Michigan Health Care Cost and Quality Advisory Committee Report

December 8, 2014

Table of Contents

Executive Summary

The Michigan Health Care Cost and Quality Advisory Committee (Advisory Committee) was created in response to the 2013 legislation that implemented the Healthy Michigan Plan.[1] The Advisory Committee was charged with issuing the report that follows this Executive Summary (Report), which includes a recommendation on the creation of a database on health care costs and quality in Michigan.

The Advisory Committee addressed all the statutory requirements set forth in MCL 400.105f in developing this Report. The Report includes discussions of the following topics: existing efforts across the United States and in Michigan to make health care cost and quality more transparent; standards governing the operation of existing cost and quality databases; the price and quality of health care services rendered in Michigan; privacy and transparency issues; and the methods for estimating, and impact of, uncompensated care on commercial insurance rates.

Regarding uncompensated care, the Advisory Committee finds that Michigan hospitals provided a total of $1.2 billion in uncompensated care in Fiscal Year 2013, representing 5.1% of total hospital costs in Michigan during this period. The Advisory Committee also concludes that at least a portion of hospitals' uncompensated care costs are shifted to insurers; and that if expanding healthcare coverage under the Healthy Michigan Act reduces hospitals' uncompensated care costs and this reduction in costs is reflected in hospitals' charge master rates, absent other influences, a resulting reduction to commercial insurance rates would be expected.

In its recommendation, the Advisory Committee concludes that the implementation of a large-scale claims database is a significant undertaking that will require a multi-stage approach. The Advisory Committee also concludes that additional consideration of several policy and legislative factors must be considered prior to drafting legislation that would provide for a large-scale claims database. The Advisory Committee recommends that the Legislature pursue a staged approach for establishment of a database that can do the following: 1) perform analytics during rate review; 2) measure health outcomes and utilization; 3) evaluate health care reform initiatives and new payment models; and 4) enable cost and quality transparency.

The Report was approved by a unanimous vote of the Advisory Committee members present at the December 8, 2014, meeting.

---

[1] On December 30, 2013, Michigan obtained approval from the Centers for Medicare and Medicaid Services for the Healthy Michigan Plan, which was created to implement the Affordable Care Act's Medicaid expansion.

I. Introduction

In 2013, Michigan passed legislation implementing the Healthy Michigan Plan. The legislation required the directors of the Departments of Community Health (DCH) and of Insurance and Financial Services (DIFS) to establish a Michigan Health Care Cost and Quality Advisory Committee (the Advisory Committee) consisting of eight or more members. Members would include the two directors (or their designees), one staff member from each department, and the chairs and minority vice chairs of the House and Senate Health Policy Committees (or their designees). See MCL 400.105f.

The Advisory Committee[2] met on eight dates in 2014: April 30, May 7, July 7, July 15, August 12, August 26, September 23, and December 8. The Advisory Committee was charged with issuing this Report, which was required to include recommendations on the creation of a database on health care costs and health care quality in the state, and will be transmitted to the Legislature and made available on the DCH and DIFS websites.

Per the statute, this Report includes the following information and analyses: a review of existing efforts across the United States to make health care cost and quality more transparent; a review of proposed legislation in Michigan to make health care costs and quality more transparent; a review of any existing standards governing the operation of similar databases; a consideration of both price and quality of health care services rendered in the state; transparency and privacy issues; the possible impact of uncompensated care on commercial insurance rates; and other methods to accurately estimate the uncompensated care impact on commercial insurance rates.[3]

II. Existing Efforts in the United States to Make Health Care Cost and Quality Information More Transparent

Health care costs continue to rise in the United States, and health care purchasers—consumers, employers, states and the federal government—want to better understand what is driving this trend. With the significant changes to the health care system catalyzed by the Affordable Care Act (ACA), concerns about cost and quality have amplified for many in the health care industry, as payers and providers strive to bend the cost curve in an ever-changing environment. As the baby boomers continue to age and utilize more health care services and millions of Americans

---

[2] The Advisory Committee was comprised of the following eight (8) members: Senator Rebekah Warren; Senator Jim Marleau; Representative Gail Haines; Representative George Darany; Annette Flood, Director of DIFS; Teri Morante, Chief Deputy Director of DIFS; James Haveman, Director of DCH (replaced by Nick Lyon, successor Director of DCH), Nick Lyon, Chief Deputy Director of DCH (replaced by Tim Becker, Acting Chief Deputy of DCH).

[3] This Report was prepared by the Advisory Committee in collaboration with DIFS' contracted consultants, Navigant Healthcare and the University of Michigan Institute for Healthcare Policy & Innovation.

attain new health insurance coverage through the Marketplaces and Medicaid, efforts around cost and quality transparency will play an increasingly larger role in providing the information necessary to understand the underlying value of health care services.

Overview of Cost Data. In its most basic sense, health care cost transparency allows consumers to see information about the prices paid for medical services by insurance carriers, governments (e.g., through Medicare) and individual patients. Payers typically negotiate different payment rates to different providers for the same service, and providers may negotiate different rates with each payer for the same service. Furthermore, the federal government reimburses providers yet a different rate for Medicare beneficiaries (typically lower than what commercial insurance pays) and states reimburse still-lower rates for Medicaid beneficiaries. It is this complicated relationship of rates that vary by payer and by provider that make health care cost transparency so challenging to attain.

Cost variation within and across markets can be significant. For example, a 2011 study in Massachusetts found that variation in prices paid across the Commonwealth for the same health care service ranged from three-fold to seven-fold, depending on the service.[4] Variation is due to multiple factors largely related to each provider's average patient acuity and market share in the local area. Each payer's market share can also greatly affect paid amounts, as it directly influences their negotiation leverage with providers.

Overview of Quality Data. Knowing about the quality of the services a health care provider delivers is equally important to purchasers and consumers, and in many ways, equally—if not more—difficult to assess than costs. The Institute of Medicine defines health care quality as "the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." There are hundreds of health care quality measures currently in use and multiple sources and types (structured and unstructured) of data from which to calculate the measures. Providers and payers are constantly seeking new ways to assess the quality of individual clinicians and care delivery systems in an ever-changing environment of new technology, medical discoveries and evidence-based practice guidelines.

Quality measures can be derived from several data sources, including administrative claims, chart reviews, electronic medical records and patient surveys. Quality measures derived from administrative claims data include, for example, adherence to clinical guidelines (e.g., percent of patients with acute myocardial infarction who received a beta-blocker), hospital readmission rates, preventive health screening rates and many others. Researchers can also derive quality

---

[4] Massachusetts Division of Health Care Finance and Policy, "Massachusetts Health Care Cost Trends: Price Variation in Health Care Services" (June 3, 2011).

measures by reviewing medical records and other clinical data sources, for example, catheter-associated infection rates or ventilator-acquired pneumonia rates, which are based on lab results and provider self-report. States can choose to require all health plans or hospitals to report the same measures to improve the ability to make "apples to apples" comparisons. States can also choose to require providers or payers to submit data to a central repository and to report on a standard set of defined quality measures. Conversely, states that simply use their data centers to make data extracts available for research use relinquish the ability to influence which quality measures to use and how to report the results.

The federal government, through agencies such as CMS, the Agency for Healthcare Research and Quality (AHRQ) and the Centers for Disease Control and Prevention, plays a large role in establishing standard quality metrics, as well as national non-profit organizations such as the National Committee for Quality Assurance (NCQA), the National Quality Forum (NQF) and The Joint Commission. For example, AHRQ maintains the National Quality Measures Clearinghouse and also oversees a set of surveys, the Consumer Assessment of Healthcare Providers and Systems (CAHPS) and Hospital-CAHPS (HCAHPS), as a means to create national standards for collecting and publicly reporting information about patient experience and satisfaction. NCQA coordinates the Healthcare Effectiveness Data and Information Set (HEDIS)—a set of 81 performance measures that are used by most health plans in the United States to measure provider performance and quality. CMS and The Joint Commission have worked together to develop a common set of measure specifications known as the *Specifications Manual for National Hospital Inpatient Quality Measures* to be used by both organizations.[5] While much progress has been made for some measures, ongoing revisions will be necessary as changes are made to coding systems (e.g., ICD-9/ICD-10), as guidelines related to evidence-based medicine continue to evolve, and as data systems increase in complexity.

Cost and Quality Transparency Efforts across the Nation. Many cost and quality transparency initiatives throughout the nation are led by providers, payers and the federal government. In April 2014, the Centers for Medicare and Medicaid Services (CMS) released millions of records of Medicare payments made to physicians throughout the United States for the first time. The data traces the $77 billion that Medicare paid to physicians, drug companies and other medical practitioners under Part B in 2012. The database, called *Medicare Provider Utilization and Payment Data,* does not contain raw claims data, but rather aggregates payment and charge information by physician, specialty, location and service type. With data covering approximately 888,000 practitioners and 6,000 procedures, the data release was a significant step by the federal government towards greater transparency of heath care costs.[6]

---

[5] The Specifications Manual contains a common data dictionary, measure information forms, algorithms, etc.
[6] The American Medical Association and the American College of Physicians have criticized the data release, concerned that it contains many inaccuracies, is incomplete, and physicians were not given a chance to correct or

States too can play a role in promoting transparency by enacting laws requiring that providers and payers collect and report data on health care costs and quality measures. The National Conference of State Legislatures provides a summary of enacted laws in 27 states regarding transparency and disclosure of health care costs on its website.[7] Another report by two consumer advocacy organizations, Catalyst for Payment Reform and the Health Care Incentives Improvement Institute, examined health care price transparency laws in all 50 states and graded them on how well they support the information needs of consumers.[8] The report gave 45 states a failing grade on the price transparency "report card." Despite the poor scores, the report indicates that states are making progress, particularly in proposing and enacting new laws and regulations. We provide examples of various cost and quality transparency initiatives across the nation below:

Table 1 Examples of Health Care Cost and Quality Transparency Initiatives in Six States

State	Transparency Initiative
Colorado	Colorado's All Payer Claims Database (APCD) supports a consumer-facing website called "CO Medical Price Compare" that enables consumers to shop for high-value health care. The interactive website currently displays estimated prices for four inpatient medical events (uncomplicated vaginal births, cesarean births, knee joint replacement and hip joint replacement) by facility, with plans to add more than 30 additional services, including outpatient and diagnostic tests, by the end of 2015.[9] Median prices paid to hospitals across all commercial carriers and Medicaid are available for each medical event, inclusive of facility, physician and ancillary costs. Consumers may also view their estimated out-of-pocket costs based on their insurance plan's deductible and coinsurance percentage. Consumers using the CO Medical Price Compare website may also view a number of quality metrics for certain provider facilities. This quality data is drawn directly from separate data sources, the "Colorado Hospital Report Card" and HCAHPS statistics from CMS's Hospital Compare website.
Maine	The Maine Health Data Organization (MHDO), supports one of the most robust cost transparency tools in the nation. The interactive website allows consumers to view cost information by procedure at the facility-level according to their own health plan. MHDO also provides a portal to a separate website that provides data on hospital quality and utilization, avoidable stays and county rates of hospital use. This data is not collected by MHDO; instead, it is drawn from other sources such as CMS Hospital Compare, AHRQ Quality indicators and HCAHPS survey data.

---

explain their data in advance. Modern Healthcare, "AMA Protests Medicare Data Release" (May 15, 2014) and ACP Internist, "Release of Medicare Pay Data Raises Questions" (October 2014).

[7] See http://www.ncsl.org/research/health/transparency-and-disclosure-health-costs.aspx

[8] Catalyst for Payment Reform and the Health Care Incentives Institute, "Report Card on State Price Transparency Laws" (March 25, 2014).

