

**DEPARTMENT OF EMPLOYEE
TRUST FUNDS**

Secretary John Voelker
4822 Madison Yards Way
P.O. Box 7931
Madison, WI 53705-9100
Telephone: (608) 266-3285
FAX: (608) 267-4549



**DEPARTMENT OF HEALTH
SERVICES**

Secretary Karen E. Timberlake
1 West Wilson Street
P.O. Box 7850
Madison, WI 53707-7850
Telephone: (608) 266-9622
FAX: (608) 266-7882

**State of Wisconsin
Governor Tony Evers**

January 24, 2022

The Honorable Patrick Testin
Chair, Committee on Health and Human Services
131 South, State Capitol
Madison, WI 53707

The Honorable Joe Sanfelippo
Chair, Committee on Health
314 North, State Capitol
Madison, WI 53708

Dear Senator Testin and Representative Sanfelippo:

Wisconsin Stat. § 153.05(2s) directs the Department of Health Services (DHS) and the Department of Employee Trust Funds to jointly prepare an annual report on the activities of the Wisconsin Health Information Organization (WHIO). This report is submitted to the standing committees of the Legislature with jurisdiction over health issues, and can also be found online at www.dhs.wisconsin.gov/library/p-01067.htm.

Please find enclosed the 2020 annual report on the activities of WHIO. If you have any questions, please contact James G. Cooper, IS Business Automation-Specialist, DHS/Division of Medicaid Services, via email at JamesG.Cooper@dhs.wisconsin.gov.

Sincerely,

Handwritten signature of John Voelker in black ink.

John Voelker, Secretary
Department of Employee Trust Funds

Sincerely,

Handwritten signature of Debra K. Standridge in black ink.

Debra K. Standridge, Deputy Secretary
Department of Health Services

Enclosures



2020 Annual Report to the Wisconsin Legislature on the Wisconsin Health Information Organization (WHIO)

Submitted by the Department of Health Services, January 2022

Executive Summary

In 2008, visionary Wisconsin leaders came together to create a health care claims repository to provide data and information health of Wisconsinites and the health care delivery system in Wisconsin. The Wisconsin Health Information Organization (WHIO) was organized to provide this service and has continued to build upon this vision since its inception.

When COVID-19 entered Wisconsin, the WHIO used its vast data asset to help organizations understand and respond to COVID-19’s impact on the health of Wisconsinites and our health care delivery system. The WHIO provided reports to the Wisconsin Division of Medicaid Services and health plans which identified their respective members at high risk for serious complications of COVID-19 to facilitate care coordination and communications. The WHIO provided a COVID-19 Cost Calculator to health plans so that they could create “what if” scenarios to evaluate their potential claims experience. The WHIO also created multiple metrics to quantify the impact of COVID-19 on the health care delivery system on behalf of the Department of Health Services (DHS). Finally, the WHIO provided information to the public on COVID-19 through its free publication, InfoBytes.

Concurrent to this critical work, the WHIO continued to intake and process hundreds of data files, added two new data contributors, and provided data sets and reports to multiple health care stakeholders. The WHIO’s data and information were used to inform strategic plans; to prioritize and drive improvements in cost, quality, and access; to guide the design of insurance benefits and payment models; and to conduct health services outcomes research.

Background

In 2008, Wis. Stat. § 153.01(3g) established a requirement for the Wisconsin Department of Health Services (DHS) to maintain a health care claims data repository and provide information to the public on the quality and cost efficiency of health care in Wisconsin. The WHIO was established in 2008 as a 501(c)(3), public-private partnership to fulfill this role on behalf of the DHS. Founding organizations of WHIO envisioned that 1) the WHIO data and information would be accessible to all health care stakeholders to answer a variety of questions, 2) the WHIO would serve as a source of unbiased information, and 3) the cost to maintain the WHIO would be shared by all stakeholders and customers. Over time, the WHIO has grown its volume of data, the sophistication of its technology and the number of diverse uses of the WHIO information to understand the health care delivery system in Wisconsin.

The WHIO is governed by a multi-stakeholder Board of Directors (BOD) that includes state agency, commercial payer, provider, business, information system and health care improvement representatives. The 2020 BOD included the organizations listed below.

