Beyond Price Shopping: How Stakeholders Utilize All-Payer Claims Databases to Address Rising Health Care Costs

Since 2005, Americans have identified the availability and cost of health care as one of their top concerns. Health care costs have risen due to various factors, such as reliance on fee-for-service payment systems, lack of patient engagement, and lack of coordination and management. In recent years, state legislatures have focused on increasing price transparency in the hopes that it will drive down health care costs by encouraging consumer price shopping. One means of promoting price transparency is through the use of database tools, such as state-mandated all-payer claims databases (APCD) and other private, consumer-facing databases that allow payers and consumers to voluntarily submit data. Over the years, non-consumer stakeholders, as compared to consumers, have more effectively utilized these tools to address the underlying problems that are causing health care prices to rise. This issue brief will focus on how states and policymakers have used data collected from their state APCDs to advance health care reform efforts.

I. How Stakeholders Have Utilized All-Payer Claims Databases

All-payer claims databases are state-mandated comprehensive databases that contain data related to medical claims, member eligibility, and provider costs submitted by public and private payers. Commonly collected data include health plan payments, member payment responsibility, diagnosis and procedure, information on the service provider, and patient demographics. Ideally, APCDs would contain information from fully-insured, self-insured, Medicare, and Medicaid payers in order to capture the comprehensive scope of availability, delivery, pricing, and utilization of health care goods and services to inform health care decision making and health reform initiatives.

Besides the potentially valuable price shopping information it provides to consumers, APCDs provide a wealth of health care information that stakeholders, including policymakers, payers, and providers, can utilize to contain and drive down health care costs. As of October 2018, twenty-one states have implemented or are implementing statewide APCDs with mandatory submission, and at least six states have APCDs with voluntary submission. States have recognized the value of having substantial health care claims information at their fingertips to support their health reform efforts. For example, participants in the Centers for Medicare & Medicaid Services (CMS) Health Care Innovation Award programs used APCD claims data to cut health care costs by \$150 per beneficiary per guarter. In 2015, Minnesota used payer-submitted information within the state's all-payer database to create a \$2 billion cost-savings opportunity after claims data revealed that 1.3 million hospital and emergency department visits were unnecessary, and that two out of three emergency department visits could have taken place within a less expensive setting. Moreover, since establishing their APCDs, some states, such as Colorado, Massachusetts, and Oregon, have been able to create reports and study trends from the states' health care claims data to achieve better health outcomes for their populations.

A. Colorado

In 2010, the Colorado legislature established the state's APCD program and charged the nonprofit Center for Improving Value in Health Care (CIVHC) with administrative responsibilities. Colorado designed its APCD to further the state's "Triple Aim" goals to lower costs, improve care, and better health for Coloradans. The state intended to utilize its APCD data so that state policymakers, researchers, advocacy organizations, and other stakeholders could improve efforts to reduce health care cost and improve quality of care. According to the latest CIVHC annual APCD report, the Colorado APCD contains health insurance claims for approximately 73 percent of covered Coloradans from over 31 commercial health insurance companies, self-insured employer plans, Medicare, Medicare Advantage, and Health First Colorado (Colorado's Medicaid Program). Not only is this comprehensive repository of information accessible to the public via a consumer-facing website, but CIVHC also generates custom APCD reports for stakeholders who plan to use them to improve Coloradans' health as required by legislative mandate. CIVHC's 2016

annual APCD report summarizes how various stakeholders, such as the Colorado Department of Insurance and Colorado's State Innovation Model, have used the Colorado APCD's wealth of information to drive change in the healthcare system.

1. Colorado's Department of Insurance Analyzes High Premiums in Certain Regions

In Colorado, all insurance companies are required to submit annually the premiums they want to charge consumers to the state Division of Insurance (DOI) for review to ensure the rates are fair and justified. When mountainous and rural residents expressed anger with their insurance companies for charging higher insurance premiums based on their location, the Colorado DOI was spurred to find a solution for the price discrepancy.

