

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

Submitted by the Department of Health Services and the Department of Employee Trust Funds

Background

In 2008, the Department of Health Services (DHS) and the Department of Employee Trust Funds (ETF) entered into a contract with the Wisconsin Health Information Organization (WHIO) to serve as the data organization defined in Wis. Stat. § 153.01 (3g). WHIO was formed to collect and aggregate health care claims data into a centralized repository (“Data Mart”) and subsequently analyze and report on the delivery of health care in Wisconsin.

WHIO is a collaborative, public-private partnership established in 2005 to drive improvements in the quality, safety, efficiency, and cost of health care. WHIO is governed by a multi-stakeholder board that includes providers, purchasers, insurance payers, and state agencies. The Board includes representatives from the following organizations:

- DHS
- ETF
- Anthem Blue Cross Blue Shield of Wisconsin
- Greater Milwaukee Business Foundation on Health
- Humana
- Security Health Plan
- The Alliance
- UnitedHealthcare of Wisconsin
- Unity Health Plan
- Wisconsin Education Association (WEA) Trust
- Wisconsin Physicians Service (WPS) Health Insurance
- Wisconsin Collaborative for Healthcare Quality (WCHQ)
- Wisconsin Hospital Association (WHA)
- Wisconsin Medical Society (WMS)

WHIO’s initial goal was to create a centralized repository of aggregated administrative medical and pharmacy claims data for Wisconsin. This data is used by organizations and researchers to generate comparative performance reports for providers, evaluate population health, and perform additional analysis on the delivery of health care. WHIO’s longer term goal continues to be to develop and disseminate public reports on health care quality, safety, and efficiency. This goal was met with the formal launch of MyHealthWI.org public reporting website in March of 2015.

Operations

WHIO and its founding members signed a three-year, \$4.8 million contract with Ingenix Consulting, (Ingenix) on March 31, 2008. This contract tasked Ingenix with responsibilities for constructing and hosting the Data Mart and developing the data analysis and reporting tools. Ingenix is a health and human services consulting organization with significant experience working with hospitals, physicians, health plans, employers, government agencies, and pharmaceutical companies. In response to successful performance under the initial agreement, WHIO renewed the contract with Ingenix effective

January 1, 2011, for services through December 31, 2013. In June 2011, Ingenix changed its name to OptumInsight and is referred to as such for the remainder of this report. The contract with OptumInsight was renewed in September of 2013 for services through December 2016. OptumInsight delivered the first version of the Data Mart to WHIO on December 2, 2008. This version of the repository included claims data submitted by Anthem, Humana, UnitedHealthcare, WEA Trust, and WPS. Since that time, 13 more health plans and an employer coalition have begun to contribute data to the Data Mart. All data contributing organizations comply with a rigorous standard data submission process. The Wisconsin health insurers voluntarily agree to submit their data and make a significant resource investment to prepare their data to meet the WHIO Data Mart standards.

To assure compliance with federal and state patient privacy, confidentiality, and anti-trust laws and regulations, OptumInsight removes all patient, commercial payer, and employer identifiers from the WHIO Data Mart in the claims data aggregation process. The WHIO Board developed and approved a Data Use Agreement in December 2008, which guides the appropriate use of the Data Mart by WHIO and all member organizations. The Agreement is reviewed annually by the Board of Directors and revised as appropriate to ensure it continues to comply with current law and incorporates policies developed by WHIO.

Currently, an estimated 71 percent of Wisconsin's covered lives are included in the WHIO Data Mart. To improve the ability to produce comprehensive comparative performance reports for health care providers throughout the state, WHIO is pursuing the capture of health care claims data from as many sources as possible. However, WHIO recognizes it will be impossible to capture all health care activity through voluntary submission of insurance claims. WHIO is actively negotiating with the Centers for Medicare and Medicaid Services (CMS) to obtain Wisconsin's Medicare Fee-For-Service (FFS) data, which represents approximately 900,000 Wisconsin lives, a significant portion of the present gap in covered lives in the WHIO data.

The Data Mart contains a rolling 27 months of data and is refreshed every 6 months. Each new version is referred to as Data Mart Version (DMV) followed by the sequential number of the edition. Each data mart version released from DMV3 through DMV7 included the addition of one or more new data contributors. WHIO is in the implementation stage of adding four new data contributors for inclusion in DMV14, due to be released in October 2015:

- DMV2: released October 2009; claims data through December 2008; no new data contributors were added
- DMV3: released April 2010; claims data through December 2009; added two new data contributors:
 - Wisconsin Medicaid Fee For Service (FFS)
 - Gundersen Lutheran Health Plan
- DMV4: released October 2010; claims data through June 2010; added five new data contributors:
 - Mercy Care
 - Group Health Cooperative (GHC) of South-Central Wisconsin
 - Dean Health Plan
 - Security Health Plan
 - WI Medicaid HMO: DHS worked through the State's Medicaid fiscal agent (HP Enterprise Services) and with the Medicaid Management Information System (MMIS) administrator to develop the technical specifications and queries necessary to extract

Medicaid HMO data for inclusion in the WHIO Data Mart. The system allows for the data to be segmented by Product Type (i.e., FFS, HMO, Dual FFS, and Dual HMO). Data Mart Version 4 and each version released since have included claims for all Medicaid product types.

- DMV5: released April 2011; claims data through December 2010; added two new data contributors:
 - Physicians Plus Insurance Corporation
 - Network Health Plan
- DMV6: released October 2011, claims data through June 2011; added two new data contributors:
 - Health Tradition Health Plan
 - Unity Health Insurance
- DMV7: released April 2012, claims data through December 2011; added one new data contributor:
 - The Alliance
- DMV8: released November 2012, claims data through June 2012; no new data contributors were added.
- DMV9: not released due to significant deficiencies in the data submission from data contributors.
- DMV10: released April 2014; was originally released in December 2013 but was delayed initially due to deficiencies in data contributor submissions and subsequently delayed due to technical problems with the software processing engine. DMV10 was the first published data mart version using Impact Intelligence v 2.0.
- DMV11: released in July 2014 and subsequently found to be missing over 9M Medicaid claims, thereby preventing the launch of MyHealthWI.org and progress with the Health Literacy Campaign work plan and deliverables.
- DMV12: released in October 2014 but needed to be reprocessed due to a significant number of records being dropped prior to processing due to data contributor issues. It was re-released December 31, 2014.
- DMV13: released in April 2015.