- Department of Health Services
- The Alliance
- Benefits Services Group Analytics
- BroadStreet
- Business Health Care Group
- Employee Trust Fund

- Marshfield Clinic Health System
- NeuGen (Service company for Wisconsin Education Association Trust and Health Tradition insurance company)
- United Health Care of WI
- Wisconsin Physicians Service Health Insurance
- Wisconsin Collaborative for Healthcare Quality
- Wisconsin Hospital Association
- Wisconsin Statewide Health Information Network

WHIO Information System Today

In 2019, the WHIO completed its transition to a state-of-the-art, “big data” technology and made available to Wisconsin organizations new de-identified data marts, web-accessible reports and custom services under the product lines Intelligence Bank, Applied Insights, and Custom Analytics and Reporting (Appendix A).

The WHIO information system today includes 320 million claims, representing about 75% of Wisconsinites and over \$147 billion in health care spending. The WHIO includes medical and pharmacy data on Medicaid, Medicare Advantage, commercial and self-funded employer health plans. **In 2020, the WHIO completed its Center for Medicare and Medicaid Services (CMS) Qualified Entity Certification Program (QECP) requirements and will receive our state’s Medicare Fee-for-Service data in early 2021, adding 650,000 insured lives to Wisconsin’s APCD and filling a “data hole” that has existed in Wisconsin for many years.** Insurance claims are voluntarily submitted to the WHIO by DHS, multiple plans, and employers who are committed to a high quality, lower cost, accessible health care in Wisconsin. In 2020, two additional health plans joined the WHIO.

The WHIO information system can answer hundreds of questions like those below that DHS and many others in Wisconsin are asking.

- Are more people using telehealth now than before the COVID-19 pandemic? Is telehealth used more often in some parts of the state?
- How much do commercial plans pay for a hip surgery compared to what Medicaid pays? Does it cost the same regardless of where the surgery occurs? Do all patients receive the same care?
- Does it cost more to have a baby at one health care organization than another?
- Which drugs cost Wisconsinites the most? Which are the most expensive?
- How many people in Wisconsin are receiving opioids and for what condition(s)? Are individual physician prescribing practices within a specialty in line with their peers?
- Are we creating superbugs by overusing antibiotics?
- Besides COVID-19, are there other communicable disease we should be watching for?

The WHIO is the only data system that can provide objective information on the full spectrum of care provided to Wisconsinites. The WHIO provides:

- Facts on preventive care, one-time treatments and chronic diseases.
- Information on emergencies, hospitalizations, procedures, radiology and laboratory tests, transport services and prescription medications.
- Figures on the health of Wisconsinites of all ages.
- Reports by hospital, ambulatory surgery centers, urgent care centers, clinics, rehabilitation centers, home health services, long-term care facilities and individual clinicians.
- Statistics on all communities in Wisconsin by organization, county, regions, and the entire state (Figure 1).

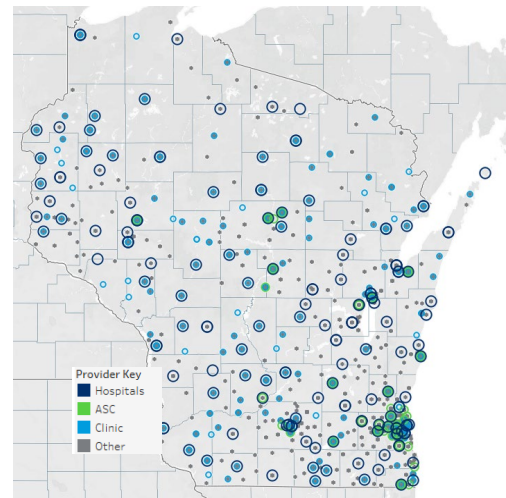


Figure 1. WHIO Coverage in Wisconsin

COVID-19 and Value of WHIO

In March 2020, COVID-19 was known to be in Wisconsin and the WHIO turned its focus to supporting these immediate information needs. Highlights of this work are outlined below.

COVID-19 High Risk Member Reports — In compliance with the federal Health Information Portability and Accountability Act (HIPAA) rules, the WHIO created a member report for Medicaid and six additional health plans which identified their respective members at high risk for serious complications should they contract the virus using the Center for Disease Control and Prevention’s 10 Underlying Conditions plus age.

These reports were used for care coordination and direct communications via letters and outreach calls to inform these high risk Wisconsinites of their health care benefits, how to access emergency care, and to ensure that these members knew how to access food, transportation, and other necessities.

COVID-19 Cost Calculator — The WHIO partnered with Business Service Group Analytics to provide a COVID-19 Cost Calculator to six health plans who wanted to model the impact of COVID-19. The COVID-19 Cost Calculator allowed these health plans to simulate their claims experience using pre-defined analytics for the cost of COVID-19 care and a reduction in claims based on deferred care.