[9] See http://civhc.org/News-Events/News/Consumers-Able-to-Shop-for-Health-Care-in-Colorado.aspx/

State	Transparency Initiative
Minnesota	Minnesota Community Measurement, a non-profit organization, hosts an interactive website called "MN Health Scores" that provides cost and quality information for the majority of Minnesota clinics.[10] The website displays quality information and prices for 88 common procedures performed in physician offices and paid for by four major health insurance plans in the State: Blue Cross and Blue Shield of Minnesota, HealthPartners, Medica and Preferred One. The Health Scores site includes a link to these websites where individuals can access cost calculators and other tools on cost that health plans provide. The charts are based on amounts paid in 2011-2012 and do not include information from Medicare or Medicaid. The four participating insurance carriers provide data voluntarily, as the website is not required by law. Minnesota state law does, however, mandate a hospital price website that contains charge information for hospitals (average charge, average charge per day and median charge).[11] As a result, the Minnesota Hospital Association maintains the Minnesota Hospital Price Check website where consumers can review and compare charge information for local hospitals.[12]
North Carolina	North Carolina passed the *Health Care Cost Reduction and Transparency Act of 2013* mandating that hospitals and ambulatory surgical centers share cost information based on paid amounts for the 100 most common inpatient services, 20 most common surgical procedures and 20 most common imaging procedures. Providers must report the range and average amount paid by the five largest health insurers in their markets, Medicaid and Medicare reimbursements, the amount charged to uninsured patients and the average negotiated settlement amount for uninsured patients. Initial data submissions began November 2014 and results will be posted on a public website maintained by North Carolina's Department of Health and Human Services beginning January 2015.[13]
Oregon	The Oregon Health Care Quality Corporation (Q-Corp) is non-profit organization dedicated to improving the quality and affordability of health care in Oregon. Q-Corp administers an administrative claims database (separate from Oregon's APCD) and reports on more than 30 quality improvement and utilization measures.[14] Q-Corp manages a website called "Partner for Quality Care" that allows consumers to compare provider quality scores across Oregon by region or provider. The quality metrics are generated through an analysis of Q-Corp's claims database, hospital patient records CMS hospital quality information.[15] As a part of a Robert Wood Johnson Foundation grant, Q Corp and four other regional health improvement collaboratives began reporting two cost of care measures to clinics and hospitals in

---

[10] MN Health Scores is available online at www.mnhealthscores.org

[11] The Hospital Pricing Transparency Act, 62J.823

[12] Minnesota Hospital Price Check is available online at http://www.mnhospitalpricecheck.org/

[13] For more information, see http://www.ncdhhs.gov/dhsr/ahc/hb834/index.html

[14] Q-Corp's claims database includes 80 percent of the state's fully insured commercial population, 100 percent of the Medicaid population and 92 percent of the Medicare population.

[15] For more information, see http://www.partnerforqualitycare.org/scoring/about

State	Transparency Initiative
	2014 and will begin reporting to the public in 2015: the Total Cost of Care Index and the Resource Use Index.[16]
Wisconsin	The Wisconsin Collaborative for Healthcare Quality (WCHQ) is a voluntary consortium of organizations working together to publicly report a broad range of performance measures that evaluate ambulatory and hospital care through its "Performance & Progress Report" online interface. Measures capture all patients by uniting claims, clinical and patient data, enabling WCHQ to track each provider's entire practice. Providers voluntarily submit data. In addition, WCHQ helps support "Wisconsin Health Reports," a website established to help consumers understand what kind of care they should expect to receive from doctors and hospitals. The site includes interactive storyboards for common conditions such as diabetes and high blood pressure, and compares standards of care across providers.

Current Public-Facing Cost and Quality Transparency Initiatives in Michigan

Two non-profit organizations in Michigan have made strides toward increasing the availability of public information about the quality of hospitals and physicians in Michigan: the Michigan Health & Hospital Association (MHA) and the Greater Detroit Area Health Council (GDAHC). MHA maintains an interactive website called "Comparing Hospitals" that allows consumers to view cost information and quality ratings for hospitals throughout the State.[17] MHA reports average Medicare charges and payments, average length of stay and total number of patients for the top 50 Medicare inpatient and outpatient procedures. The website also displays quality data on surgical infections and the most common causes of hospitalization among Medicare patients based on Medicare data drawn from CMS's Hospital Compare website. While the information on this website is somewhat limited because it is based on Medicare patients only, it provides helpful indicators of cost and quality because Medicare patients represent a large proportion of hospital patients overall.

GDAHC, a multi-stakeholder regional coalition that is comprised of hospitals, physicians, health plans, large businesses and consumers across southeastern Michigan, maintains a public-facing website called "myCareCompare."[18] The website provides quality information based on

---

[16] The Total Cost of Care Index and Resource Use Index were developed by Health Partners® Measures can be compared across regions in Oregon. Oregon's APCD is not used for public reporting of cost information. Only employees of the Office for Health Policy and Research (OHPR), applicable contractors, and other entities inside the Oregon Health Authority are able to access APAC data.

[17] MHA's Comparing Hospitals website is available at: http://www.mhakeystonecenter.org/compare.htm

[18] MyCareCompare is available online at http://mycarecompare.org/

claims data from three health plans: Blue Care Network, Blue Cross Blue Shield of Michigan (BCBSM) and Health Alliance Plan on more than 4,000 physicians in the greater Detroit area. These three carriers submit data voluntarily to support GDAHC's analysis of the quality of care provided in primary care settings. For example, consumers can view quality metrics by physician group practice such as "appropriate use of antibiotics for adults with bronchitis." The myCareCompare website also displays hospital performance reports based upon publicly available quality data from CMS's Hospital Compare website. For example, consumers can view quality metrics for individual providers such as "the average number of minutes before patients with chest pain or possible heart attack got an ECG." GDAHC also plans to begin reporting patient experience information in 2015 and physician-level performance information in 2016 (GDAHC is currently applying to become a Medicare-recognized "Qualified Entity" (QE)).[19] GDAHC is a leader in the Network for Regional Health Improvement (NRHI), a national organization that brings together non-profit multi-stakeholder organizations seeking to promote public reporting and payment reform.

III. Review of Proposed Health Care Transparency Legislation in Michigan

In recent years, a number of initiatives with a focus on achieving increased health care transparency have been introduced to the Michigan Legislature. Most notably, in early 2013, the *Michigan Healthcare Transparency Act* was introduced in the Michigan Senate (*SB 333*), and in late 2013, Governor Snyder signed into law legislation implementing the "Healthy Michigan Plan" which includes efforts to promote quality and transparency of health care information in Michigan.

On October 17, 2014, Senator Hune introduced *Senate Bill No. 627*, which would require hospitals to make charge description masters ("charge masters") available to the public, either on the hospital's website or at the hospital. A charge master is defined in the bill as "a uniform schedule of charges represented by the hospital as its gross billed charge for a given service or item, regardless of payer type." Charge masters often serve as a starting point for negotiations between hospitals and health insurance carriers to determine final payment amounts. *SB 627* also authorizes the Michigan Department of Licensing and Regulatory Affairs to impose an administrative fine of up to $1,000 per day for a violation of this requirement. The bill was referred to the Committee of the Whole on November 6.

On April 30, 2013, Senators Marleau, Kahn, Moolenaar, Jansen, Green, Schuitmaker, Emmons, Pappageorge, Hune and Jones co-sponsored *Senate Bill No. 333*, known as the *Michigan Healthcare Transparency Act*, which sought to bring transparency to Michigan's health care

---

[19] This information was provided to DIFS via GDAHC's response to the APCD stakeholder survey.

market by creating a public price and quality transparency database.[20] The public database would be a tool to help consumers and employers make more informed health care choices, and would indicate which providers achieve good value for outcomes. *SB 333* was referred to the Senate Committee on Health Policy but was never voted on by the legislature.[21]

Additionally, the Healthy Michigan Plan has the potential to enroll up to 475,000 low-income people into the Medicaid program. The plan will cover adults making up to 133 percent of the poverty level. In addition, the Healthy Michigan Plan contains several provisions related to price transparency—the creation of the Health Care Cost and Quality Advisory Committee to promote quality and transparency of information, the undertaking of several studies over the coming years to determine how well the Healthy Michigan Plan is controlling costs and improving quality, and a requirement for DIFS to examine financial reports of health insurance companies to determine the impact of reductions in uncompensated care on insurance rates.[22]

IV. Overview of Payer Claims Databases

Payer Claims Databases (PCDs) are large-scale databases that collect medical claims, pharmacy claims and eligibility files from health care payers such as health insurance carriers, self-funded employers, third party administrators (TPAs), pharmacy benefit managers (PBMs) and the federal government (Medicare and Medicaid).[23] PCDs merge and standardize the claims from multiple payers to provide a comprehensive view of the provision of health care services across payers and providers throughout the state. The large volume of claims data contained in PCDs makes them powerful analytic tools that allow the public, policymakers and researchers to study outcomes and effectiveness of the patient's health care consumption, health outcomes, health care costs, utilization trends and more.

Because of their ability to provide the full picture of a patient's health care consumption over time, PCDs can also serve as the data engine behind a wide range of health care cost and quality information. For example, PCDs can be used to understand the prevalence of diseases, utilization of health care services and medications, and the overall costs of treating health conditions across the state. Such analyses can be conducted at a provider-level or by

---

[20] Senator Marleau introduced a similar bill (*SB 1237*) a year earlier (in 2012), to create a government "medical care database" to compile statewide data from health insurance companies and HMOs on the cost of health care services provided in the state. The responsibility for maintaining the database was proposed to fall under the authority of the Michigan Certificate of Need (CON) Commission. CON is a state regulatory program intended to balance the cost, quality and access of Michigan's health care system. *SB 1237* was referred to the Committee on Health Policy on August 15, 2012.

[21] *Senate Bill 333* (2013). Introduced by Senator Marleau and referred to the Committee on Health Policy on April 30, 2013.

[22] Healthy Michigan Plan, Section 400.105f of the Social Welfare Act 280 of 1939.

[23] For the purposes of this report, we include Administrative Services Organizations when we refer to TPAs.

geographic region to understand variation in treatment costs across the state, or by demographic characteristic to understand health treatment and outcomes disparities across populations. PCDs can be used to evaluate health care reform initiatives, such as patient-centered medical homes, and other care coordination programs, as well as to support payment reform initiatives such as Accountable Care Organizations (ACOs) and other value-based purchasing programs.

PCDs are also a key component of several states' efforts to increase the transparency of health care cost and quality information.[24]   Payer claims data contain a key element of cost transparency—the amount paid for a service by health plans and patients.[25] When reaching for true cost transparency, knowing the amounts paid by the insurance plan and the patient is critical to paint a clear picture of health care costs. PCDs can be used to fill this gap because payer claims contain this payment information for each health care service or product.[26]

As of November 2014, 14 states have an operational All- or Multi-Payer Claims Database (APCD or MPCD) and 7 states are in the developmental stage (Figure 1).[27] Of the states with operational PCDs, 11 have passed legislation mandating payers to submit data to the database. Three states—California, Washington and Wisconsin—currently have voluntary PCDs that are administered by independent non-profit organizations. Five of the seven states that are in the developmental stages have passed enabling legislation for the creation of their databases. Beyond those states that have operational or in-development databases, several other states have shown interest in pursuing a PCD initiative.[28]

---

[24] Cost transparency can also be referred to as "price transparency." We use the term "cost" generally to refer to the amount paid for a health care service by both a health plan (or public insurance source like Medicare or Medicaid) and the patient.

[25] Paid amounts are also called "allowed" amounts.

[26] Allowed amounts are the negotiated amounts typically considered payment-in-full by an insurance carrier and a provider. The allowed amount is typically a discounted rate that is lower than the amount charged by the providers. Allowed amounts are sometimes called allowable charges, eligible expenses, payment allowances or negotiated rates.

[27] Virginia and Rhode Island's PCDs are nearly operational; they both began collecting claims from payers in 2014 and expect to begin reporting in 2015. The APCD Council lists Rhode Island as an operational APCD, but we consider their database to be in-development because it is still in the initial stages of data collection and processing.