To address deficiency issues identified in recent releases of the Data Mart, WHIO conducted a root cause analysis to document the specific issues present in DMV8, DMV9, and DMV10 and identify the root causes and respective action steps to remedy the issues. A number of actions have been completed or are underway to improve the overall integrity and quality of the WHIO data.

With each release of the Data Mart, the volume of aggregated data has increased and has become more robust and useful for WHIO users. The table below provides a summary of general facts for each Data Mart version and also shows the increase in data available after each Data Mart release. Through DMV13, GHC-Eau Claire was the only remaining Wisconsin domiciled health plan not contributing claims data to WHIO, but ETF has a new requirement for entities participating in the state employee health plan to contribute their data to WHIO beginning in 2015.

	DMV2	DMV3	DMV4	DMV5	DMV6	DMV7	DMV8	DMV10	DMV11	DMV12	DMV13
Members Included	1.51 M	2.82 M	3.44 M	3.73 M	3.86 M	3.94 M	3.95 M	4.02 M	3.83 M	4.05 M	4.14 M
% WI Population	26.8%	47.1%	58.0%	62.8%	64.9%	65.6%	65.7%	70.5%	67.1%	69.9%	71.9%
Claims Included	72.7 M	136.8 M	207.1 M	233.5 M	247.6 M	249.6 M	247 M	247 M	280 M	302 M	308 M
% Commercial Claims	92%	52%	40%	42%	42%	42%	40%	41%	37%	37%	36%
% Medicaid FFS Claims	0%	42%	29%	26%	25%	24%	24%	24%	28%	25%	25%
% Medicaid HMO Claims	0%	0%	20%	19%	20%	20%	22%	21%	21%	22%	20%
% Medicare Claims	8%	6%	11%	13%	13%	14%	14%	14%	14%	16%	19%
Claim \$ Included (Std. Cost/ Billed)		\$20.7 B / \$35.7 B	\$28.9 B / \$51.6 B	\$32.2 B / \$59.3 B	\$34.4 B / \$64 B	\$35.7 B / \$66 B	\$36.8 B / \$67.5 B	\$40.1 B / \$70.9 B	\$39.4 B / \$69.0 B	\$44.5 B / \$74.1 B	\$42.2 B / \$80.4 B
Episodes of Care	7.3 M	11.1 M	18.8 M	21.5 M	23.1 M	23.7 M	23.9 M	23.9 M	22.2 M	23.1 M	24.3 M
Providers Included		133,845	88,171	93,245	95,214	98,278	90,956	97,246	88,055	106,551	110,649
Time Period Covered	10/2006 - 12/2008	10/2007 - 12/2009	4/2008 - 6/2010	10/2008 - 12/2010	4/2009 - 6/2011	10/2009 - 12/2011	4/2010 - 6/2012	4/2011 - 6/2013	10/2011 - 12/2013	4/2012 - 6/2014	10/2012 - 12/2014
Data Mart Published:	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11	Apr-12	Nov-12	Dec-13	Jul-14	Oct-14	Apr-15

WHIO's contract with OptumInsight expired at the end of 2013, so WHIO established an ad hoc committee in January 2013 to develop a Request For Proposals (RFP) for 1) WHIO's data mart hosting, operations, maintenance; 2) a data mart analysis and reporting tool suite; 3) inclusion of Medicare claims data; and 4) a Provider Review and Reconsideration (R&R) business process and technical solution. WHIO released the RFP the beginning of March and received vendors' proposals the end of April. Four national vendors responded to the RFP and ultimately the committee concluded that WHIO renew its contract with OptumInsight for the term 2014-2016.

The Affordable Care Act presented an opportunity for WHIO to become approved by CMS as a Qualified Entity under the federal statutes. WHIO is now able to obtain and publicly report with the inclusion of the Medicare Fee-for-Service claims data in the WHIO Data Mart and provide a more comprehensive analysis of a physician or medical group's performance. WHIO was approved as a Certified Qualified Entity in July of 2013. Following approval of the components submitted for Phase II Security, WHIO will obtain files of Medicare FFS claims data for the two-year period ending September 2014 and will combine that data with its DMV12 for the purposes of public reporting on the MyHealthWI website. WHIO is also pursuing an alternative and parallel path to obtain the Medicare FFS claims through ResDAC as a state data organization.

Physician Engagement

Throughout 2009 and 2010, WHIO focused on physician outreach and engagement by encouraging physician groups to participate in the system configuration and reporting templates associated with the WHIO Data Mart. WHIO has created a standard format for provider performance reporting to assist in building awareness of the data and gain acceptance of the WHIO data in the provider community. This standard report summarizes information at the practice group site level and compares overall quality and efficiency of a practice site specialty group relative to their peers across the state. It includes a case-mix (morbidity) index and stratifies resource use by type of service, enabling risk-adjusted

comparisons of the practice group relative to peer group norms. These reports are made available at no cost to physicians and are distributed by the Wisconsin Medical Society and WHIO. These reports are now available by clinic and by individual physician on the MyHealthWI website for physicians to download. A copy of a current standard provider performance report is attached for reference.

The Wisconsin Medical Society (WMS) has been very supportive of WHIO's physician engagement efforts. In 2010, WMS convened and facilitated multiple Wisconsin Health Improvement Zone – Community Improvement Dialogues (WHIZ – CIDs). Each multi-stakeholder group, consisting of physicians—both primary care and specialists, as well as nurses, social workers, psychologists, employer representatives, researchers, and data analysts, met monthly to examine WHIO data and discuss how it can benefit provider practices and increase value to their patients. Throughout 2011 and 2012, WMS Account Executives have hand delivered dozens of group practice reports to clinic locations throughout the state, engaging with clinicians and discussing their practice group performance reports.

The Wisconsin Hospital Association has also contributed to engaging providers by hosting multiple regional meetings that included as many as 35 organizations at each meeting to present WHIO concepts and demonstrate the reporting tool as a key business asset for their organizations.

