Enhancing the Value of Coverage Through Transparency: How APCDs Can Support Insurance Regulation

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Table of Contents

Executive Summary.....1

I. Overview of All Payer Claims Databases (APCDs).....2

What Are All Payer Claims Databases?.....2

The Expanding APCD Landscape.....3

APCD Fundamentals.....5

II. Future of APCDs.....8

Data Quality Challenges.....8

National Data Approach.....8

State-based Use Cases.....10

III. Insurance-Related Use Cases.....12

Price Transparency.....12

Responding to Public Health Crises (e.g., Opioid Epidemic).....15

Rate Review.....16

Network Adequacy.....18

Market Oversight.....20

IV. Recommendations for NAIC and Insurance Department Engagement With APCDs.....21

The NAIC Should Support National APCD Data Standardization.....21

Insurance Departments Should Promote State-Specific Use Cases.....22

Insurance Departments Should Build Long Term Alliances With APCDs.....22

Appendix A: State Interviewees.....23

Appendix B: State APCD Information.....24

Appendix C: Works Cited.....28

Executive Summary

From Utah and Oregon to Maine and Massachusetts, state insurance departments across the country are exploring how All Payer Claims Databases (APCDs) can be used to support and enhance insurance regulation. APCDs are large and developing data assets that promise states new capacity for monitoring and regulating a rapidly changing healthcare landscape. Interviews with insurance department and APCD leaders from 11 states revealed areas where APCDs can be used to support insurance regulation, as well as areas where the NAIC and state insurance regulators can support APCDs in accomplishing their mission.

This report is divided into four sections with three appendices. Section 1 provides background on APCDs for an insurance department audience, explaining what APCDs are, how they are active in 14 states and spreading to more states, how they are organized and funded, and what data they collect.

Section II addresses three challenges APCDs must meet if they are to reach their full potential in nurturing a data-driven approach to improving our health care system: improving data quality, establishing national data standards, and defining state-based priorities for using APCD data. In each case, insurance regulators can offer experience and expertise to support progress as APCDs learn to balance what should be national and uniform and what should be tailored to state circumstances and choices—a balance that the NAIC and state insurance departments have been working on for 150 years.

Section III examines five use cases relevant to insurance regulators on a state-by-state basis. The first two areas: price transparency and responding to public health crises—are examples of where insurance regulators can work with other agencies and stakeholders to achieve broad state goals. The other three use cases are specific to insurance departments: rate review, network adequacy, and market oversight. With each use case, the goal is to illustrate what can work with the right focus and what may be less productive, with the caveat that use cases will vary tremendously by state.

Section IV offers three recommendations for building on what already are productive partnerships in many states:

- The NAIC should support national APCD data standardization
- Insurance Departments should promote state specific use cases
- Insurance departments should build long term alliances with APCDs

The appendices list the 32 state officials in 11 states who were interviewed for this report, provide additional information on 18 active or developing APCDS, and offer a detailed list of works cited.

I. Overview of All Payer Claims Databases (APCDs)

What Are All Payer Claims Databases?

All Payer Claims Databases (APCDs) are state-based data sources that include medical and dental health insurance membership and claims records for large populations across most insurance categories.[1] Their breadth and depth of coverage make them an attractive resource for state policy-makers, researchers, and other healthcare stakeholders for enhancing transparency; analyzing coverage, cost, and utilization trends; identifying access and use disparities; and conducting targeted research around distinct subpopulations. APCDs have the potential to be a key resource for a new generation of data-driven decision-making.

States with APCDs typically require health insurers operating in their markets to submit administrative data—including member characteristics, plan details, and medical, pharmacy, and dental claims records—to their APCDs for plan members in specified market segments, with the largest gap typically being self-insured lives where federal law limits state regulatory authority.[2] Data file submissions may be required monthly, quarterly, or annually, varying by state and file type. Most APCDs collect data on states' private fully-insured, Medicaid (fee-for-service and managed care), and Medicare Advantage populations; some also collect voluntarily reported self-insured data, from self-funded state employee benefit plans and cooperative large employers. Several states have also purchased fee-for-service Medicare data from CMS' Research Data Assistance Center (ResDAC), linking it to their standard APCD files to provide data users a more comprehensive market overview.[3] While Medicare and Medicaid fee-for-service data present unique issues, it is worth noting that insurers are increasingly reporting Medicare and Medicaid data as well, with more than a third of

Project Overview

This project was sponsored by the Robert Wood Johnson Foundation. It is comprised of primary research on APCD use by insurance departments, including more than 20 interviews with state insurance and APCD leaders across 11 states (Appendix A). Several insurer representatives were also interviewed on background, providing candid assessments of existing and developing APCD use cases. Interviews were conducted throughout the first half of 2018. Preliminary results were presented to the National Association of Insurance Commissioners (NAIC) Health Insurance Regulatory Framework Task Force at the Spring National Meeting in March 2018, and this report was presented at the Fall National Meeting in November 2018.

Medicare enrollees in Medicare Advantage and more than two-thirds of Medicaid in managed care organizations.

APCDs include a wide range of data

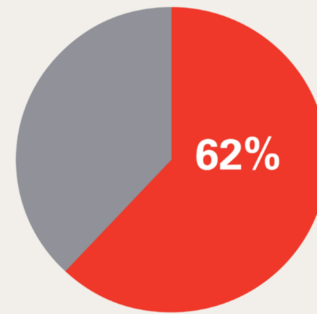
All APCDs collect data for private fully insured members, and more than three-quarters collect Medicaid and Medicare Advantage member data.

Private Fully Insured | **Medicaid** (Fee-for-Service, Managed Care) | **Medicare Advantage**

All APCDs collect medical and pharmacy claims data, and a majority collect dental claims data.

APCDs include a majority of residents

APCDs hold data for nearly two-thirds (62%) of state residents on average.