In a 2016 report submitted to the state General Assembly, the DOI used APCD data in three ways to examine region-specific premiums and the underlying reasons for high premiums. First, the DOI analyzed medical services and pharmacy trends during its rate-review process to ensure the requested premium rates were accurate. Second, the DOI considered consolidating the nine geographic regions into a single, uniform geographic region as an alternative method for reducing premium prices. Finally, the DOI analyzed the data to understand what was actually driving health care costs. The report concluded premiums varied across geographic regions due to differences in health care service utilization and the prices the providers charged. DOI Commissioner Marguerite Salazar concluded that consolidating the state into one large region to prevent insurers from varying premium prices based on location would not fully address the high premium issue. Instead, she recommended focusing on the underlying high health care service costs that are causing the variation in premiums.

Based on this initial study, the Colorado Commission on Affordable Health Care released a final report in 2017 to the state General Assembly with recommendations to promote transparency of provider claims data. The Commission believed greater availability of provider claims data would allow providers to compare their rates with other providers and to identify wasteful low-value services in the region.

${\it 2.~Colorado's~SIM~Program~Establishes~Innovative~Health~Care}$

Cost Solutions

Several organizations have used Colorado's APCD data to establish better health for Coloradans. Colorado's State Innovation Model (SIM) program is a particularly useful example that showcases how individual, local-level APCD data can create forward-looking, state-level best practices methods. The CMS funded SIM to empower state experimentation with innovative health care delivery reforms. In conjunction with the SIM patient attribution model, which helped identify consumers with their primary care providers, CIVHC developed fifteen claims-based clinical quality measures from the APCD data. These quality measures have been used to create benchmarks that allow state and local improvement teams to assess the impact SIM activities have on reducing health care costs while simultaneously improving the population's health.

By creating custom reports for stakeholders and making APCD data publicly available, Colorado continues to make strides in advancing its Triple Aim goals. Various stakeholders have analyzed and determined factors that have driven premium price variations and the effectiveness of innovative health care delivery reforms. As Colorado's APCD grows in size and scope, state policymakers and legislators should consider taking greater advantage of the non-partisan data available to develop a better healthcare system for Coloradans.

B. Massachusetts

The Massachusetts All-Payer Claims Database (MA APCD) is maintained by the Center for Health Information and Analysis (CHIA), which collects and monitors medical, pharmaceutical, and dental claims submitted by commercial insurance carriers, third party administrators, and public programs (Medicare and Medicaid/MassHealth). CHIA also created regulations to ensure uniform reporting of information from both private and public health care payers. However, CHIA excludes claims from certain kinds of coverage, including workers' compensation, TRICARE and the Veterans Health Administration, federal employees health benefit plan, and private insurers with under 1,000 lives. Despite these claim omissions, the MA APCD remains the state's most comprehensive database that stakeholders use to meet their health care cost containment goals.

1. CHIA's Price Transparency Website for Consumer Use

A study on consumer response to health care price transparency showed that consumers will price-shop for health care when they can easily access out-of-pocket prices. In 2018, CHIA launched MassCompareCare, a consumer-friendly website that provides health care costs and quality information for the public. MassCompareCare includes a procedure pricing tool that uses data extracted from the state's 2015 MA APCD data and displays, by insurer, the median payment to any provider of 295 services. Besides finding the cheapest procedure price, consumers can also find quality information about different providers when shopping for care. CHIA's MassCompareCare serves as a resource for consumers to make informed decisions about their health care and engage in thoughtful conversations with their providers about recommended treatments and procedures.

2. How Non-Consumers Have Utilized MA APCD Data

Because CHIA consolidates health care claims data into a single uniform central location, it allows non-consumer entities to analyze the data to determine changes that should be implemented to address the pressing health care concerns in the community. Massachusetts state agencies, researchers, health care providers, and other organizations have used MA APCD data to address a variety of health care issues, including of price variation, population health, and quality measurement.