WHIO has offered several opportunities for all healthcare stakeholders in Wisconsin to engage in discussions of how to realize value from WHIO data:

- In May 2011, WHIO held its First Annual Symposium, featuring speakers from ThedaCare, WMS, Aurora, and the WCHQ, and panels on how users are integrating the findings from the WHIO data into their business models.
- In May 2012, WHIO offered a full-day learning forum, including hands-on user training, with a focus on practical applications of WHIO data across multiple stakeholder groups. Seventy-five WHIO Data Mart users representing physician groups, hospitals, health plans, and employers attended the event. Staff from DHS, ETF, WMS, and WHA participated as well.
- In November 2012, WHIO offered another full-day learning forum to users and other key stakeholders, with a focus on analytics and using WHIO data for competitive benchmarking and business intelligence. It was attended by over 150 users and other interested stakeholders including self-funded employers and benefits consultants, agents and brokers, and researchers. Speakers included thought leaders from the Benefit Services Group (BSG), Thedacare Center for Healthcare Value, and featured a poster session showcasing uses of WHIO data in a broad spectrum of different applications, including health services research, bundled payment modeling, claim repricing, and web-based reporting.
- In October 2013, WHIO conducted its annual full-day learning forum for users and key stakeholders, Navigating Healthcare Reform with a focus on uses of WHIO data. It was attended by over 150 users, including physician groups, hospitals, health plans, and employers. Speakers included Phil Kalin, CEO of Center for Improving Value in Healthcare, “Colorado All Player Claims Database”; Lynn Wood, Vice President of Wood Communication Group, “Consumer’s Perspective on Transparency and Public Reporting”; and Cheryl DeMars, CEO of The Alliance, “The Alliance Quality Path.” Breakout/panel sessions included: David Krueger, MD from Bellin/ThedaCare Healthcare Partners, and Emily Brower, Executive Director of Accountable Care Programs, Atrius Health - “Pioneer ACO Successes and Key Learnings”; Lon Sprecher, CEO of Dean Health Plan, and Tom Scherdin, Director of Medical Analytics, Dean Health Plan – “Provider Engagement to Control Total Cost of Care”; and Linda Buntrock, Senior VP of Human

Resources, Serigraph and Ross Bjella, Co-founder and CEO of Alithias – “Engaging Employees through Data and Smart Benefit Design.”

- In November 2013, the WHIO Governance Committee recommended the re-establishment of the Physician Advisory Committee. Subsequently, the Committee, comprised of 10 statewide physicians, convened in early 2014 with the charter of advising WHIO regarding its physician performance metrics.
- October 2014 Learning Forum - WHIO conducted its annual full-day learning forum for users and key stakeholders, Spotlight on Payment Reform with a focus on WHIO data. It was attended by over 150 users, including physician groups, hospitals, health plans, and employers. The keynote speaker, Elizabeth Mitchell, President and CEO of Network for Regional Healthcare Improvement (NRHI), provided a very well-received presentation on “State of the Art in Regional Health Improvement: Innovation from the Ground Up.” Other speakers included Dr. Anthony DeFranco, Medical Director, Cardiovascular Quality and Coronary Intensive Care at Aurora Medical Group/Aurora Health Care, “SMARTCare”; Deputy Secretary Kevin Moore, Wisconsin Department of Health Services, “Medicaid Initiatives”; Phil Swain, PT, Director of Orthopedics and Rehabilitation, Meriter-Unity Point Health, “Meriter Experience with Bundle Payments for Care Improvement”; Dr. Phil Colmenares, Chief Medical Officer at WPS Health Insurance, and Michael Chester, M.S., R.Ph., Director of Pharmacy at WPS Health Insurance and Arise Health Plan, “Specialty Rx.” Karen Timberlake, Director, Population Health Institute, University of Wisconsin School of Medicine and Public Health, moderated a panel discussion, “Payment Reform: What will it take?” Panelists, who shared perspectives from their vantage point, included: Rick Abrams, CEO, Wisconsin Medical Society; Terry Bolz, President and CEO, Unity Health Insurance; Bill Mann, Senior Vice President, ThedaCare; Ryan O. Catignani, Field Vice President, Humana; Dianne Kiehl, Director, The Greater Milwaukee Business Foundation on Health; and Mark Xistris, Vice President, The Alliance.
- WHIO made the MyHealthWI.org website with physician ratings available for preview by providers in 3 separate 60-day “blackout periods” prior to the site being made available to the general public. This resulted in WHIO receiving a total of 579 contacts from providers. The feedback consisted predominantly of corrections to physician location/affiliation and/or major area of practice.

Sales and Marketing

Adequate and recurring revenue remains a challenge. Prior to 2009, WHIO depended exclusively on the contributions of member organizations and the State contract for revenue. Increasing membership has been paramount to WHIO’s long-term sustainability and has served two purposes: 1) advancing the sources of data for aggregation and reporting, and 2) increasing revenue. However, the number of Data Contributor members is finite. The only potential Data Contributors remaining that are not already members include one Wisconsin health plan and CMS for the Medicare FFS claims data. All Founding Members continue to pay fees in support of WHIO’s mission and all additional Data Contributor members have renewed their contracts at term and continue to submit data.

Subscriptions from organizations that are not data contributors provide a third source of revenue for WHIO. Currently there are 10 subscribers to the Data Mart and several other subscriptions are currently being negotiated, setting WHIO on its way to become a self-sustaining organization built on providing value to its stakeholders. WHIO has added another distribution channel and thus an additional revenue source to its mix, that of the Value-Added Reseller. WHIO entered into agreements with the Wisconsin Medical Society, Wisconsin Hospital Association, and Benefits Services Group to be Value-Added Resellers of WHIO reports to physician groups. The Medical Society is targeting smaller medical groups that would not have the resources to host, manage, and analyze the data set in

house. Presently over 40 organizations resulting in over 200 licensed end users have access to the Data Mart. This represents 27 members and subscribers, their owners or wholly owned subsidiaries, and research organizations. Annual revenue from these organizations results in \$1.8M from subscription and member fees.

In order to continue to promote and market the Data Mart, WHIO added in-house analytics expertise to its staff. They have been producing samples of organization-specific reports and presenting the data to the medical groups and hospitals as a way of increasing their understanding of the value of the data, how to deploy it, and how to do analytics on their own performance.

Research activities continue to be a source of interest and potential use of the WHIO Data Mart. However, the lack of patient zip codes in the data due to Health Insurance Portability and Accountability Act requirements limits the usefulness of the data for some research purposes. Efforts are underway to include limited socio-economic variables in a HIPAA-compliant manner to enhance the value of the Data Mart for research purposes.