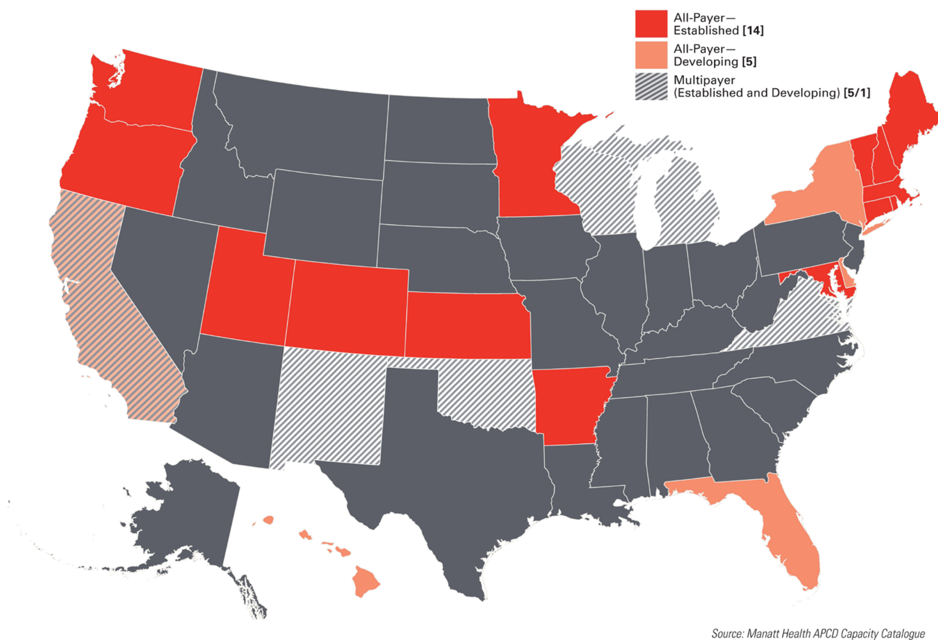


According to the results of Manatt Health's 2017 APCD Capacity Survey, co-administered with the National Association of Health Data Organizations (NAHDO), fully-operational APCDs include data for 62 percent of their states' populations on average. There is no other comparable dataset that covers as many state lives with as much member- and commercial plan-specific claims detail as APCDs.[4] This makes APCDs a powerful data asset for states with goals of price transparency, cost-containment, or market performance monitoring. However, while APCDs show tremendous promise, APCDs in 2018 remain emerging data assets with significant variation in data quality. APCD use often requires significant user investment and sustained commitment to glean meaningful results.

The Expanding APCD Landscape

Maine established the country's first APCD in 2003, but was not alone for long. Kansas, Maryland, Massachusetts, and New Hampshire had early-stage APCDs by 2008, with Minnesota, Tennessee, Utah, and Vermont joining the movement by 2010.[5,6] In 2018, according to Manatt Health's APCD Capacity Catalogue, there are currently 14 states operating APCDs. Five more states, including three of the country's four largest states, are in the process of building APCDs: California, Delaware, Florida, Hawaii, and New York.[7] Six other states are either operating or establishing "multi-payer" claims databases (MPCDs), which are typically more limited and/or voluntary databases intended for similar use.[8] In some states, including Florida, there have been discussions about collaborating with the owners of commercially-held claims datasets.

Figure 1: National APCD Landscape (July 1, 2018)



Breaking News: In early June, California Governor Jerry Brown signed a bill that allocated $60M to establish a California APCD—creating what will be the largest APCD in the country.

APCDs currently hold data for more than 27M people. This number is expected to triple in the next five years.

In June 2018, California became the country's latest and largest state to announce its development of an APCD. Governor Jerry Brown signed Assembly Bill No. 1810 Chapter 34 which allocated $60 million to establish California's "Health Care Cost Transparency Database" and requested that the Office of Statewide Health Planning and Development (OSHPD) recommend a plan for APCD development and implementation no later than July 1, 2020.[9,10]

APCDs currently hold data for more than 27 million people nationally. With California, New York, and Florida planning to collect resident data within the next five years, the number of U.S. lives covered by APCDs is expected to triple to at least 83 million.[11]

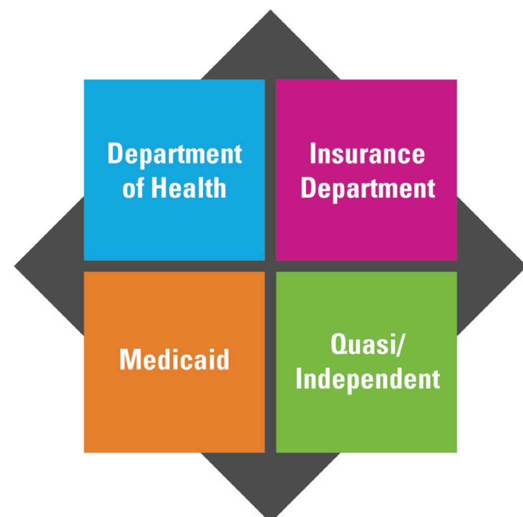
Bills to establish APCDs have also recently been introduced in Montana, Pennsylvania, New Mexico, and New Jersey.[12] With 21 new governors elected in 2018, the number of states interested in APCDs is likely to grow even larger.

APCD Fundamentals

No two state APCDs are exactly alike. Each APCD is founded for different purposes, and oriented to support the priorities of its hosting agency and the most pressing needs of state policy-makers; as health care priorities differ between states, so too will the type of APCD data collected, curated, and analyzed. State-by-state APCD variation is both a strength and a weakness of the existing APCD landscape. While use case variation allows states to focus on local priorities, variations in data collection requirements result in significant inefficiencies, make interstate comparisons difficult, and create substantial reporting burdens on insurers (ultimately resulting in the Supreme Court shielding self-insured employers from the regulatory burden of APCD claims submission). Section II of this report explores the balance between national data standards and state-driven use cases.

APCD Hosting Agencies

APCDs are typically hosted by one of three types of state agencies: Health, Insurance, or Medicaid. APCDs may also be hosted by a health policy agency or by a quasi-governmental or independent agency/non-profit. Each model carries its own operational benefits and drawbacks, from the regulatory authority over data reporting entities to federal matching fund eligibility, and each brings its own perspectives and priorities for APCD use. APCDs developed using Insurance Department regulation, for example, more frequently prioritize data collection and quality checks for claim financial fields (e.g., allowed amounts, paid amounts) than other agencies; conversely, those relying upon Departments of Health authority focus greater attention on diagnosis fields. These differences impact when and how APCDs tackle various use cases. See Appendix B for a list of hosting agencies.



APCD Governance Models

Depending upon the hosting model, APCDs may not need a governing structure beyond the standards that apply to the state agency within which it is housed. If, however, the APCD is a stand-alone agency or an independent non-profit, it may need its own rules of operation and governance

structure, potentially including an independent board of directors. Regardless of hosting model, advisory boards are a key and critical feature in some of the country's most successful APCDs. Insurance departments frequently hold permanent seats on these boards, demonstrating the deep connections many states seek to forge between APCDs and insurance department.

APCD Funding Models

APCD agencies have varying funding mechanisms and budgets depending on the size of the state and scope of responsibilities. Some states began with state or federal grant funding, and have yet to achieve stable and permanent funding. Other states rely on state general funds or inter-governmental agency transfers (i.e., funding from other departments) to support their ongoing operations. APCDs also rely on various forms of user fees. Massachusetts, for example, relies upon a combination of insurer and provider assessments, along with general funds, to maintain its operations. Several APCDs rely on federal Medicaid matching funds for infrastructure development and a portion of ongoing operations.

APCD Administration

APCD agencies typically are lean enterprises that hire contractors to manage much of their file administration, including file intake, curation, and analytic dataset creation. Major contractors include OnPoint Health, Milliman MedImpact, Health Care Cost Institute (HCCI), Optum, and the National Opinion Research Center (NORC). Many of these organizations also handle data access and release procedures, production and dissemination of limited data sets, and development of customized views or "enclaves" for user access to data through a web portal.

APCD Files & Data Specifications

There is currently no standard APCD data specification across states. While most APCDs share a common "core" set of fields (most traceable back to Maine's first APCD data request), each APCD requests "non-core" fields with varying definitions, and data files with varying frequency and format. This national patchwork of data submission requirements results in significant burden and reporting inefficiencies for insurers and notable data submission quality issues for states, as insurers have difficulty developing and maintaining current customized queries—often pulling from separate administrative systems—for each state.