COVID-19 Impact Metrics — The WHIO created nearly 60 metrics for the DHS to provide a high level view of the impact of COVID-19 on the health care delivery system. This work was guided by a series of discovery meeting to identify questions that various DHS divisions were unable to answer. These metrics focused on questions about the impact of COVID-19 on preventive care, chronic disease management, behavioral health care, as well as care for patients diagnosed with COVID-19. In addition, the average cost of COVID-19 testing and COVID-19 care was determined.

Public Information — The WHIO distributed five InfoBytes, a free publication that is distributed to thousands of people and is available on the WHIO Website (www.whio.org). These publications included Opioid Dependency in WI, Benchmarking the Impact of COVID-19, Behavioral Health and COVID-19, COVID-19 Impact on Respiratory Infections, and COVID-19 Impact on Health Care Utilization (Appendix B).

Other Uses of WHIO in Wisconsin

The WHIO information system is used to inform policy, support strategic planning, prioritize, and monitor improvements in cost, quality, and access to care, identify best practices, conduct health services research, and to inform the public. Examples of how the WHIO information is used to improve care outcomes and reduce costs are listed below.

- State agencies — Conduct public health evaluations such as the annual Wisconsin Mental Health and Substance Abuse Needs Assessment and the SeniorCare program reporting to the CMS.
- Health insurers and employers — Incentivize the use of evidence based practices to reduce variation and costs, identify high performing providers to build high value networks, inform value-based benefit plan design, and enhance consumer’s engagement in their care.
- Statewide quality improvement organizations (Wisconsin Collaborative for Health Care Quality (WCHQ) and Surgical Collaborative of Wisconsin) — Prioritize, benchmark, and monitor their improvement initiatives.
- Health care providers — Benchmark and monitor the quality of their care against best practices and statewide benchmarks; compare the level of resources used (a proxy for cost) to streamline care processes to prepare for value-based payments.
- Researchers — Perform health services outcomes research on various clinical topics to shape future care models.

Strategic Uses of WHIO that State Leaders Should Embrace Now

The COVID-19 pandemic has had an immediate impact on the health and lives of Wisconsinites with over 611,000 confirmed cases and 7,189 deaths as of June 1, 2021, as reported on the DHS website. In addition, this pandemic catalyzed an economic downturn as businesses strove to keep their doors open and retain employees.

Wisconsin ranks in the top 10 states for the quality of health care delivered due to the collective efforts of many organizations. Wisconsin also ranks in the bottom (most expensive) 10 states for the cost of its health care. Multiple studies have shown that there is no relationship between the quality and the cost of health care nationally or in Wisconsin as demonstrated by the 2019 **Business Health Care Group’s Physician Value Study** (Figure 2).

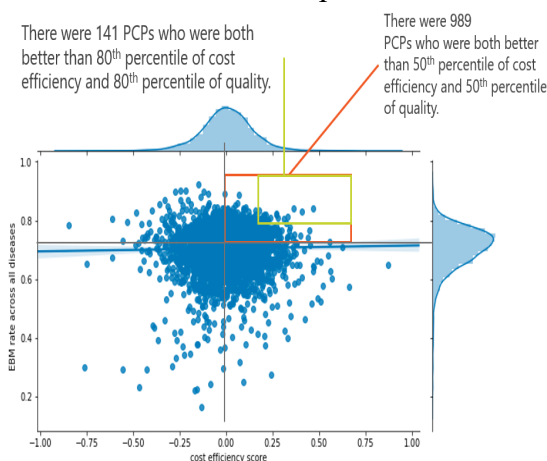


Figure 2. Relationship Between Quality and Cost

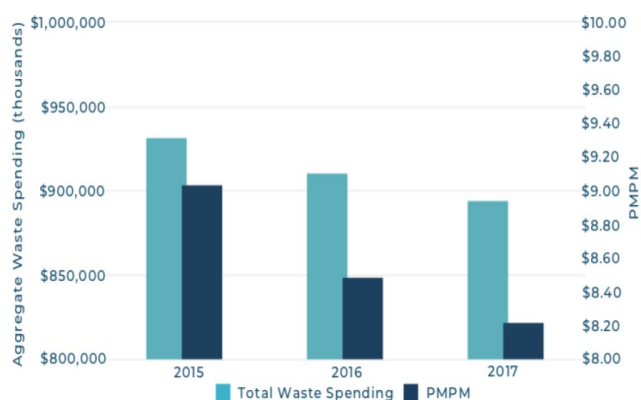
The Physician Value Study, performed by GNS Health using the WHIO data, also indicated that in 2017 alone, more patients could have received the evidence based care they deserved and \$394.5 million could have been saved if the primary care providers that scored in the bottom half of this analysis had provided care similar to their peers that scored in the top half. Moving into this pandemic with higher than average health care costs, compared to other states, and excess spending creates a steeper barrier to economic recovery from COVID-19 for State government and Wisconsin businesses. As more people rely on public health insurance programs, the percentage

of annual tax dollars required to fund the Medicaid program has increased. In turn, lack of affordable health insurance and health care has decreased access to care for many citizens, and the state’s ability to retain and attract new businesses.