WHIO Membership

WHIO works continuously to expand its membership. Presently, there are 30 organizations participating in the initiative, 21 of which contribute data to the Data Mart. In June 2014, the Group Insurance Board voted to require that all health plans seeking to provide benefits to state employees must submit all of their claims data to WHIO and meet WHIO's claims submission requirements. Subsequent to that announcement, Group Health Cooperative of Eau Claire, Medical Associates of Dubuque, and Health Partners of the Twin Cities have begun the process of submitting claims to WHIO. The number of members represented by these plans are relatively small, approximately 75,000 lives in total. Another business opportunity for WHIO is to engage the participation of large employers in Wisconsin with Administrative Services Only (ASO) self-funded plans.

Member Education

WHIO has an opportunity to support its members, subscribers, and the physician community by demonstrating how the WHIO data can help inform strategic business issues. WHIO has produced over 50 organization-specific presentations designed to answer common business questions to demonstrate how the data and analytical software can be leveraged for their organizations. WHIO conducts user group meetings, webinars, and customized on-site training sessions where users help determine presentations and content to ensure a common understanding of the data and tools available through the Data Mart. Beginning in the fall of 2014, WHIO began offering monthly webinars and virtual office hours. These offerings have consistently been filled to capacity. WHIO does not currently have the capacity to provide additional opportunities due to staffing levels.

Consumer Education and Health Literacy

To meet the statutory requirement for WHIO to conduct statewide consumer information campaigns to improve health literacy, WHIO worked with public and private sector stakeholders to outline a project, measurable outcomes, and research design and implementation for a Health Literacy Program. WHIO is partnering with Health Literacy Wisconsin, a division of Wisconsin Literacy, Inc. and the University of Wisconsin Population Health Institute's Covering Kids & Families - Wisconsin program to implement the Health Literacy Program, titled "Consumer Engagement & Activation through Health Literacy." This program was presented at the April 2014 WHIO Board of Director's meeting. A project update is also provided in Attachment 2.

Consumer Reporting

As the Data Mart continues to expand and the data quality and reporting capabilities improve, WHIO is able to generate meaningful, credible reports for public distribution. WHIO continues to develop reports for distribution to provider groups and employer groups. Several of the commercial payer members and one employer coalition member of WHIO have begun to publish physician performance reports and ratings using the WHIO data on their member/consumer-facing websites.

At the point where WHIO is able to combine the Medicare FFS claims data with its commercial, Medicaid and Medicare Advantage data, it must implement a process for provider review and reconsideration per CMS regulations. This will be an additional level of granularity and refinement to the currently employed 60-day blackout period for provider review. This will enable an expansion of WHIO's public reporting ability while maintaining a high-level of credibility in the data.

In August 2012, WHIO convened a multi-stakeholder workgroup to discuss, research, and evaluate public reporting efforts. They were tasked with developing recommendations to address the state contract requirement of public reporting of provider performance on the web. The WHIO Board, upon the workgroup's recommendations, convened a Public Reporting Implementation Advisory Workgroup in January 2013 and tasked the workgroup to guide the implementation of WHIO's consumer-level public reporting initiatives. WHIO developed a detailed project plan to guide the project and hired a project manager. WHIO also selected a software development firm to produce a prototype website, which was shown to groups of physicians to obtain feedback. The firm then made modifications based on the physician feedback and delivered Version 1.0 of the site, which was shown to consumer focus groups and medical groups for their input. Version 2.0 was developed based on feedback received from consumers and providers. WHIO commenced a second blackout period for review of the site exclusively by providers in December 2013. Due to data quality issues described above, WHIO had to suspend the blackout period in January 2014 and resume it in May 2014. An initial public launch of the MyHealthWI website occurred in March 2015. The launch was accompanied by a public relations and media campaign. WHIO is making continual enhancements to the site to ensure ease of understanding and use for the consumer. WHIO engaged the Wisconsin Literacy Council and Communicate Health to do usability testing of the site. The testing was performed and the results reported to the WHIO Board and the Public Reporting Advisory Committee.

State Innovation Model Design Grant to Develop the State Health Innovation Plan

As an original member of the Statewide Value Committee, WHIO has been actively supporting the analytics and measurement development process of that group. Upon the State receiving the SIM grant award, the State requested WHIO staff to:

1. Provide a series of analyses to support the work of three SIM workgroups: the Population Health, Behavioral Health, and Care Redesign workgroups. WHIO data are uniquely suited to inform the decision-making of these groups.
2. Participate in the Transformation Measurement Workgroup.
3. Participate in the Health IT Advisory Panel.

Attachments:

1. Sample Provider Performance Report
2. Project Update to WHIO Board from Covering Kids & Families/Health Literacy Wisconsin

Affiliation Group

Affiliation ID: T120915
 Affiliation Description: THEDACARE INC

Peer Group

Peer Group Number of Episodes: 1,084,649
 Peer Group Name: WHIO PCP (Family)

Key Statistics

Number of Providers: 74
 Number of Episodes: 73,359
 Case Mix Episodes: 1.05

Overall Quality Index: 1.07
 Overall Cost Index, Episode: 0.93

Confidence Intervals for the Index

Overall Quality Index: 1.07 to 1.07 **
 Overall Cost Index, Episode: 0.92 to 0.94 **

Statistical significance of difference between index and peer group average: * p<0.10; ** p < 0.05

Episode Case Mix Summary

Top 10 ETGs, by Total Cost (Completed Episodes of Care)

ETG Family Description	Episodes			Encounters (Per 1000 Episodes)	
	Episodes	Actual Cost / Episode	Peers Cost / Episode	Actual Encounters / 1000 Episodes	Peers Encounters / 1000 Episodes
Diabetes	3,624	\$1,555.09	\$1,712.07	16,816	16,759
Hypertension	8,543	\$573.12	\$662.12	11,608	10,600
Pregnancy, with delivery	217	\$10,356.10	\$9,680.87	23,569	23,667
Attention deficit disorder	1,558	\$1,429.00	\$1,386.04	10,450	10,160
Hyperlipidemia, other	7,506	\$274.94	\$301.48	4,767	4,475
Ischemic heart disease	971	\$2,076.66	\$2,213.98	20,351	15,977
Mood disorder, depressed	2,641	\$726.46	\$803.33	11,332	10,553
Asthma	1,413	\$1,107.00	\$992.03	10,320	9,343
Chronic obstructive pulmonary disease	447	\$3,102.07	\$3,021.84	18,838	17,677
Congestive heart failure	340	\$3,344.60	\$2,933.35	22,843	19,351
All Others	46,099	\$437.40	\$471.80	4,782	4,676
All Episodes	73,359	\$616.89	\$656.41	7,063	6,713

