

# Information to Improve Health and Health Care in Wisconsin

What will it take to make healthcare in Wisconsin more available, more affordable, and more effective? For starters, clinicians, administrators, policy makers, insurers, employers and consumers all need vast amounts of diverse data turned into useful information that can identify opportunities and support good decisions to deliver higher value care. This information needs to span the continuum of care from prevention to critical care to long-term care. And it must identify who is at risk for advancing disease, inform acute care episodes and identify individuals with chronic conditions that are very sick, incur high costs and require care coordination.

Provider organizations and insurance companies need information on health care utilization, costs, adherence to evidence-based metrics and clinical outcomes to benchmark performance, monitor improvements and create alternative payment models (APMs). Policy makers need cost, clinical and patient outcome information to develop sound policies and monitor results. Consumer-reported responses to treatments and personal health habits, compared to personal goals, are required to refocus care delivery from a model based on illness to one focused on wellness and shared decision making. This information, combined with social risk factors, will assist in targeting interventions within and beyond the traditional delivery system to improve the health of all Wisconsinites.

An All-Payer Claims Database (APCD) is a very large data system that includes medical, pharmacy, and dental claims, as well as eligibility and provider files collected from private and public payers of health care services.<sup>1</sup> Advanced APCDs are beginning to add data like socio-economic data to their claims data. Around the country, APCDs are used by private and public sector health care stakeholders, including state governments, to understand trends in health care quality, safety and cost, to support health care innovation and to advance improvement in the health of their population.<sup>2</sup>

## Wisconsin's APCD – WHIO

In 2007, the State of Wisconsin established Chapter 153, which requires 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 as a 501c3, public-private partnership to fulfill this role on behalf of the DHS. The WHIO is governed by a multi-stakeholder Board of Directors which includes state agency, insurance organizations, provider organization, clinician, and business representatives.

Today, the WHIO maintains Wisconsin's largest source of health information and data spanning the continuum of care with the capability of delivering insights into the health of the people of the state and evaluating Wisconsin's health care delivery system. The WHIO information system includes claims data on approximately 4.2 million insured lives submitted by Medicaid, commercial insurers, self-funded employers, and Medicare Advantage plans. Payers, including the Wisconsin Medicaid program, submit their claims data to the WHIO on a voluntary basis. To increase the volume of data submitted to the WHIO, the state's Department of Employee Trust Funds implemented a requirement in 2012 that health plans that serve state employees must contribute claims data to the WHIO.<sup>3</sup>

In 2019, the WHIO completed a transition to a state-of-the-art information system to expand its ability to serve the needs of Wisconsin's health care stakeholders today and into the future. Current products and services include the Intelligence Bank, consisting of de-identified data files; the Applied Insights benchmarking reports; a Provider Portfolio; Custom Analytics and education provided under Data Driven Decisions services.

Wisconsin healthcare stakeholders - providers, payers, purchaser, patients, researchers and state government - have taken steps to use the WHIO data to drive higher quality, safer, more cost-efficient healthcare over the past 12 years. While some progress has been made, the state and its health care stakeholders could do much more to take full advantage of the wealth of information the WHIO data and analytics provide.

### **APCD Use Across the United States**



Figure 1 APCD Council Interactive State Report Map illustrating APCD activity [4]

## **APCDs Transform Data into Information and Action**

#### Promoting Transparency of Information on Health Care Cost and Value

Some states use their APCDs to spearhead data transparency efforts with an eye towards informing consumers and reducing costs in the long run. Thanks to these efforts, consumers can shop for their health care with an understanding of the value (quality and cost) of the care they are purchasing, payers can use the information to shape incentives for improvements in care delivery, and providers can benchmark themselves against their peers to determine where their improvement efforts should be directed.

Colorado is a leader in this space—the Center for Improving Value in Health Care (CIVHC) maintains an online Shop for Care tool based on their APCD.<sup>5</sup> This public website, paired with public awareness campaigns, encourages consumers to choose providers with lower total costs, regardless of their out-of-pocket costs. CIVHC describes the use of total cost shopping as similar to turning off the faucet in a hotel room—it may not impact your out-of-pocket costs immediately, but by reducing what your insurer pays, it will lower costs over the long run.<sup>6</sup>



Choose a procedure to learn how cost and guality varies in Maryland:

maintained by the Maryland Health Care Commission, has also developed publicly available information on health care costs. Its website, WearTheCost.org, lists prices for select procedures across every hospital that encounters a minimum number of episodes of care. (Figure 2) The Website's tagline,

Maryland's APCD,

Figure 2 WearTheCost.org campaign by Maryland's APCD [7]

"We won't control the high costs of health care until we're all talking about it," demonstrates the state's commitment to turning informed consumers into savings.<sup>7</sup>

National health plans have used publicly available cost information to encourage providers to reduce their costs. In 2010, Anthem Blue Cross Blue Shield was embroiled in a contract dispute with Exeter Hospital in New Hampshire. Anthem officials were able to point to APCD information which showed that Exeter had unusually high costs for certain services. With support from the media, Anthem obtained \$10 million in concessions from Exeter.<sup>8</sup>

Even states with a voluntary APCD can create tools for public use if they have high participation by their health plans, self-funded employers and state government, combined with a strong commitment to reducing costs. Virginia, which does not mandate data submission, publishes the Healthcare Pricing Transparency tool, which allows consumers to select a procedure and view cost breakdowns by service setting and cost category.<sup>9</sup> (Figure 3) The tool also displays median costs by region within the state. Today, healthcare consumers in Wisconsin do not have access to the same sort of publicly available information.