Typical APCD file submission requirements include, but are not limited to:

- *Member Eligibility File:* health plan member and member-plan information, including demographic characteristics (e.g., age, sex, residence location), plan characteristics (e.g., plan type, start/end dates, plan ID number), plan purchaser characteristics (e.g., employer size), member-selected

clinical care professional information (e.g., PCP name/ID), and occasionally member-plan financial information (e.g., premiums, deductibles).

- *Product File:* where requested, plan reference file information, with additional details on plan-specific cost-sharing amounts (e.g., deductibles, co-insurance, copays) and other plan characteristics.
- *Medical Claims File:* health plan member inpatient and outpatient claims, submitted either by incurred or paid date with related versioning indicators (per APCD submission methodology).
- *Pharmacy Claims File:* health plan member pharmacy claims, excluding drugs as administered in an inpatient or outpatient settings, submitted either by incurred or paid date with related versioning indicators (per APCD submission methodology).
- *Dental Claims File:* where requested, health plan member dental claims, excluding dental services provided in an inpatient or outpatient setting, submitted either by incurred or paid date with related versioning indicators (per APCD submission methodology).
- *Provider File:* provider reference file with additional details on health plan member providers, often including parent organization affiliation, billing and service locations, and credentials.

Each of these files may include more than a hundred data fields, dozens of which may be customized for each state's submission. File submission will also vary considerably for insurers by whether the state requests claims as they are incurred or as they are paid. For states requesting incurred claims, each insurer may be asked to provide the state with relevant fields as well as documentation to analyze its own versioning logic to ensure that state analyses accurately capture the latest paid claims, mirroring the insurer's own system.

II. Future of APCDs

Supporters of APCDs will need to address multiple challenges if APCDs are to reach their full potential in nurturing a data-driven approach to improving our health care system. This section outlines three critical challenges: improving data quality, establishing national data standards, and defining state-based priorities for using APCD data.

Data Quality Challenges

APCDs are not an "all" purpose solution. They are only as useful as membership records and claims lines can be, and only as powerful as the quality and completeness of their data. Even the most advanced APCDs continue to face significant data quality concerns, especially when testing new use cases.

APCD agencies must assimilate dozens of insurers' membership and claim files to allow for like comparisons. They must develop file specifications, quality check file submissions, verify or apply claims versioning, and allow variances for known—and acceptable—payer-specific anomalies. This will get APCDs to a baseline file upon which core analytic fields would still need to be applied (e.g., master member indexing, master provider indexing, groupers). Even APCD agencies who diligently maintain robust quality assurance processes will face ongoing, data issues as payers struggle to meet the needs of a growing number of state APCDs.

Data quality follows data use, and data use follows program and policy priorities. As previously discussed, fields most frequently used by APCD agencies—especially for public reporting or fund allocation purposes—will have the highest levels of data quality. For insurance departments aiming to have their state's APCD as a dependable data resource, engagement with APCD staff should start as early as possible, with returns on that investment viewed through a long-term lens.

National Data Approach

As more states adopt APCDs, the case for national data standards grows stronger, with their potential to: reduce insurer reporting burdens, improve data quality, provide cross-state comparisons, and potentially allow the collection of self-insured data. The case for national standards is well known by state insurance regulators, who vastly improved the efficiency and effectiveness of their state-based financial regulatory system by moving to a national accreditation system for financial reporting and regulatory oversight in the 1990s.

Insurer reporting burden is particularly acute with APCDs. In each of the 14 states that have fully-operational APCDs, insurers typically are required to submit six or more separate data files on a monthly or quarterly basis, with some files consisting of millions—or tens of millions—of claim lines or records. States may also diverge in their claim version requirements (i.e., whether only final action claims or all claims are required for submission); submission tools, instructions, and protocols; metadata reporting requirements; and threshold and field variance requirements. These differences place substantive reporting burden on insurers, especially those operating in more than one state, and contribute to APCD data quality issues as insurers struggle to keep up with specification changes and track how individual states intend to use provided data.

"There are only so many lines on a claim field," one insurer representative noted in our interviews, citing common frustration over how many ways insurers are expected to report otherwise congruent data. State customization of filing thresholds, fields, field-value options, and filing frequencies, among other variations, requires insurers to develop customized programming code for each state and state file, while trying to understand how and whether developed code would get state APCD agencies to the individual answers they are seeking.[13]

National data standards are not a panacea for solving all APCD data problems, but the process of establishing such standards should accelerate APCD quality improvement and analytic use. While states have long acknowledged the importance of APCD data specification harmonization and sharing of best practices, data vendors have historically been the main drivers of consistency, encouraging the implementation of fields and methods previously employed by the vendor elsewhere.

In 2016, however, the need for a national data approach became a front burner issue when the U.S. Supreme Court dealt a major blow to state APCDs in *Gobeille vs. Liberty Mutual*.[14] As explained more fully in the call-out box, the *Gobeille* decision held that states could not require self-insured employers to report claims data, leaving a large data gap and forcing the states to look a viable alternative (approximately 60 percent of workers with employer-sponsored insurance are self-insured).[15] The National Association of Health Data Organizations (NAHDO), the national convener of state data entities, I responded to the need by creating a national work group to develop a common data layout (CDL). The CDL was created with the goal of submitting it to the Department of Labor (DOL) for adoption as a national model that states could use to collect data from self-insured employers as suggested by a concurring opinion in *Gobeille*. Unfortunately, the project stalled after the 2016 election when NAHDO was unable to secure DOL support for advancing the CDL.

A Supreme Set-back to State APCD Data Collection. In 2016, states found new incentive to collaborate around a Common Data Layout (CDL), with the Supreme Court's ruling in Gobeille vs. Liberty Mutual. In Gobeille, the Court ruled that states, individually, did not have the authority to collect claims data from self-insured health plans. The case started in Vermont, where an out-of-state, self-insured employer (Liberty Mutual) argued that the state APCD's (VHCURES) authority to collect data from self-insured employers was preempted by ERISA. The Supreme Court agreed in a ruling that was a significant setback to state APCDs and states' general healthcare data collection authority. Approximately 60 percent of Americans with employer-sponsored health plans are covered by self-insured plans.

While Gobeille created a major data gap for state policy-makers and APCDs, it also offered an opening for resuming self-insured data submission. In his concurrence, Justice Breyer suggested that the U.S. Department of Labor (DOL) may have the authority to allow self-insured data collection, should a standard national model for data submission be established. States, in coordination with NAHDO, were quick to respond.

NAHDO convened a national workgroup of state APCD business and technical leaders and payer representatives to develop a common data layout (CDL) for APCDs nationally, with the expectation of submitting it to the DOL after the 2016 election. The workgroup negotiated common data specifications for the collection of insurer membership records and medical, dental, and pharmacy claims, and reached high-level consensus on submission frequency and other "front matter" filing requirements. However, NAHDO has since been unable to identify appropriate stakeholders within the DOL to partner with as part of a national effort to reduce insurer reporting burden, while simultaneously empowering states with critical self-insured data.