As administrator of the MA APCD, CHIA publishes an annual report with key findings from the MA APCD data. The report calculates the state's total health care expenditures (THCE), and provides information from public and private sources related to specific health care expenditures for Massachusetts residents, quality of care in the state as compared to national performance, enrollment and coverage trends, premiums and member cost-sharing, and payer use of funds.

The 2017 report identified pharmaceutical spending as a major component of total health care expenditures, representing over 18 percent of commercial spending in 2015 and 2016. To better understand the drivers of pharmaceutical spending, CHIA published its first Prescription Drug Use & Spending report in August 2018. The report concentrates on the top ten therapeutic classes of drugs by utilizing a subset of pharmacy claims data sourced from the MA APCD. In future reports, CHIA plans

to incorporate analyses of changes over time to help identify shifting patterns of prescription drug utilization and costs.

Additionally, CHIA uses the data to analyze changes over time in premium levels, benefit and cost-sharing design of plans offered, cost and utilization, and payment methods. Moreover, the data has shed light on the causes of and effective responses to public health crises, including the opioid epidemic, providing a more comprehensive understanding of the burden of chronic conditions and health dynamics of aging populations, and evaluating the quality and costs of care for lung, colorectal, breast, and prostate cancer. Finally, the information has been used to scrutinize healthcare mergers and affiliations that may increase costs or reduce quality.

Looking forward, CHIA anticipates expansion of the original regulation to include collection of claims from Medicaid and self-funded providers, and to promote more studies of cost, global payments, behavioral health, and system utilization.

C. Oregon

The Office of Health Analytics, Health Policy and Analytics Division, Oregon Health Authority (OHA) maintains the Oregon All Payer All Claims Database (APAC). APAC collects data on all paid claims from commercial health insurance carriers, licensed third party administrators, pharmacy benefit managers, Medicaid managed care organizations, Medicaid-fee-for-service, and Medicare parts C and D. APAC includes medical and pharmacy claims, non-claims payment summaries, member enrollment data, billed premium information, and provider information. Notably, APAC is the only health data set in Oregon that contains both the charged amount and the paid amount for health care services, which is significant as these amounts often differ based on the reimbursement arrangements negotiated between the provider and the payer. The database currently contains data for approximately 3.4 to 3.9 million individuals, representing about 87 percent to 98 percent of Oregon's population. In September 2016, APAC became one of just two APCDs in the nation to collect information on alternative payment methods (APMs).

APAC is used as a component of Oregon's ongoing health care improvement efforts, specifically to help achieve the state's "Triple Aim" goals of improved health,

increased quality of care, and lowered health costs. To that end, APAC has been used by OHA, Oregon state agencies, as well as private organizations to inform activities and policy decisions related to health care operations, treatment, payment, public health, and research.

1. State and Private Organizations Utilize APAC Data to Inform State Policy

Oregon state and private interest groups have used APAC to fulfill legislative mandates to inform the development and evaluation of health policies, as well as guide and assess programmatic efforts to improve health access, outcomes, and costs. For example, in 2017, OHA and the Department of Consumer and Business Services (DCBS) used APAC to create a report on primary care spending in Oregon that provides a snapshot of the percentage of total medical spending allocated to primary care across multiple payers. The report offers an innovative measurement strategy that Oregon policymakers can use to close the gap in primary care spending across all payers.

Additionally, private organizations like the High Cost Prescription Drug Workgroup used APAC data to provide insight on prescription drug cost and trend information across all payers. The data was intended to help identify utilization and cost trends for both brand and generic drugs, as well as specific drugs with the highest cost impact on payers. Data gathered from APAC have assisted the Workgroup in determining a potential definition of "high cost" prescription drugs, which has informed legislative concepts that the Workgroup introduced during the 2017 legislative session.