Quality Measures

Analysis Period (10/01/2012 - 09/30/2014)

	Number of Quality Opportunities		Rates		Index
	With Compliance	Total	Actual Rate	Peer Rate	Quality Index
Cardiology					
CAD					
Patient(s) currently taking a statin.	680	860	0.79	0.76	1.03
CAD					
Patient(s) with a myocardial infarction in the past who are currently taking a beta-blocker.	65	77	0.84	0.78	1.09
CHF					
Patient(s) currently taking a beta-blocker.	144	168	0.86	0.81	1.06
CHF					
Patient(s) currently taking an ACE inhibitor or acceptable alternative.	134	173	0.77	0.72	1.08
Endocrinology					
Diabetes					
Patient(s) that had at least 2 HbA1c tests in last 12 reported months.	2,921	3,563	0.82	0.66	1.24
Diabetes Care (NS)					
Patient(s) 18 - 75 years of age that had an annual screening test for diabetic retinopathy.	1,559	2,845	0.55	0.44	1.25
Diabetes Care (NS)					
Patient(s) 18 - 75 years of age that had annual screening for nephropathy or evidence of nephropathy.	2,496	2,845	0.88	0.85	1.04
Orthopedics and Rheumatology					
LBP Imaging (NS)					
Patient(s) with uncomplicated low back pain that did not have imaging studies.	281	368	0.76	0.78	0.97
Otolaryngology					
Pharyngitis (NS)					
Patient(s) treated with an antibiotic for pharyngitis that had a Group A streptococcus test.	354	837	0.42	0.70	0.60
Preventive and Administrative					
Chlamydia Scrn (NS)					
Patient(s) 16 - 24 years of age that had a chlamydia screening test in last 12 reported months.	499	1,556	0.32	0.41	0.78
Psychiatry					
Depression Med Mgmt (NS)					
Patient(s) with a major depression who start an antidepressant medication that remained on treatment for at least 6 months (continuation phase treatment).	279	692	0.40	0.38	1.06
Depression Med Mgmt (NS)					
Patient(s) with major depression who start an antidepressant medication that remained on treatment for at least 12 week (acute phase treatment).	426	692	0.62	0.60	1.02
Mental Illness - FU (NS)					
Patient(s) hospitalized for mental illness that had a follow-up encounter with a mental health practitioner within 30 days after discharge.	33	37	0.89	0.78	1.15
Pulmonology					
Asthma (NS)					
Patient(s) with presumed persistent asthma using an inhaled corticosteroid or acceptable alternative.	377	402	0.94	0.91	1.04
Bronchitis, Acute (NS)					

Specialty Patterns of Care

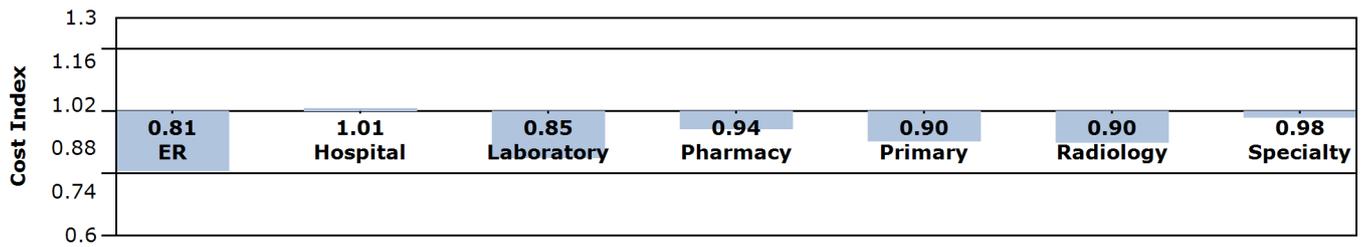
Affiliation Group ID: T120915

Reporting Period : 10/01/2013 - 09/30/2014

Affiliation Group Name: THEDACARE INC

Patient(s) with a diagnosis of acute bronchitis that did not have a prescription for an antibiotic on or three days after the initiating visit.	76	292	0.26	0.23	1.11
COPD Exacerbation (NS)					
Patient(s) 40 years of age and older with COPD exacerbation that received a bronchodilator within 30 days of the hospital or ED discharge.	49	60	0.82	0.84	0.97
COPD Exacerbation (NS)					
Patient(s) 40 years of age and older with COPD exacerbation that received a systemic corticosteroid within 14 days of the hospital or ED discharge.	48	60	0.80	0.78	1.03
URI (NS)					
Patient(s) with a diagnosis of upper respiratory infection (URI) that did not have a prescription for an antibiotic on or three days after the initiating visit.	867	931	0.93	0.84	1.11
Total	11,288	16,458	0.69	0.64	1.07

Cost Index Summary, by Service Category



Cost and Utilization Summary Measures

Profiled Costs

	Actual Encounters	Peers Encounters	Actual Cost / Episode	Peers Cost / Episode	Cost / Episode Index	Actual Total Cost
ER	2,989	2,987	\$16.15	\$19.96	0.81	\$1,184,436
Hospital Services	13,827	14,411	\$105.40	\$104.45	1.01	\$7,731,785
Laboratory	56,207	48,252	\$40.24	\$47.34	0.85	\$2,951,633
Pharmacy	256,665	243,259	\$195.31	\$207.21	0.94	\$14,327,560
Primary Care Core	78,022	82,595	\$96.76	\$107.20	0.90	\$7,098,502
Radiology	10,898	9,582	\$42.70	\$47.42	0.90	\$3,132,284
Specialty Care	99,545	91,369	\$120.34	\$122.82	0.98	\$8,827,622
Total	518,154	492,455	\$616.89	\$656.41	0.94	\$45,253,822

