month expected to be reenrolled in each subsequent month. Third, to account for new enrollment, we regressed the number of new enrollees on each calendar month from 2015 through 2017 and created a monthly estimate for 2017 through 2020, a specification that accounts for strong seasonal enrollment patterns. Fourth, we applied estimated nonparametric survival functions to each month's estimated new enrollees (much as we did for existing enrollees in step 1) to obtain the total number of ongoing newly enrolled beneficiaries. Fifth, we sum estimated the monthly continuing enrolled, reenrolled, and newly enrolled individuals to obtain total enrollment.

Model 1 yielded estimates of what Medicaid enrollment would have been without the COVID-19 pandemic under similar economic circumstances as previous years and allowed us to decompose enrollment into its components (continued enrollment, reenrollment, and newly enrolled).

To consider the economic circumstances of the pandemic vs MOE, we incorporated information about recent employment experiences of Medicaid enrollees and the elasticity of new enrollment with respect to new unemployment claims (model 2). We matched enrollment data to wage reports from the Wisconsin unemployment insurance reporting system, available from the first quarter of 2017 to the second quarter of 2020. We then made 2 changes to model 1. First, each step described above was estimated separately for those who did and did not experience an employment shock, measured as any member of the Medicaid case having a decrease in unemployment insurance earnings of 50% or more from 1 quarter to the next, from the first quarter to the second quarter (March enrollees) or at the time of their enrollment (new enrollees). Second, we estimated new enrollment as a function of new unemployment claims[15] and calendar month using 2017 through 2019 data and used estimates from this regression to predict new enrollment during 2020.

We also simulated longer enrollment associated with the COVID-19 pandemic–induced recession (model 3) by eliminating disenrollments among those with a recent employment shock but otherwise following the model 2 procedure. This simulation assumed that all of those individuals currently or newly enrolled in Medicaid who were experiencing an employment shock during the early public health emergency would remain continuously enrolled.

In all 3 models, we used a 95% prediction interval (PI) to express uncertainty in the enrollment predictions. These simulated intervals incorporated estimation error and sampling error in the prediction and are further described in the Supplement.

eTables 1 through 6 and the eFigure in the Supplement present details on model estimation and performance in 2018 and 2019 (the placebo periods). Mean absolute percentage error is 1.08 for model 1 and 0.62 for model 2. Mean absolute deviation is 8525 for model 1 and 4925 for model 2. These metrics are another way to think about uncertainty in the model forecasts. All analyses were performed using Stata/MP, version 17 (StataCorp LLC), Excel 2016 (Microsoft), and The Decision Tools Suite @Risk, version 8.2 (Palisade).

Results

The study estimated ongoing Medicaid enrollment in March 2020 for 792 777 enrollees (mean [SD] age, 20.6 [16.5] years; 431 054 [54.4%] women and 361 723 [45.6%] men) and compared that enrollment with actual enrollment totals. Enrollees in March 2020 self-identified (or were sometimes categorized by caseworkers) as American Indian (24 924 [3.1%]), Asian (32 868 [4.1%]), Black (164 715 [20.8%]), Hispanic (109 810 [13.9%]), Pacific Islander (1949 [0.2%]), and White (428 944 [54.1%]) (95 107 [12.0%] participants had missing data on race and ethnicity; participants could choose more than 1 race or ethnicity, so totals do not add to 100%). **Table 1** summarizes other characteristics of Medicaid enrollees during the study period. The average enrollee in the March 2020 cohort was similar to enrollees in earlier years across almost all characteristics. The public health emergency coincided with a substantial shift in economic circumstances in the population: among those enrolled in March of each year, 213 904 (27.0%) experienced an employment shock from the first quarter to the second quarter in 2020, roughly twice the mean in past years.

We analyzed trends in new enrollments, total enrollment, and disenrollments. **Figure 1** shows that total enrollment across the state's Medicaid programs had been steady at a mean of approximately 788 026 individuals per month in 2019. In April 2020, enrollment began to increase steadily until reaching 894 619 by September 2020, an increase of 13.5%.

Figure 1 shows that the increase was clearly not propelled by new enrollment overall. Relative to the previous mean of 28 026 new enrollees per month, new enrollment spiked briefly in April (31.7% increase) and May (16.9% increase) and then decreased 24.0% to a mean of approximately 21 297 per month from June through September 2020. A substantial decrease in disenrollments from 27 499 per month to 5659 per month (one-fifth of the previous level) appeared to be responsible for the increase.

Figure 2 shows the model estimates compared with actual enrollment, summarized and decomposed by type of enrollment as described in **Table 2**. In model 1, based on past enrollment trends and demographic characteristics, actual total Medicaid enrollment by September 2020 (894 619) was 11.9% higher than the predicted 799 711 (95% PI, 795 782-803 677) enrollees

Table 1. Characteristics of Enrolled Wisconsin Medicaid Cohorts, 2017-2020[a]

Characteristic	No. (%) 2017 (n = 803 659)	2018 (n = 796 162)	2019 (n = 786 095)	2020 (n = 792 777)
Age, mean (SD)	20.3 (16.6)	20.3 (16.6)	20.4 (16.6)	20.6 (16.5)
Sex				
Male	363 814 (45.3)	361 588 (45.4)	356 983 (45.4)	361 723 (45.6)
Female	439 845 (54.7)	434 574 (54.6)	429 112 (54.6)	431 054 (54.4)
Race and ethnicity[b]				
American Indian	25 334 (3.2)	25 082 (3.2)	24 597 (3.1)	24 924 (3.1)
Asian	33 745 (4.2)	33 235 (4.2)	32 632 (4.2)	32 868 (4.1)
Black	168 525 (21.0)	166 420 (20.9)	163 423 (20.8)	164 715 (20.8)
Hispanic	113 075 (14.1)	113 332 (14.2)	110 006 (14.0)	109 810 (13.9)
Pacific Islander	1916 (0.2)	1888 (0.2)	1842 (0.2)	1949 (0.2)
White	461 952 (57.5)	446 942 (56.1)	432 803 (55.1)	428 944 (54.1)
Missing race and ethnicity	63 195 (7.9)	73 304 (9.2)	83 623 (10.6)	95 107 (12.0)
Educational level[c]				
High school diploma or higher	188 915 (23.5)	187 680 (23.6)	186 542 (23.7)	188 903 (23.8)
Educational data missing	296 995 (37.0)	294 809 (37.0)	294 060 (37.4)	300 517 (37.9)
Income % of FPL, mean (SD)	56.1 (61.3)	58.1 (63.0)	59.5 (66.0)	58.4 (80.6)
Employment shock	104 965 (13.1)	108 805 (13.7)	107 358 (13.7)	213 904 (27.0)
Eligibility type				
Childless adult	149 104 (18.6)	151 613 (19.0)	151 274 (19.2)	157 199 (19.8)
Parents	148 464 (18.5)	141 714 (17.8)	133 123 (16.9)	129 147 (16.3)
Child	419 637 (52.2)	427 257 (53.7)	414 290 (52.7)	392 474 (49.5)
Pregnant	19 463 (2.4)	19 350 (2.4)	18 985 (2.4)	18 073 (2.3)
Other eligibility[d]	66 991 (8.3)	56 228 (7.1)	68 423 (8.7)	95 884 (12.1)

Abbreviation: FPL, federal poverty level.

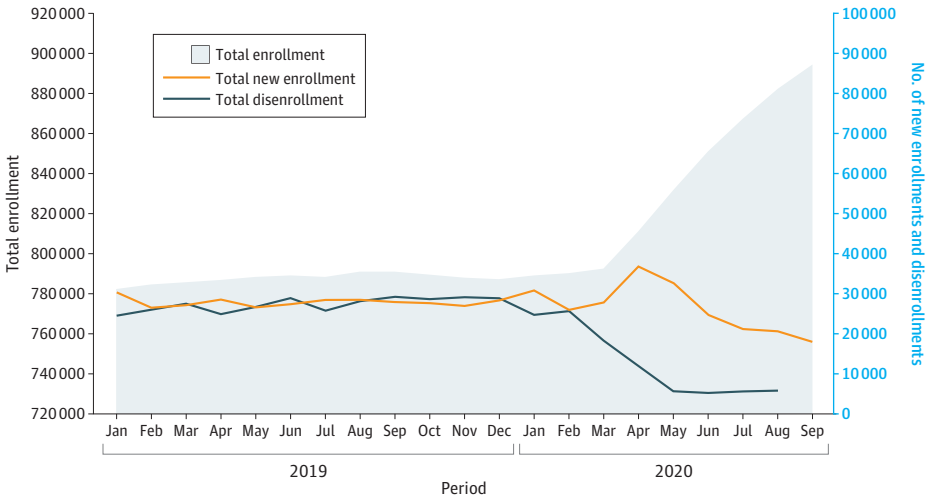
[a] Information was derived from Wisconsin administrative data. Demographic characteristics of the enrolled Wisconsin nonelderly, nondisabled Medicaid population are shown in March of each year.

[b] Individuals may have reported more than 1 race or ethnicity, so totals may add to more than 100%.

[c] An excluded category (no high school diploma) is not shown, so totals may add to less than 100%.

[d] Other eligibility includes extensions, transitional eligibility, and youth exiting foster care.

Figure 1. Trends in Wisconsin Medicaid Enrollment

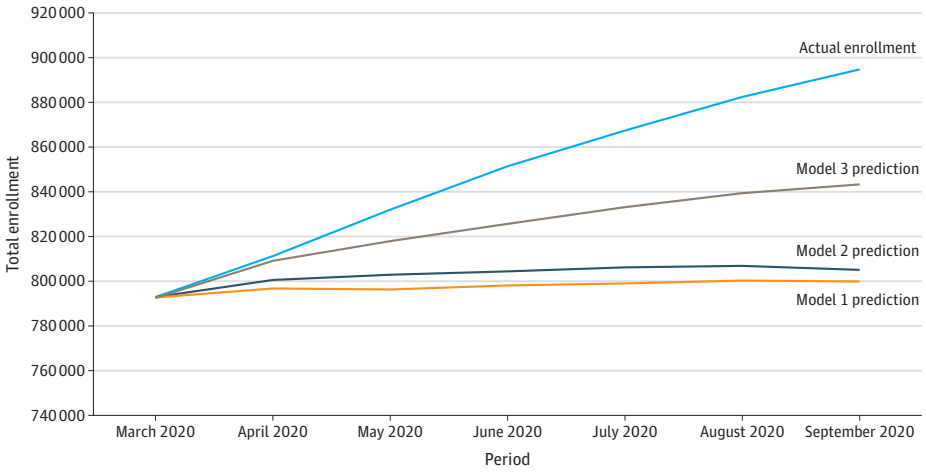


Information was derived from Wisconsin administrative data and shows monthly total enrollment (left axis) and new enrollment in and disenrollment from (right axis) Medicaid, where new enrollment and disenrollment implies at least 1 month out of the program. Disenrollment data for September 2020 were not available at the time of writing.

(Table 2), which was then decomposed by source (ie, continuously enrolled since March 2020, temporarily disenrolled and reenrolled by September 2020, and newly enrolled after March 2020). The actual number of individuals with continuous enrollment since March 2020 (746 286) was 15.9% higher than the predicted 643 628 (95% PI, 642 895-644 361) enrollees. The number of ongoing newly enrolled individuals after March 2020 (139 281) was 19.5% higher than predicted at 116 574 (95% PI, 112 729-120 445) enrollees partly because the number of individuals (144 395) with any new Medicaid enrollment from April through September 2020 was 12.5% higher than the predicted 128 393 (95% PI, 124 210-132 593) individuals (eTable 6 in the Supplement). Reenrollment of enrollees who had disenrolled as of September 2020 (9052) was 77.1% lower than the 39 509 (95% PI, 39 117-39 899) enrollees estimated by the model. In addition, disenrollments of the March 2020 cohort who had not reenrolled by September were down 57.6% compared with the predicted estimate (46 491 vs 109 640 [95% PI, 108 810-110 474] individuals) (eTable 6 in the Supplement).