Our interviews with APCD officials suggest continued interest in promoting the CDL as a way to improve data quality and resume collection of self-insured data. Insurers, many of whom remain on the fence about APCDs, may be natural allies to the extent they are persuaded that APCDs are permanent actors in the landscape.

State-based Use Cases

Unlike data collection, which would benefit from uniformity across states, data use is best determined at the state level, with APCDs partnering with other state agencies and helping stakeholders to identify the best "use cases" on a state-by-state basis. APCDs have already generated a plethora of

use cases that vary widely by state, demonstrating the diversity of state health markets and health reform priorities. Examples include:

- **Utah** uses its APCD to create dynamic quality measure comparisons for state clinics. Measures are then profiled in maps, with data available for download.
- **Massachusetts** uses its APCD to regularly monitor health insurance enrollment trends and to eliminate select payer reporting to its Division of Insurance.
- **Oregon** released an overview of 52 use cases for its APCD, including how its insurance department has used the APCD to track primary care spending trends.
- **New Hampshire**'s insurance department is using its APCD to revamp its network adequacy requirements.
- **Arkansas** added new data elements to its APCD in 2017 to allow it to perform deeper analyses around medical marijuana use, recently profiling patient characteristics and conditions.
- **Maryland**'s Insurance Administration uses its APCD to provide a broader context for its rate filing process and to run targeted analyses on specific rating issues. Its APCD also provides data for the state's price transparency website, WearTheCost.org.

The list of use cases is long and impressive, but our research also found that many reports and activities were ad hoc, with APCD use not necessarily advancing specific long-term agency priorities. One example of this are the public-facing price transparency websites, which include outdated pricing information, crowding out investments in ongoing statewide cost-drive reporting, which may have more efficacy in informing state action. In the insurance sphere, APCDs have spent significant time on rate review with minimal results to date, and not as much time on network adequacy where there are multiple compelling use cases.

III. Insurance-Related Use Cases

This section examines five use cases relevant to insurance regulators, starting with two broad areas: price transparency and responding to public health crises, using the opioid epidemic as an example. The other three use cases are specific to insurance departments: rate review, network adequacy, and market oversight. With each use case, the goal is to illustrate what can work with the right focus and what may be less productive.

Price Transparency

"Price transparency" is a frequently used and frequently ill-defined term that captures public and private efforts to reveal healthcare charges, allowed amounts, cost-sharing amounts, and even more specific financial amounts (e.g., Rx rebates) for the purposes of informing consumer choice or legislative policy-making. Insurance regulators tend to focus on a different set of prices: the total amount the consumer pays in premiums and out-of-pocket costs for health care services rather than the cost or price of the underlying health services. Nevertheless, insurance regulators can play an important role in helping consumers understand the distinction between what they pay in premiums and out-of-pocket expenses and the underlying cost of health care. In particular, insurance regulators can help policy-makers understand that proposals focused on full retail "list" prices (or even discounted "allowable charges" negotiated by insurers) will miss the mark if they do not clearly account for the distinction between list and discounted prices and what consumers actually pay under their health benefit plans. This does not mean list prices are unimportant; indeed, they often are the baseline for various forms of discounting. It just means that price transparency is complicated in relation to health benefit plans and how insured consumers pay for their health care.

Transparent list prices are important but insured consumers are more interested in their out-of pocket costs for specific services.

APCDs are best known for supporting price transparency through their public-facing consumer websites such as New Hampshire's HealthCost or Washington's recently launched HealthCareCompare. These websites are designed to help consumers understand price variations for procedures and services across providers for the purposes of healthcare "shopping." While organizations such as Catalyst for Payment Reform have aggressively promoted such initiatives, "failing" the vast majority of states in its annual Report Card for not adequately pursuing these

goals,[16] most state policy-makers believe these generic websites provide little value to consumers (though third party developers may find their underlying data useful).

For insured consumers, generic APCD-powered state transparency websites do not provide accurate, reliable, and timely information on which to base decisions. APCD data will reflect past costs, without information and context around an individual's plan-specific out-of-pocket liabilities. That is why generic websites are (or should be) heavily caveated as to their limitations for consumer shopping. Massachusetts' CompareCare, for example, launched in July 2018 to satisfy a legislative directive, prominently features a pop-up disclaimer on its landing page: "The cost quotes you are about to see are an estimation of the entire cost of the procedure in 2015… To find out what this procedure will cost you, please visit your insurance plan's cost estimator."

Massachusetts Frees the Data

Following its CompareCare launch, Massachusetts took the unprecedented step of releasing a significant cut of the data powering the website for general researcher and third party use. It is likely the biggest public release of state APCD data ever. While insurers were not identified in this release, future releases promise such detail.

Even New Hampshire's website that allows consumers to further customize results by selecting deductibles and other plan-specific features, does not provide the type of actionable guidance that consumers need—which is realistically only available from the insurer itself.

Efforts to legislatively prescribe insurer obligations to create their own price transparency websites go back to at least 2007, when Oregon enacted a law requiring insurers to provide real-time data on their websites for members who wanted to know what their out-of-pocket costs would be for user-selected services and providers.[17] (Note: The ACA includes a similar provision though it has not been actively enforced at the federal level.)

In Massachusetts, the Division of Insurance more recently played a lead role in implementing a 2012 law that required insurers and providers to provide consumers with accurate cost estimates for services and procedures. Insurers were first required to provide a toll-free number for prospective patients to call to better understand their out-of-pocket liabilities for various services, before being required to have online cost estimator tools available by October 2014. A recent study found these early, rudimentary tools have improved significantly, covering between 700 and 1,600 procedures, while major insurers provide financial incentives for members to use the sites.[18]

Beyond providing service-specific price transparency, APCDs may also be used by insurance departments and other state agencies to provide information on provider price variation and identification of leading cost-drivers. In August 2018, Minnesota used its APCD to show how "a patient undergoing one of four hospital procedures may pay between two to nearly seven times as much as another patient at the same hospital…mean[ing] a price difference from about $7,000 to nearly $70,000."[19]

Meanwhile, Massachusetts has used its APCD to dig into details of its health system performance reporting—derived from separate, aggregate data submissions directly from insurers—to target specific cost-drivers. In 2016, for example, Massachusetts' cost reporting identified statewide pharmacy spending growth in excess of 25 percent between 2013 and 2015. The Commonwealth then used its APCD to identify the biggest individual drug cost drivers by subpopulation, with state leaders following up with carefully targeted policy and regulatory solutions. The broad perspective of cost reporting combined with the power to dive deeply into APCD data has given policy makers new cost-containment tools in Massachusetts, although bending the cost curve remains a work in progress.

As more governors and legislatures appreciate the value of APCDs to highlight cost drivers, insurance departments will be called upon to play a leading role in cost containment. Indeed, many of the state

initiatives that focus on cost drivers give insurance departments a lead role in enforcing reporting requirements and promoting price transparency in areas such as:

- Pharmaceutical pricing transparency, wherein manufacturers, pharmacy benefit managers, or insurers may be compelled to disclose drug price variation and changes, net of rebates;
- Hospital charge transparency, wherein hospitals may be required to publicly disclose their charge masters or average negotiated prices with insurers;
- State cost-driver transparency, wherein insurers and public payers submit aggregated data that outlines health care spending and spending trends by market population, service category, and providers, allowing for health system performance monitoring and cost-driver identification.