Overall Cost Index: 0.93

Utilization Rates Per 1,000 Episodes

	Actual	Peers	Index
Specialist Visit Rate	1,142	1,192	0.96
Other Specialty Care Rate	205	248	0.83
Radiology Procedure Rate	149	131	1.14
MRI Procedure Rate	7	7	0.98
Laboratory Procedure Rate	766	658	1.16
Overall Prescribing Rate	3,499	3,316	1.06
Generic Prescribing %	95%	93%	1.02
ER Visit Rate	36	36	0.99
Admits per 1000 Episodes	13	11	1.19
Days per 1000 Episodes	79	54	1.48
Average Length of Stay	6.33	5.08	1.25

Episode Detail and Analysis

Acute bronchitis

Total Specialty Episode Costs: \$388,315

Cost per Episode	# of Episodes	Total	Primary Care Core	Specialty Care	Laboratory	Radiology	Hospital	Pharmacy	ER
Actual	2,327	\$166.87	\$84.13	\$14.63	\$2.66	\$18.02	\$3.99	\$34.02	\$9.42
Peers		\$188.39	\$94.55	\$22.18	\$3.02	\$15.33	\$4.57	\$37.65	\$11.09
Index			0.89	0.66	0.88	1.18	0.87	0.90	0.85

Encounters per 1000 Episodes

Actual			1,028	253	62	268	42	1,541	32
Peers			1,033	384	50	204	54	1,616	36
Index			0.99	0.66	1.25	1.31	0.79	0.95	0.91

Asthma

Total Specialty Episode Costs: \$1,563,688

Cost per Episode	# of Episodes	Total	Primary Care Core	Specialty Care	Laboratory	Radiology	Hospital	Pharmacy	ER
Actual	1,413	\$1,107.00	\$122.44	\$187.11	\$16.85	\$41.63	\$125.59	\$576.67	\$36.71
Peers		\$992.03	\$134.10	\$153.98	\$18.59	\$33.95	\$99.49	\$501.98	\$49.95
Index			0.91	1.22	0.91	1.23	1.26	1.15	0.73

Encounters per 1000 Episodes

Actual			1,306	1,881	211	395	373	6,054	100
Peers			1,348	1,822	132	265	300	5,375	101
Index			0.97	1.03	1.60	1.49	1.25	1.13	0.99

Chronic sinusitis

Total Specialty Episode Costs: \$813,635

Cost per Episode	# of Episodes	Total	Primary Care Core	Specialty Care	Laboratory	Radiology	Hospital	Pharmacy	ER
Actual	3,069	\$265.13	\$117.45	\$41.27	\$4.61	\$24.27	\$3.54	\$65.15	\$8.84
Peers		\$327.33	\$127.37	\$62.46	\$6.22	\$35.50	\$5.93	\$78.00	\$11.85
Index			0.92	0.66	0.74	0.68	0.60	0.84	0.75

Encounters per 1000 Episodes

Actual			1,446	572	82	88	25	2,696	29
Peers			1,403	706	80	86	53	2,818	33
Index			1.03	0.81	1.03	1.02	0.47	0.96	0.87

Diabetes

Total Specialty Episode Costs: \$5,635,896

Cost per Episode	# of Episodes	Total	Primary Care Core	Specialty Care	Laboratory	Radiology	Hospital	Pharmacy	ER
Actual	3,624	\$1,555.09	\$187.43	\$208.07	\$82.31	\$33.73	\$69.22	\$920.50	\$53.83
Peers		\$1,712.07	\$194.10	\$210.40	\$101.26	\$43.35	\$90.01	\$1,018.27	\$54.68
Index			0.97	0.99	0.81	0.78	0.77	0.90	0.98

Encounters per 1000 Episodes

Actual			1,782	3,003	1,837	47	323	9,705	118
Peers			1,936	2,712	1,757	51	290	9,921	91
Index			0.92	1.11	1.05	0.91	1.11	0.98	1.30

Hyperlipidemia, other

Total Specialty Episode Costs: \$2,063,735

Cost per Episode	# of Episodes	Total	Primary Care Core	Specialty Care	Laboratory	Radiology	Hospital	Pharmacy	ER
Actual	7,506	\$274.94	\$17.82	\$7.81	\$49.42	\$8.40	\$2.13	\$189.17	\$0.20
Peers		\$301.48	\$27.94	\$8.72	\$54.93	\$6.67	\$3.34	\$199.26	\$0.62
Index			0.64	0.90	0.90	1.26	0.64	0.95	0.32

Encounters per 1000 Episodes

Actual			169	588	823	7	17	3,163	1
Peers			262	584	773	6	39	2,810	1
Index			0.64	1.01	1.06	1.26	0.42	1.13	0.57

Hypertension

Total Specialty Episode Costs: \$4,896,462

Cost per Episode	# of Episodes	Total	Primary Care Core	Specialty Care	Laboratory	Radiology	Hospital	Pharmacy	ER
Actual	8,543	\$573.12	\$139.41	\$91.31	\$51.52	\$51.26	\$57.32	\$170.96	\$11.34
Peers		\$662.12	\$152.07	\$101.32	\$73.29	\$60.94	\$76.63	\$182.37	\$15.51
Index			0.92	0.90	0.70	0.84	0.75	0.94	0.73

Encounters per 1000 Episodes

Actual			1,338	1,958	1,018	119	252	6,896	25
Peers			1,471	1,622	831	123	307	6,220	27
Index			0.91	1.21	1.23	0.97	0.82	1.11	0.92

Hypo-functioning thyroid gland

Total Specialty Episode Costs: \$1,029,821

Cost per Episode	# of Episodes	Total	Primary Care Core	Specialty Care	Laboratory	Radiology	Hospital	Pharmacy	ER
Actual	2,421	\$425.30	\$77.07	\$32.71	\$104.34	\$16.30	\$19.20	\$173.51	\$2.18
Peers		\$465.48	\$100.09	\$41.92	\$116.77	\$16.89	\$24.49	\$162.23	\$3.10
Index			0.77	0.78	0.89	0.97	0.78	1.07	0.70

Encounters per 1000 Episodes

Actual			733	1,429	1,522	31	99	6,115	5
Peers			936	1,277	1,365	35	185	5,034	6
Index			0.78	1.12	1.12	0.88	0.54	1.21	0.86