Accounting for recent employment shocks modestly reduced the gap in predicted vs actual total enrollment (Figure 2). In model 2, total Medicaid enrollment was 11.1% higher by September 2020 (894 619) than the prediction of 805 130 (95% PI, 767 991-843 086) enrollees (Table 2).

Figure 2. Predicted vs Actual Medicaid Enrollment Under Different Scenarios From March through September 2020



Information was derived from Wisconsin administrative data. Model 1 is based on only enrollment projections. Model 2 incorporates information on recent employment shocks. Model 3 uses model 2 estimates and simulates no disenrollment among those with a recent employment shock.

Table 2. Decomposition of Differences in Actual vs Predicted Wisconsin Medicaid Enrollment as of September 2020[a]

	No. of individuals (95% PI)			
	Continuously enrolled since March 2020	Temporarily disenrolled and reenrolled by September 2020	Newly enrolled after March 2020	Total September 2020 enrollment[b]
Actual enrollment[c]	746 286	9052	139 281	894 619
Model 1 predicted[d]	643 628 (642 895-644 361)	39 509 (39 117-39 899)	116 574 (112 729-120 445)	799 711 (795 782-803 677)
Difference, %	15.9	−77.1	19.5	11.9
Model 2 predicted[e]	640 880 (640 134-641 613)	41 104 (40 705-41 502)	123 146 (85 993-161 186)	805 130 (767 991-843 086)
Difference, %	16.4	−78.0	13.1	11.1
Model 3 predicted[f]	685 450 (684 836-686 059)	27 851 (27 535-28 169)	129 965 (90 055-170 812)	843 266 (803 334-884 215)
Difference, %	8.9	−67.5	7.2	6.1

Abbreviation: PI, prediction interval (incorporates estimation and sampling error).

[a] Information was calculated from Wisconsin administrative data.

[b] Sum of individuals continuously enrolled since March 2020, those temporarily disenrolled and reenrolled by September 2020, and those newly enrolled after March 2020.

[c] Benchmark enrollment as of March 2020 was 792 777.

[d] Model 1 is based only on enrollment projections.

[e] Model 2 incorporates information on recent employment shocks.

[f] Model 3 uses model 2 estimates and simulates no disenrollment among those with a recent employment shock.

Continuous enrollment was up 16.4% (746 286 vs 640 880 enrollees [95% PI, 640 134-641 613 enrollees]), with the number of newly enrolled individuals (139 281) 13.1% higher than the predicted 123 146 (95% PI, 85 993-161 186) enrollees, and the actual number of reenrollees (9052) 78.0% lower than the predicted 41 104 (95% PI, 40 705-41 502) reenrollees. The number of individuals who disenrolled and did not reenroll decreased more than predicted by 58.0% (46 491 vs 110 793 [95% PI, 109 959-111 638] individuals) (eTable 6 in the Supplement). Cumulatively, total new enrollment was close to predicted (1.8%; 144 395 vs 141 879 [95% PI, 96 701-188 178] individuals) (eTable 6 in the Supplement). Of the total difference in predicted and actual enrollment, 18.0% (16 135 individuals) was explained by cumulative higher-than-expected new enrollment, whereas the remaining 82.0% represented a lack of disenrollment and reenrollment.

In model 3, which simulated disallowed disenrollment among those with recent employment shocks, the estimated difference between predicted and actual enrollment decreased to 6.1% (894 619 vs 843 266 individuals [95% PI, 803 334-884 215 individuals]) (Table 2). In other words, enrollment remained 6.1% higher than expected in the absence of MOE, assuming those without recent employment shocks had followed their typical enrollment cycles, those with recent employment shocks did not disenroll, and new enrollment was higher than typical because of increased employment shocks. This model reduced the gap between actual and counterfactual newly enrolled individuals to 7.2% (139 281 vs 129 965 individuals; 95% PI, 90 055-170 812 individuals) and slightly reduced the gap in reenrollees (9052) to 67.5% fewer than expected at 27 851 (95% PI, 27 535-28 169) individuals. The model 3 simulation also modestly reduced the gap in individuals who disenrolled and did not reenroll (41.5% lower; 46 491 actual vs 79 476 predicted individuals [95% PI, 78 786-80 158 individuals]) (eTable 6 in the Supplement).

Increased retention could be explained by reduced churning or by individuals who would be ineligible under non-MOE circumstances remaining enrolled. Although we cannot directly observe eligibility under non-MOE circumstances, short-term disenrollment followed by reenrollment is more likely to represent churning of eligible people, whereas longer-term disenrollment is more likely to reflect ineligibility. To assess the potential magnitude of these channels, we focused on the cohort originally enrolled in March 2020. We calculated the share of the gap in predicted vs actual retention of the March 2020 cohort (Table 2) coming from individuals predicted to be reenrolled in September 2020 vs those predicted to be no longer enrolled. In model 1, the gap in retention was 102 658 individuals, and temporary disenrollments with reenrollment were 30 457 lower than expected, suggesting 29.7% of the difference in predicted and actual retention came from individuals who would have left and quickly reenrolled. The remaining 70.3% (72 201 individuals) would not typically be enrolled 6 months later, 8.1% of the total enrolled caseload in September 2020. In model 2, the gap was similar at 105 406 with 32 052 fewer reenrollments than predicted and 73 354 more individuals who would not typically be enrolled 6 months later than predicted (8.2% of total September 2020 caseload). In model 3, the difference in predicted and actual retention was reduced to 60 836 individuals with 18 799 more reenrollments than expected, again approximately 30.9% of the gap. Because the absolute difference in predicted and actual enrollment was smaller than in models 1 and 2, this difference equaled 4.7% of the total September 2020 enrolled caseload. In summary, most excess retention of the initial cohort was explained by retention of individuals who would not typically be enrolled 6 months later, though a substantial fraction came from a reduction in churning.

Discussion

This study assessed how observed increases in Medicaid enrollment reflect the retention of individuals under the continuous coverage provision of the MOE vs the enrollment of those newly eligible after economic displacement. We showed that, compared with a model of enrollment based on past enrollment data and incorporating the role of recent employment shocks, most ongoing excess enrollment was associated with the MOE rather than increases in enrollment associated with

employment shocks. Furthermore, the analyses suggest that the continuous coverage provision may have promoted increased enrollment primarily via increased retention of those unlikely to remain otherwise enrolled 6 months later.

These findings highlight the difficult task of coverage redetermination as the public health emergency is expected to end in early 2022. The Centers for Medicare & Medicaid Services has issued 2 letters to state health officials with detailed instructions about how to prepare, possibly signaling concerns about precipitous coverage loss.[12,16] The upcoming changes will affect state budgets, managed care entities, and provider organizations, all of which have come to rely on the higher federal matching funds tied to the increases in Medicaid enrollment.

Before the COVID-19 pandemic, Medicaid beneficiaries faced ongoing documentation requirements to maintain coverage. Such administrative burdens create potential coverage disruption even if the beneficiary remains eligible.[17] We found that decreased churning explained nearly one-third of higher-than-predicted retention during the study period. Findings of the present study also showed that targeted policies can reduce disruptions and promote coverage continuity.

Results of this study are consistent with those of previous work showing that increased federal funds are not strongly correlated with changes in Medicaid enrollment nationally.[18] The results are also consistent with findings that insurance coverage remained steady, unlike in previous recessions, with a larger increase in public coverage than decrease in employer-sponsored insurance[19] and findings of weak correlation between Medicaid enrollment increases and unemployment rates.[7,8] If enrollment increases operate largely through reduced churning, larger state programs with cumbersome enrollment processes before the COVID-19 pandemic might be expected to have the largest enrollment increases under MOE, and economic recovery may not be associated with a decrease in Medicaid enrollment.

Limitations

This study has limitations. The COVID-19 pandemic is unprecedented, and the results of this study depend on the assumptions made and the data used for estimation. The nature of job loss may have changed throughout the pandemic in ways not captured. Medicaid enrollment may lag employment loss as unemployment benefits generally count as income for Medicaid eligibility. We estimate enrollment, not eligibility, so we cannot directly distinguish between reduced disenrollment and reenrollment owing to reduced administrative burden vs retained eligibility. In addition, our estimates may not be generalizable to other states.

Conclusions

In this cohort study, we found that Medicaid enrollment in Wisconsin increased during the public health emergency more than expected based on previous enrollment patterns. The findings suggest that excess Medicaid enrollment could be largely attributed to MOE provisions rather than new eligibility tied to COVID-19 pandemic–related employment shocks. On expiration of the public health emergency, states face the sizeable task of transitioning a large fraction of their added caseload off of Medicaid. Without proper preparation, many current enrollees may face a period without insurance.

ARTICLE INFORMATION

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Drafting of the manuscript: Dague, Badaracco, DeLeire, Tilhou, Friedsam.

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REFERENCES

1. Centers for Medicare & Medicaid Services. Medicaid and CHIP enrollment trend snapshot. Accessed November 10, 2021. https://www.medicaid.gov/medicaid/program-information/medicaid-chip-enrollment-data/medicaid-and-chip-enrollment-trend-snapshot/index.html

2. Centers for Medicare & Medicaid Services. Monthly Medicaid & CHIP application, eligibility determination, and enrollment reports & data: April 2021 applications, eligibility, and enrollment data. Updated October 26, 2021. Accessed November 10, 2021. https://www.medicaid.gov/medicaid/national-medicaid-chip-program-information/medicaid-chip-enrollment-data/monthly-medicaid-chip-application-eligibility-determination-and-enrollment-reports-data/index.html

3. Ruhter J, Conmy AB, Chu RC, Peters C, De Lew N, Sommers BD. Tracking health insurance coverage in 2020-2021. Office of the Assistant Secretary for Planning and Evaluation. October 29, 2021. Accessed November 10, 2021. https://aspe.hhs.gov/reports/tracking-health-insurance-coverage

4. Dolan R, Musumeci M, Tolbert J, Rudowitz R. Medicaid maintenance of eligibility (MOE) requirements: issues to watch. Kaiser Family Foundation. December 17, 2020. Accessed November 10, 2021. https://www.kff.org/medicaid/issue-brief/medicaid-maintenance-of-eligibility-moe-requirements-issues-to-watch/

5. Musumeci M. Key questions about the new increase in federal Medicaid matching funds for COVID-19. Kaiser Family Foundation. May 04, 2020. Accessed November 10, 2021. https://www.kff.org/coronavirus-covid-19/issue-brief/key-questions-about-the-new-increase-in-federal-medicaid-matching-funds-for-covid-19/

6. Garfield R, Claxton G, Damico A, Levitt L. Eligibility for ACA health coverage following job loss. Kaiser Family Foundation. May 13, 2020. Accessed November 10, 2021. https://www.kff.org/report-section/eligibility-for-aca-health-coverage-following-job-loss-data-note/

7. Bundorf MK, Gupta S, Kim C. Trends in US health insurance coverage during the COVID-19 pandemic. *JAMA Health Forum*. 2021;2(9):e212487-e212487. doi:10.1001/jamahealthforum.2021.2487

8. Frenier C, Nikpay SS, Golberstein E. COVID-19 has increased Medicaid enrollment, but short-term enrollment changes are unrelated to job losses. *Health Aff (Millwood)*. 2020;39(10):1822-1831. doi:10.1377/hlthaff.2020.00900