Figure 3 Virginia's online Healthcare Pricing Transparency tool [9]

### Understanding Drivers of Health Care Cost

Wisconsin's self-funded employers, led by the Business Health Care Group, are using the WHIO data to evaluate the quality and cost efficiency of primary care physicians through the Wisconsin Physician Value study. Using WHIO data to evaluate primary care physicians on 26 conditions they commonly treat. The study determined that **if physicians that ranked in the lowest 50<sup>th</sup> percentile practiced like the physicians that ranked in the upper 50<sup>th</sup> percentile, Wisconsin could have saved \$394.5M in 2017**. Additional savings were identified among select procedures performed by specialist.<sup>9,10</sup>



On a national level, the Network for **Regional Healthcare** Improvement (NRHI) produced a report in 2018 titled "Healthcare Affordability: Untangling Cost Drivers."<sup>11</sup> (Figure 4) This collaborative effort by the APCDs of six states resulted in a better understanding of the relative cost of healthcare across different states.

Figure 4 NRHI 6 state APCD collaborative work on the relative cost of healthcare [11]

Similar studies have been conducted in other states, such as Oregon's quarterly reports of per-member per-month costs and utilization and Colorado's study of price variations for common procedures across facilities.<sup>12</sup> As more states adopt APCD models, standardization of the APCD data across states will allow for interstate comparisons to be conducted. The APCD Council is also working to improve the uniformity of data submission requirements across states.<sup>13</sup>

#### Policy Decisions

When policy changes are under consideration, many policy makers turn to their **APCD to identify** changes that will have the greatest potential impact for their constituents and to monitor the impact of these policies over time.

In Wisconsin, the DHS has used the WHIO data, along with other data sources, to complete its SeniorCare Program evaluation required by the Centers for Medicare and Medicaid Services and to conduct a needs assessment of the Wisconsin Behavioral Health and Substance Use program to identify the number of individuals receiving these services in the Medicaid and commercial sectors. Wisconsin's own Department of Health Services (DHS) has used WHIO data to improve efficiency and value. For example, WHIO data has been used by the Medicaid program to:

- Identify Medicaid populations who receive care that is different from the commercial populations;
- Identify providers with high readmission rates, as well as factors that contribute to readmissions;
- Identify low value care (e.g., imaging for low back pain) provided to Medicaid members and incentivize Medicaid HMOs to scrutinize this care. Educate Medicaid members regarding the potential harm this care could cause; and
- Compare providers on quality and resource use/cost (value) for high volume populations (e.g., pregnancy, depression, diabetes, hypertension). With the addition of a Medicaid HMO field to the data Medicaid currently submits, these evaluations could be completed at the Medicaid HMO level.

The Division of Public Health (DPH) has also used the WHIO data to complete studies like those listed below.

- Chronic condition estimates of prevalence, cost and geographic variation
- Impact of Hepatitis C in Wisconsin
- Measuring maternal Tdap and influenza vaccination rates
- HCV antibody testing for patients who were seen at Sixteenth Street Clinic

In Arkansas, their APCD is used to understand the results of Medicaid expansion efforts by comparing care provided to Medicaid members to those who had commercial plans.<sup>14</sup>

In December 2018, Minnesota released a report using information from its APCD on the utilization of telemedicine in the state.<sup>15</sup> The study's authors were able to analyze the extent to which telemedicine is being used in metropolitan vs. non-metropolitan areas, and by type of insurance coverage in each of those categories. This information will inform policymakers and provider organizations as telehealth services continue to grow.

Maryland uses its APCD to evaluate the impact of legislation and regulation. Following implementation of major portions of the Affordable Care Act in 2014, the Maryland Health Care Commission produced an analysis of per member per month (PMPM) spending across all insurance market seaments, with a focus on the individual market, considering the many changes the ACA made to the individual market.<sup>16</sup>



**Figure 5** Change in per member per month spending in Maryland after implementation of the Affordable Care Act. <sup>[16]</sup>

## Using APCDs to Solve Healthcare's Most Pressing Issues

APCDs are often tasked with identifying problems and solutions to healthcare's most difficult issues.

### Addressing the Opioid Epidemic

In recent years, several states have aimed the analytic power of their APCDs at evaluating opioid prescribing practices.