Responding to Public Health Crises (e.g., Opioid Epidemic)

APCDs offer important claims data of value to public health officials and insurance departments in responding to public health crisis, such as the opioid epidemic, which is claiming more lives in the United States than HIV/AIDS did at its peak. In 2017, deaths caused by opioids exceeded the total deaths in any single year from car accidents and gun violence. Fighting the epidemic requires a multi-faceted effort and broad interagency coordination at the federal and state level. APCDs can provide information on where critical services are and are not available to combat the epidemic, including:

- Naloxone to reverse overdoses and save lives;
- Medication-assisted treatment (MAT) to treat substance use disorders (SUDs);
- Non-opioid drugs and therapies to treat pain;
- Opioid prescription patterns; and
- Shifting nature of SUDs as limits on opioid prescriptions take hold.

APCDs also allow states to look at which public policies and interventions are working to expand access to care and improve outcomes.

For example, in September 2017, the Utah Department of Health (DOH) used its APCD to profile demographic and diagnosis characteristics of patients who became chronic opioid users after initial prescription to inform its ongoing policy and program actions. The Utah DOH is exploring whether and how to link the state's Controlled Substance Database (CSD) to its APCD, connecting real-time substance use alerts to a wealth of individual historical information. The combined databases would allow policy-makers and researchers to better understand root causes and methods to mitigate opioid addiction potential.

Virginia's APCD was used to identify trends in prescription volume, refills, and dispensing habits, while Colorado's APCD helped to identify that the majority of prescriptions for stronger cancer-pain opioids were prescribed to individuals without a cancer diagnosis.[20]

APCDs have the potential to be used by insurance departments to measure progress on several issues related to how insurers do and do not cover important health services for patients with SUDs or those needing pain medication. Examples include:

- As insurers eliminate prior authorization and reduce cost-sharing burdens for patient access to MAT, APCDs can help assess what other barriers to access remain, such as identifying areas where there are not enough providers with the waiver authority and training to prescribe buprenorphine;
- As opioid prescriptions are reduced and the need grows for non-opioid alternatives to treat pain, APCDs can help assess which alternative medications and therapies are being used and how effective they are; and
- As naloxone becomes more available through standing orders, APCDs can help assess where pharmacies are and are not making naloxone readily available.

Rate Review

Insurance departments typically require insurers to file and obtain prior approval for the rates (or insurance premiums) they propose to charge consumers for certain health insurance products. The ACA requires this prior approval process on an annual basis for individual and small group health premiums and 47 states conduct the reviews at the state level with three states deferring to the federal government to conduct the reviews. The process includes insurer filings each spring, including an actuarial memorandum justifying rate increases, and in some states, supplemental material on cost drivers and insurer cost containment efforts. The review process includes various levels of transparency, with some states holding public hearings, and other states releasing very little information until the final rates are approved, typically in August for the annual open enrollment period that begins each November.

This may seem like an area where APCDs could be used by insurance regulators to enhance their understanding of claims trends and the significant role that medical trend projections play in establishing reasonable rates. Several states have pursued this use case, but the results have been at least somewhat disappointing. All of our interviewees noted that APCD data is no substitute for the actuarial data that insurers are required to include in their rate filings. Part of the challenge is timing: rate filings are based on recent insurer experience and APCD reporting is generally not current enough to fit the rate review timeline. APCD data may also lack the precision that insurer and regulatory actuaries have developed over the years in rate filings.

Some states are working to address these drawbacks by, for instance, adding or refining APCD data fields. The Maryland Health Care Commission (MHCC) maintains the state's APCD, including its private insurance component, the Medical Care Data Base (MCDB). The Maryland Insurance Administration (MIA) uses the MCDB when reviewing insurer rate filing submissions, though data discrepancies continue to present challenges. In 2013, MHCC received a $2.9 million federal grant to enhance its MCDB to better serve the MIA with rate review, addressing data integrity and data timeliness issues. MHCC has since worked with MIA to reconcile differences between APCD data and payer rate filings, bringing on actuarial expertise to support the effort. The results have been most promising for certain targeted analyses, such as understanding the impact of state and federal insurance market changes. For example, to understand the impact of the ACA's tobacco use rating adjustment, the MIA used the MCDB to estimate the prevalence and cost of smoking-related conditions in Maryland.

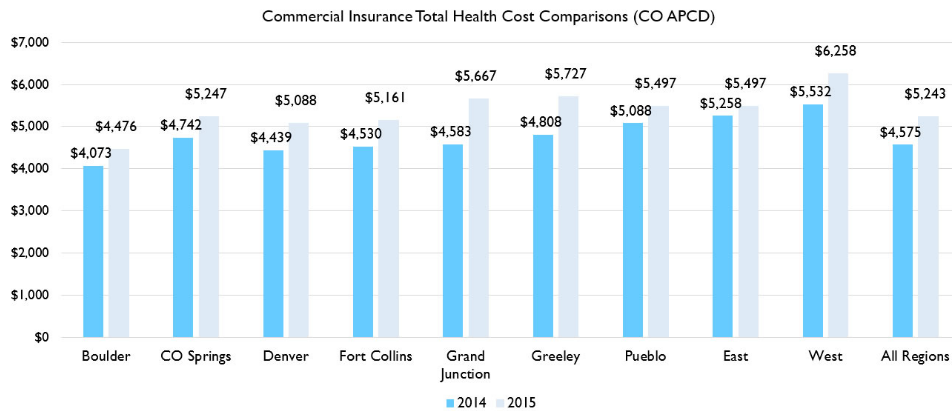
In Colorado, the Division of Insurance (DOI) pays the Center for Improving Value in Health Care (CIVHC) to access CO APCD data. The DOI has used the CO APCD in targeted ways to:

- Analyze medical and pharmacy cost trends to provide background for insurer rate setting;
- Analyze regional variations in considering changes to the state's rating regions;
- Identify county-level cost drivers; and
- Address specific concerns raised by the legislature.

Oregon's Insurance Division has had more success in using APCD data to address specific public policy challenges, such as the prevalence of surprise billing (out-of-network charges at in-network facilities), though the Division continues to work with the state's APCD on potential use cases for rate review. Massachusetts' APCD has worked with payers and its Division of Insurance to source payer reporting directly from the MA APCD as part of "administrative simplification" efforts.

Given the track record, APCD use in rate review should be approached with caution and viewed as a long-term investment to move beyond targeted uses. However, states should consider that APCDs can generate trend reports on claims that are relevant and supportive to rate review, including:

- Regional variation in provider rates;
- In- vs. out-of-network insurer payments;
- Frequency and severity of claims for reinsurance;
- Key cost-drivers (hospital, drug trends); and
- Analyses of payment reforms and quality initiatives.



Source: Colorado Center for Improving Value in Health Care, Data and reporting available at: https://www.civhc.org/get-data/public-data/interactive-data/cost-of-care/.