9. Shafer PR, Anderson DM, Whitaker R, Wong CA, Wright B. Association of unemployment with Medicaid enrollment by social vulnerability in North Carolina during COVID-19. *Health Aff (Millwood)*. 2021;40(9):1491-1500. doi:10.1377/hlthaff.2021.00377

10. Khorrami P, Sommers BD. Changes in US Medicaid enrollment during the COVID-19 pandemic. *JAMA Netw Open*. 2021;4(5):e219463-e219463. doi:10.1001/jamanetworkopen.2021.9463

11. Saloner B, Gollust SE, Planalp C, Blewett LA. Access and enrollment in safety net programs in the wake of COVID-19: a national cross-sectional survey. *PLoS One*. 2020;15(10):e0240080. doi:10.1371/journal.pone.0240080

12. Tsai D. Updated guidance related to planning for the resumption of normal state Medicaid, Children's Health Insurance Program (CHIP), and Basic Health Program (BHP) operations upon conclusion of the COVID-19 public health emergency. Center for Medicaid & CHIP Services. August 13, 2021. Accessed November 10, 2021. https://www.medicaid.gov/federal-policy-guidance/downloads/sho-21-002.pdf

13. Sugar S, Peters C, De Lew N, Sommers B. Medicaid churning and continuity of care: evidence and policy considerations before and after the COVID-19 pandemic. Assistant Secretary for Planning and Evaluation Office of Health Policy. April 12, 2021. Accessed November 10, 2021. https://aspe.hhs.gov/system/files/pdf/265366/medicaid-churning-ib.pdf

14. Dague L, Burns M, Friedsam D. The Line Between Medicaid and Marketplace: Coverage Effects from Wisconsin's Partial Expansion. *J Health Polit Policy Law*. 2021;9626852. Published online November 29, 2021. doi:10.1215/03616878-9626852

15. Wisconsin Department of Workforce Development. Wisconsin Unemployment Insurance initial and weekly claims filed. Accessed August 27, 2021. https://dwd.wisconsin.gov/uistats/.

16. Costello AM. Planning for the resumption of normal state Medicaid, Children's Health Insurance Program (CHIP), and Basic Health Program (BHP) operations upon conclusion of the COVID-19 public health emergency. Center for Medicaid & CHIP Services. Published December 22, 2020. Accessed November 8, 2021. https://www.medicaid.gov/sites/default/files/2020-12/sho20004.pdf

17. Herd P, Moynihan D. How administrative burdens can harm health. Health Affairs. October 2, 2020. Accessed November 10, 2021. https://www.healthaffairs.org/do/10.1377/hpb20200904.405159/full/

18. Clemens J, Ippolito B, Veuger S. Medicaid and fiscal federalism during the COVID-19 pandemic. *Public Budgeting Finance*. Published online May 18, 2021. doi:10.1111/pbaf.12287

19. Karpman M, Zuckerman S. The uninsurance rate held steady during the pandemic as public coverage increased. Urban Institute. August 18, 2021. Accessed November 10, 2021. https://www.urban.org/research/publication/uninsurance-rate-held-steady-during-pandemic-public-coverage-increased

SUPPLEMENT.

eAppendix. Additional Details for Models
eTable 1. Margins From Propensity Score
eTable 2. Postmatching Characteristics of 2017 Cohort
eTable 3. Survival Probabilities
eTable 4. Number of Entries, Exits, and Fraction of Original Cohort Reenrolled by Cohort
eTable 5. Reenrollment Probabilities
eTable 6. Total Exits and New Enrollees
eFigure. Ratio of Predicted to Actual Enrollment by Model and Cohort-Month

ATTACHMENT 5: COVID TELEHEALTH ANALYSIS FOR BENEFICIARIES WITH SUBSTANCE USE DISORDERS

Background

The emergence of the COVID-19 pandemic in 2020 impacted health care by influencing the content and structure of care delivery as well as creating new access barriers to care. In efforts to reduce the spread of infection, in-person care was temporarily reduced and provision of services by telehealth increased. To understand the Demonstration Waiver Provisions in the context of these changes, particularly Provision 4, we evaluated the utilization of primary care services among patients with established substance use disorders (SUDs) relative to a comparison cohort defined by chronic medical disease, specifically Type 2 Diabetes Mellitus (T2DM), before and during the early phase of the public health emergency (PHE).

Executive Summary of Findings

In a continuously-enrolled cohort of Wisconsin Medicaid beneficiaries, we found significant differences in primary care in-person and telehealth utilization between beneficiaries with substance use disorders (SUD) and those with Type 2 Diabetes Mellitus (T2DM). Beneficiaries with SUDs experienced substantial decreases in utilization of primary care services for all indications as well as for SUD-specific care. These decreases were greater than those observed for beneficiaries with T2DM seeking care for any diagnosis and T2DM specifically. Utilization levels did not fully recover for either beneficiaries with SUDs or T2DM. However, the recovery was greater for beneficiaries with T2DM. Telehealth represented a larger proportion of primary care utilization for beneficiaries with T2DM relative to SUDs in the early PHE, but over time this trend reversed. For any given visit, beneficiaries with SUDs were more likely to utilize telehealth relative to beneficiaries with T2DM.

Research Questions

1. What proportion of primary care services were performed via telehealth during the era of COVID-19 for patients with SUDs relative to beneficiaries with chronic diseases such as T2DM?

2. How did utilization of primary care services, in-person and by telehealth, vary by SUD type?

3. Did the PHE impact primary care utilization differently for beneficiaries with SUDs and T2DM?

4. Did beneficiaries with SUDs and T2DM incorporate telehealth proportionately at different rates post-PHE?

5. How did the increase in likelihood of a telehealth primary care visit differ between beneficiaries with SUDs and T2DM?

Methodology

We constructed a continuously-enrolled cohort of Wisconsin Medicaid beneficiaries defined by the diagnosis of a SUD or T2DM and used descriptive analyses to characterize trends in

telehealth utilization at the person-week level in the 9 months leading up to and after the initiation of the COVID-19 PHE. To answer questions 3-4 above, we used difference-in-differences regression using logistic and fractional regression.

Target and Comparison Populations

To construct the analytic sample, we used Medicaid administrative data to identify a base cohort of non-dually-eligible nonpregnant adult (ages 18-64) Medicaid beneficiaries with continuous enrollment from 06/01/2019–12/31/2020. From this group, to construct the SUD subcohort, we identified individuals with at least one medical claim for a SUD diagnosis according to *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision* (ICD-10) codes in the six months prior to study start. To compare health care utilization of this SUD subcohort with a subcohort defined by T2DM, we used similar methods to identify beneficiaries in the base cohort with at least one claim for a diagnosis of T2DM by ICD-10 codes in the six months prior to study start. For SUD diagnoses, we included ICD-10 codes for alcohol use disorders, opioid use disorders, cannabis use disorders, sedative use disorders, stimulant use disorders, and other psychoactive substance use disorders (F10-F19 excluding nicotine use disorders: F17). We also excluded miscellaneous SUDs (F550-F558: antacids, herbal remedies, laxatives, steroids, vitamins and other non-psychoactive substances). For T2DM, we used ICD-10 codes E1100-E118 and E119, thereby identifying all individuals with a pre-period claim for a diagnosis for Type 2 Diabetes Mellitus.

Evaluation Period

The evaluation period in this study is 06/01/2019–12/31/2020 to allow observation before and during the early COVID-19 PHE. We selected a period of 9 months before and after the PHE to allow adequate observation time while minimizing restrictions caused by continuous enrollment. Notably, lags in claims data limited analysis of data beyond 2020. We therefore used a 9-month symmetric panel design centered around the COVID-19 PHE, declared on March 13, 2020.

Evaluation Measures

We defined four outcome variables: having a primary care office visit in the week for any diagnosis in any format (outcome 1) and by telehealth (outcome 2), and having a primary care office visit in the week for a disease-specific diagnosis in any format (outcome 3) and by telehealth (outcome 4). To create these outcome measures, we identified primary care visits using a combination of provider specialty codes and the rendering provider taxonomy to identify visits completed by a primary care provider and/or in a primary care location. We identified the use of telehealth, as opposed to in-person services, based on the presence of either a place of service code or modifier indicating telehealth. Finally, outcomes 3–4 required that a claim for a SUD or T2DM (respective to each cohort) was filed in association with the office visit. Other measures include eligibility pathway, age, sex, race, ethnicity, education, geography (urban, rural), percentage of the federal poverty limit, citizenship, and tribal status.

Data Sources

Study data sources include Wisconsin Medicaid administrative enrollment, claims, and encounter data from 2019–2020. We used claims to identify beneficiaries with a SUD or T2DM diagnosis for cohort construction. Demographic characteristics were obtained from enrollment data at baseline. Primary care utilization was assessed using claims data.

Analytic Methods

Baseline characteristics were summarized for the base cohort and the SUD and T2DM subcohorts. Differences in characteristics between the SUD and T2DM subcohorts were evaluated using chi-square tests for factors with more than one level and two-sided t-tests. Rates of primary care visit completion were estimated as proportion of the cohort with a visit at the person-week level (any format and by telehealth, specifically). Analyses were repeated to assess trends 1) for disease-specific visits and 2) by SUD type. We conducted logistic regression to test for differences between the SUD and T2DM subcohorts in the change in probability of having a primary care visit in the week (any format, any diagnosis) in the post-PHE period (Model 1). We conducted fractional regression to test for differences in the rate of incorporating telehealth into primary care visit utilization between the SUD and T2DM subcohorts (Model 2).

Methodological Limitations

Analyses were limited by low levels of telehealth utilization in the pre-PHE period, reducing reliability of findings. Analyses were also limited by the potential for under-identification of beneficiaries with SUDs more than for beneficiaries with T2DM, given known low rates of health care utilization and underdiagnosis among individuals with SUDs. Finally, analyses only represent the experiences of beneficiaries with continuous enrollment.

Results

Table 1 presents the sociodemographic characteristics of beneficiaries from a base cohort of continuously-enrolled beneficiaries alongside the SUD and T2DM subcohorts. The table also shows the average number of in-person and telehealth primary care visits in the week prior to and after the start of the COVID-19 PHE for each group.