2. Non-Consumer Entities Analyze APAC Data to Understand Health Care Spending

Besides providing policy recommendations, APAC has been a useful resource that allows various stakeholders to better understand health care costs and spending in Oregon. In 2015, the Oregon State Legislature mandated that OHA publish an annual Hospital Payment Report in an effort to bring increased price transparency to the Oregon healthcare market. The first report, published in July 2018, includes the median payments from commercial insurers to hospitals for common procedures.

For each procedure, the report provides a hospital-to-hospital comparison of the median paid amount and the range of paid amounts for the procedure. The conclusions indicate that median amounts paid for certain procedures, such as mammography and colonoscopies, have increased since from 2015-16, while cost of other procedures, such as hip and knee replacements, decreased. Similarly, non-state entities such as the Oregon Health & Science University's Center for Health Systems Effectiveness (CHSE) also used APAC data to shed light on the causes of increased health care spending. After establishing trends in health care spending, the study will examine why health care spending continues to rise.

Since its implementation in 2009, APAC data has successfully helped Oregon better understand health care trends, analyze health care costs, and improve health care outcomes. In 2016, Oregon was ranked fourth in the nation for its performance in health care price transparency by the national Report Card on State Price Transparency Laws. Beyond that, OHA is seeking new ways to expand APAC's research and further its ability to inform health care improvement efforts.

As seen in Colorado, Massachusetts, and Oregon, the implementation of APCDs allow consumers to utilize publicly available information provided by the states' APCD consumer-facing websites. More importantly, they showcase how state agencies, nonprofits, providers, and payers have turned APCD data to actionable items to improve outcomes and create innovative solutions by measuring and analyzing health care performance and costs. While databases alone will not resolve the health care cost crisis, they do provide valuable information that can point stakeholders in the right direction.

II. Challenges of Price Transparency Databases

A. Administrative Challenges

While APCDs can be effective tools to help reduce costs, improve quality, and promote transparency, they face administrative challenges in terms of costs, privacy, and accuracy. States report that there are often high costs to states and data submitters to develop, maintain, and comply with the administration of APCDs and

maintain data confidentiality. One report that examined APCD cost information from ten states in the first year of APCD implementation found internal costs of approximately \$600,000, with annual internal maintenance costs of just under \$115,000. Additionally, annual contractual expenses varied between \$202,000 and \$1,474,000 depending on the type of contract. Beyond costs, states also face challenges in maintaining privacy and security over patient data. Finally, APCDs face difficulty in ensuring the integrity, comprehensiveness, and accuracy of the data. Specifically, it is difficult to accurately reflect prices and quality through the data without taking into account variations in the complexity of cases and the subjectivity within quality of care.

As these common issues continue to arise, states can collectively collaborate and share their experiences with their own APCD to help others streamline and standardize how data is collected and managed. For example, greater APCD operational standardization and data uniformity could make the database more cost-effective for states and data submitters. Over time, these administrative challenges should lessen as more information becomes available to learn from, especially for states with APCDs in early implementation stages.

B. Legal Challenges

In addition to administrative challenges and costs, APCDs have faced significant legal challenges. In 2016, Vermont's APCD faced a legal challenge in the Supreme Court case *Gobeille v. Liberty Mutual Insurance Co. Inc.* Vermont enacted a law that required all health plans, including self-insured plans, to file reports containing claims data and other information with the state. Instead of complying with Vermont's statute, Liberty Mutual instructed its insurer Blue Cross not to submit information about its employees to the state database and filed a claim in court, seeking a declaration that the Employment Retirement Income Security Act (ERISA) preempts the Vermont statute. Congress passed ERISA with the intent to set minimum and uniform standards for employee pensions and benefit programs and it preempts any state law that "relates to an employee benefit plan." ERISA's preemptive reach is limited by the "savings clause" which saves all laws that regulate insurance from preemption; however, ERISA does not deem self-insured employer plans to constitute as insurance for purposes of regulation, and therefore

preempts any state insurance law that relates to an employee benefit plan provided by a self-insured employer. The Supreme Court held that ERISA preempted the Vermont state law and as a result, self-insured plans in Vermont and elsewhere may decide not to allow submission of their employees' claims information to the state.