Network Adequacy

All state insurance departments have established network adequacy standards which measure "a health plan's ability to deliver the benefits promised by providing reasonable access to a sufficient number of in-network primary care and specialty physicians, as well as all health care services included under the terms of the contract."[21] The standards for network adequate are evolving as networks continue to narrow, health service delivery sites change, and new resources come on-line to more clearly define and test networks (e.g., APCDs, provider directories).

Many states are in the process of reviewing and updating their network adequacy standards, following the NAIC's 2016 revisions to its model act. The most significant change was to apply one common standard to all plans which offer preferential treatment to certain "in-network" providers, recognizing that traditional distinctions between "preferred provider organizations" (PPOs) and "managed care" were obsolete in a world where indemnity plans have virtually disappeared and network limits vary widely across a continuum that requires plan-specific reviews. The NAIC model, which is advisory but influential, also incorporated new standards for network sufficiency and how it is determined, strengthened requirements for provider directories, and introduced consumer protections around "surprise billing" that establish mechanisms for consumers to appeal out-of-network bills incurred while receiving care at in-network facilities.

The emerging network adequacy landscape is ideally suited to insurance departments using APCD data to assess network sufficiency in a more calibrated way than was feasible in the past, helping to answer critical question such as:

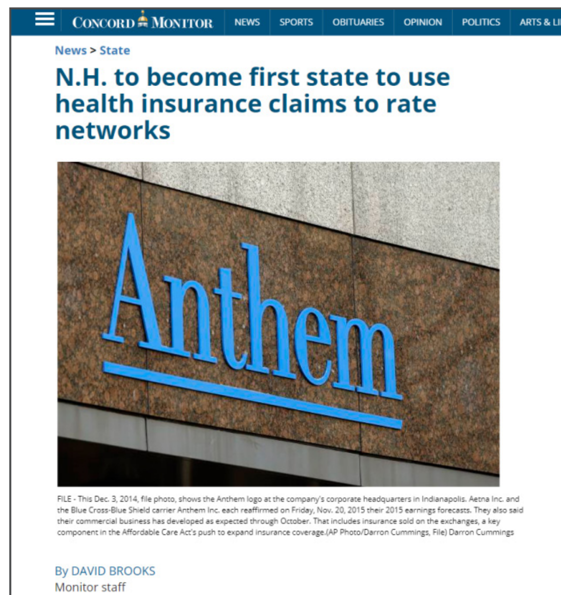
- Which providers deliver what services and at what volume?
- Where are certain services scarce (and may merit different standards)?
- What are the in-network and out-of-network price variations?

APCDs may also help answer specific policy questions such as the prevalence of out-of-network charges at in-network facilities (surprise billing), as well as provide insurance regulators information to verify or challenge insurer assertions that certain services are unavailable or over-priced in specified regions.

New Hampshire showcases how a state can use a new, data-driven approach to network adequacy testing. New Hampshire revamped its approach to network adequacy by using its APCD, the NH Comprehensive Health Care Information System (CHIS), to focus on the availability of key health care services rather than the availability of certain categories of providers. The shift in focus was driven by APCD data showing that provider category was not always the best predictor of what services were available, showing that providers may not conform to their reported specialties in terms of what services they do and do not provide.

New Hampshire's precedent-setting rule took effect on August 1, 2018 and illustrates what is possible when APCD data is available and used to calibrate network adequacy standards to what claims data reveals about service availability and cost for key primary care and specialty services. Among changes in the rule:

- Standards are set by region based on the availability and price of services.
- Insurers are held to stricter standards where services are plentiful and reasonably priced, and given more flexibility where the data show gaps in the delivery system;
- With enhanced data transparency, insurers, providers, and other stakeholders can have more informed debates about what is causing network deficiencies, including where provider prices are "reasonable" and where there are outliers among insurers or providers.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News > State

N.H. to become first state to use health insurance claims to rate networks

FILE - This Dec. 3, 2014, file photo, shows the Anthem logo at the company's corporate headquarters in Indianapolis. Aetna Inc. and the Blue Cross-Blue Shield carrier Anthem Inc. each reaffirmed on Friday, Nov. 20, 2015 their 2015 earnings forecasts. They also said their commercial business has developed as expected through October. That includes insurance sold on the exchanges, a key component in the Affordable Care Act's push to expand insurance coverage.(AP Photo/Darron Cummings, File) Darron Cummings

By DAVID BROOKS
Monitor staff

Many states, including Colorado and Oregon, are looking to APCDs to illuminate regional pricing variations and could move in the same direction as New Hampshire with network adequacy rules. Insurers may be hesitant to embrace APCD use in monitoring network adequacy, but may benefit from its use. For example, Colorado recently released a proposed regulation relaxing network adequacy standards in areas with monopolistic provider pricing, which APCD data could help to uncover.[22]

States will also find APCDs to be helpful in determining the scope of the surprise billing issue in their state, the extent to which providers are available to treat substance use disorders, and a myriad of other granular questions about network adequacy for high priority services.

Market Oversight

Insurance departments have multiple tools for overseeing insurer practices, and most of them begin with data analysis: analyzing consumer complaint data to identify patterns of noncompliance, issuing data calls to understand an emerging issue, or requesting claims runs and other company information as part of a market conduct examination. In all these cases, APCDs will have data that can make the job easier. Working together, insurance departments and APCD agencies can learn from each other in ways that can streamline data collection efforts and enhance other insurer oversight activity.

The partnership has advantages for both insurance departments and APCDs. Insurance departments can be a valuable resource for APCDs in defining and implementing their data collection role. Insurance regulators are highly knowledgeable about the technical aspects of insurance data and highly experienced in enforcing data collection requirements. New Hampshire has leveraged these attributes by having the Insurance Department serve as the collection and enforcement agent for the APCD, while the Department of Health serves as the data repository.

Whether they oversee the data collection process or not, insurance regulators can use APCD data to enhance their market oversight work. Claims data can help insurance regulators target their market analysis activities, focusing on common rather than isolated problems. New data requests can supplement rather than replicate data collection by APCDs. And claims review in market conduct exams can start with full claims sets from an APCD that may be a viable alternative to traditional claims sampling techniques.

APCDs can also point toward solutions to common consumer complaints. Several states have relied on APCD data to help them understand how big a problem surprise billing is generally, and where the problem is most severe if it varies by region, provider category, or facility type. APCDs can even help states solve the toughest problem with surprise billing—how insurer-provider disputes over what is a reasonable payment formula should be resolved—by offering comprehensive data on what actual payment amounts are by region.

Once a solid relationship is established, insurance regulators are likely to find that APCDs have helpful data on most market oversight issues involving consumer claims, and if not, it is likely that the state APCD will have ideas on how to obtain the needed data. Indeed, an emerging role for APCDs is as a data nexus for understanding the many datasets available in each state and how they can be accessed and effectively deployed in combination with each other.

IV. Recommendations for NAIC and Insurance Department Engagement With APCDs

The NAIC Should Support National APCD Data Standardization

The NAIC has been facilitating state collaboration on insurance-related issues s since 1871, and is ideally positioned to work with NAHDO, state APCDs, and insurers to find the best path forward to a national data approach for APCDs. In the 1990s, insurance regulators and insurers worked together to develop a national financial accreditation program that included uniform data collection methods, templates, and standards for insurer financial filings across the country. Today, the Financial Annual Statement is used by all 50 states and countless stakeholders use it to assess insurers' financial standing. A uniform national approach to financial reporting has reduced insurer burdens and resulted in higher-quality filings that are upgraded each year through a process that draws on regulator and industry expertise.