Table 1. Characteristics of Continuously-Enrolled Wisconsin Medicaid Beneficiaries with Diagnoses of Substance Use Disorder and Type 2 Diabetes Mellitus

	Continuous Cohort		SUD Cohort		T2DM Cohort		p
N=unique subjects	143,992	100.00%	17,336	100.00%	8,499	100.00%	-
Eligibility Category							
Childless Adults	82,434	57.25%	11,841	68.31%	5,373	63.22%	
Parents/Caretakers	61,558	42.75%	5,495	31.69%	3,126	36.78%	<0.001
SUD and Diabetes							
Both SUD and T2DM	1,111	0.77%	1,111	6.41%	0	0.00%	-
SUD Groups							
Opioids Use Disorder	5,294	3.68%	5,294	30.54%	0	0.00%	
Alcohol Use Disorder	4,707	3.27%	4,707	27.15%	0	0.00%	
Polysubstance Use Disorder	4,365	3.03%	4,365	25.18%	0	0.00%	
Cannabis Use Disorder	1,488	1.03%	1,488	8.58%	0	0.00%	-
Stimulant Use Disorder	806	0.56%	806	4.65%	0	0.00%	
Other Substance Use Disorder	604	0.42%	604	3.48%	0	0.00%	
Sedative Use Disorder	71	0.05%	71	0.41%	0	0.00%	
Sex							
Female	81,094	56.31%	8,301	47.88%	4,703	55.34%	
Male	62,898	43.69%	9,035	52.12%	3,796	44.66%	
Missing	0	0.00%	0	0.00%	0	0.00%	<0.001
Age							
Mean age (SD)	39 (11.89)		38.88 (10.34)		48(9.88)		<0.001

	Continuous Cohort		SUD Cohort		T2DM Cohort		p
Race							
American Indian	3,332	2.32%	799	4.62%	300	3.53%	
Asian	4,687	3.25%	107	0.62%	424	4.99%	
Black	29,082	20.19%	2,525	14.54%	1,581	18.60%	
Multiracial	2,880	1.97%	368	2.09%	126	1.48%	
Pacific Islander	211	0.15%	15	0.09%	23	0.27%	
White	90,397	62.70%	12,340	71.13%	4,880	57.42%	<0.001
Race Missing	13,403	9.43%	1,182	6.91%	1,165	13.71%	
Ethnicity							
Hispanic	11,698	8.11%	1,154	6.63%	1,015	11.94%	
Not Hispanic	129,846	90.13%	15,972	92.13%	7,334	86.29%	
Missing	2,448	1.76%	210	1.24%	150	1.76%	<0.001
Education							
More than High School	80,258	55.69%	10,255	59.12%	4,452	52.38%	
Less than High School	26,464	18.39%	3,440	19.85%	1,558	18.33%	
Missing	37,270	25.92%	3,641	21.03%	2,489	29.29%	<0.001
Geography							
Urban	92,310	64.10%	11,223	64.66%	5,288	62.22%	
Rural	31,327	21.77%	3,573	20.59%	1,885	22.18%	
Missing	20,355	14.13%	2,540	14.74%	1,326	15.60%	<0.001
Citizenship							
No	3,961	2.78%	94	0.54%	519	6.11%	
Yes	140,031	97.22%	17,242	99.46%	7,980	93.89%	
Missing	0	0.00%	0	0.00%	0	0.00%	<0.001
Tribal Status							
No	140,659	97.70%	16,561	95.54%	8,210	96.60%	
Yes	3,333	2.30%	775	4.46%	289	3.40%	
Missing	0	0.00%	0	0.00%	0	0.00%	<0.001
Income							
≤50 FPL	104,860	72.82%	14,560	83.99%	5,659	66.58%	
>50-100% FPL	39,132	27.18%	2,776	16.01%	2,840	33.42%	
>100% FPL	0	0.00%	0	0.00%	0	0.00%	
Missing	0	0.00%	0	0.00%	0	0.00%	<0.001
Average Visit Rate in the Week							
Pre-PHE (All PC visit types)	5.27%		7.90%		7.10%		
Post-PHE (All PC visit types)	4.30%		6.13%		5.85%		
Pre-PHE (PC telehealth only)	0.00%		0.00%		0.00%		
Post-PHE (PC telehealth only)	0.90%		1.48%		1.34%		

Abbreviations: SUD, substance use disorder; T2DM, Type 2 Diabetes Mellitus; SD, standard deviation; FPL, federal poverty level; PHE, public health emergency; PC, primary care

- We identified 17,336 adult beneficiaries with established SUDs and 8,499 adult beneficiaries with established T2DM meeting continuous enrollment criteria.
- Beneficiaries with SUDs were more likely to be CLAs (68.31% vs 63.22%; p<0.001) and male (52.12% vs 44.66%; p<0.001) than beneficiaries with T2DM.
- Opioid use disorder (OUD) was the most prevalent SUD (30.54%) followed by alcohol use disorder (AUD) (27.15%) among beneficiaries with SUDs.

- Beneficiaries with SUDs were more likely to be White (71.13% vs 57.42%) than beneficiaries with T2DM ($p<0.001$), while beneficiaries with T2DM are more likely to be Hispanic relative to their SUD cohort counterparts (11.94% vs 6.63%; $p<0.001$).

- Beneficiaries with SUDs were more likely to receive income at less than or equal to 50% of the federal poverty level compared with beneficiaries with T2DM (83.99% vs 66.58%; $p<0.001$).

- The mean primary care visit rate decreased in the post-PHE period for all cohorts. There were near zero primary care telehealth visits for any cohort pre-PHE. Post-PHE, on average, 1.48% of the SUD cohort and 1.34% of the T2DM cohort had a primary care telehealth visit in the week.

Figure 1 Panels A–E present the weekly trends in in-person and telehealth use of primary care services for beneficiaries with SUDs and T2DM. The wedges reflect the percentage of the cohort with an in-person, telehealth, or both types of visits in the week.

Figure 1. Trends in Primary Care Visits for Any and Disease-Specific Diagnoses in Continuously-Enrolled Wisconsin Beneficiaries with Diagnoses of Substance Use Disorders and Type 2 Diabetes Mellitus

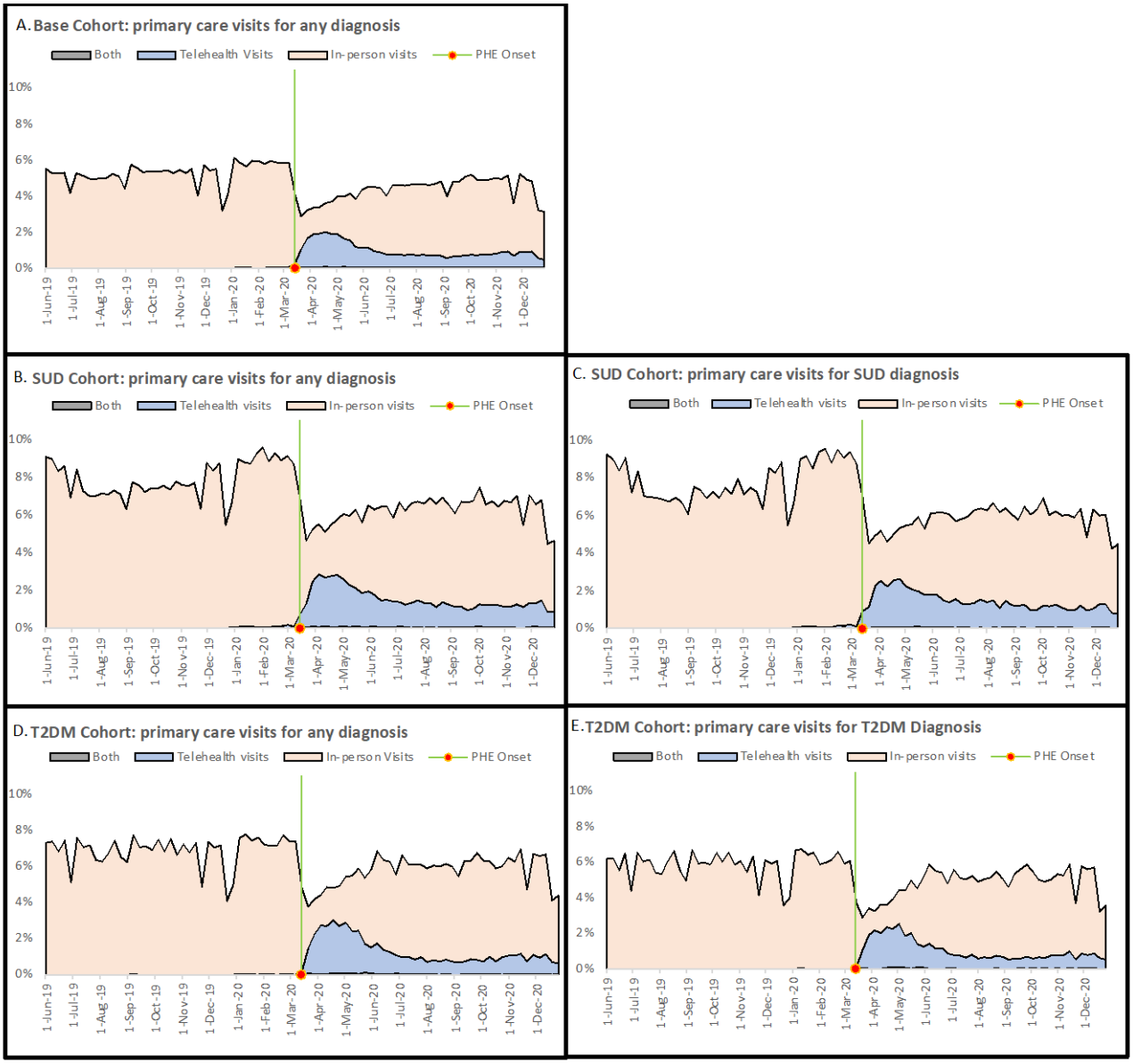

Figure 1:

- Primary care visits dropped with the onset of the PHE for all groups and all diagnoses.
- Primary care visits dropped with the onset of the PHE for all groups and all diagnoses
- Restricting visits to SUD diagnoses eliminates very few visits from observed trends, suggesting that most primary care visits for patients with established SUDs address a

SUD during the visit. Patients with T2DM tend to also have visits that address T2DM but do occasionally have visits that do not address diabetes.

- Beneficiaries with SUDs experienced a larger proportionate drop in primary care utilization for both any diagnosis and SUD diagnoses relative to beneficiaries with T2DM. In both cohorts, partial recovery to pre-PHE levels is observed, more so for beneficiaries with T2DM than SUDs.

- Initially, a larger proportion of utilization was completed via telehealth for the T2DM cohort relative to the SUD cohort. However, with time, telehealth utilization maintained a higher proportionate level in the SUD cohort relative to the T2DM cohort.

- In sum, T2DM primary care utilization exhibits less disruption and greater recovery compared with SUD primary care utilization. Alongside these utilization disparities, telehealth played a bigger role in buoying primary care utilization among beneficiaries with SUDs than T2DM.

Figures 2–**3** show health care utilization for beneficiaries with SUDs separated by SUD type. Overall utilization levels are shown alongside telehealth services. **Figure 2** focuses on utilization of any primary care services; **Figure 3** focuses on utilization of primary care services associated with a SUD diagnosis.