Mood disorder, depressed

Total Specialty Episode Costs: \$1,918,667

Cost per Episode	# of Episodes	Total	Primary Care Core	Specialty Care	Laboratory	Radiology	Hospital	Pharmacy	ER
Actual	2,641	\$726.46	\$176.71	\$105.21	\$26.50	\$9.21	\$28.76	\$356.73	\$23.33
Peers		\$803.33	\$173.21	\$127.23	\$43.11	\$11.42	\$44.82	\$373.20	\$30.34
Index			1.02	0.83	0.61	0.81	0.64	0.96	0.77

Encounters per 1000 Episodes

Actual			1,829	908	271	13	104	8,151	56
Peers			1,726	1,068	281	12	152	7,258	55
Index			1.06	0.85	0.96	1.11	0.69	1.12	1.01

Report Introduction and Interpretation

Patterns of Care

This section gives an overview of the performance of the report entity for the 12 month period ending on the date in the banner of the section. Note that claims paid in the 3 months after that date for dates of service in those 12 months prior to the date are included in the data. All comparisons in the report are with the report entity peer group, based on a peer definition centered on a specialty. The peer group defines how and what episodes and quality measures are attributed, as well as how those episodes are attributed. For example, a specific subset of ETGs and quality measures are assigned to the peer group General Surgery. The Peer Group Name identifies the comparison group for the report. Note that the episode information on which all of this report is based is for completed, non-outlier episodes that ended during the last 12 months of the report period. Episodes may be attributed to only one provider in a peer group, but may be attributed to more than one peer group.

Number of Providers: This field, in a group report only, reports the number of providers in this peer group with the same affiliation ID, who had episodes attributed during the 12 month reporting period.

Number of Episodes: The total number of complete, non-outlier, within the peer group definition episodes attributed to the providers included in the report during the 12 month reporting period

Case Mix Episodes: This ratio expresses the relative health risk represented by the report entity's attributed episodes compared to that represented by the attributed episodes for the peer group. Episode Risk Groups (ERGs) are used for the calculation. Thus, a value equal to 1 would indicate that the disease burden for the episodes attributed in this report is exactly the same as the disease burden for all of the episodes captured by all members of the peer group.

Overall Quality Index: This ratio represents the relative performance of the report entity on the set of evidence-based medicine measures included in the peer group definition compared to the performance of the peer group as a whole. The set of rules included for primary care is quite large, approximately 250 rules, spanning a number of disease entities. The higher the index, the better the performance of the report entity relative to the peer group on these measures. This ratio will usually be different from the Quality Index in the Quality Measures section of the report as that index only represents the relative performance for the subset of measures included in that section of the report.

Overall Cost Index, Episode: This ratio represents the costs for the episodes attributed to the report entity relative to the average costs for the peer group for the exact same set of episodes, with the comparisons made at the episode severity level. The lower the number, the lower the costs are for the report entity relative to the peer group for the set of episodes. Note that all claims are standard priced, eliminating contractual payment differences as drivers of cost differences throughout the report. Cost differences are driven by units of service and mix of services for an episode of care. The overall cost index is adjusted across the peer group by weighting at the service category level to account for differences in estimated impact of control by a peer group specialty (see Cost Index Summary, by Service Category section of the report explanation).

Confidence Intervals: Each index has a range that reflects the 90% confidence interval around the index value. The confidence intervals are used to indicate the reliability of the value. A 90% confidence interval represents the 90% statistical probability that the value actual value lies within that interval. As a general rule, the more episodes or EBM measures the narrower the confidence interval.

The asterisks associated with the confidence intervals represent the statistical significance of the difference between the index and the peer group average, expressed as a p value. This is attempting to answer the question, "is this entity's performance truly statistically different from peers?" The peer group index is 1.0. One asterisk, representing $p < 0.10$, would indicate that the answer to that question is yes, as the 90% confidence interval does not include 1.0. Two asterisks, representing $p < 0.05$, would indicate that the answer to that question is a statistically stronger yes, as the 95% confidence interval does not include 1.0.

Episode Case Mix Summary

This section of the report is a tabular summary of the top 10 episode families by total cost (number of episodes times average standard cost per episode for the report entity). This provides an overview of those episodes that contribute the most to costs of care for the report entity. Note that the term actual throughout the report should be interpreted as the standard priced result for the report entity for cost measures and the actual encounters for the report entity for encounter measures. These results will be compared to the standard priced results and encounter results for the peer group for the exact same set of episodes, with the comparisons made at the episode severity level.

Quality

WHIO, in conjunction with its Clinical Advisory Panel, has chosen a subset of the evidence-based medicine quality measures to be displayed in this section of the report. The measures in this report are only for rules associated with the episodes attributed to the report entity. Thus, if an internist affiliated with the entity in the report cares for a diabetic, but the diabetic's episode of care is attributed to an endocrinologist and does not meet the threshold (thirty percent of services) for attribution to the internist, the EBM measures for which that diabetic met the inclusion criteria would NOT be included in the internist's report. They would be included in the entity report that includes the endocrinologist. The Number of Quality Opportunities in this section contains, in the total column, all patients who had an episode attributed to the report entity who met the requirements for inclusion in the quality measure denominator. The actual rate is the rate for the report entity, and the peer rate is the rate for the entire peer group. The quality index is the actual rate divided by the peer rate. The quality index total represents the index only for the rules displayed in the Quality Measures section of the report. It will typically be different than the Overall Quality Index in the Specialty Patterns of Care Section, which represents performance across all of the EBMs included in the peer group definition. Indices on individual quality measures should only be considered meaningful if there are sufficient numbers in the total opportunities column.