[28] According to the APCD Council, 19 states have a "strong interest" in pursuing an APCD.

Figure 1 States with Operational and In-Development Payer Claims Databases
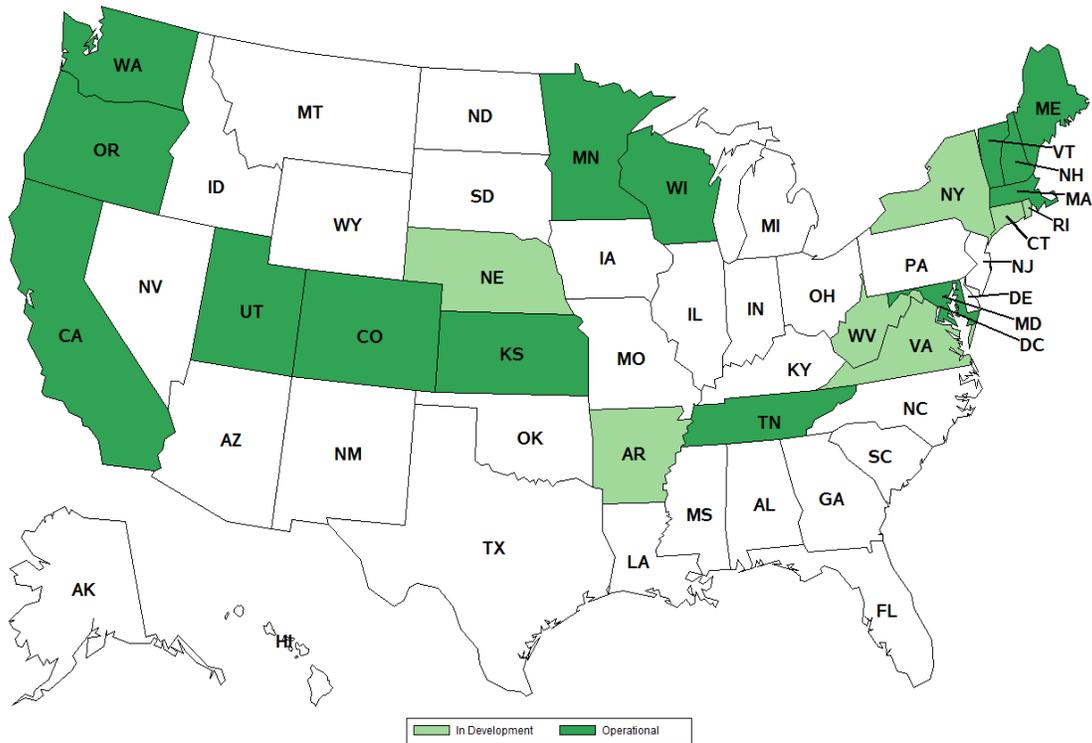
Navigant Consulting (Navigant) conducted in-depth interviews in March 2014 with representatives from six states with operational PCDs: Colorado, Kansas, Maryland, Massachusetts, Minnesota and Utah. These interviews provided extensive information regarding how the six states administer, finance and use their databases. Appendix A contains additional information about these six states' databases, and Appendix B contains information about the other eight states with operational databases and seven states with in-development databases.

PCD Governance, Funding, Data Sources, Data Types and Uses

There are several key characteristics related to how states structure, operate and use their PCDs. Governance structures and administrative authority vested to PCDs vary widely, while submitting entities and the data they submit tend to be more consistent across states. Privacy and data transparency remain the most sensitive features of the PCDs, and evolve based on each state's political and stakeholder environment, ultimately guiding the collection, uses and release practices of the data. Typically outlined in legislation and described further in

regulations, these factors are critical to understanding the broader requirements and implications of PCD development. We describe the following key PCD characteristics below: governance, funding, data sources and types, and uses of data.

Governance. States have taken a variety of approaches to governing and administering PCDs. The administrative entity, usually designated in legislation, is responsible for overseeing the development and day-to-day operations, as well as setting the directional goals of the PCD. Five of the six PCDs studied for this report are governed and administered by a state agency or a combination of multiple state agencies such as the Department of Insurance or Department of Health. Colorado is the only state of the six that designated a non-state entity as the PCD administrator—the Center for Improving Value in Health Care (CIVHC). We summarize the governance approaches used by the 14 operational PCDs in the country in Table 2 below.

Table 2 Description of PCD Governance by State

Governance Approach	States
State Agency: Legislation grants authority to a single state agency to collect and manage data, either internally or through contracted external vendors.	Maine, Maryland, Massachusetts, Minnesota, Oregon, Tennessee, Utah
Shared State Agency: Multiple State agencies share in the governance and management of the data collection, reporting and release.	Kansas, New Hampshire
Public-Private Partnership: The State typically designates a non-profit organization to administer the PCD.	Colorado, Vermont*
Private Entity Administration: Data are collected voluntarily by non-profit entities without authority to impose penalties for non-compliance.	California, Washington, Wisconsin

* Vermont's PCD administrator was transferred to a quasi-governmental entity called the Green Mountain Care Board (GMCB) in 2013.

Funding. Alongside variation in administration models, strategies as to how PCDs are funded vary across states. While most state-administered PCDs are funded primarily through State budget appropriations, some, like Maine's and Vermont's, offset their costs by charging assessment fees to payers or charging researchers for access to datasets. Of the six states interviewed, five fund their PCDs through budgetary appropriations, while Colorado's is funded almost entirely through private grants and trusts. Some states also incorporate federal grants such as State Innovation Model (SIM) grants and Rate Review grants from CMS to

develop or enhance certain database capabilities.[29] For example, Massachusetts explained they intend to use SIM grant funding to develop an provider portal, through which providers can track utilization and patient health outcomes. Of the six PCDs analyzed in this report, only Massachusetts and Colorado currently sell data extracts for outside analysis as a revenue source, although officials from Utah said they plan to begin doing so in the coming years. Officials from two states—Kansas and Utah—indicated that they draw down Medicaid matching funds for some of the database costs because they are used to conduct analytics for the states' Medicaid programs. Such analyses are eligible for reimbursement from the federal government and the state considers the federal match as a funding source for the PCD.[30]

Research of states with existing PCDs demonstrated a wide variance in annual operating costs, depending largely on the database's analytic and reporting capabilities. For instance, the Colorado APCD's annual budget was reported at $2.4 million for 3.2 million covered lives and approximately 146 million claims. Utah's APCD reported an annual budget of approximately $585,000 for 1.5 million covered lives and 84 million medical claims, although this figure does not include staffing costs, as salaries are paid separately under the administering state agency's budget. Kansas's and Maryland's annual budgets for their databases were both estimated to be approximately $1 million.

Data Sources. Nearly all 14 operational PCDs collect Medicaid claims data, while fewer collect Medicare claims. Most PCDs include fee-for service (FFS) claims from the State's Medicaid agency and, if the State contracts with Medicaid managed care organizations, may also collect encounter data from those plans. PCDs may also collect data from Medicare Advantage plans sold in the state, and some states also include Medicare Parts A,

_____
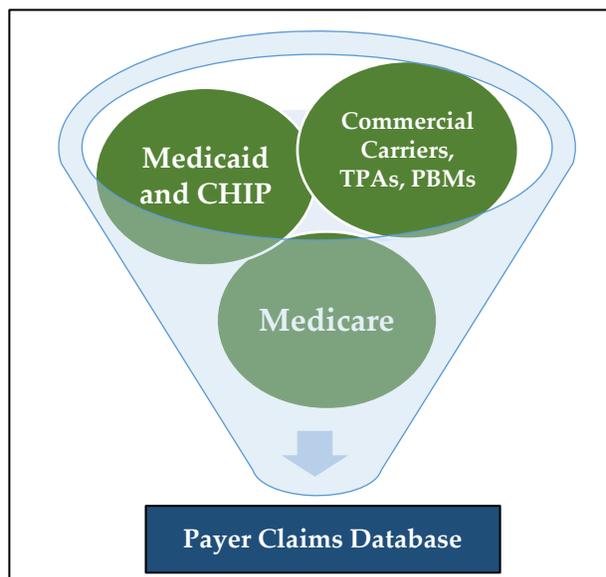
[29] The Health Insurance Rate Review Program was designed to assist states in improving and enhancing their health insurance rate review and reporting processes. CMS issued grants to states under the funding opportunity titled "Support Health Insurance Rate Review and Increase Transparency in Health Care Pricing" to assist states in meeting the ACA requirements for an "Effective Rate Review Program" as set forth in the ACA. The funding opportunity was available to states in four installments: Cycle I in August 2010, Cycle II in September 2011, Cycle III in September 2013 and Cycle IV in September 2014. Each funding opportunity application had specific requirements for states to be eligible for grant awards and criteria related to how the funds may be utilized. Michigan has received a total of $9.5 million across all four grant cycles.

[30] Medicaid claiming for certain administrative activities, such as data analysis, is eligible for reimbursement at the federal financial participation (FFP) rate of 50 percent. The claim must be submitted to CMS by the state's Medicaid agency.

B and D claims from CMS.[31] Most states exempt payers from submitting data for Medicare Supplemental plans. In order to expand data reporting efforts, representatives from some PCDs are applying to become Medicare QEs. By receiving QE certification, an organization is able to publically report analyses derived from the Medicare claims to evaluate the performance of individual providers. Three of the six selected states—Colorado, Maryland and Minnesota—are in the process of applying for QE certification from CMS.

States that choose to mandate the creation of a PCD must establish data submission requirements through legislation or in regulations. In these states, regulations typically mandate all commercial carriers that exceed a designated minimum threshold of annual revenues or number of covered lives to submit claims on a prescribed interval (e.g., monthly, quarterly). States must also choose whether to collect data on self-insured plans. Currently, 11 of the 15 states that have passed PCD legislation require carriers and TPAs to submit claims for self-insured plans. States that elect to collect claims data from self-insured plans must consider the legal implications related to these plans' exemption from the Employee Retirement Income Security Act (ERISA). Two states (Maine and Vermont) have faced litigation related to their collection of self-insured claims, but in both cases, the Court determined the inclusion of self-insured plans is not subject to ERISA preemption, thus upholding the states' authorities to collect such data.[32]

Types of Data. Database administrators must determine which data elements to collect from payers. States with operational PCDs typically collect data from payers' claims files (medical, pharmacy and, in some cases, dental), provider files and eligibility files. Within those files, administrators specify the exact data elements payers must submit. Figure 2 below illustrates data elements commonly collected by PCDs.

---

[31] States wishing to include Medicare claims in an APCDs must request and purchase data from CMS for Medicare beneficiaries in the state. CMS has established a Medicare Claim request process through its contractor, the Research Data Assistance Center (ResDAC). States are provided discount pricing as well as the option of data sharing within state agencies. Medicare data provided to states contains beneficiary-level PII and the ability to link to non-CMS data using a beneficiary identifier.

[32] Several of ERISA's provisions preempt state insurance laws and regulations. ERISA's "preemption clause," Section 514, makes void all state laws to the extent that they "relate to" self-insured employer-sponsored health plans.