Figure 2. Percentage of Continuously-Enrolled Wisconsin Medicaid Beneficiaries with a Substance Use Disorder Diagnosis Receiving a Primary Care Visit in the Week for Any Diagnosis, Any Format and by Telehealth Only, Separated by SUD Type

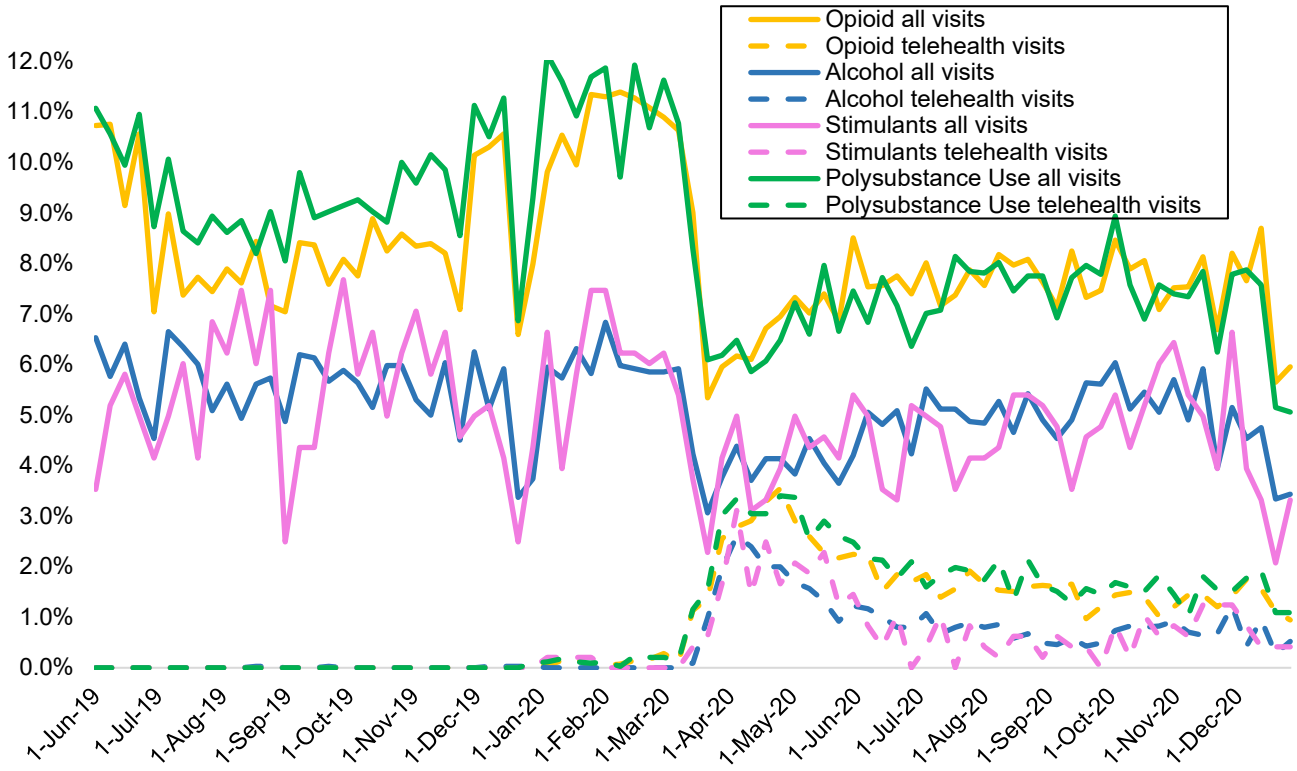

Figure 2:

- Beneficiaries with OUD and polysubstance use disorder (PUD) exhibit similar trends in overall and telehealth primary care utilization, with higher utilization than beneficiaries with stimulant use disorder (StUD) and AUD, which also trend together.
- Beneficiaries with OUD and PUD exhibit a greater decrease in utilization at the start of the PHE compared with beneficiaries with StUD or AUD.
- No group exhibits complete recovery of utilization in the post-PHE period, but recovery is greater for beneficiaries with StUD and AUD relative to those with OUD or PUD.
- In the early PHE, telehealth comprises a greater proportion of overall utilization among beneficiaries with StUD or AUD relative to OUD or PUD. However, in the later PHE, telehealth comprises a similar proportion of overall utilization for all four groups.

Figure 3. Percentage of Continuously-Enrolled Wisconsin Medicaid Beneficiaries with a Substance Use Disorder Diagnosis Receiving a Primary Care Visit in the Week for a Substance Use Disorder Diagnosis, Any Format and by Telehealth Only, Separated by SUD Type

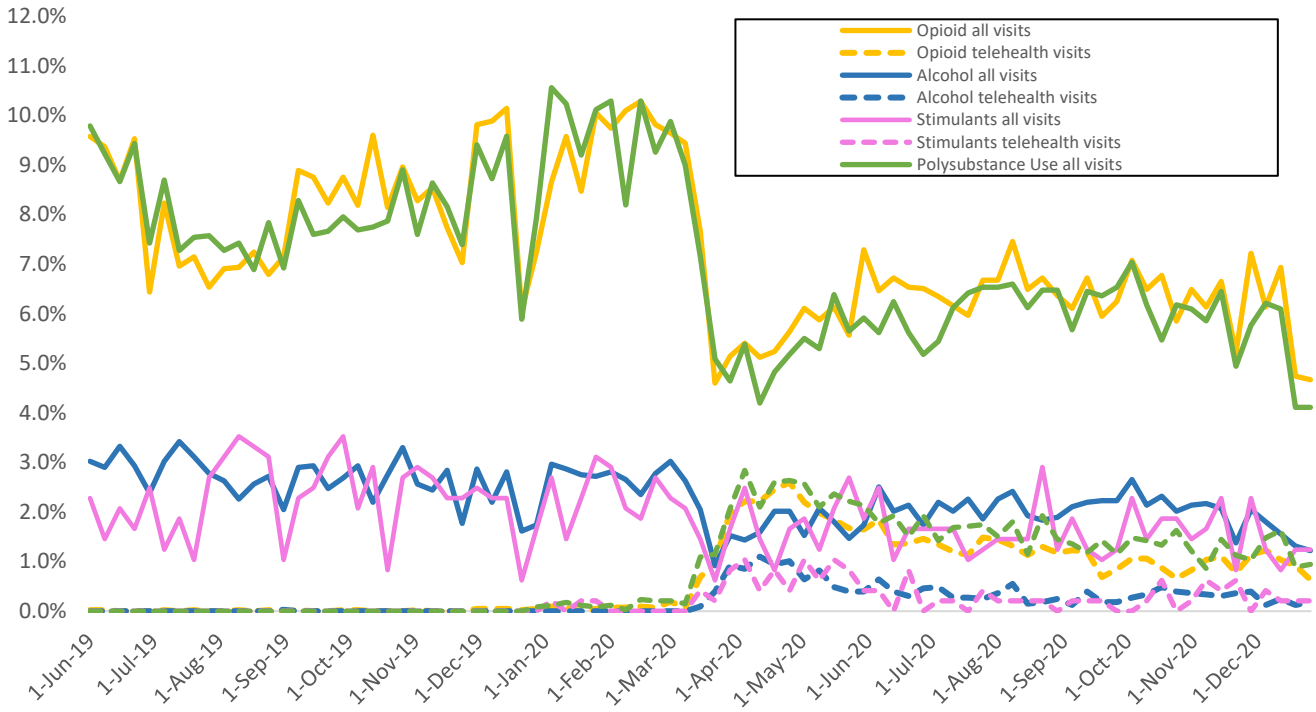

Figure 3:

- OUD and PUD again exhibit a greater drop in utilization relative to beneficiaries with StUD and AUD, with minimal recovery to pre-PHE utilization levels.
- Utilization rates for beneficiaries with StUD and AUD in the post-PHE period remain about 2/3 of pre-PHE visit levels, similar to trends for primary care visits for any diagnosis in **Figure 2**.
- Telehealth represents a greater percentage of visits for SUD diagnoses (**Figure 3**) compared with visits for any diagnosis (**Figure 2**) for beneficiaries with StUD and AUD.
- Telehealth generally represents a similar proportion of utilization across the groups.

Table 2 presents the results of regression analyses comparing primary care services utilization for beneficiaries with SUDs and T2DM (individuals without one of these diagnosis groups were excluded). These regressions aim to investigate 1) if the PHE impacted primary care utilization differently for beneficiaries with SUDs and T2DM (Model 1), and 2) if beneficiaries with SUDs and T2DM proportionately incorporated telehealth at different rates (Model 2). Regressions 1–2 answer these questions with respect to primary care services for any diagnosis.

Table 2. Regressions Predicting Primary Care Utilization in Any Format (Regression 1) and by Telehealth Only (Regression 2) for Continuously-Enrolled Wisconsin Medicaid Beneficiaries with Substance Use Disorders or Type 2 Diabetes Mellitus

	1. Primary care utilization			2. Fraction of telehealth utilization		
Variables	Coef	SE	p	Coef	SE	p
Post-PHE x SUD	-0.065	0.018	<0.001			
Post-PHE	-0.190	0.012	<0.001			
SUD	0.120	0.017	<0.001	0.093	0.023	<0.001
Age	-0.001	0.001	0.287	-0.005	0.0010	<0.001
Female	0.086	0.016	0.016	0.208	0.0201	<0.001
≤50 FPL	-0.142	0.017	0.017	-0.055	0.0210	0.009
Hispanic	-0.035	0.040	0.381	0.149	0.0483	0.002
American Indian	-0.015	0.045	0.735	-0.093	0.0514	0.070
Asian	-0.008	0.043	0.861	0.110	0.0683	0.109
Black	-0.10	0.022	<0.001	0.203	0.0289	<0.001
Multiracial	-0.056	0.062	0.399	-0.325	0.0824	<0.001
Pacific Islander	-0.093	0.166	0.572	0.001	0.2764	0.996
Race missing	0.075	0.041	0.068	0.228	0.0482	<0.001
Intercept	-0.248	0.043	<0.001	-2.125	0.0576	<0.001

Abbreviations: Coef, coefficient; SE, standard error; PHE, public health emergency; SUD, substance use disorder; FPL, federal poverty level.

Findings from **Table 2**, Regressions 1–3:

- Model 1 results show that overall, beneficiaries with SUDs are more likely to use primary care relative to beneficiaries with T2DM ($p<0.001$). In addition, the model shows that the onset of the PHE is associated with a large negative effect on primary care utilization regardless of diagnosis subgroup ($p<0.001$). However, the PHE had a larger negative effect on primary care utilization for beneficiaries with SUDs relative to beneficiaries with T2DM ($p<0.001$).

- Model 2 results demonstrate that beneficiaries with SUDs exhibit greater fractional use of telehealth relative to beneficiaries with T2DM ($p<0.001$). In other words, any given visit is more likely to be telehealth for beneficiaries with SUDs relative to beneficiaries with T2DM.

- These results demonstrate that beneficiaries with SUDs experienced more primary care disruptions than beneficiaries with T2DM. However, for any given visit, SUD beneficiaries have a greater likelihood of completing it as a telehealth visit than beneficiaries with T2DM.

Conclusions, Interpretations and Policy Implications

In conclusion, results indicate that beneficiaries with SUDs experienced a larger drop in primary care utilization with the start of the PHE relative to a comparison cohort defined by T2DM. Overall utilization levels recovered more for beneficiaries with T2DM than SUDs. Telehealth initially played a larger role for beneficiaries with T2DM relative to SUDs in supporting continued

primary care utilization, but this trend inverted later in the PHE. In addition, beneficiaries with SUDs incorporated telehealth proportionately more than those with T2DM. Although we cannot know what utilization levels would have occurred if telehealth had not expanded, given disproportionately low overall utilization among beneficiaries with SUDs during the PHE, our results suggest that telehealth played an outsized role in maintaining utilization in this population during the PHE. Furthermore, given the higher rate at which beneficiaries with SUDs incorporated telehealth, findings suggest that additional telehealth expansion could serve to increase utilization levels among this at-risk population.

Next Steps

To complete this work, we will answer question 5 using an additional regression analysis looking at the difference in likelihood of completing a telehealth visit between beneficiaries with T2DM and SUDs. We will then repeat these regression analyses to investigate the role of SUD type.

ATTACHMENT 6: COVID DIGITAL DIVIDE ANALYSIS

Background

The COVID-19 pandemic dramatically reordered the provision of care as health care organizations adjusted to changing demands and shortages. To minimize disruptions in care, in mid-March 2020 the Wisconsin Medicaid program approved reimbursement for telehealth services when implemented in place of face-to-face encounters. This policy change opened the door to rapid incorporation of telehealth into health care services. While telehealth utilization has increased during the pandemic, questions remain about variation in telehealth use on an individual level. In particular, disparities may exist in telehealth utilization by race, ethnicity, education, geography, and income, with the potential to exacerbate health inequity. To understand the demonstration waiver provisions and interpret their effects in the context of these changes, this analysis investigates the degree to which disparities exist in telehealth utilization among Wisconsin Medicaid beneficiaries.