Cost and Use

The 3 subsections of this report contain cost and utilization information for the report entity. Every claim that is part of an episode attributed to the report entity or the peer group is allocated into one of the seven service categories, based on CPT/Revenue code, place of service, rendering provider and ordering provider. This section of the report provides a ratio of the standard pricing results for the report entity relative to the exact same mix of episodes, compared at the severity level, for the peer group. This, combined with the next section of the report, helps to illuminate specific drivers of cost variation from the peer group. Examples of services that are included in the different categories are:

Hospital Services: All inpatient facility services; Outpatient facility services, including surgery, diagnostic (other than imaging and lab), and facility-based PT/OT; DME/MedSurg supplies

Radiology: Facility and professional components of radiology services, excluding therapeutic radiology. Selected diagnostic x-rays performed or ordered by a primary care provider are also excluded (these are assigned to Primary Care Core per below)

Laboratory: Facility and professional components of laboratory and pathology services, excluding selected lab tests performed or ordered by a primary care provider and typically performed in a PCP/physician office

ER: Professional and facility components of ER services

Primary Care Core: Evaluation and management services rendered by a primary care provider (office visits, nursing home visits, preventive care – does not include inpatient visits, ER visits or consultations); CXR, abdominal XR, and sinus XR; Minor lab procedures; Minor procedures and diagnostic tests, including diagnostic endoscopy, EKG and pulmonary function tests

Specialty Care: Evaluation and management services rendered by a physician other than a primary care provider; Diagnostic testing (other than lab and radiology); Allergy tests; Physical medicine and rehab; Professional component of surgery and anesthesia; Chemotherapy

Pharmacy: All pharmacy claims

The summary and measures subsection provides the cost and encounter detail that drove the service category indices in the previous subsection. Again, the values labeled actual represent the performance of the report entity. See portion of Episode Cost and Detail labeled "Using the cost and encounters ratios." The Actual Total Cost column provides the ability to get a sense of the relative importance of a particular service category variation to the overall cost variation for the report entity. For example, a total cost for a service category of \$50,000 with a cost index of 2.0 represents \$25,000 of cost variation (1.0 for the peer group would be \$25,000), while a total cost for a different service category of \$500,000 with a cost index of 1.25 represents \$100,000 of cost variation (1.0 for the peer group would be \$400,000). Note that that Overall Cost Index in this section is the same as in the Specialty Patterns of Care overview and is different, in most cases, from the Cost/Episode Index. That is because the Overall Cost Index is compiled from service category indices that are weighted depending on the peer group specialty. For example, the Primary Care Core category is weighted higher for an internist than for a general surgeon, while the Hospital category is weighted higher for a general surgeon than for an internist.

Utilization Rates Per 1,000 Episodes

This utilization rates subsection provides additional detail for helping to hone in on report entity cost variation. Some of these rates tie directly to the service categories in the Cost Index Summary above. The rates reflect results for the report entity (actual) relative to the exact same mix of episodes, compared at the severity level, for the peer group. Note that the results are reported as rates per 1,000 episodes as opposed to per 1,000 patients. The exception to this is the generic prescribing rate, which is defined as number of generic prescriptions divided by the number of prescriptions for which a generic rate is available for the episodes attributed to the report entity. Prescriptions for which a generic is not available are not included in the denominator. This can result in different rates than those seen in other generic calculation rates performed across all prescriptions. The index is calculated by dividing the actual rate by the peer rate. A higher index for generic prescribing rate would generally be considered better performance, while lesser utilization indices for the other metrics would typically be considered better performance. Note that the three inpatient measures may not be consistent with the Hospital service category above, as inpatient services are only one component of that category and typically represent less than half of the costs for the category.

Episode Detail

This section contains information similar to that in the Cost and Utilization Summary Measures section, except at a level of detail of the episode family. These are specific to the peer group, reflecting the most common episode families for that peer group, and there can be up to eight episode families displayed in a report. The Total Specialty Episode Costs represent the standard pricing costs for all of the episodes in that episode family attributed to the report entity. The comparisons are exactly the same as in the Cost and Utilization Summary and can be used similarly to determine the significant drivers of any cost variation and whether that variation is being driven by units or mix of services.

Using the cost and encounters ratios:

The encounters category can encompass a wide variety of unit types, ranging from E&M visits to units of chemotherapy administered. While caution should be exercised in some categories due to unit type variety, comparing the cost index in a service category with the relative ratio of the encounters can help illuminate whether units of service or mix of services is driving variation. For example, if the cost index is 1.5 in pharmacy where the actual encounters are 1,500 and the peer encounters are 1,000, it is likely that the cost variation of 50% (1.5 represents 50% more than the 1.0 of peers) is being driven by units (in this case prescriptions, most likely), rather than mix of services (more expensive medications). The ratio of actual encounters to peer encounters is 1.5 (1500/1000), exactly the same as the cost ratio. If in this case the actual encounters were 1,000, and the peer group encounters, 1,500, the encounter ratio would be 0.67 (1000/1500), making it very likely that mix of services was driving the cost variation of 50%.

Again note that comparisons at the episode family level should only be considered meaningful if there are sufficient numbers of episodes (a minimum of 30 has been suggested by some authorities).

Consumer Engagement & Activation through Health Literacy

Date: June 10, 2015
To: WHIO Board of Directors
From: Project Partners:
Covering Kids & Families – Wisconsin
Wisconsin Health Literacy
Subject: Consumer Engagement & Activation through Health Literacy Monthly Report

This submission summarizes activities and progress during the past month. The project period includes June 1, 2014 to May 31, 2016. A Steering Team, with representatives from WHIO and the project partners, Covering Kids & Families - Wisconsin (CKF) and Wisconsin Health Literacy (WHL), meets regularly to monitor and guide project progress. The project is on schedule.

Since the last report, activities have included:

- Continuing identification and engagement of partner organizations in the East Central Region Enrollment Network (REN), Milwaukee, Racine and Kenosha area
- Distribution and analysis of baseline survey of health literacy and health insurance literacy awareness and perceived capabilities among professionals in the East central REN, as well as Capital, and Great Rivers RENs for comparison. Twelve organizations in the East Central REN indicated interest in further engagement on the project.
- Continuing development and refinement of informational materials to be used with consumers at partner organizations
- Continued refinement of initial draft of curriculum plan for consumers and CKF partner training
- Continuing refinement of content for WHL workshops to be conducted with consumers
- Completion of three consumer focus groups (at Bread of Healing Clinic, Milwaukee; Lake Area Free Clinic, Oconomowoc; and, The Guest House, Milwaukee) to inform workshop content and gain feedback on printed informational materials. Final focus group is scheduled for June 23rd).
- Awareness raising about the project:
 - Completed draft of customizable presentation on project submitted to WHIO leadership for review.
 - Completion of WHCQ webinar
 - Wisconsin Association of Free and Charitable Clinics Summit (June)
 - Statewide Fall Enrollment Conference (September)