Figure 2 Examples of Commonly Used Data Files and Elements in a PCD
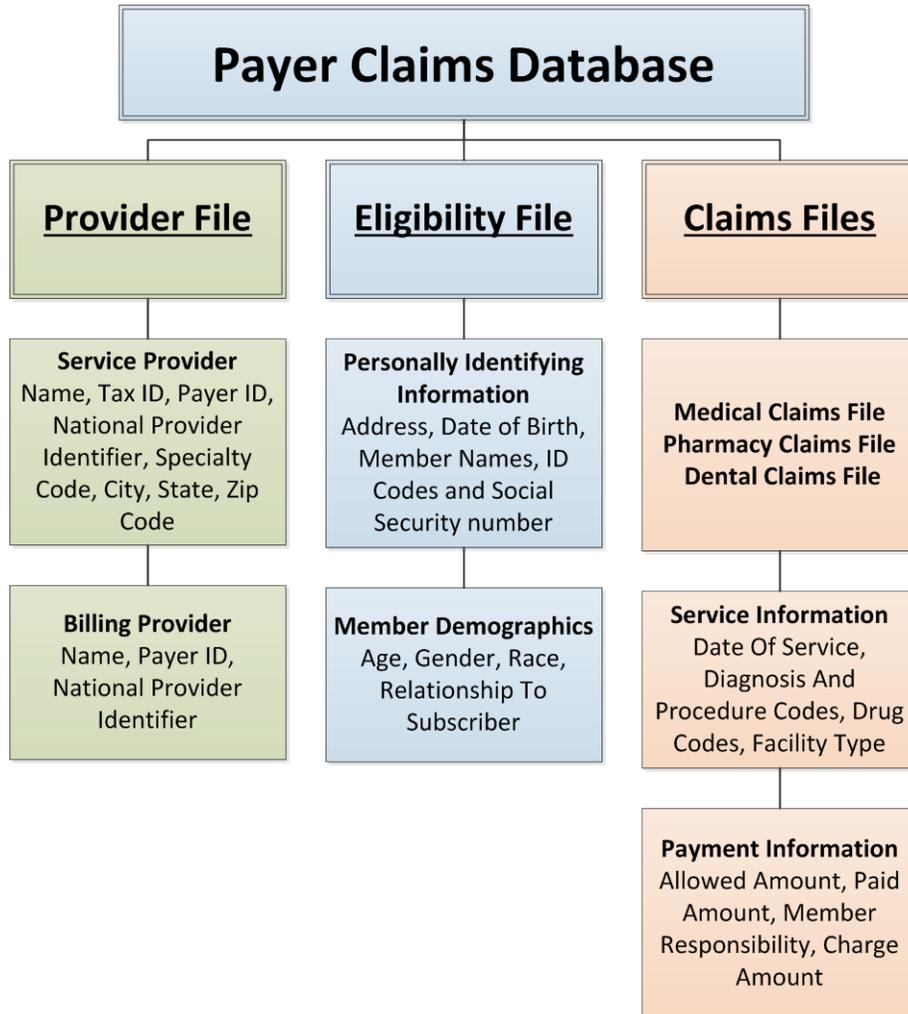
Some states also choose to collect product files in order to collect information about the plan type and other benefit design elements of enrolled members. Information from product files is particularly valuable for states that wish to use the PCD to support rate review activities and study general trends in the state's insurance market. Access to such data would allow for analysis of trends in spending and utilization by people enrolled in different types of insurance products—for example, to compare utilization by people enrolled in Preferred Provider Organization (PPO) plans versus a Health Savings Account (HSA) plan, or to compare premiums and out-of-pocket costs for people in plans with varying benefit designs.

Data elements that are *not* typically included in a PCD include but are not limited to: denied claims, claims for services provided to the uninsured, test and lab results, chart notes (e.g., patient history, patient conversation), insurance premium information, and capitation rates for managed care plans.

Uses of Data. States use PCDs to examine trends in their health care markets, study population health and inform policy decisions. Payer claims data are useful to analyze health care prices (versus provider charges), regional and statewide expenditure and utilization trends, capacity and distribution of health care resources across the State and disparities in health care delivery and outcomes. A few states are also beginning to use or considering how to use their PCDs to measure the cost-effectiveness of public health and other health reform programs, such as health homes and ACOs.

Most PCDs allow researchers and insurance carriers to request access to public or restricted datasets, although permission to access data containing PII usually requires approval by a data review committee or other governing body. Currently, no PCDs link or exchange data with electronic medical records from a Health Information Exchange (HIE), although some may use hospital claims data or other clinical data sets to enhance the capability to report on quality and outcomes measures for populations or groups of people. Some states also plan to use their PCDs to enhance the rate review processes undertaken by insurance regulators.

Review of Privacy and Transparency Issues and Existing Standards Governing the Operation of Similar Databases

Data Privacy and Security. States vary as to how they collect, encrypt, store and release claims data to safeguard the privacy of individuals. All databases containing claims data must comply with the Health Insurance Portability and Accountability Act's (HIPAA) Privacy Rule when releasing data to avoid indirect or direct patient identification.[33] The key privacy and security factors are discussed below.

> *Personally Identifying Information (PII) protection*. States vary on whether they require payers to submit encrypted member ID information or whether they collect members' Social Security numbers. Encryption is the mechanism that prevents any person or entity from directly identifying any individuals in the data. Some PCDs, such as those in Maine, Tennessee and New Hampshire, require payers to encrypt all or certain patient identifiers

---

[33] 45 CFR Parts 160, 162, and 164

prior to submission.[34] Others require payers to submit such PII variables, but commit to de-identifying or encrypting all PII before any data are released for outside analysis (e.g., Ohio and Massachusetts).

Data release protocols. PCDs that allow for the release of data to outside entities generally stipulate in legislation or implementing regulations the process for making and approving data requests. Some PCDs make public use files widely available and offer restricted files only to pre-approved individuals. An entity requesting data may be another state agency, academic or other non-profit researchers or insurance carriers that wish to analyze their own data. Many states—for example, Colorado, New Hampshire, Utah and Vermont—require approval by a review committee before restricted datasets are released.

Vendor Involvement. Data vendors have varying responsibilities regarding the privacy and security of PCD data. Of the six states studied for this report, all but Massachusetts outsourced a significant portion of data management activities to third-party vendors. Common PCD vendor responsibilities include data intake from submitting entities, data validation, and encryption of PII and data extraction services.

Relevant Federal Laws and Guidance. There are no federal laws that explicitly govern or regulate PCDs, but certain aspects of HIPAA and guidance issued by the Federal Trade Commission and Department of Justice apply to the data collected, stored and released by PCDs. We describe these federal requirements below.

Health Insurance Portability and Accountability Act (HIPAA). To improve the health care system and better protect all stakeholders, the Office for Civil Rights within HHS enforces HIPAA and the law's four distinct rules. To improve the efficiency and effectiveness of the health care system, HIPAA included the security rule that required HHS to adopt national standards for electronic health care transactions and code sets, unique health identifiers and security. Congress incorporated into HIPAA provisions that mandated the adoption of federal privacy protections, or the "Privacy Rule," in recognition that advances in technology could threaten the privacy of health information. The Privacy Rule establishes national standards for the protection of PII for three types of covered entities: health plans, health care clearinghouses and health care providers who conduct the standard health care transactions electronically. Despite thorough protections, the Privacy Rule is balanced to permit the disclosure of health information needed for patient care and other important purposes. Because PCDs often include some degree of PII data, HIPAA plays a very strong role in the creation and evolution of database regulations.

---

[34] Direct identifiers, such as name, SSN and date of birth may be encrypted (or hashed) by submitting entities by using an algorithm (usually SHA 512) prior to transmission of data.

In addition to the HIPAA security and privacy rules, HIPAA includes a breach notification rule and a patient safety rule. The breach notification rule requires covered entities and business associates to provide notification following a breach of unsecured protected health information, while the confidentiality provisions of the patient safety rule protect PII being used to analyze patient safety events and improve patient safety.

Statement of Antitrust Enforcement Policy in Health Care. A top concern of many stakeholders in Michigan regards the exchange of proprietary information in the form of competitive information about negotiated prices. Any exchange of data that includes current pricing information has the ability to raise antitrust concerns if the data artificially creates more uniform market prices than before. In 1996, the U.S. Department of Justice and the Federal Trade Commission issued a joint statement, a "Statement of Antitrust Enforcement Policy in Health Care," laying out guidelines on such activities in the health care arena.

The statement establishes a number of recommendations for organizations involved in the exchange, storage and dissemination of health care pricing and sales data. Among these recommendations are the "safety zone" guidelines for data exchange, intended to ensure that any exchange of price or cost data is not used by competing providers for collusive activities. Generally, exchanges of price and cost information among entities that fall within all three safety zone guidelines will not be challenged by the Department of Justice or the Federal Trade Commission. The three safety zone guidelines are described below.

1. Data are gathered and managed by a third party (government agency, academic institution or trade association)

2. Information provided by participants is based on data more than three months old

3. Data collected on at least five participants, where no individual participant accounts for more than 25 percent on a weighted basis of the statistic reported, and the data is aggregated such that it would not be possible to identify the data of any particular participant.

Efforts to Standardize Claims Data. A key challenge in implementing a PCD is acquiring data in a standardized fashion from payers while minimizing unique formatting requirements. Payers may each use unique claims data processing and storage systems, thus the administrative burden associated with providing the required data may vary. The federal government has encouraged states to standardize claims data collection to facilitate shared analysis across states and to minimize cost implications for payers, especially those that operate in multiple states. The APCD Council worked with AHRQ and the National Association of

Health Data Organizations (NAHDO) to draft a core set of data elements for both the eligibility and medical files in an effort to standardize data submission formats and elements across states.[35,36]

Best Practices from Existing PCDs

Representatives from each state shared best practices and key lessons they have learned through administering a successful PCD that they wished to pass on to other states that are considering the feasibility of developing a PCD. The highlights from their lessons learned include:

- It is critical to clearly state the PCD's goals and objectives. It is equally important to determine all necessary data specifications, infrastructure requirements and levels of regulatory and vendor oversight during the pre-development stages to help in the eventual operationalizing of major goals.

- Demonstrating the potential value of the PCD data to payers and other health care stakeholders is necessary so that they see a benefit to themselves.

- Be collaborative with stakeholders throughout every step of the initiative. Stakeholders, particularly payers, appreciate when they are treated like partners.

- If multiple state agencies are involved with the development and maintenance of a PCD, ensure that all agencies have a common understanding of how the data will be used. Open communication and collaboration among agencies that own the data is necessary to facilitate fluid data sharing across agencies.

- Providing timely data is a challenge, as data validation is a major undertaking. Benchmarking claims against third party data (e.g., health plan statistics, disease registries, etc.) is important to ensure data accuracy.

- Maintain frequent communication with data vendors and submitters. Avoid relying too heavily on vendors without proper communication and documentation.

- Launching a consumer-facing website is a valuable endeavor, but requires a great deal of time and effort.

---

[35] A list of the proposed core data elements can be downloaded online at:
http://www.apcdcouncil.org/sites/apcdcouncil.org/files/APCD%20Council%20CORE%20Data%20Elements_5-10-12.pdf
[36] No information is available about the costs incurred by states or payers that have elected to adhere to these guidelines.

- Costs tend to grow as capabilities are realized and expanded. Financing this growth in a sustainable manner is a difficult task.

V. Consideration of Price and Quality of Health Care Services in Michigan

The potential size of a claims database is dependent on two main factors - the number of covered lives in the State and the number of payers that would be required to submit data. About 8.8 million individuals in Michigan currently have health insurance coverage (commercial, Medicare and Medicaid), although that number will likely grow in the coming year as more people become newly enrolled in Medicaid and commercial insurance through the Michigan Health Insurance Marketplace. Table 3 summarizes health insurance coverage in Michigan and the United States in 2013, by coverage type.