Executive Summary of Findings

In a continuously-enrolled cohort of Wisconsin Medicaid beneficiaries, we identified significant differences in telehealth utilization at the individual level. Beneficiaries who used telehealth were more likely to be female, from metro areas, and have had access to higher broadband internet speeds than those who did not use telehealth. Beneficiaries who used telehealth were also more likely to have chronic medical, psychiatric, and substance use disorders. Beneficiaries with these diagnoses exhibited higher mean rates of telehealth utilization. Lower income and lower education were associated with increased telehealth utilization particularly among beneficiaries with chronic medical and psychiatric diagnoses. In-person visit utilization was higher among childless adults while telehealth visit utilization was higher among parents and caretakers. Findings suggest that while rural areas have the potential to benefit from telehealth expansion, most telehealth utilization at the time of these analyses was still occurring in urban areas. In addition, access to higher internet speed, well above that deemed necessary for telehealth, was associated with increased telehealth utilization. Expanding access to higher internet speeds could promote increased telehealth use in new geographic areas. While financial barriers and computer literacy present potential barriers to telehealth utilization, we found that beneficiaries with lower income and education exhibited higher rates of telehealth utilization. Thus, findings suggest that telehealth may serve to reduce barriers to care for patients with fewer socioeconomic resources. Additional analyses are needed to confirm these findings and to better understand the mechanisms by which individual-level characteristics are associated with telehealth utilization.

Research Questions

1. How do patients who use primary care telehealth services differ from those who do not use telehealth services before and during the COVID-19 public health emergency (PHE)?

2. How does utilization of telehealth vary by individual-level characteristics including sociodemographic factors such as sex, race, ethnicity, geography, education, income, and internet speed?

3. How does utilization of telehealth vary by individual-level clinical characteristics like having a diagnosis of chronic medical disease, chronic psychiatric disease, or substance use disorder?

Methodology

Evaluation Design

In a continuously enrolled cohort of Wisconsin Medicaid beneficiaries, we used descriptive analyses to compare the characteristics of beneficiaries who do and do not use telehealth. We also described average utilization rates of in-person and telehealth services for select subgroups defined by individual-level sociodemographic and clinical risk factors for disparities in utilization of telehealth services.

Target Populations

To address this project's research questions, we used the CARES database and Wisconsin Medicaid medical claims and encounter data to identify non-dually-eligible nonpregnant adult (ages 19-64) Medicaid beneficiaries with continuous enrollment from 06/01/2019 to 12/31/2020.

Evaluation Period

The period of evaluation in this study is 06/01/2019 to 12/31/2020. While the implementation of new benefits went into effect February 1, 2021, the COVID-19 pandemic emerged in the United States in early 2020. Thus, to understand the health care context of the Waiver Provisions in the era of COVID-19, we initiate our analyses prior to the PHE declaration. To minimize exclusion based on a requirement for prolonged continuous enrollment, and to balance observed time before and after the PHE declaration, we used a 9-month symmetric panel design centered around the COVID-19 public health emergency declared on March 13, 2020. Thus, the period 06/01/2019 to 03/12/2020 is considered "pre-PHE" and the period 03/13/2020 to 12/31/2020 is considered "post-PHE."

Evaluation Measures

Outcome measures for this project include completion of a primary care office visit by any format and by telehealth specifically. Outpatient visits were identified from Medicaid encounter data. We identified primary care visits, specifically, using a combination of provider specialty codes and the rendering provider taxonomy to identify those visits completed by a primary care provider and/or in a primary care location. We identified the use of telehealth, as opposed to in-person services, based on the procedure code, or the presence of either a place of service code or modifier indicating telehealth. Other measures include eligibility category, race, ethnicity, sex, education, income, and geography; all of which were assessed at baseline.

To determine access to high-speed internet, individuals were assigned to a census block group using Medicaid administrative zip code data from March 2020. Census block groups were then matched to internet data from the Federal Communications Commission (FCC). Access to high-speed internet was defined as living in a census block group where the median census block of the block group had a maximum available download speed of 940mbps or higher.

To identify individuals with a chronic medical disease, chronic psychiatric disease, or substance use disorder, we used outpatient Wisconsin Medicaid claims data in the six months prior to study start. We required at least one outpatient claim for a corresponding diagnosis according to *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision* (ICD-10) codes. For chronic medical diseases, we used ICD-10 diagnosis codes for asthma, chronic obstructive pulmonary disease, chronic kidney disease, coronary artery disease, diabetes, hypertension, or thyroid disease. For chronic psychiatric diseases, we used ICD-10 codes for all psychiatric disorders excluding substance use disorders and acute psychiatric diagnoses. For substance use disorders (SUDs), we

used ICD-10 codes for all SUDs excluding nicotine use disorders and miscellaneous use disorders (antacids, herbal remedies, laxatives, steroids, vitamins and other non-psychoactive substances).

Data Sources

Study data sources include Wisconsin Medicaid administrative enrollment, claims, and encounter data from 2019–2020. Baseline administrative data were used to obtain sociodemographic characteristics. Claims and encounter data were used to identify medical, psychiatric, and behavioral health subgroups. We also use publicly available data on high-speed internet service provision at the census block group level from the FCC (https://opendata.fcc.gov/Wireline/Fixed-Broadband-Deployment-Data-December-2019/whue-6pnt). These internet service data were matched to the study cohort at the individual level using residential zip codes from Medicaid administrative data.

Analytic Methods

Baseline characteristics were summarized for the full cohort and by telehealth utilization. Characteristics between beneficiaries by their use of telehealth were evaluated using pairwise t-tests. Mean primary care visit completion (any format and by telehealth specifically) was estimated for the pre- and post-PHE time periods separately. Estimates were repeated by key subgroups including eligibility category, race, ethnicity, health status, sex, education, income, geography, and internet speed.

Methodological Limitations

Requiring continuous enrollment minimizes the risk of underestimating health care utilization but excludes individuals with inconsistent enrollment. Our analyses are limited by the available geographic data in two ways. First, to model the association of telehealth utilization and access to broadband internet, we assume fixed residence based on beneficiary zip codes recorded in March 2020. As a result, beneficiaries who move during the study period may be misclassified with respect to their broadband access. Second, broadband data is available at the census-block level, however, beneficiary addresses can only be mapped to the block group level, thereby reducing the specificity of broadband data.

To understand differences in utilization among individuals with chronic diseases, we identified individuals with at least one claim in the outpatient setting for a corresponding diagnosis. This approach may have misclassified individuals whose chronic disease care during the pre-period occurred only in non-outpatient settings such as the emergency department or hospital. Our definition of chronic medical disease is restricted to seven key diagnoses, which allows characterization of a prototypical chronic disease group but excludes other types of common chronic conditions.

Finally, we present the results of bivariate t-tests of the differences between characteristics in **Table 1**. However, in large administrative samples such as ours, the t-statistic can be large in absolute value even when differences are small and not meaningful for policy. In work to be completed, we will present and test for normalized differences that should account for our large sample size.[1] We note this limitation directly in the Results text below, where relevant.

Results

Table 1 shows the sociodemographic and clinical characteristics of beneficiaries who did and did not use telehealth at some point during the study period. Pair-wise t-tests compare the characteristics of beneficiaries with at least one primary care telehealth visit (column 2), with those who had no primary

care telehealth visits (column 3 and associated p-values in column 4), and with those who had a primary care in-person visit but no telehealth visit (column 5 and associated p-values in column 6). Notably, these are descriptive analyses limited to tests of correlation.

Table 1. Sociodemographic and Clinical Characteristics of Continuously-Enrolled Wisconsin Medicaid Beneficiaries by Use of Primary Care and Primary Care Telehealth Services

	(1)	(2)	(3)	(4)	(5)	(6)
Characteristic	**Full Sample**	**≥ 1 PC Telehealth**	**No PC Telehealth**	***p*[a]**	**In-Person PC Only**	***p*[a]**
	N = 187173	N = 25089	N = 162084		N = 89001	
Eligibility Category						
Childless adults	44.51%	42.76%	44.78%	<0.001	43.06%	0.397
Parents/caretakers	55.49%	57.24%	55.22%	<0.001	56.94%	0.397
Race[a]						
American Indian	2.19%	1.81%	2.25%	<0.001	2.26%	<0.001
Asian	3.62%	2.69%	3.77%	<0.001	3.46%	<0.001
Black	20.24%	18.48%	20.51%	<0.001	17.36%	<0.001
Pacific Islander	0.15%	0.16%	0.15%	0.595	0.14%	0.432
White	62.00%	62.31%	61.95%	0.284	65.43%	<0.001
Multiracial	2.00%	2.07%	1.99%	0.425	2.01%	0.531
Ethnicity[a]						
Hispanic	8.71%	11.87%	8.23%	<0.001	8.29%	<0.001
Health Status[b]						
Chronic Medical Dx	15.24%	25.85%	13.60%	<0.001	18.22%	<0.001
Chronic Psychiatric Dx	21.68%	34.55%	19.69%	<0.001	24.94%	<0.001
SUD Dx	6.92%	10.81%	6.32%	<0.001	8.21%	<0.001
None	64.71%	45.29%	67.72%	<0.001	58.69%	<0.001
Sex						
Female	60.09%	69.03%	58.71%	<0.001	62.93%	<0.001
Age						
Mean age (sd)	38.27 (11.41)	39.37 (10.88)	38.10 (11.48)	<0.001	38.92 (11.48)	<0.001
Education[a]						
Less than high school	17.44%	17.02%	17.50%	0.059	15.86%	<0.001
High school or more	58.02%	60.49%	57.64%	<0.001	59.41%	0.002
Income						
≤ 50% FPL	63.53%	62.97%	63.62%	0.046	61.72%	<0.001
> 50 to 100% FPL	30.43%	30.71%	30.39%	0.301	31.90%	<0.001
> 100% FPL	6.03%	6.32%	5.99%	0.040	6.38%	0.753
Geography[a]						
Metro area	65.16%	71.42%	64.19%	<0.001	65.18%	<0.001
Non-metro area	22.59%	16.60%	23.52%	<0.001	23.09%	<0.001
Internet Speed[a]						
Low (< 939 mbps)	14.69%	11.10%	15.24%	<0.001	14.29%	<0.001
High (≥ 940 mbps)	81.46%	85.71%	80.80%	<0.001	81.83%	<0.001
Average Visits Per Person Throughout Period						
PC visit, any type	2.50 (5.58)	6.85 (6.79)	1.83 (5.04)	<0.001	3.32 (6.43)	<0.001
PC telehealth	0.25 (0.90)	1.83 (1.77)	0.00 (0.00)	<0.001	0.00 (0.00)	<0.001
Pre-PHE PC telehealth	0.00 (0.05)	0.01 (0.14)	0.00 (0.00)	<0.001	0.00 (0.00)	<0.001
Post-PHE PC telehealth	0.24 (0.90)	1.82 (1.77)	0.00 (0.00)	<0.001	0.00 (0.00)	<0.001

Abbreviations: PC, primary care; Dx, diagnosis; SUD, substance use disorder; sd, standard deviation; FPL, federal poverty line; mbps, megabits per second download speed; PHE, Public Health Emergency.
[a]Missing: race, 9.8%; ethnicity, 1.6%; education, 24.5%; geography, 12.3%; internet speed, 3.9%.
[b]Individuals can have more than one diagnosis and thus contribute to more than one chronic disease group.
P-values in columns (4) and (6) correspond to comparisons between (2) and (3), (2) and (5), respectively.

Among those who used telehealth in the study period, the mean number of primary care visits was 6.85 and the mean number of primary care telehealth visits was 1.82. Almost all of these telehealth visits occurred in the post-PHE period.