While there are many factors that contribute to high health care costs, **the provision of care that is not supported by research, fueled by a fee-for-service payment system, is one area that everyone can agree runs counter to Wisconsin’s tradition of innovation. The WHIO is the only Wisconsin data asset that can provide the information needed to inform cutting edge payment models while maintaining our high quality standards so that Wisconsin remains an attractive place to live and work. Many states fund their APCD’s to identify opportunities for innovation and to monitor the impact of improvement initiatives such as those outlined below.**

Low Value, Potentially Harmful Care — Through the national program Choosing Wisely, physicians have identified hundreds of procedures that research has determined do not improve a patient’s outcome, increase the risk of harm to a patient, and increase costs (Low-Value Services). Other states are using their APCD to quantify Low-Value Services (Figure 3). **Wisconsin could join this national effort and make care safer by eliminating care that does not improve outcomes and adds costs.**

Figure 3. Total Spending on 47 Low-Value Services by Four States in Medicaid and Commercial Plans, 2015-2017



Note: this figure shows total spending (sum of plan and patient spending) on the 47 low-value services for commercial and Medicaid only, across three years for all four states: Colorado, Maine, Virginia, Washington.

Reduce Prescription Drug Prices — As drug manufacturers bring new medications to the market or increase the price of medications that are widely used by consumers, the **WHIO could prioritize high cost prescription drugs for state funded insurance groups to use in their contract negotiations to reduce the cost of prescription drugs paid for by the State.**

Peer Group Opioid Prescribing Patterns — Unnecessary prescriptions for opioids has contributed to Wisconsin’s opioid crisis and has led to loss of productivity, human suffering, and excess economic burden. The challenge to combating this crisis is in determining who should (and should not) receive these medications, for how long, and what alternative medications are being used. **The WHIO has created a series of reports on opioid prescribing patterns by medical specialty that allow clinicians to compare their own opioid prescribing patterns to their peers who treat similar patients. These reports could be used to monitor the effectiveness of provider improvement initiatives.**

Antibiotic Stewardship — It is well known that the overuse and inappropriate use of antibiotics to treat infections is the root cause of superbugs, mutated strains for which there are few treatment alternatives. In addition to this health impact, the overuse of antibiotics is wasteful spending. A February 2021 poll conducted by DHS indicates that about half of the respondents have ongoing efforts to address outpatient antibiotic prescribing, and that these efforts are hampered by limitations in reporting and the inability to identify “champions” within their

organizations. While these organizations have access to data on their own prescribing behaviors, they are not able to obtain comparisons of peer groups (i.e., benchmarks) to know what is possible. **The WHIO has provided custom antibiotic stewardship reports to provider organizations and could address this information deficit for the DHS Antibiotic Stewardship Program and interested provider organizations.**

Other Considerations

At its inception, the State's portion of the WHIO's funding was provided through the Physician Office Visit Data Program fee. In 2012, this fee was discontinued without identification of an alternative state funding mechanism. In response, the Wisconsin Division of Medicaid Services obtained a 2013-2015 grant from the Center for Medicare and Medicaid Services to fulfill the state's funding commitment to the WHIO.

Since 2016, the WHIO has been funded through private sector support with a small amount of project-based funding from state agencies, while fulfilling the Chapter 153 requirements on behalf of the DHS. Of note, about 20 states now have an APCD for which their state government provides full or partial funding to pay for projects that their state government and state agencies lead using their APCD, and to ensure the ongoing viability of this important, objective data resource. These states use their APCD to inform policy decisions, to monitor their investment in state funded programs, and to better understand the health and health care delivery system in their state, one of the largest industries in most states.

Summary

2020 was a year of challenges and triumphs as Wisconsin's policy leaders, state agencies, community leaders, health care providers, businesses, citizens, and others worked daily to address the COVID-19 pandemic. The WHIO used its state-of-the-art information system to meet multiple COVID-19 information needs and ongoing health care stakeholder requests for data and information. Wisconsin's recovery from the COVID-19 pandemic and its ability to address high health care costs while maintaining high quality care requires comprehensive, unbiased health care information.