APCDs have not reached all 50 states yet, but there are nearly twenty states that either have APCDs or are in the process of implementing one, including three of the four largest states. Like state insurance departments, each state APCD is interested in protecting state prerogatives. It took the threat of federal insurance regulation to bring the states together on financial accreditation; and it may be that *Gobeille* and the loss of self-insured data will be enough to bring the states together on national APCD standards.

There are many ways for NAHDO and the NAIC to work together. The best opportunity would seem to be the DOL process suggested by Justice Breyer in his *Gobeille* concurrence—developing a national data collection model that all states could use to regain the right to collect data from self-insured employers. But there also may be other ways that the NAIC can work with NAHDO to engage with insurers and vendors on a technically-sound data submission framework and process that generates efficiencies across states, taking into account the tremendous resource variations between the largest and smallest states. It may be that other claims datasets, such as that held by HCCI, or a centralized repository, similar to ResDAC and Medicare data, could be part of the equation. The NAIC's financial database has reduced state costs and helped states navigate various regulatory challenges. Most importantly, the NAIC system preserves a balance between national uniformity and state flexibility.

Insurance Departments Should Promote State-Specific Use Cases

APCDs are large and versatile datasets that can be used for many purposes. While national uniformity is important in data collection, the opposite is true in data use. APCDs work best when state agencies and other stakeholders are engaged in helping identify the most compelling use cases in each state. State insurance departments have mixed levels of involvement with APCD agencies, ranging from being the core agency responsible for APCD data collection to being one among many state clients to having minimal involvement. Insurance departments and APCDs are natural allies on improving healthcare data collection, and the best way to deepen that alliance is for insurance departments to embrace their state APCD as a critical resource and look for opportunities to develop use cases together.

Insurance Departments Should Build Long Term Alliances with APCDs

Insurance departments should carefully consider opportunities to be involved in governance and advisory roles with their state's APCD. Insurance departments have special expertise on insurer data submission and other data governance issues. Along with public health departments, insurance departments also are the most likely users of APCDs among state agencies. Insurance departments should build strategic and long term alliances with APCDs on both fronts—serving in technical capacities that help improve data quality and championing one or more use cases that require ongoing collaboration.

Appendix A: State Interviewees

State	Insurance Department	APCD Agency
Arkansas	—	Kenley Money
Colorado	Michael Conway, Peg Brown	—
Maine	Bob Wake	Karynlee Harrington
Maryland	Todd Switzer, Adam Zimmerman	Linda Bartnyska, Kenneth Yeates-Trotman
Massachusetts	Kevin Beagan	Ray Campbell
Minnesota	Peter Brickwedde	Stefan Gildemeister, Pam Mink
New Hampshire	Tyler Brannen	Morine Muster, Josephine Porter
New York	Troy Oechsner, John Powell	Marybeth Conroy, Natalie Helbig, Josh Klemm
Oregon	Tashia Sizemore, Michael Schopf	Jeremy Vandehey, John Collins
Utah	Jaakob Sundberg	Norm Thurston, Sterling Peterson
Washington	Jane Beyer	Thea Mounts, Ted vonGlahn

Appendix B: State APCD Information

Table 1: State All Payer Claims Databases

State	Status	APCD Name
Arkansas	Developed	Arkansas All Payer Claims Database
California	Developing	*TBD*
Colorado	Developed	Colorado All Payer Claims Database
Connecticut	Developed	Connecticut All Payer Claims Database
Delaware	Developing	Delaware Health Care Claims Database
Florida	Developing	Florida APCD/Health Price Finder Commercial Price Dataset
Hawaii	Developing	Hawai'i All Payer Claims Database
Maine	Developed	Maine Health Care Claims Database
Maryland	Developed	Maryland Medical Care Data Base (MCDB)
Massachusetts	Developed	Massachusetts All Payer Claims Database
Minnesota	Developed	Minnesota All Payer Claims Database
New Hampshire	Developed	New Hampshire Comprehensive Health Care Information System
New York	Developing	New York All Payer Database
Oregon	Developed	Oregon All Payer All Claims (APAC) Database
Rhode Island	Developed	HealthFacts Rhode Island Database
Utah	Developed	Utah All-Payer Claims Database
Vermont	Developed	Vermont Healthcare Claims Uniform Reporting and Evaluation System (VHCURES)
Washington	Developed	Washington State All-Payer Claims Database

Table 2: State APCD Hosting Agencies

State	APCD Hosting Agency(ies)	Website	Agency Type[23]
Arkansas	Arkansas Insurance Department + Arkansas Center for Health Improvement	Link	Insurance + Independent Non-Regulatory
California (Developing)	Office of Statewide Health Planning and Development	N/A	TBD
Colorado	Center for Improving Value in Health Care	Link	Independent Non-Regulatory
Connecticut	Connecticut Office of Health Strategy + Connecticut Health Information Technology Office	Link	State Data Agency
Delaware (Developing)	TBD		TBD
Florida (Developing)	Florida Agency for Health Care Administration	Link	Medicaid
Hawaii (Developing)	TBD	Link	TBD
Kansas	Unknown	N/A	Unknown[24]
Maine	Maine Health Data Organization	Link	State Data Agency
Maryland	Maryland Health Care Commission	Link	Independent Regulatory
Massachusetts	Center for Health Information and Analysis	Link	State Data Agency
Minnesota	Minnesota Department of Health	Link	Health
New Hampshire	New Hampshire Department of Health and Human Services + New Hampshire Insurance Department	Link	Health + Insurance
New York (Developing)	New York State Department of Health	Link	Health
Oregon	Oregon Health Authority	Link	Health

State	APCD Hosting Agency(ies)	Website	Agency Type[23]
Rhode Island	Rhode Island Department of Health, Office of the Health Insurance Commissioner, HealthSource RI, Executive Office of Health and Human Services	Link	Health + Insurance + Executive Office
Utah	Utah Department of Health	Link	Health
Vermont	Green Mountain Care Board	Link	Independent Regulatory
Washington (Developing)	Washington State Office of Financial Management	Link	Other Regulatory

Table 3: State APCD Administration Vendor

State	Website	Agency Type
Arkansas	Link	Arkansas Center for Health Improvement
California (Developing)	N/A	N/A
Colorado	Link	Human Services Research Institute (HSRI) + National Opinion Research Center (NORC)
Connecticut	Link	OnPoint Health
Florida (Developing)	Link	Health Care Cost Institute (HCCI) + National Opinion Research Center (NORC)
Hawaii (Developing)	Link	University of Hawaii, Pacific Health Informatics and Data Center (PHIDC)
Kansas	N/A	Unknown
Maine	Link	National Opinion Research Center (NORC)
Maryland	Link	Social & Scientific Systems, Inc. (SSS)
Massachusetts	N/A	TBD
Minnesota	Link	OnPoint Health
New Hampshire	Link	Milliman MedImpact
New York (Developing)	Link	Optum
Oregon	Link	Milliman MedImpact
Rhode Island	Link	OnPoint Health
Utah	Link	Milliman MedImpact
Vermont	Link	OnPoint Health
Washington (Developing)	Link	OHSU + OnPoint Health

Appendix C: Works Cited

Manatt Health interviewed approximately two dozen state health insurance and APCD leaders from eleven states to inform this report. Targeted state research was also conducted; sources for examples used in this report are shown below.