Table 3 Health Insurance Coverage, By Type, 2013

Location	Employer	Other Private	Medicaid	Medicare	Other	Uninsured
United States	48%	6%	16%	15%	2%	13%
Michigan	53%	5%	16%	15%	1%	11%

Source: Kaiser State Health Facts, *Michigan*

Blue Cross Blue Shield of Michigan (BCBSM) dominates most Michigan markets in the State across most product lines. [37] Among the exceptions is western Michigan, where rival Priority Health holds dominant market share in Kent County, Ottawa County and Muskegon County for HMO coverage. Priority Health has the second largest market share in Michigan, with 9 percent statewide across all insurance products and 24 percent of the HMO market. Priority Health is owned by Spectrum Health, a large provider based plan in Grand Rapids. There were 62 HMOs in Michigan in 2012 with total enrollment of 3,032,606.[38]

Approximately 1.5 million individuals are covered by Medicaid in Michigan, and about three-fourths of them are enrolled in a managed care plan. Meridian Health Plan of Michigan has the largest Medicaid HMO market share (22 percent), followed by United Healthcare of the Great Lakes (18 percent) and Molina Healthcare of Michigan (17 percent).[39] Michigan became the 25th

---

[37] BCBSM recently converted from a "benevolent trust" owned by the people of Michigan to a non-profit mutual insurance company beginning January 1, 2014.

[38] Kaiser State Health Facts, Michigan

[39] Kaiser Family Foundation, "A Profile of Medicaid Managed Care Programs in 2010: Findings from a 50-State Survey" (September 2011).

state (in addition to Washington, DC) to expand Medicaid when CMS approved the Healthy Michigan Plan on December 30, 2013. As of November 2014, approximately 450,000 people were enrolled in a Healthy Michigan health plan (most enrolled in an HMO operated by one of Michigan's commercial carriers). Most new enrollees who earn between 100 and 133 percent of the federal poverty level will contribute up to 2 percent of their income into a HSA that will be administered by the State and can be used for out-of-pocket medical expenses.

Existing Health Care Data Collection Initiatives in Michigan

There are two primary sources of health care data: health care providers and payers. Providers generate administrative claims that reflect the provision of services and may also generate electronic medical records if they have the necessary technology infrastructure. Payers generate administrative claims data regarding payment for services. The key difference between provider and payer claims data is the type of cost information they contain. Provider claims typically contain only the amount charged by the provider for the service or item, whereas payer claims also contain information on the amount "allowed" (and paid) by the payer (often less than what was charged) and the patient's out-of-pocket costs. It is this difference that makes access to payer claims necessary to achieve true cost transparency, and why so many states have created or are considering PCDs.

There are currently five organizations in Michigan that collect health care claims or medical records from payers or providers in the State. They are:

1. Michigan Department of Community Health (MDCH)

2. Michigan Data Collaborative (MDC)

3. BCBSM: Value Partnerships and Value Collaborative

4. The Michigan Health & Hospital Association (MHA)

5. Greater Detroit Area Health Council (GDAHC)[40]

We provide descriptions of three health care database types in Table 4 below, and additional information about each existing health care database in Michigan in the pages that follow, including a discussion of their ability to support the development of a PCD.

---

[40] The Michigan Health Information Netowrk (MiHIN) is a transporter of health data and has the ability to provide certain data sharing functionalities among different groups or for an emerging data center.

Table 4 Health Care Data Sources

Database Type	Description	Database Example in Michigan
Provider Claims	Providers generate claims when they provide a service and submit them to payers for reimbursement (e.g., health insurance carriers, Medicare, Medicaid). Many state hospital associations collect hospital claims at the state-level, and other organizations may collect claims from physician group practices at a state or local level. Provider claims can provide information to analyze utilization of health care services, such as hospital inpatient stays, surgeries, outpatient treatments, lab and imaging tests, etc. They may also be used to assess an individual provider's performance against certain quality indicators. Provider claims contain information about the diagnosis associated with the service or drug (ICD-9/10 code, NDC code) and charges, but do not typically contain information on payment amounts.	MHA
Payer Claims	Payer claims are generated by commercial health insurance carriers, Medicare, Medicaid, self-insured employers, dental insurance carriers and others. In addition to the information that is also available on provider claims, payer claims contain health care price information (allowed and paid amounts), and may be broader in scope because they allow for the analysis of an individual's receipt of services from many providers across the continuum of care. Payer claims databases vary in the amount of price information and PII they collect from payers. A payer claims database can include claims from all payers (e.g., an APCD) or from only a subset of payers in a particular state or region.	MDCH, MDC, GDAHC, BCBSM
Electronic Medical Records	Electronic medical records contain all of the information collected by a clinician during a health care encounter, which includes information such as the patient's medical history, demographics, medication use, allergies, test results, vital signs, and many other elements.	MiHIN

Opportunities and Gaps in Michigan's Existing Health Care Databases

While none of Michigan's six existing health care databases are currently capable of producing the same level of cost transparency and analytic power as a PCD, three have the potential, if expanded, to support the development of a PCD: the MDCH Data Warehouse, and the databases maintained by MDC and GDAHC. Although currently limited to Medicaid and CHIP claims, the MDCH data warehouse collects the full range of data elements necessary for

formation of a claims database, including a master person index.[41] The data collected by MDC and GDACH also contain many useful data elements that could serve as the foundation for a PCD, but they would need to be expanded to include additional payers and data elements. In addition, certain aspects of MiHIN's infrastructure could potentially be leveraged, such as its governance and legal framework for sharing health information, as well its master person and provider indexes.

1. ***Michigan Department of Community Health Data Warehouse***. The Michigan Department of Community Health (MDCH) collects a range of health care data, including the data necessary to administer Michigan's Medicaid and Children's Health Insurance Plan (CHIP) programs and several other public health initiatives. The warehouse contains data from MDCH's claims processing system, the Community Health Automated Medicaid Claims Processing System (CHAMPS), which currently processes approximately 19 million claims and 45 million encounters annually for Medicaid and CHIP enrollees in Michigan. MDCH also collects Medicare claims from CMS for beneficiaries who are dually enrolled in both Medicare and Medicaid. In addition, Michigan legislation requires all commercial health insurance carriers in the State to submit to MDCH monthly enrollment data, which MDCH uses to create a Master Person Index to allow the Department to ensure Medicaid is the payer of last resort. *The Medicaid claims and the Master Person Index contained in MDCH's data warehouse could both be leveraged in the development of a PCD.*

2. ***Michigan Data Collaborative.*** MDC, a data collection and provisioning group at the University of Michigan, provides support to the Michigan Primary Care Transformation (MiPCT) project, a demonstration project testing the value of the patient-centered medical home (PCMH) model in Michigan. Claims data are collected within the multi-payer claims data repository from several payer organizations to monitor the health care utilization and outcomes of MiPCT participants over time. Medicaid managed care plans are required to submit claims data to MiPCT, while commercial carriers submit claims voluntarily for their non-Medicaid plans. MDC provides online interactive dashboards and reports for the physician organizations participating in MiPCT. Data sources are combined using master patient and provider indices in a dashboard format that allows users to review patient-level information or evaluate utilization and outcomes at the provider organization or population level. *Infrastructure developed by MDC as part of the MiPCT evaluation could be leveraged in a PCD—in particular the master patient and provider indices. However, while the data submitted by payers includes provider charges, it does not include paid and allowed amounts—two key data*

---

[41] The Data Warehouse also contains Medicare claims for individuals who are dually eligible for Medicare and Medicaid, as well as data related to the Michigan Maternal and Infant Health Program.

elements necessary for full price transparency. In addition, the MDC/MiPCT database is limited by the number of payers that submit data and the number of patients for whom claims are submitted.

3. ***Greater Detroit Area Health Council.*** In addition to GDAHC's hospital performance reports (based on CMS Medicare data) and consumer survey reports available on its "myCareCompare" website, GDAHC collects claims data on more than 4,000 physicians in southeast Michigan from three health plans (Blue Care Network, BCBSM and Health Alliance Plan) and has been publicly reporting information about physician organizations since 2008. Participating health plans submit data voluntarily with the purpose of conducting analysis on the quality of care provided in a primary care setting. For example, consumers can view quality metrics by physician organization such as "appropriate use of antibiotics for adults with bronchitis." GDAHC does not collect charge or payment information as part of this effort. *If expanded, GDAHC's database could be leveraged in a PCD. Expansions would be necessary to collect claims from payers throughout Michigan, and to begin collecting price information.*

4. ***BCBSM Value Partnerships and Value Collaborative***. BCBSM's Value Partnership and Value Collaborative programs both entail internal data initiatives designed to support various quality improvement and pay-for-performance incentive programs. Participating providers (hospitals and physician groups) have access to monthly claims-level data with pre-defined reports and queries using BCBSM claims data, and also have the ability to compare their metrics to statewide averages. The Michigan Value Collaborative (MVC) uses BCBSM claims and Medicare fee-for-service data for hospital-based care, professional services and post-acute care, as well as clinical data to enable more than 50 participating acute care hospitals in Michigan to see how they compare against statewide averages on the resources they use to deliver care to patients. *Data collected as part of BCBSM's Value Partnerships and the Value Collaborative programs are not shared with the State and are not publically available; thus, they are not likely to directly support a PCD.*

5. ***The Michigan Health & Hospital Association.*** MHA collects discharge data from most hospitals in Michigan and these data are available to the State for the purpose of analyzing health care utilization (e.g., hospital admissions, inpatient procedures) and various hospital quality indicators throughout the State. MHA's databases also include claims for Medicare beneficiaries who are treated at Michigan hospitals and outpatient centers, including charge information. Collectively, the systems compile approximately 1.2 million inpatient and 12 million outpatient claims submitted annually by member hospitals. MHA uses this data for policy and advocacy purposes and member hospitals that actively submit data can access the data via the online Interactive Data System (IDS). Hospitals can then use the data for

their own planning, development and quality assessment as well as for benchmarking against other hospitals.[42] It is important to note that while MHA does collect hospital charge data, they do not collect reimbursement data (e.g., paid amounts) because of anti-trust concerns related to collecting such proprietary information from hospitals. *Because hospital claims data do not include such reimbursement data, they are not considered to be useful in a PCD.*

6. ***The Michigan Health Information Network***. The Michigan Health Information Network (MiHIN) is a public-private non-profit collaboration that has been formally designated as Michigan's statewide Health Information Exchange (HIE) by cooperative agreement between the Michigan State HIE program and the federal government. HIEs allow the secure exchange of health information including real time, actionable, clinical information collected at the point of care. This information can be collected through electronic health records (EHR) systems and other tools. MiHIN's governance structure is intended to be broad and inclusive, and relies on input from stakeholders from more than 20 organizations. Due to lack of funding and competitive pressures, some HIEs closed and others have merged. Now, seven organizations remain in Michigan with a goal to be interconnected through MiHIN.[43] While it is unlikely that claims databases will be integrated with HIEs in the near term, there may be opportunities to leverage the work that MiHIN has done with regard to establishing the public-private governance model, establishing the necessary legal framework for privacy and security issues, setting up exchange standards and protocols and obtaining patient consent. MiHIN's functionality includes state-level directories such as a Master Person Index and Master Provider Index (which are shared services with the DCH Data Hub, which houses the services) and a Record Locator Service that could be leveraged in the development of a PCD.

If a desired goal of a claims database is to track patients' utilization of health care services and outcomes over time to help improve service delivery and reduce costs, it is necessary that the databases contain information at the patient level. While databases that collect provider data, such as MHA's hospital data, would not serve as a payer claims data source, they could be leveraged to assist with certain analytical functions. For example, because MHA's Inpatient and Outpatient databases collect large amounts of hospital-submitted discharge data from across the State, they could potentially be leveraged to 1) independently validate claims data patterns within a payer claims database and 2) capture information about services provided to uninsured and self-pay patients. Access to uncompensated care amounts would improve

---

[42] Access to IDS is only provided to hospitals submitting quarterly data and meeting the submission deadline.
[43] Crain's Detroit Business, "Merger of 2 health information exchanges could create one of nation's largest," January 20, 2014.

reporting on the success of health care reform initiatives across the state. Table 5, below, summarizes key PCD data elements collected by each of the existing health care data collection efforts in Michigan.