As the federal and other state governments have gained an understanding of the value of information derived from claims, maximizing the value of the WHIO to inform policies and improvement initiatives is an investment in Wisconsin's knowledge infrastructure. The WHIO is poised to meet Wisconsin's demands for knowledge today and into the next decade.

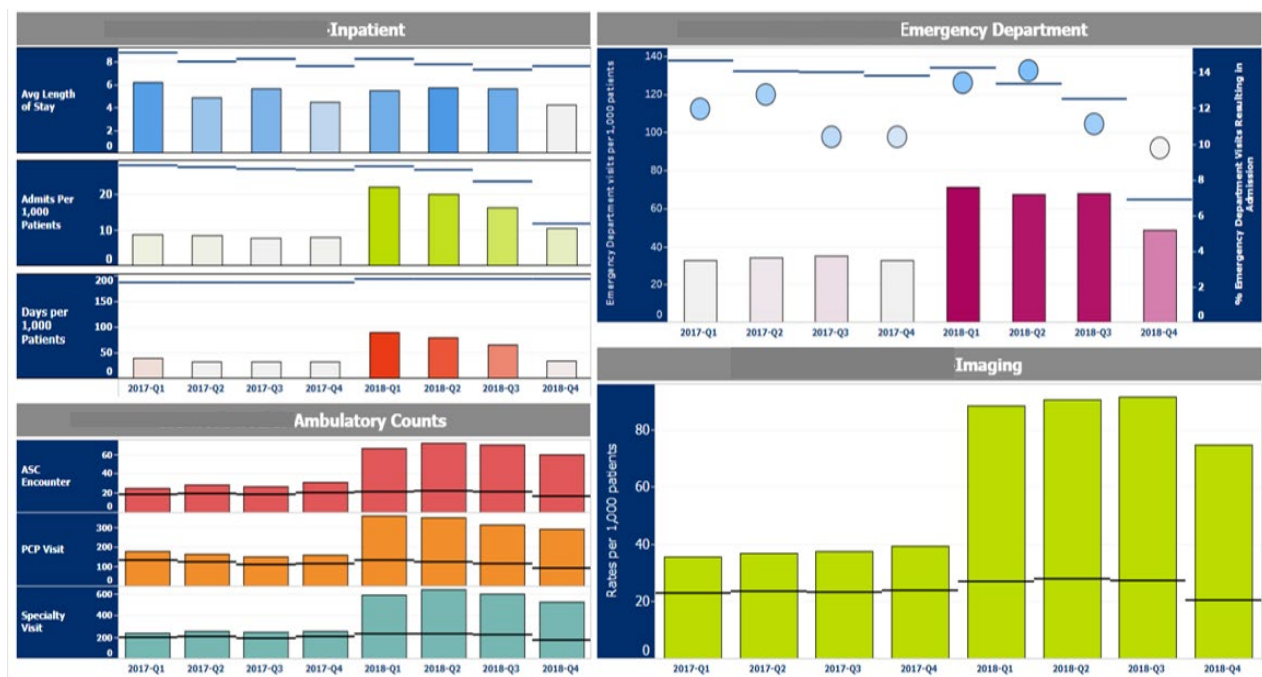
Appendix A — WHIO Products and Services

The **Intelligence Bank** product line is used by organizations that have a mature business intelligence program. The Intelligence Bank currently includes two de-identified data files.

- Standard Integrated Data File (SID)** — SID includes member characteristics, medical, pharmacy, provider, and reference/code set data files. The data is organized around a unique, de-identified insured person number (WHIO ID) to organize the data by insured person or by population over time regardless of who provided or paid for the care. The SID is primarily used by insurance companies, provider organizations and researchers.
- Enhanced Data file (ED)** — ED includes the WHIO ID, member characteristics, medical, pharmacy, provider and reference/code set data files, plus indicators of patient risk (for risk adjustment), episodes of care (also called bundles of care) and normalized prices (to evaluate the resources used to create an episode of care). The unique value of ED is the ability to evaluate care quality, utilization, and costs more quickly. Ed is used by insurance companies, provider organizations, employers, and consultants.

The **Applied Insights** product line offers pre-built reports for provider organizations and insurance companies. The Applied Insights reports are accessed through a secure, web-based portal which provides the organization’s results compared to a statewide benchmark. Report selection criteria/filters allow the user to create hundreds of reports on demand without any IT or analytical requirements (Figure 4). In addition to the reports, providers and insurance companies can extract de-identified claims data through Population Analyzer for nine chronic diseases and conduct their own analyses to support their specific population health management programs.