APCD Overview

Material in this section was sourced from the Manatt APCD Catalogue.

The Future of APCDs

- Gobeille v. Liberty Mutual: https://www.supremecourt.gov/opinions/15pdf/14-181_5426.pdf
- Common Data Layout Information: https://www.apcdcouncil.org/standards

Use Cases

Price Transparency

- New Hampshire Health Cost: https://nhhealthcost.nh.gov/
- Oregon APAC: https://www.oregon.gov/oha/HPA/ANALYTICS/Pages/All-Payer-All-Claims.aspx
- Oregon, HB2213 (2007): https://olis.leg.state.or.us/liz/2007R1/Measures/Overview/HB2213
- Oregon, SB900 (2015): https://olis.leg.state.or.us/liz/2015R1/Measures/Overview/SB900
- Oregon, Hospital Payment Reporting: https://www.oregon.gov/oha/HPA/ANALYTICS/Pages/Hospital-Reporting.aspx
- Massachusetts, CHIA: http://www.chiamass.gov/
- Massachusetts, CompareCare: https://masscomparecare.gov/
- Massachusetts, Procedure Pricing Data: http://www.chiamass.gov/transparency-initiatives/

Rate Setting

- Maryland, MCDB: http://mhcc.maryland.gov/mhcc/pages/apcd/apcd_mcdb/apcd_mcdb.aspx
- Maryland, MCDB Enhancement Grant: http://www.worcesterhealth.org/news/70-wchd-news-flash/837-mhcc-receives-29-million-grant-to-improve-insurance-rate-reviews
- Maryland, MCDB Tobacco Use Rating Study: http://www.insurance.maryland.gov/Consumer/Appeals%20and%20Grievances%20Reports/tobacco-use-rating-study-092014-hilltop.pdf
- Colorado, CIVHC: http://www.civhc.org/
- Colorado, DOI Rate Analysis: http://www.civhc.org/change-agent-gallery/division-of-insurance-rate-analysis/

Network Adequacy

- NH, CHIS: https://nhchis.com/
- NH, Network Adequacy: https://www.nh.gov/insurance/media/pr/2018/documents/06-15-18-network-adequacy-rule-adopted.pdf
- NH, Network Adequacy News: https://www.concordmonitor.com/health-insurance-nh-18208930

Opioids

- Utah, APCD: http://stats.health.utah.gov/about-the-data/apcd/
- Utah, Initial Diagnosis of Opioid Native Patients: https://ibis.health.utah.gov/pdf/opha/publication/hsu/2017/1709_Opioid.pdf#HSU

Endnotes

[1] State populations captured by APCDs vary widely, from less than a third to three-quarters, with most concentrated around the two-thirds level.

[2] States usually set minimum "threshold" levels of the number of lives insured before insurers are required to submit APCD files. The self-insured data gap is a significant drawback to using APCD files for research purposes, and potential solutions to this gap are discussed extensively in this paper.

[3] ResDAC reviews and grants access to protected CMS data (Medicare, Medicaid, SCHIP), and provides technical assistance to users as they work towards specific research goals. ResDAC is a cross-university collaboration funded by a CMS research contract.

[4] Several private commercial datasets, including FAIR Health and Truven's Marketscan, offer similar access to claims data repositories. However, while these private options are typically more refined than the data contained within state APCDs, they may lack key member and plan-level details (e.g., plan IDs, member characteristics, plan characteristics, cross-payer member IDs).

[5] Massachusetts did not have a full APCD operation until at least 2010; Tennessee's nascent APCD was defunded in 2017.

[6] "The Basics of All-Payer Claims Databases," Robert Wood Johnson Foundation. January 2014. Available here.

[7] As it does not require data submission from all significant payers, Virginia was categorized as an MPCD for our review. Manatt Health will continue to assess its classification in future years.

[8] California is counted here for its existing MPCD.

[9] "Assembly Bill No. 1810, Chapter 34," State of California Legislative Counsel Bureau. June 27, 2018. Available here.

[10] California currently maintains a multi-payer claims database.

[11] Excludes lives currently covered by multi-payer claims databases; based on available public information.

[12] Montana: House Bill 620, Introduced by A. Redfield in 2016 (Bill); Pennsylvania: Senate Bill 913, Introduced by K. Ward in 2017 (Bill); New Jersey: Senate Bill 978, Introduced by J. Vitale and T. Singleton in 2018 (Bill); New Mexico: Senate Bill 191, Introduced by G. Ortiz y Pino in 2018 (Bill).

[13] Two examples of how these current methods and expectations may fail in practice, resulting in unreliable data submissions:

- State A may require insurers to populate "employer size" as the number of employees; State B, the number of employees on the fully-insured contract; and State C, the number of individuals (employee and employee dependents') on the employer's contract. However, the insurer's programmer: (1) may not understand the nuance between the definitions for the field (one of at least one hundred on the Member Eligibility File); or (2) may understand

the nuance, but the insurer's administrative system may only have reliable data to populate the field by one of those variations. The result in either case would be the insurer populating three states' APCD fields by a single submission, with the states often unaware of the difference.

- State D may require that all insurer Membership Eligibility file records include assigned primary care physician (PCP). However, depending upon the member plan, not every insured member is required to have an assigned PCP (e.g., PPO, EPO plans). Without options or the time to clarify directions, the insurer may populate member records without a PCP with "dummy" values. Even for those members required to have a PCP, important information may be lost if, for example, the reporting does not distinguish whether the PCP was actively selected or passively assigned, a difference that may have significant implications for data use and research.

[14] "Gobeille v. Liberty Mutual Insurance Company," U.S. Supreme Court. 2015. Available here.

[15] "2017 Employer Health Benefits Survey," Kaiser Family Foundation. Sept. 2017. Available here.

[16] "2017 Price Transparency Report Care," Catalyst for Health Reform. 2017. Available here.

[17] Oregon Insurance Statute ORS 743B.281. Available here.

[18] "MA Health Insurers Have Improved Their Consumer Price Transparency Efforts, But Significant Work Remains," Pioneer Institute. April 2018. Available here.

[19] "Research finds: same Minnesota hospital, same surgery, big price differences," Minnesota Department of Health. August 9, 2018. Available here.

[20] Virginia. Available here. Colorado. Available here.

[21] "Network Adequacy," National Association of Insurance Commissioners. July 14, 2016. Available here.

[22] Colorado Division of Insurance Proposed Amended Regulation 3 CCR 702-4. Note that the rulemaking process on this regulation has been terminated as discussions continue.

[23] Note: Non-Medicaid hosted APCDs may still receive Medicaid federal matching funds.

[24] Manatt is in the process of verifying the extent to which the Kansas APCD is a fully-operational APCD and currently active.