Table 5 Existing Availability of Key PCD Data Elements in Michigan

Organization	Name or Description	Patient-Level Data*	Contains Payer Data	Charge Amount	Paid Amount	Raw Data Available to State†
MDCH	CHAMPS and Pharmacy Medicaid claims data	✔	✔	✔	✔	✔
MDC	Payer claims data to support MiPCT evaluation	✔	✔	✔		✔
GDAHC	Physician Organization Report	✔	✔			
BCBSM	Value Partnerships	✔	✔		✔	
MHA	Michigan Inpatient and Outpatient Databases	✔		✔		✔
MiHIN	HIE data exchanges	✔				✔

*Patient level indicates data are available at an identifiable, patient level and has not been aggregated

†Data are defined as raw data files at the patient-level. Online reports, hospital reports, aggregated data and de-identified data are not considered raw data.

VI. Claims Database Options for Consideration

A number of factors should be considered regarding the development of a PCD. Decisions about those factors may vary based on the intended use and established goals of the database. Many of these decisions result in different costs. After the purpose(s) has been determined, several other key decisions will follow related to database governance, data architecture and administration.

Description of Key Database Design and Administrative Decisions and Phases

We have considered that there are three decision phases that must occur prior to ascertaining accurate cost estimates:

- Phase 1: Define the goals and purposes of the database
- Phase 2: Determine the governance, funding sources and database architecture
- Phase 3: Determine the administrative operating procedures

Below we provide an overview of the three phases involved in designing a PCD and provide a high-level overview of such key decisions in Figure 3.

Figure 3 Schematic of Claims Database Design Phases
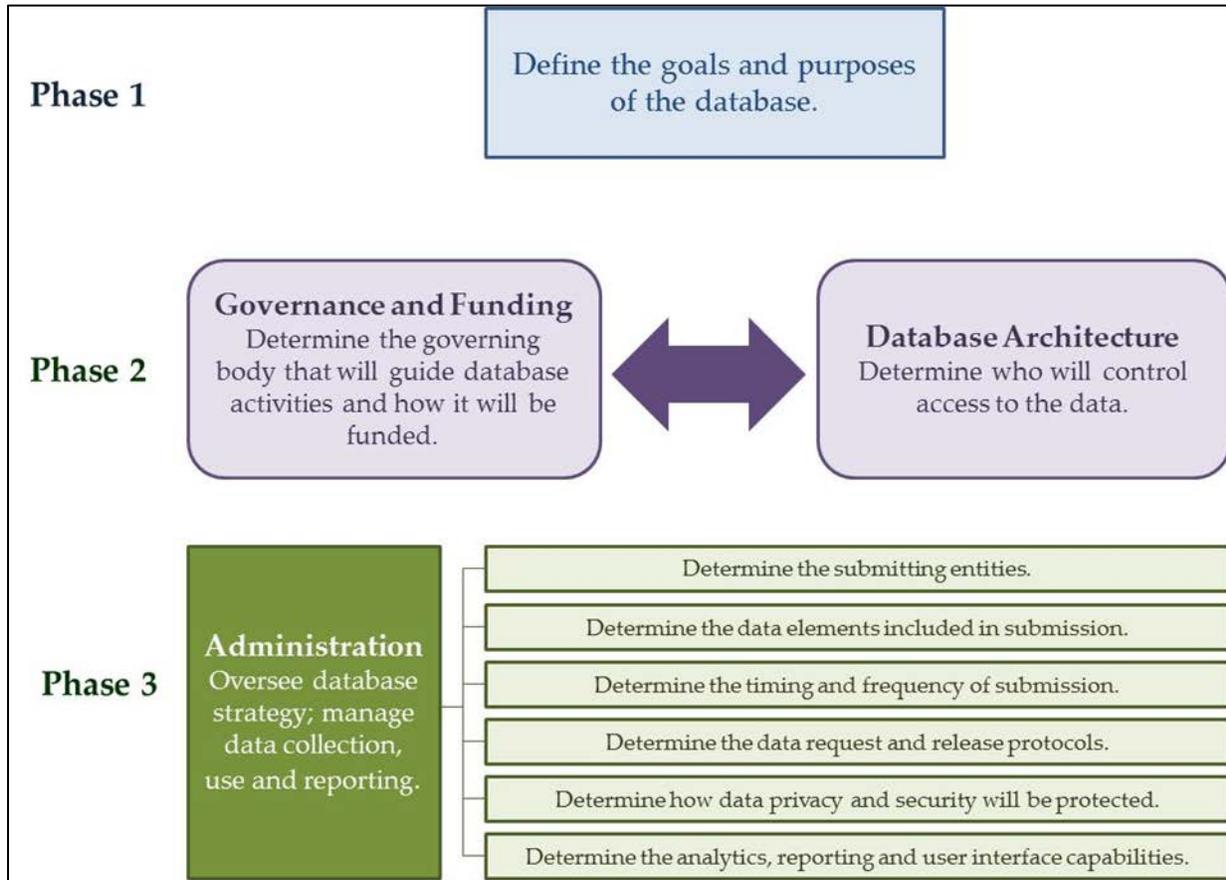
Phase I: Determine the Objectives and Scope

The goals and objectives of the claims database will dictate the data sources, data elements, analytics, reporting requirements, technical design and other business requirements. As the objectives of the claims database become more expansive, the costs to develop, implement and maintain it will increase. Below, we describe four sample objectives to illustrate how database features will be different based on the purpose of gathering the claims data. We start with describing a claims database purposed to meet the ACA requirements for rate review and then

examine three additional scenarios whereby each incrementally adds more functionality, capabilities and costs.

A) *Perform analytics during rate review.* A claims database can provide DIFS with the tools and additional data related to claims and utilization to perform relevant analytics that will inform the rate review process, especially the verification that a rate increase is justified. In addition to collecting claims data, the DIFS would also want to collect enrollment data, premiums and data related to plan design (e.g., deductibles, coinsurance) of individual and small group insurance plans from the carriers. This is particularly important to comply with the ACA, which requires that all proposed rate increases of ten percent or more must be reviewed and approved according to federal specifications. The State would be able to use the data the followings ways:

- Independent verification and analysis of claims
- Plan design and benefit modeling
- Cost driver and trend analysis
- Geographic variation analysis

B) *Measure health outcomes and utilization.* Claims data provide a wealth of information that can be used to measure health outcomes, utilization, expenditures and other health care trends in a state. The collection of claims from multiple payers allows for greater potential in investigating health care cost and quality disparities across groups of people, as well allowing powerful insights into patients' medical care received through the continuum of care across multiple facilities, physicians and payers over time. If the database contains demographic information of members, the State could analyze the prevalence of certain diseases or conditions by population groups as well as the provision of services related to these conditions to better understand disparities based on gender, race, or geographic location (e.g., rural/urban). Claims data can be used to demonstrate adherence to and effectiveness of clinical guidelines on care and cost, and if the claims database contains multiple years of data, longitudinal analysis can be conducted to ascertain trends.

C) *Evaluate health care reform initiatives and new payment models.* As care coordination, shared saving payment models and other value-based purchasing initiatives take center stage in states' efforts to improve the quality of the health care system while decreasing costs, claims databases can provide the data necessary to evaluate the effectiveness of these and other health reform initiatives and payment models. States use PCDs in this regard, for example, to assess whether PCMH participants experience improved health outcomes, such

as decreases in emergency department use and hospital admissions. Similarly, as Michigan considers moving away from FFS payments toward global payments for Medicaid providers, it will be important to understand the underlying costs for designated "bundles" of care.[44] MDCH could use a claims database to examine costs for bundles of care in other populations, and commercial payers themselves may be interested in using the data to analyze bundles across other payers. This level of analysis requires complex analytic capabilities, such as episode groupers and patient attribution.[45] States can choose whether to develop these capabilities in-house or to contract with vendors who specialize in or license such analytics. This sample objective contains multiple payers and represents the capabilities of the majority of PCDs through the country.

D) *Enable cost and quality transparency.* Utilizing cost and quality data together enables provision of information that can assist consumers in their decision-making to maximize the value of their health spending. Incentives for payers and providers are rapidly aligning with an increase in cost and quality transparency. Achieving these benefits requires the claims database to serve as the foundation on which the analytics and reporting are built. A sophisticated and robust web portal with a facile user interface is necessary to make the data accessible and understandable to the public, which will require additional investment beyond the data and analytic foundations. Furthermore, to ensure fair treatment of all payers and providers, a well-developed statistical algorithm will be required to develop provider ratings (e.g., how does the website treat low volume facilities).

Knowledge about the variation in risk-adjusted prices paid by differing payers to differing providers is important to understand the true costs of health care services. Risk adjustment is a vital step of the transparency process, as it allows for adjustments based on each provider's average patient acuity.[46] Claims databases can also be used to support quality improvement efforts, as they provide the data necessary to generate dashboards or report cards that compare providers along defined sets of quality metrics. Combining price information with such quality indicators is an important component in better understanding the true value of health care spending. We outline the data sources and elements necessary to achieve various objectives in

---

[44] Michigan DCH stated in its SIM design proposal that it will use the grant funds, in part, to shift away from FFS-based reimbursement in Medicaid toward global payments.

[45] An episode grouper is an algorithm that groups related medical procedures together (inpatient and outpatient) to assess the total cost of care for a specific medical condition over a specified period of time. A patient attribution algorithm assigns the costs of each patient (entirely or for certain medical conditions) to a designated provider for the purposes of evaluating the provider's costs associated with treating that patient.

[46] Risk adjustment is a statistical methodology that uses information about each patient's health status and previous medical conditions and procedures to reflect each patient's overall health "risk." Patient risk scores can be rolled up to determine an average risk score for each provider or for each health plan.

Table 6 below, including any algorithms that may be necessary to conduct the requisite analytics. Each proposed purpose contains the functionality of the previous purpose – for example, proposed purpose C includes functions and capabilities included in A and B.

Table 6 Key Data Elements to Achieve Proposed PCD Objectives

Objective	Key Data Elements to Achieve Objective*	Proposed Data Sources
A. Perform analytics during rate review	- Plan year and quarter - Allowed amounts, paid amounts, member responsibility - Plan ID - Limited PII for geographic analysis - Premiums - Plan type (e.g., PPO, HMO) - Plan design/benefits (i.e. cost-sharing arrangements) - Administrative costs (taxes, fees, licensing) - Medical management expenses (e.g., care coordination, disease management, electronic health records) - Medical loss ratio (MLR) algorithm - Beneficiary demographics - Risk adjustment algorithm or scores	- Commercial business for the individual and small group markets
B. Measure health outcomes	- Patient demographics - Diagnosis and procedure codes - Present on Admission indicators - Drug codes and related data (dose, etc.) - Allowed amounts, paid amounts, member responsibility - Facility type	- Commercial business for all markets (individual, small group and large group) - Medicaid - Medicare - Self-insured employers/TPAs
C. Evaluate health care reform initiatives and new payment models	- Episode groupers - Patient identifier - Provider characteristics - Patient attribution algorithm - Risk adjustment algorithm or scores - Quality metric algorithms (e.g., readmissions, ED utilization)	- Commercial business for all markets - Medicaid - Medicare - Self-insured employers/TPAs
D. Enable cost and quality transparency	- Allowed amounts - Master provider index - Plan type - Risk adjustment algorithm or scores	- Commercial business for all markets - Medicaid - Medicare - Self-insured

Objective	Key Data Elements to Achieve Objective*	Proposed Data Sources
	(optional)	employers/TPAs

*The data elements listed under each objective are cumulative—that is, they would include all the data elements from the previous objective.

Phase II: Determine the Governance, Funding Sources and Data Architecture

In addition to determining the intended objectives and scope of a PCD, it is necessary to decide what entity will have oversight responsibility, how the database will be funded, and who will control it. In most states these decisions are codified in the enabling legislation that created the claims database by designating the state agency or agencies authority to either govern the database directly or to choose and oversee the operations of a non-profit entity. Decisions around funding may or may not be included in enabling legislation, as there are a variety of approaches to how or if states fund a claims database.