Figure 4. Key Performance Indicators with WI Benchmarks



The **Custom Analytics and Reporting** service provides custom data extracts, analytics, and reports to customers who are interested in a one-time set of data or information. Figures 5 and 6 are examples of custom analytics. In 2020, most custom projects were commissioned by DHS and researchers.

Figure 5. Inpatient Behavioral Health Utilization, January 2019-June 2020

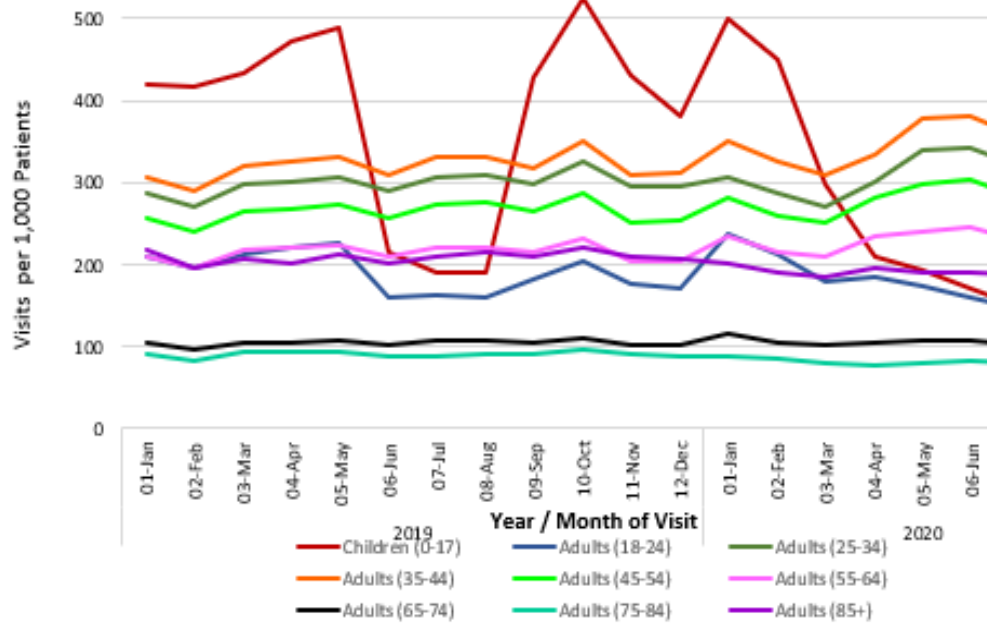
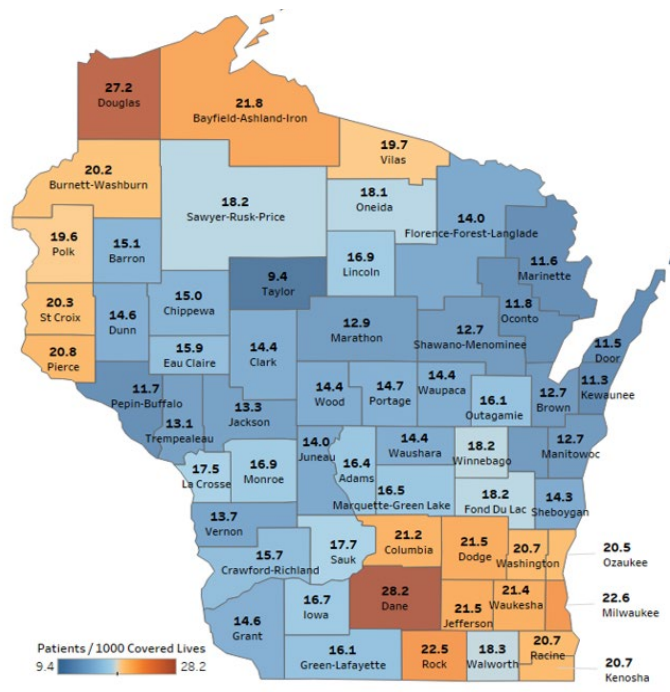


Figure 6. Unique Telehealth Users per 1000 insured Lives, 2020



In 2020, the WHIO included 34.7 million outpatient and telehealth visits with telehealth comprising 6.3% of these visits, a 2,433% increase from 2019.