In Wisconsin, WHIO has published a statewide snapshot of opioid use which includes the distribution of opioid prescriptions by clinical area and patient demographics.<sup>17</sup> (Figure 6) In addition, the WHIO provides reports that allow provider organizations to compare their clinicians prescribing practices to their peers to understand the appropriateness of these prescribing practices.

**Figure 6** Snapshot of opioid prescriptions by condition produced by Wisconsin's APCD as part of an InfoByte: Opioid Dependence in Wisconsin. <sup>[17]</sup>

Colorado's CIVHC produced a report in March 2019 detailing prescribing patterns in the state.<sup>18</sup> While it found that Colorado was "seeing positive movement toward reducing the total number of prescriptions," CIVHC was able to recommend several data-driven courses of action to speed up progress including provider education, patient education and research on alternative pain management.

Virginia's voluntary APCD has been used to locate health districts with the worst opioid problems and design interventions. Faced with "alarming" localized overdose information from the APCD, officials at Sova Health-Martinsville quickly created policies to limit prescriptions. Over a five-month period, the health system reported a 61 percent decline in prescribed opioids.<sup>19</sup>

## Understanding the Health and Fiscal Effects of Smoking

Smoking – specifically diseases caused by smoking and tobacco use - remains a leading cause of preventable death in Wisconsin and the nation. The Arkansas Center for Health Improvement, using APCD data, completed a study of smoking-attributable healthcare costs for both Medicaid and commercial insurance. It found that \$795 million of Arkansas Medicaid's annual expenditures were tied to smoking, compared to \$542 million for private insurance. The use of more comprehensive APCD data provided a much more accurate—and daunting—estimate of the costs of smoking than the state had seen previously. Before the study, a Campaign for Tobacco-Free Kids study estimated that smoking only cost the Medicaid program \$293 million.<sup>20</sup>

### Ensuring Healthcare Access

Achieving better health outcomes and wiser healthcare utilization requires access to the care people need when they need it. In Oregon, data from the state's APCD was used by the Oregon Health Authority to compare access to care for dual-eligible Oregonians to access for fully insured populations.<sup>21</sup>

In Washington State, health officials have set their sights on reducing unnecessary and wasteful care. In a 2018 report titled "First, Do No Harm," the Washington Health Alliance used APCD data to track the utilization of 47 treatments known by the medical community to be overused.<sup>22</sup> The report uncovered potential waste of \$282 million. Washington has used this report to push medical professionals away from these low value services. Minnesota has also used its APCD to identify lowvalue health services that are not supported by research to drive down the use of these services.<sup>23</sup>

The Wisconsin Counsel on Medical Education and Workforce used the WHIO data to determine future demand for primary care physicians and compared this information to the projected supply. (Figure 7) This report determined that across all health services areas, Wisconsin will need an additional 20.4% primary care physicians by 2035.<sup>24</sup>



*Figure 7* Snapshot of Outagamie County's projected increase in demand for PCP services from "Mapping Our Way to Success".<sup>[24]</sup>

#### Data to Support Research and Large-scale Improvement

Information does not need to be public to be impactful. APCDs provide health services researchers data that contribute to a broader understanding of the health care ecosystem to drive progress. The University of Wisconsin Health Innovation Program facilitates the use of WHIO data by health services researchers. Examples of recent studies include two studies titled, "Reducing major amputations for rural patients with diabetic foot ulcers: the who's and how's of integrated care" and "Medicaid vs. private insurance for near-poor adults." The Surgical Collaborative of Wisconsin uses the WHIO data to measure baseline performance and monitor topic specific improvement projects and the Wisconsin Collaborative for Healthcare Quality has used the WHIO data to identify priority conditions for its improving health care value initiative.

CIVHC has seen growing demand for its datasets, as year-over-year growth in data requests has been robust as seen in figure 8, below.<sup>25</sup>



Figure 8 Growing demand for datasets from Colorado's APCD, CIVHC.

## **Opportunities for Wisconsin**

Wisconsin health care stakeholders know that even in a state that consistently ranks in the top ten in overall health care quality, variation in access, efficiency, cost and outcomes persists. APCDs enable state government, private sector stakeholders and researchers to assess variations in the quality, utilization, access and cost of health care services and shine a light on underlying causes so that large scale improvements can be realized.

Wisconsin health care stakeholders, including the State of Wisconsin, have invested in developing and using the WHIO for purposes like those described above. Over time, many insurance companies and the state's Medicaid program have voluntarily chosen to submit their data to support this state-wide information asset or are doing so through the ETF contract requirement.

As Wisconsin's health care system continues to evolve through innovative care models and the implementation of value based payment programs, complex analyses of the WHIO's "big data" are fundamental to understand how patients are accessing the health care system, how provider practice patterns are or are not evolving to deliver better value to consumers, how new payment models are impacting care outcomes and the role of informed consumers to garner the care they desire. **Investing in WHIO's analytic capabilities will drive greater healthcare value across Wisconsin.** 

To learn more about how the WHIO's information can help improve healthcare in Wisconsin please contact: info@whio.org | 608.442.3876

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