The largest differences in telehealth use are observed for the following characteristics:

- Beneficiaries who used telehealth during the study period were more likely to be Hispanic compared with those who did not use telehealth (11.87% vs 8.23%, p<0.001), even among those who used in-person primary care services (p<0.001).

- Beneficiaries who used telehealth were disproportionately female (p<0.001) and from metro areas (p<0.001) when compared to non-telehealth users overall and those who used in-person primary care only. They were also significantly more likely to have access to higher broadband speeds in both comparisons (p<0.001).

- A disproportionate percentage of beneficiaries who used telehealth have chronic medical diseases, chronic psychiatric diseases, and substance use disorders. For example, rates of chronic medical disease, chronic psychiatric disease, and substance use disorders among telehealth users were 25.85%, 34.55%, and 10.82%, respectively, compared with 13.60% (p<0.001), 19.69% (p<0.001), and 6.32% (p<0.001).

In addition, small differences were observed between groups for most other characteristics; these differences were often statistically significant, potentially as a result of our large sample size. For example:

- Beneficiaries who used telehealth were slightly more likely to be parents/caretakers and less likely to be childless adults than those who did not use telehealth (all non-telehealth users, p<0.001). However, these differences disappeared when analyses were restricted to individuals who had received in-person primary care (p=0.397).

- Beneficiaries who used telehealth were less likely to be American Indian, Asian, or Black than beneficiaries who used no telehealth (p<0.001 for all). However, among beneficiaries who used in-person primary care services during the study period, people who used telehealth were more likely to be Black than people who have not used telehealth (p<0.001).

- Compared with beneficiaries who used no telehealth primary care services, beneficiaries who used telehealth during the study period were more likely to report earnings at or below 50% FPL (p=0.046) or above 100% FPL (p=0.043). Compared with beneficiaries who used in-person primary care services only, telehealth users were more likely to report lower income (≤50% FPL: p<0.001; >50% to 100% FPL: p<0.001).

- Beneficiaries who used telehealth were slightly older than those who did not, with a mean age of 39.37 years (telehealth users), compared with 38.10 years (all non-telehealth users, p<0.001) and 38.92 years (in-person primary care only, p<0.001).

Tables 2–**5** demonstrate the mean number of visits in the pre- and post-PHE period broken down by individual-level characteristics. We present results for the full cohort and for subcohorts defined by the presence of a chronic medical disease, chronic psychiatric disease, and substance use disorder.

Table 2: Average Per-Person Primary Care Visit Utilization by Modality Before and During the PHE (Full Sample)

			Pre-PHE				Post-PHE			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Characteristic	N	% of Total	Overall	In-Person	Tele.	% Tele.	Overall	In-Person	Tele.	% Tele.
Full sample	187173	100%	1.325	1.323	0.002	0.15%	1.175	0.931	0.244	20.77%
Eligibility Category										
Childless adults	83304	44.51%	1.379	1.377	0.002	0.15%	1.199	0.961	0.238	19.85%
Parents/caretakers	103869	55.49%	1.282	1.280	0.001	0.08%	1.155	0.907	0.249	21.56%
Race[a]										
American Indian	4107	2.19%	1.496	1.496	0.000	0.00%	1.380	1.153	0.227	16.45%
Asian	6784	3.62%	1.045	1.044	0.000	0.00%	0.894	0.738	0.156	17.45%
Black	37883	20.24%	1.073	1.072	0.001	0.09%	1.013	0.785	0.228	22.51%
Pacific Islander	276	0.15%	1.377	1.377	0.000	0.00%	1.091	0.866	0.225	20.62%
White	116048	62.00%	1.411	1.409	0.002	0.14%	1.225	0.985	0.240	19.59%
Multiracial	3749	2.00%	1.323	1.322	0.001	0.08%	1.219	0.986	0.233	19.11%
Ethnicity[a]										
Hispanic	16311	8.71%	1.376	1.375	0.001	0.07%	1.279	0.909	0.370	28.93%
Non-Hispanic	167909	89.71%	1.322	1.320	0.002	0.15%	1.168	0.936	0.233	19.95%
Sex										
Male	74696	39.91%	1.158	1.157	0.001	0.09%	1.015	0.829	0.186	18.33%
Female	112477	60.09%	1.435	1.434	0.002	0.14%	1.281	0.998	0.282	22.01%
Education[a]										
Less than high school	32636	17.44%	1.244	1.242	0.001	0.08%	1.196	0.935	0.261	21.82%
High school or more	108597	58.02%	1.379	1.377	0.002	0.15%	1.227	0.972	0.255	20.78%
Income										
≤ 50% FPL	118913	63.53%	1.355	1.353	0.002	0.15%	1.202	0.954	0.248	20.63%
> 50% to 100% FPL	56959	30.43%	1.276	1.275	0.001	0.08%	1.127	0.892	0.235	20.85%
> 100% FPL	11295	6.03%	1.248	1.246	0.001	0.08%	1.122	0.880	0.242	21.57%
Geography[a]										
Metro area	121956	65.16%	1.374	1.373	0.001	0.07%	1.232	0.961	0.271	22.00%
Non-metro area	42290	22.59%	1.195	1.192	0.003	0.25%	1.023	0.858	0.166	16.23%
Internet Speed[a]										
Low (< 939 mbps)	27494	14.69%	1.113	1.111	0.002	0.18%	0.970	0.800	0.170	17.53%
High (≥ 940 mbps)	152474	81.46%	1.368	1.366	0.002	0.15%	1.217	0.958	0.259	21.28%

Abbreviations: PHE, Public Health Emergency; tele., telehealth; FPL, federal poverty line; mbps, megabits per second download speed.
[a]Missing: race, 9.8%; ethnicity, 1.6%; education, 24.5%; geography, 12.3%; internet speed, 3.9%.

Table 3: Average Per-Person Primary Care Visit Utilization by Modality Before and During the PHE (Chronic Medical Diagnosis Subgroup)

			Pre-PHE				Post-PHE			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Characteristic	N	% of Total	Overall	In-Person	Tele.	% Tele.	Overall	In-Person	Tele.	% Tele.
Full subsample	28527	100%	2.226	2.224	0.002	0.09%	1.911	1.485	0.426	22.29%
Eligibility Category										
Childless adults	14809	51.91%	2.285	2.284	0.002	0.09%	1.914	1.509	0.405	21.16%
Parents/caretakers	13718	48.09%	2.161	2.159	0.002	0.09%	1.909	1.459	0.450	23.57%
Race[a]										
American Indian	725	2.54%	2.393	2.392	0.001	0.04%	2.222	1.788	0.434	19.53%
Asian	968	3.39%	2.334	2.334	0.000	0.00%	2.195	1.781	0.414	18.86%
Black	6023	21.11%	2.134	2.133	0.001	0.05%	1.955	1.443	0.512	26.19%
Pacific Islander	42	0.15%	2.595	2.595	0.000	0.00%	2.071	1.690	0.381	18.40%
White	17343	60.80%	2.195	2.193	0.002	0.09%	1.821	1.466	0.355	19.49%
Multiracial	425	1.49%	2.489	2.489	0.000	0.00%	2.019	1.579	0.440	21.79%
Ethnicity[a]										
Hispanic	2494	8.74%	2.439	2.438	0.002	0.08%	2.148	1.453	0.695	32.36%
Non-Hispanic	25591	89.71%	2.208	2.206	0.002	0.09%	1.891	1.490	0.401	21.21%
Sex										
Male	11256	39.46%	2.150	2.149	0.001	0.05%	1.799	1.433	0.365	20.29%
Female	17271	60.54%	2.275	2.273	0.002	0.09%	1.985	1.519	0.466	23.48%
Education[a]										
Less than high school	5163	18.10%	2.282	2.280	0.002	0.09%	2.008	1.498	0.509	25.35%
High school or more	16047	56.25%	2.256	2.254	0.002	0.09%	1.964	1.529	0.435	22.15%
Income										
≤ 50% FPL	17790	62.36%	2.286	2.284	0.002	0.09%	1.950	1.519	0.431	22.10%
> 50% to 100% FPL	9253	32.44%	2.140	2.138	0.002	0.09%	1.861	1.436	0.425	22.84%
> 100% FPL	1483	5.20%	2.040	2.036	0.003	0.15%	1.761	1.385	0.376	21.35%
Geography[a]										
Metro area	18260	64.01%	2.316	2.315	0.001	0.04%	2.021	1.536	0.485	24.00%
Non-metro area	6324	22.17%	1.942	1.939	0.003	0.15%	1.591	1.335	0.256	16.09%
Internet Speed[a]										
Low (< 939 mbps)	4208	14.75%	1.810	1.809	0.001	0.06%	1.531	1.276	0.255	16.66%
High (≥ 940 mbps)	23339	81.81%	2.308	2.306	0.002	0.09%	1.984	1.522	0.462	23.29%

Abbreviations: PHE, Public Health Emergency; tele., telehealth; FPL, federal poverty line; mbps, megabits per second download speed.
[a]Missing: race, 10.5%; ethnicity, 1.6%; education, 25.7%; geography, 13.8%; internet speed, 3.4%.

Table 4: Average Per-Person Primary Care Visit Utilization by Modality Before and During the PHE (Chronic Psychiatric Diagnosis Subgroup)

			Pre-PHE				Post-PHE			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Characteristic	N	% of total	Overall	In-person	Tele.	% Tele.	Overall	In-person	Tele.	% Tele.
Full subsample	40576	100%	2.107	2.104	0.003	0.14%	1.790	1.360	0.430	24.02%
Eligibility Category										
Childless adults	18241	44.96%	2.232	2.228	0.004	0.18%	1.871	1.439	0.432	23.09%
Parents/caretakers	22335	55.04%	2.005	2.003	0.002	0.10%	1.724	1.295	0.429	24.88%
Race[a]										
American Indian	927	2.28%	2.397	2.397	0.000	0.00%	2.095	1.643	0.452	21.58%
Asian	506	1.25%	1.980	1.978	0.002	0.10%	1.488	1.196	0.292	19.62%
Black	4410	10.87%	1.928	1.924	0.004	0.21%	1.748	1.304	0.444	25.40%
Pacific Islander	45	0.11%	2.311	2.311	0.000	0.00%	1.422	0.978	0.444	31.22%
White	30772	75.84%	2.112	2.109	0.003	0.14%	1.785	1.368	0.417	23.36%
Multiracial	963	2.37%	2.040	2.040	0.000	0.00%	1.570	1.206	0.364	23.18%
Ethnicity[a]										
Hispanic	2962	7.30%	2.216	2.214	0.002	0.09%	1.937	1.341	0.596	30.77%
Non-Hispanic	37199	91.68%	2.101	2.098	0.003	0.14%	1.781	1.363	0.418	23.47%
Sex										
Male	12043	29.68%	2.047	2.044	0.002	0.10%	1.689	1.321	0.368	21.79%
Female	28533	70.32%	2.133	2.130	0.003	0.14%	1.833	1.376	0.457	24.93%
Education[a]										
Less than high school	5522	13.61%	2.148	2.144	0.004	0.19%	1.855	1.378	0.477	25.71%
High school or more	25931	63.91%	2.130	2.127	0.003	0.14%	1.837	1.402	0.434	23.63%
Income										
≤ 50% FPL	27301	67.28%	2.189	2.185	0.003	0.14%	1.831	1.393	0.438	23.92%
> 50% to 100% FPL	11108	27.38%	1.941	1.940	0.002	0.10%	1.705	1.291	0.414	24.28%
> 100% FPL	2167	5.34%	1.927	1.924	0.003	0.16%	1.708	1.291	0.417	24.41%
Geography[a]										
Metro area	25603	63.10%	2.195	2.193	0.002	0.09%	1.872	1.397	0.475	25.37%
Non-metro area	9867	24.32%	1.879	1.875	0.004	0.21%	1.600	1.286	0.314	19.63%
Internet Speed[a]										
Low (< 939 mbps)	5687	14.02%	1.841	1.837	0.004	0.22%	1.580	1.229	0.351	22.22%
High (≥ 940 mbps)	33308	82.09%	2.162	2.159	0.003	0.14%	1.833	1.386	0.447	24.39%

Abbreviations: PHE, Public Health Emergency; tele., telehealth; FPL, federal poverty line; mbps, megabits per second download speed.
[a]Missing: race, 7.3%; ethnicity, 1.0%; education, 22.5%; geography, 12.6%; internet speed, 3.9%.