InfoByte: COVID-19 Impact on Healthcare Utilization

Courtesy of the Wisconsin Health Information Organization

December 2020



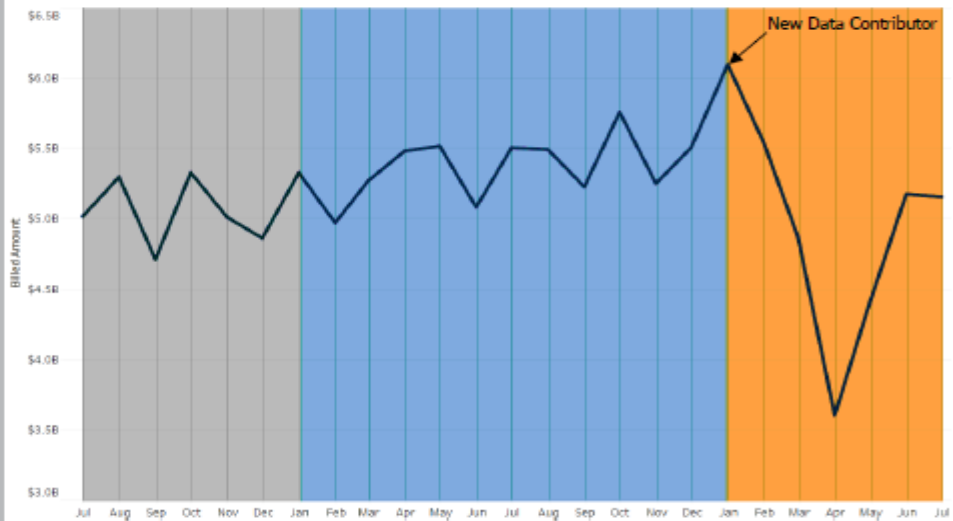
On December 1, 2020, the Kaiser Family Foundation published [How Have Health Spending and Utilization Changed During the Coronavirus Pandemic?](#), which concluded, in part, "that by the end of 2020 health spending may be somewhat lower than it was in 2019." The article goes on to say, "Any decrease in health spending would be historic, as health costs tend to rise faster than inflation and have even grown during past periods of economic downturn."

Since the onset of the pandemic there has been speculation by news media, providers, payors, government leaders, and others about the impact of COVID-19 on healthcare utilization. The WHIO set out to answer this question - using the WHIO health care claims data - so that Wisconsin has facts to guide future decisions.

The WHIO is Wisconsin's All-Payer Claims Database, containing information on the health and health care delivered to over 4.9 million insured people.

If you have an idea of how the WHIO information can be used to help Wisconsin reduce the impact of coronavirus, please let us know. info@whio.org

Total Health Care Services Utilization
July 1, 2018 - July 31, 2020



Health care utilization can be measured in a variety of ways. Care bundles and episode treatment groups are examples of population-based, utilization evaluations that measure the average number of services provided to a group of patients with a similar characteristic(s). It is common when measuring utilization to use a measure of "cost" so that services can be summed over all provided services. Billed charges (billed amount) are often used to determine "cost" because these data are more readily available. Billed charges do not represent what is actually paid by an insurance company or what is paid to a provider as they do not take into account contractual discounts. Also, billed charges do not represent what an individual would pay as these charges do not consider co-payments, deductibles or out of pocket expenses. However, because billed charges are based on a standard unit of measure (the dollar) they are useful when comparing and quantifying the number of resources used to provide a service(s).

The information in this InfoByte is based on the sum of all billed charges for nearly all services provided to insured persons in the WHIO information system. This high-level information can be used to understand the relative size of the decrease in health care services utilization that occurred when the COVID-19 pandemic began in Wisconsin. And to begin to track when, and to what extent, the use of health care services has come back over time.

Total Amount of All Billed Charges
January 1, 2018 - July 31, 2020

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2018	5.2B	4.7B	5.1B	5.0B	5.2B	4.9B	5.0B	5.3B	4.7B	5.3B	5.0B	4.9B	\$60.3B
2019	5.3B	5.0B	5.3B	5.5B	5.5B	5.1B	5.5B	5.5B	5.2B	5.8B	5.3B	5.5B	\$64.4B
2020	6.1B	5.5B	4.9B	3.6B	4.4B	5.2B	5.2B						\$34.8B

Data includes individuals who received health care services and are insured by entities that participate in WHIO.