This ruling created a significant roadblock for APCD data collection because nationally, 56 percent of the U.S. nonelderly population is covered by employer-based health insurance. Out of those, 60 percent are self-funded plans, meaning approximately one-third of the population cannot be regulated by state laws. For example, the Oregon Health Authority estimates that the state's All Payer All Claims database is missing 300,000 covered lives reported from the commercial market due to the *Gobeille* decision. Without this data, APCDs are deprived of a significant amount of information about private health insurance prices and services.

Despite the *Gobeille* decision, APDCs still remain one of the most comprehensive data set available for stakeholder utilization, as exhibited in Colorado, Massachusetts, and Oregon. To truly capture all prices consumers are paying through private health insurance, Congress should consider amending ERISA to limit its jurisdiction over state regulatory efforts on health care costs. The goal of price transparency cannot be advanced so long as ERISA prevents states from collecting health care cost, quality, and utilization information from self-insured employer plans.

C. Barriers to Consumer Utilization

Finally, even without its administrative and legal challenges, studies have shown that most consumers do not use APCDs for purposes of price shopping. The push for price transparency rests on the theory that if the cost of health care services among different providers are made transparent, consumers will be incentivized to shop around for cheaper health care providers and services. Greater consumer price sensitivity would in turn increase competition among health care providers and insurers as they lower prices to attract and retain consumers.

Unfortunately, studies found that "price transparency has not achieved the promises of facilitating price shopping and decreasing spending." Consumers like the concept of price shopping to find cheaper, high-quality health care services, but fail to

properly utilize these tools to their potential. The lack of utilization is due to various factors, such as lack of awareness of the tools, confusion by the complexity of the medical billing system, and patient loyalty. A study of Aetna's Member Payment Estimator price transparency tool showed that only 3.5 percent of enrollees used the the tool in 2011-12, even though over 90 percent of enrollees in Aetna's commercial plans had access to it. Additionally, a study of New Hampshire's APCD consumerfacing website, NH HealthCosts, found that approximately 1 percent of the state's residents used the tool between 2011-13.

Due to these barriers, use of price transparency databases to promote consumer price comparison may not be the most effective means to achieve the overall goal of affordable health care. In order for price shopping to occur, consumers must be aware that the tools exist. Furthermore, policymakers should educate consumers on how to use them and incentivize them to engage in shopping. Well designed user-friendly price transparency tools, coupled with public education about the tools and a digestible format of the consolidated data will promote consumer engagement and utilization. However, ultimately, APCDs are best used not just as a consumer-facing price shopping tool, but as a repository of information for policymakers and stakeholders to truly create an impact in the healthcare field.

III. Conclusion

The goal of APCDs and other consumer-facing transparency tools is to inform consumers, providers, and policymakers of health care price, quality, and availability in order to drive down costs. In theory, price transparency helps encourage price comparison and price shopping. In practice, however, these tools can be costly and difficult to implement and manage. Furthermore, the Supreme Court decision in *Gobeille* significantly reduces the amount of data that these tools can collect. While APCDs may not be as comprehensive and effective as they could be given these constraints, the data provides meaningful information that can be converted to actionable decisions and policies. As seen in Colorado, Massachusetts, and Oregon, APCD data have been invaluable to states to help drive down costs and inform policies and state programs. Besides removing legal and administrative barriers to

APCDs, such as amending ERISA, states could create incentives to encourage self-insured employers and their third-party administrators to voluntarily submit data. Given the value of these databases as a wealth of raw data, states should continue to develop and improve APCDs so policymakers and payers can create stronger legislation and policies and design innovative health and payment reforms for the public's benefit.