Governance. Governance decisions relate to who or what entity will have oversight responsibility and final decision-making authority related to the database's purpose and operations. The governing body could be responsible for the decisions related to data sources, data elements, data release protocols, etc. In many states, the designated governing body is responsible for codifying such administrative details in regulations if participation is to be mandatory.

Funding. Officials from all states we spoke with except Colorado said that the PCD's operating budgets are allocated directly from the governing agency's annual state budget appropriations. Colorado's legislature dedicates no state funds to the database, delegating funding responsibility to the non-profit organization that administers the database.[47] States can choose to sell data extracts as a revenue source, although data sales alone are not sufficient to support a database's annual budget. Overall, financial sustainability is a challenge in states that do not receive budgetary support from the legislature.

Data Stewardship. Decisions about data control will determine the data collection model. Choosing between centralized and distributed data models may require trade-offs between the level of control and level of access. All existing state-governed PCDs collect and store submitted claims in a centralized database. In the centralized model, payers submit data on a regular interval to a centralized aggregator that is responsible for storing and disseminating the data in a secure manner. Access to a centralized database allows the administrative entity flexibility in its ability to conduct ongoing secondary analyses of the data as needed. The

---

[47] Colorado's current budget is largely supported by private and federal grants and data sales.

centralized model sits in contrast to a distributed, or decentralized, data model where data submitters make data extracts available on ad hoc basis, as requested by the governing body, but data is not warehoused centrally.[48] In the distributed data model, a coordinating center function is necessary at the State level to serve as the facilitator of the data requests. Data partners regularly submit aggregated or summary data that describes new data, which is organized and made accessible by the coordinating center on behalf of the governing body.

A tradeoff in centralizing data is that doing so may be perceived as increasing vulnerability to data breaches; the magnitude of this risk is related to the data elements (e.g. inclusion of PII) and data sources. Under a decentralized (or distributed) model, payers would retain control of the data, which may reduce the risk of security breaches when compared to a centralized database and make them more willing to participate in the initiative.[49]

While there are frequently higher infrastructure costs for centralized models at the outset, distributed data models are often more administratively complex to implement and potentially more expensive to operate over time. Because, under a distributed data model, each payer responds to each analytic query on an ad hoc basis, common data models and architecture must be implemented at each data partner site and the coordinating center must assemble the data extracts into a useable data set for the end user. In addition, the administrative costs to submitting entities under a distributed data model will likely be higher than under a centralized model, as they will need the capability to respond to requests on a per-query basis. The inability to fully automate the process under a distributed model, including each step of "minimum data required," the time elapsed between data request and delivery of the data extract file is often greater than in a central data warehouse model.

Phase III: Determine the Administrative Operating Procedures

Administrative specifications necessary to define the scope of the PCD will be driven by objectives of the database. A primary decision will relate to the participation of payers, as the State would need to decide which payers will be mandated to submit data, if any. For most states, specifications surrounding data submission rules (format, data elements, timing, etc.), privacy and security protection and data release policies are outlined in the administrative regulations and other guidance promulgated by the governing agency or agencies. States have considerable latitude in establishing the policies and practices relating to how the data will be made available for external use while balancing concerns of stakeholders regarding privacy protections and protection of proprietary information.

---

[48] There are multiple potential approaches to collecting data under a distributed model.
[49] Some are concerned that centralized databases necessitate the sharing of multiple copies of the data, which could render the data vulnerable to a breach. See, Center for Democracy & Technology, "Decentralizing the Analysis of Health Data," March 22, 2012.

We outline key administrative policies that must be considered when designing a claims database in Table 7 below.

Table 7 Key Administrative Decisions of a State Payer Claims Database

Key Administrative Decisions	

Scope of Data Submitters	• Will payer participation be mandatory or voluntary?
	• What criteria are used to determine which payers must submit data? For example, any payer that exceeds the following thresholds:
	    ○ Minimum number of covered lives, or
	    ○ Minimum annual claims volume, or
	    ○ Minimum annual premium revenue
	• Will TPAs submit claims for self-funded employers?

Data Submission Rules and Compliance	• What is the frequency of submissions? • What data elements must be submitted? • How will PII be treated (e.g., encryption before or after collection)? • What are the required date file layouts, formats and coding requirements? • Will penalties be imposed for payer noncompliance?

Data Release Protocols	• Will public-use and restricted data files be made available for outside use?
	• What process will be used for approving data requests:
	    ○ Composition of data review committee
	    ○ Required information in application
	• Will there be a cost to purchase datasets?

Claims Database Costs and Resources

The costs associated with developing and implementing a PCD can be significant for both the administrator and participating payers. Costs are driven by several factors, including the number of unique data sources and platforms used by payers as well as the intended uses of the data. Payers often maintain multiple claims processing systems that would result in multiple separate submissions. Officials from other states with PCDs told us that payers themselves also incur costs ranging from tens to hundreds of thousands of dollars each year to format and submit their claims to the PCD. If Michigan chooses to develop a statewide claims database, the State should consider an assessment of each payer's current data platforms to design the State's technical specifications of the database.

Costs will also vary depending on the desired user interface and the required analytic capabilities associated with the database's purposes. For example, creating an interactive

transparency website requires significant investment in the analytic capabilities necessary to develop provider cost estimates and quality metrics, as well as in the IT infrastructure to host the website. Similarly, using a database to evaluate health reform initiatives requires significant investment to develop or license patient attribution and episode grouping algorithms. Because these future decisions have a direct impact on the potential costs associated with the database, it is not possible to provide precise costs estimates for this feasibility study.

The technical build and ongoing maintenance are major cost drivers of any database. Costs associated with the database's technical build include the consensus building around common data model and architecture, database development, Extract, Transform and Load (ETL) capability, reporting and user interaction. Ongoing maintenance includes data management activities (intake, validation, storage, etc.), reporting, modifications and staffing resources. Decisions to outsource many functions may or may not reduce ongoing operational costs. The decision of whether a PCD would be administered by a state agency or through a public-private partnership has direct human resources implications. Similarly, decisions around whether the data management and analytics will be conducted in-house or outsourced to third-party vendors also have cost implications.

In Figure 4 below, we illustrate how database start-up costs increase as more data sources, data elements, analytic capabilities, user interfaces and other functionalities expand using our four proposed purposes outlined above.[50] For example, *Purpose A: Perform analytics during rate review* would result in the least costly option, and would include an annual data submission of fewer than 500 data fields from commercial payers (individual and small group markets only) with some standard analytics and reporting requirements. On the other end of the cost/complexity spectrum would be proposed *Purpose D: Enable quality and cost data transparency*, which includes data submission from all-payers, data warehousing, complex analytics and reporting, and a consumer interactive website.

---

[50] The cost estimates assume biannual data submission from 20 unique data sources to a centralized database. Additional costs depend on how the data will be used and the analytics necessary to achieve those purposes. These estimated costs do not include ongoing expenses related to maintenance, storage and operations of the system, nor do they consider the potential for Michigan to leverage some existing database infrastructure, such as MDCH's master person index, that could reduce some nontrivial development costs.

Figure 4 Estimated Startup Costs Associated with Proposed Purpose Scenarios for a Claims Database
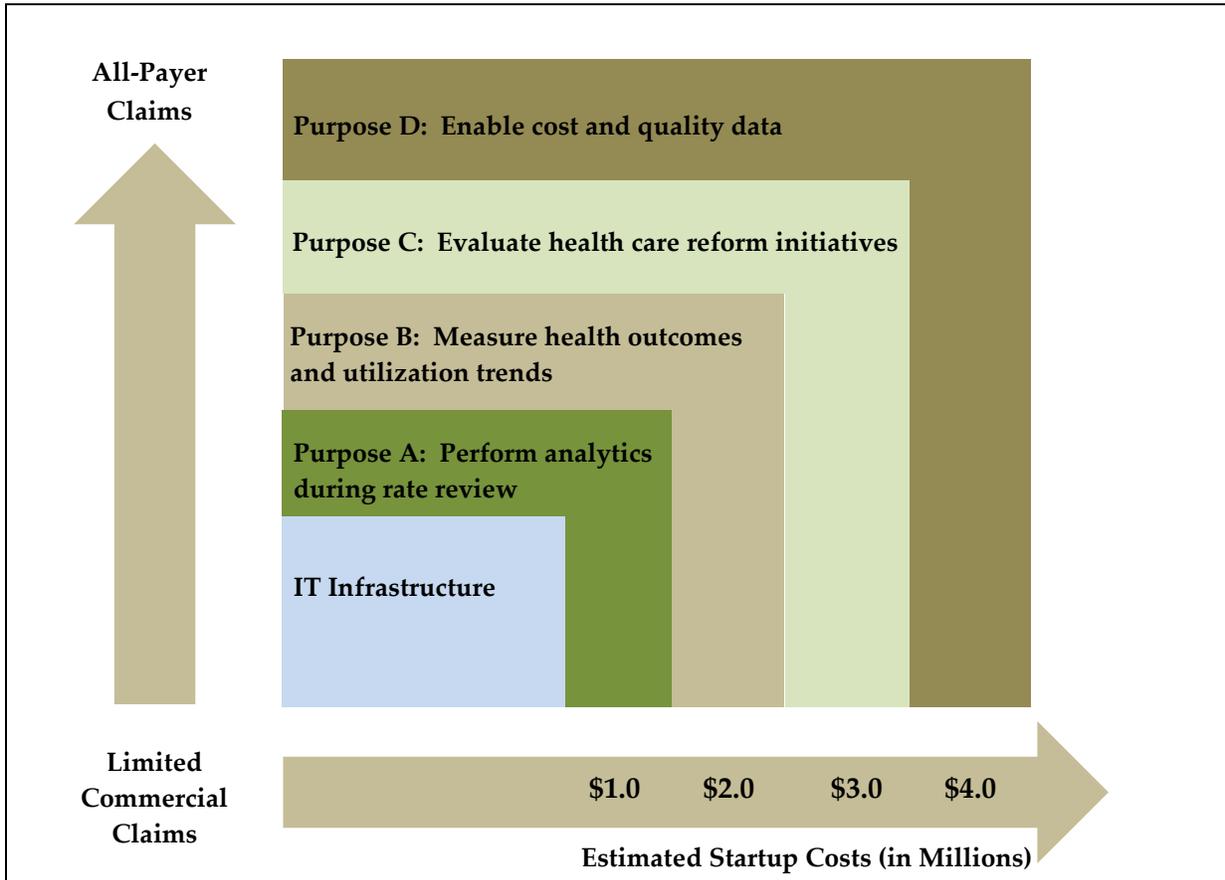
Michigan could choose to use a portion of its CMS Rate Review grant funds to support the development of a PCD.[51] Funds under this grant program must be used to support rate review activities, enhance the availability of price transparency information to the public, or both. States may use the grant funds to collect and analyze health care pricing data as part of their rate review activities and to create a data center that supports overall price transparency. The grant stipulates that if funds are used to develop a data center whose purpose is to "compile and publish fee schedule and other health care pricing data," it must be located at an academic or other non-profit institution. However, CMS also allows states to use the funds to support data collection efforts within state government that support rate review activities. Thus, if Michigan chooses to leverage MDCH's existing Data Warehouse to build a broader claims database (that includes commercial payers), it would need to demonstrate to CMS that DIFS

---

[51] Michigan DIFS received $3,370,813 during Cycle III and $1,179,000 during Cycle IV of the CMS "Health Insurance Rate Review" grant program.

will also use the data for its rate review activities (via interagency agreement or other arrangement) if any Rate Review grant funds are to be applied toward the data warehouse.