InfoByte: COVID-19 Impact on Healthcare Utilization

Courtesy of the Wisconsin Health Information Organization

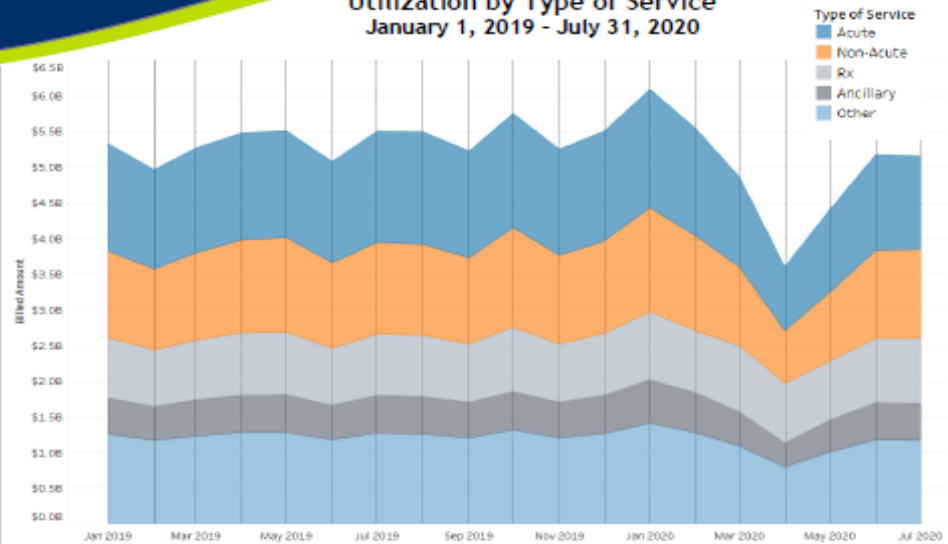
December 2020

The U.S. Department of Health & Human Services published their findings of [The Impact of COVID-19 on Medicare Health Services and Payments](#) in September 2020. Key findings from that brief are below:

- Medicare beneficiary utilization of services declined substantially beginning in mid-March 2020, bottomed out the week ending April 8, and have increased through June.
- By the week ending July 1, weekly payments had nearly returned to 2019 levels.
- At the end of June, cumulative year to date payment deficits relative to 2019 ranged from 12-16% for these service categories.
- Utilization of individual preventative screening and surgical services declined substantially during March and April and have increased through June.
- There is geographic variation in the magnitude of both the utilization declines and the rate of recovery.

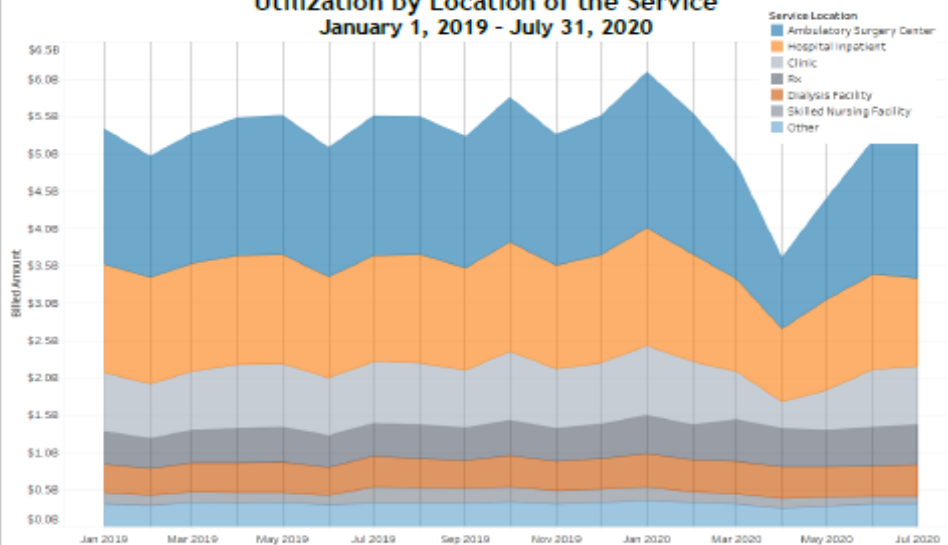
For additional information please contact the WHIO at 608.442.3876

Utilization by Type of Service
January 1, 2019 - July 31, 2020



The graph above is organized by large groupings like "Acute" for high acuity services and "Non-acute" for clinic like services. The graph below represents the type of facility where these services occurred. This information helps us to know which services have been most/least affected by COVID-19 and where the pandemic has had the greatest/smallest impact on health care services utilization.

Utilization by Location of the Service
January 1, 2019 - July 31, 2020



Data includes individuals who received health care services and are insured by entities that participate in WHIO.