Table 5: Average Per-Person Primary Care Visit Utilization by Modality Before and During the PHE (Substance Use Disorder Subsample)

			Pre-PHE				Post-PHE			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Characteristic	N	% of Total	Overall	In-Person	Tele.	% Tele.	Overall	In-Person	Tele.	% Tele.
Full subsample	12950	100%	3.028	3.019	0.009	0.30%	2.842	2.304	0.539	18.97%
Eligibility Category										
Childless adults	7736	59.74%	3.054	3.044	0.009	0.29%	2.788	2.279	0.510	18.29%
Parents/caretakers	5214	40.26%	2.989	2.982	0.008	0.27%	2.923	2.341	0.582	19.91%
Race[a]										
American Indian	678	5.24%	3.276	3.276	0.000	0.00%	3.115	2.600	0.515	16.53%
Asian	83	0.64%	2.012	2.012	0.000	0.00%	1.277	0.952	0.325	25.45%
Black	1216	9.39%	2.309	2.294	0.015	0.65%	2.581	2.150	0.430	16.66%
Pacific Islander	7	0.05%	2.286	2.286	0.000	0.00%	2.000	1.000	1.000	50.00%
White	9876	76.26%	3.097	3.089	0.009	0.29%	2.881	2.316	0.565	19.61%
Multiracial	262	2.02%	2.821	2.821	0.000	0.00%	3.744	3.420	0.324	8.65%
Ethnicity[a]										
Hispanic	846	6.53%	3.110	3.100	0.009	0.29%	2.508	2.038	0.470	18.74%
Non-Hispanic	11990	92.59%	3.028	3.019	0.009	0.30%	2.877	2.331	0.545	18.94%
Sex										
Male	6312	48.74%	2.865	2.856	0.008	0.28%	2.697	2.240	0.457	16.94%
Female	6638	51.26%	3.183	3.174	0.009	0.28%	2.981	2.364	0.617	20.70%
Education[a]										
Less than high school	2368	18.29%	2.951	2.940	0.011	0.37%	3.162	2.670	0.492	15.56%
High school or more	8014	61.88%	3.078	3.069	0.009	0.29%	2.848	2.278	0.570	20.01%
Income										
≤ 50% FPL	10308	79.60%	3.097	3.088	0.010	0.32%	2.960	2.427	0.533	18.01%
> 50% to 100% FPL	2245	17.34%	2.735	2.730	0.005	0.18%	2.286	1.741	0.544	23.80%
> 100% FPL	397	3.07%	2.879	2.872	0.008	0.28%	2.952	2.287	0.665	22.53%
Geography[a]										
Metro area	8219	63.47%	3.148	3.138	0.010	0.32%	3.105	2.523	0.582	18.74%
Non-metro area	2955	22.82%	2.841	2.837	0.004	0.14%	2.224	1.778	0.446	20.05%
Internet Speed[a]										
Low (< 939 mbps)	1659	12.81%	2.596	2.594	0.002	0.08%	2.157	1.664	0.494	22.90%
High (≥ 940 mbps)	10696	82.59%	3.103	3.093	0.010	0.32%	2.999	2.451	0.548	18.27%

Abbreviations: PHE, Public Health Emergency; tele., telehealth; FPL, federal poverty line; mbps, megabits per second download speed.
[a]Missing: race, 6.4%; ethnicity, 0.9%; education, 19.8%; geography, 13.7%; internet speed, 4.6%.

- In the full cohort, the mean number of total and in-person primary care visits decreased from pre- to post-PHE. The mean number of telehealth visits increased from pre- to post-PHE (**Table 2**).

- In the full cohort, the mean number of in-person primary care visits was relatively higher among childless adult beneficiaries; American Indian; non-Hispanic; and individuals with higher levels of education (**Table 2**). This pattern held for chronic medical and psychiatric disease subgroups (**Tables 3** and **4**, respectively). However, among beneficiaries with SUDs, parents/caretakers, beneficiaries with less education, and incomes 50% to 100% FPL had a relatively higher mean number in-person primary care utilization (**Table 5**).

- Overall mean visits, including telehealth visits, were higher in the three clinical subgroups than the full cohort (**Tables 3**–**5**) in the post-PHE period. In the full cohort, the mean telehealth utilization was 0.244 visits per person in the nine-month post-PHE period compared to 0.426, 0.430, and 0.539 in the chronic medical groups defined by medical disease, psychiatric disease, and substance use disorders, respectively.

- In addition, telehealth visits were proportionately higher in the subgroups defined by chronic medical and psychiatric disease compared with the full cohort. For example, 20.77% of visits were via telehealth in the full cohort compared to 22.29% for beneficiaries with chronic medical diseases and 24.02% for beneficiaries with chronic psychiatric disease. However, the opposite was true among beneficiaries with substance use disorders, for whom 18.97% of visits were telehealth (compared to 20.77% for the full cohort).

- **Table 2** demonstrates that the mean number of primary care telehealth visits in the post-PHE period was higher for individuals who were parents/caretakers, White, Hispanic, and female. The mean number of telehealth visits was also higher for individuals with less education, lower income, higher internet speed, chronic disease, and those who lived in metro areas.

- When restricted to the medical or psychiatric subgroups, the relationship between individual-level characteristics and telehealth use paralleled the full cohort for all variables except race. In other words, higher telehealth visit counts were observed in the medical and psychiatric subgroups for the following characteristics: Hispanic ethnicity, female sex, lower education, lower income, metro geography, and higher internet speed. However, in these two groups, individuals who were Black, American Indian, or Pacific Islander had higher mean telehealth utilization than individuals who were White, Asian, or reported multiple races. Parents and caretakers exhibited higher telehealth visits than childless adults among beneficiaries with chronic medical disease but not chronic psychiatric disease.

- Different patterns held among beneficiaries with SUDs. In contrast to the full cohort and the chronic medical and psychiatric disease subgroups, among patients with SUDs, higher rates of telehealth visits were observed among patients with more education and higher income.

Conclusions, Interpretation and Policy Implications

These analyses suggest that individual-level characteristics were associated with different levels of telehealth utilization, such as being female, living in a metro area, and living in a census block group with higher median internet speed. In addition, greater use of telehealth was observed among beneficiaries who had lower levels of income and education, as well as chronic medical conditions, psychiatric conditions, and SUDs. Interestingly, we found several patterns related to race and ethnicity. Individuals of Hispanic ethnicity exhibited higher mean telehealth visits than non-Hispanic individuals

(except among those with SUDs). In the full sample, the mean number of telehealth visits was higher among beneficiaries who were White, but the inverse was true among beneficiaries with chronic medical or psychiatric diseases.

These findings carry important implications. First, while telehealth is seen as a modality that can expand access in rural areas, greater use of telehealth was observed among beneficiaries in metro areas. This observation raises questions as to why rural beneficiaries use telehealth less and what efforts might assist in expanding telehealth utilization in these regions. Additional analyses looking at use of telehealth by managed care organization and/or health system could help elucidate these findings. Second, while telehealth can increase barriers to care by requiring expensive technologies, it can also reduce barriers to care by minimizing the need for transportation or scheduling flexibility. We found that lower education and income was associated with higher telehealth use except for individuals with SUDs. These findings suggest that telehealth may lower barriers to care for individuals with fewer resources. Third, beneficiaries who live in census block groups with lower median internet speeds exhibit lower rates of telehealth use. Interestingly, our threshold of 940mbps is well above the minimum required to meet the definition of high-speed internet.[2] Additional research should investigate whether efforts to expand access to higher internet speed could facilitate more equitable access to telehealth services. Fourth, higher rates of telehealth use among beneficiaries with chronic medical conditions suggests that these patient populations, who have greater need for frequent medical visits, may benefit from ease of access via telehealth, and that strengthening telehealth services for these populations could continue to increase access to care. Fifth, the lack of stable patterns in primary care and telehealth utilization by race suggests that the relationship between race and telehealth utilization is complex. Alongside these results, the consistent association of Hispanic ethnicity with telehealth utilization suggests different factors at play related to this group's utilization of telehealth services.

Next Steps

The descriptive analyses reported here suggest potentially important disparities in telehealth utilization at the individual level. We will use these findings to build statistical models that more rigorously examine these associations and assess for possible causal patterns in these data. We will also repeat analyses expanded to all outpatient visit types, not just primary care visits.

References

1. Imbens GW. Matching methods in practice: Three examples. *J Hum Resour*. 2015;50(2):373-419.

2. Federal Communications Commission. 2019 Broadband Deployment Report. Published online May 29, 2019. Accessed July 7, 2022. https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2019-broadband-deployment-report

ATTACHMENT 7: PLANS FOR EVALUATION ACTIVITIES DURING THE EXTENSION PERIOD

We will continue to monitor program effectiveness and outcomes by monitoring the currently approved hypotheses and evaluation questions.

Coverage for Non-Elderly Childless Adults up to 100% FPL

- Expansion of benefits to non-elderly childless adults (CLAs) will reduce the state's uninsured rate.
- Expansion of benefits to CLAs will lead to their increased access to medical care.
- Expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals.
- Additional requirements of the current demonstration may increase administrative costs.

Health Assessment Linked to Eligibility and Premiums

- Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in healthier behaviors.
- The health assessment will increase the number of beneficiaries receiving treatment for substance-use disorders.
- The requirement to answer the health assessment as a condition of eligibility will discourage some potential beneficiaries from enrolling in Medicaid.

Premiums, Lock-Out Periods, and Emergency Department Copayments

- Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance.
- The imposition of premium requirements for childless adults will reduce enrollment in Medicaid.
- The imposition of premium requirements for childless adults will increase enrollment in commercial insurance following exits from Medicaid.
- The imposition of premium requirements for childless adults will lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums.
- The imposition of a copayment for non-emergent use of the emergency department (ED) will lead to more appropriate uses of medical care among childless adults enrolled in Medicaid.
- Hospitals vary in how they implement the required copayment for non-emergency use of the ED.

Expansion of Coverage for Substance Use Disorder Treatment Services

- Does the waiver increase the supply of substance use disorder (SUD) providers for Medicaid enrollees?
- Does the waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees?
- Does the waiver change Medicaid enrollees' use of existing covered SUD services?
- Does the waiver reduce the rate of drug overdose deaths among Medicaid enrollees, including opioid-related deaths?
- What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver?

Additionally, the following new hypotheses will be added upon approval of the proposed health savings accounts (HSA) provision:

- Creation of a Medicaid HSA will incentivize current BadgerCare Plus childless adult members to shorten their enrollment in the program.
- Creation of the Medicaid HSA will incentivize those BadgerCare Plus childless adult members who disenroll from the program to remain in the private market and not return to the BadgerCare Plus or Medicaid programs within 24 months.

Both interim and final evaluations will be conducted to help inform the state, CMS, stakeholders, and the general public about the performance of the demonstration. All evaluation reports will be made public and posted on the DHS website.