Stakeholder Input Related to a PCD in Michigan

Development of a claims database would affect a number of stakeholders in the state, including payers, providers, consumers, employers, state government, policymakers and health services researchers. Other states with existing PCDs have acknowledged that inclusion of stakeholders in preliminary discussions is important to establish trust and concurrence on achievable goals. Stakeholders have valuable knowledge about current initiatives and efforts underway in the state, and their feedback can highlight the level of support and engagement that Michigan could expect for a potential statewide effort. Stakeholder input has the potential to significantly shape and influence the State's discussion and pursuit of such an initiative.

Navigant interviewed over a dozen key health care stakeholders in Michigan in February and March of 2014, and the Michigan Health Care Cost and Quality Advisory Committee (the Advisory Committee) conducted a second stakeholder engagement process during summer 2014 with more than 20 different stakeholders. We summarize the comments and opinions expressed during these two phases below.

Stakeholders expressed support for efforts to increase transparency of cost and quality data in Michigan, within appropriate regulatory parameters, and generally agreed on the following points:

- *Goals and Objectives*. One theme that clearly emerged during both rounds of stakeholder engagement was the need for a clear objective statement related to the development of a PCD with explicit intended uses. Several stakeholders remarked that knowledge about how a PCD will be used and who will have access to the data will help focus the various data collection and standardization efforts and help the State better understand the potential value of such an initiative.
- *Governance*. Many stakeholders suggested that a PCD administrator and governance model should not have strong affiliations with individual providers or payers in the state to discourage bias related to the development of database goals and policies. When asked about particular models, a majority of stakeholders favored a partnership between a state agency and a private entity to administer the database.
- *Leverage existing data sources*. Nearly all stakeholders suggested the State should evaluate and consider the data systems, tools and data compilation efforts that already exist in Michigan to leverage best practices, avoid redundancy and minimize reporting and administrative efforts. Stakeholders offered MiHIN, MiPCT, GDAHC and the Michigan Data Collaborative as possible options to leverage.

- *Learn from other states*. A PCD in Michigan should be well-informed from the best practices of existing PCDs in states such as Colorado, Maine and Massachusetts.
- *Maintain stakeholder involvement.* Stakeholders expressed great appreciation to be called on to provide their perspective on whether and how best to pursue an PCD-like system in the state. Many asked to remain engaged throughout the deliberation process and encouraged the inclusion of stakeholder representatives on formal advisory and planning committees.
- *Concerns*. Stakeholders expressed similar concerns regarding the development of a PCD in Michigan, citing the potential costs of development, the protection of patient privacy and the confidentiality of proprietary information.

Stakeholder opinions were more divided on other topics. For example,

- *Funding*. While stakeholders agreed that funding sources for a PCD should be diverse, they debated the tradeoffs of using assessments on the payer community to help supplement funding—namely that insurance carriers will pass the costs on to their members through increased premiums.
- *Collection of PII*. A number of stakeholders discussed the balance that must be achieved between flexibility and rigidity when considering how to protect patient privacy, so that risks are mitigated while allowing for meaningful analyses. About half of stakeholders advocated for the collection of Social Security numbers in order to properly track patients through the continuum of care and tap into the full utility of a claims database, while the others argued that a PCD can reach meaningful insights by limiting PII collection to other information such as sex, age and zip codes.
- *Data stewardship*. Stakeholders debated whether a centralized or a decentralized database would be most beneficial. Several expressed strong belief that only a centralized database would be a viable PCD option, while others felt strongly that a decentralized database should be explored because it would best protect the privacy and security of the database. Stakeholders had opposing views on the cost-efficiency and related administrative burden of each database type.

Additional discussion of the stakeholder feedback collected through responses to the Advisory Committee's questionnaire and at stakeholder meetings, as well as a list of stakeholders, can be found in Appendix C.

VII. Possible Impact of Uncompensated Care on Commercial Insurance Rates

Section 105d(9) of the Healthy Michigan Act requires DIFS to examine the financial reports of health insurers and evaluate the impact that expanding medical coverage to more Michigan

residents has on the cost of uncompensated care as it relates to insurance rates. Section 105d(9) further requires that, no later than December 31, 2014, DIFS issue a baseline report to the legislature on insurance rates and each December 31 after that issue a report on the evidence of the change in rates. DIFS partnered with DCH and the University of Michigan's Institute for Healthcare Policy & Innovation to conduct a study on this issue and prepare the required reports. For the purpose of these reports, the definition of "uncompensated care" includes a hospital's bad debt (uncollectable bills) and charity care (care that was provided with no expectation of repayment). It should be noted, however, that many health care providers and a large volume of literature on this topic also include Medicare and Medicaid underpayments in their definition of "uncompensated care."

The study found that Michigan hospitals provided a total of $1.2 billion in uncompensated care in Fiscal Year 2013. This represented 5.1% of total hospital costs in Michigan during this period. These findings will serve as the baseline that could be used to measure the effects of the Healthy Michigan Act on uncompensated care in future years. Changes in uncompensated care costs could be compared against changes in commercial insurance rates to determine if there is any correlation.

It is generally accepted that hospitals recoup the cost of their uncompensated care by "cost-shifting" the burden, or at least a portion of it, onto private payers—commercial insurers and self-payers—in the form of increased charges for goods and services. As noted earlier in this report, hospital charges are based on a "charge master" document that often serves as the starting point for contract negotiations between hospitals and commercial insurers.   Assuming the cost of uncompensated care is built into these charge master rates, hospitals effectively shift a portion of these costs onto commercial insurers during the contract negotiation process. These increased costs for commercial insurers are then most likely passed on to their policyholders in the form of increased premiums. Thus it follows that if the cost of uncompensated care can be reduced, these decreased costs could be reflected in the charges that hospitals use to negotiate reimbursement rates with commercial insurers. If this does in fact occur, savings realized by commercial insurers could be reflected in their rates.

The cost of uncompensated care is recognized in some commercial insurance rates. For example, under PA 350 of 1980, BCBSM was required to develop and maintain a "provider class plan" with a detailed description of reimbursement arrangements made by BCBSM to pay providers. These provider class plans were filed with DIFS and required to contain a reimbursement methodology that included recognition of providers' uncompensated care costs. In addition, the Michigan Health & Hospital Association has publicly stated that "when the cost

of care for Medicaid recipients is not fully covered, hospitals are forced to shift those costs to the privately insured, businesses and others." [52]

Based on the information above, it seems clear that, according to both hospitals and commercial insurers, at least a portion of hospitals' uncompensated care costs are shifted to insurers. If expanding healthcare coverage under the Healthy Michigan Act reduces hospitals' uncompensated care costs and this reduction in costs is reflected in hospitals' charge master rates, absent other influences, a resulting reduction to commercial insurance rates would be expected.

VIII. Methods to Estimate Impact of Uncompensated Care on Commercial Insurance Rates

The extent to which uncompensated care affects commercial insurance rates is difficult to determine. The most accurate method of estimating the impact of uncompensated care on commercial insurance rates would require access to every hospital's information detailing how their charges for goods and services are developed—in other words, information on whether the cost of uncompensated care is built into their charges and, if it is, to what extent. This information would then need to be compared against the negotiated reimbursement rates of every commercial insurer and self-payer from which the hospital received a payment.

While most of this information is propriety and difficult, if not impossible, to obtain, Spectrum Health System provided a detailed presentation on cost-shifting to the House Committee on Insurance during an October 11, 2011 hearing. In written testimony provided to the committee, Spectrum's Director of Government Affairs stated:

The issue of the cost-shift begins with the determination of our rates (a.k.a. charges). Our rates are the fees we charge those individuals or groups that actually pay for our services. Charges always start at the same amount for ALL payers. But just as with any business, payment plans can be, and are negotiated with individual patients who pay cash for our services or with insurance companies that manage the health care needs of a large volume of people, typically through employer-sponsored health care benefits… As you will begin to see on the illustration, uninsured patients, who often have little or no financial means available, pay us nothing for our services. Michigan's Medicaid program pays on average only 70 cents on the dollar of our costs, and Medicare pays on average 95 cents on the dollar of cost. Fee schedules, like workers compensation, also dictate the payment or use a formula that is at or only slightly above our costs. For Spectrum Health specifically, this amount of uncompensated services resulted in

---

[52] Michigan Health & Hospital Association, "Mission Critical. Michigan Hospitals: The Heart of Our Communities, the Key to Our Recovery," February, 2011.

$176.5 million in community benefit in FY 2011… Therefore, in order to sustain health care services that are designed to meet the health care needs of the communities we serve… our overall costs must be paid for… Therefore, the "cost-shift/hidden tax" burden is placed on all of our others payers, such as auto insurance companies through auto no-fault, and commercial insurers through higher employer-sponsored health insurance premiums.

Assuming other hospitals in the state are as willing as Spectrum was to discuss how they cost-shift to commercial insurers, interviews with hospital administrators and staff involved with the development of the Charge Master document and hospital/insurer contract negotiations will likely result in at least some estimate of the impact of uncompensated care on commercial insurance rates.

To date, several studies on the impact of cost-shifting uncompensated care to private payers have been conducted. One study in particular, conducted by economist Harold "Hal" Cohen, quantified the cost-shift between Michigan hospitals and insurance companies.[53] Dr. Cohen's study concluded that, in 2007, private payers in Michigan paid 130.9 percent of hospitals' cost levels to help offset uncompensated care and Medicaid and Medicare payment shortfalls.[54]

IX. Conclusions and Recommendation

Uncompensated Care

As noted above, Michigan hospitals provided a total of $1.2 billion in uncompensated care in Fiscal Year 2013, representing 5.1% of total hospital costs in Michigan during this period. Accordingly, it is reasonable to conclude that at least a portion of hospitals' uncompensated care costs are shifted to insurers.

If expanding healthcare coverage under the Healthy Michigan Act reduces hospitals' uncompensated care costs and this reduction in costs is reflected in hospitals' charge master rates, absent other influences, a resulting reduction to commercial insurance rates would be expected. However, DIFS and DCH do not have access to, and/or authority to collect, much of the data that would be required to measure/quantify uncompensated care costs as it relates to insurance premiums. Much of the information needed to quantify the relationship between charges, costs, and premiums is proprietary in nature, and not subject to State review or authority. In addition, not all plans offered in the state are subject to regulation, review, and approval. As a result, the exact impact of uncompensated care on insurance premiums in Michigan is unknown at this time.

---

[53] Harold A. Cohen, PhD, "More Than a Decade of Quality, Efficiency and Value Improvements at Michigan Hospitals: 2009 Update," November, 2009.
[54] Ibid.

Recommendation on a PCD

This report is a comprehensive review of the subject matter required by MCL 400.105f and is intended to serve as a roadmap, rather than instruction manual, for an eventual payer claims database in Michigan. As the foregoing makes clear, a large-scale database that collects medical claims, pharmacy claims and eligibility files from health care payers is a significant undertaking that will require a staged approach and continuous evaluation of numerous policy and legislative factors. Key among these factors are the following: the data elements to be captured and stored; payers to be included; intended uses of the data; cost; desired governance model; and privacy and security protections. A thorough review of these, and other, factors must take place prior to drafting any legislation that would provide for a PCD in Michigan. Further stakeholder engagement is also necessary prior to embarking on the next stage of the PCD development process. The Committee recommends that the Legislature, consistent with the roadmap set forth herein and in full consideration of the factors detailed in this Report, pursue a staged approach for establishment of a PCD with the following capabilities: (1) perform analytics during rate review; (2) measure health outcomes and utilization; (3) evaluate health care reform initiatives and new payment models; and (4) enable cost and quality transparency.

Appendix A
In-Depth Analysis of Selected State Payer Claims Databases

Colorado
Name of APCD System: Colorado All Payer Claims Database
APCD Status: Operational
Legislation Passed: 2010
Year Created: 2010
Administered by State or Non-Profit: State-Private (Center for Improving Value in Health Care)

Colorado's APCD is administered by an independent non-profit organization, the Center for Improving Value in Health Care (CIVHC), with oversight from the Colorado Department of Health Care Policy and Financing (HCPF). The APCD was established by Colorado legislation in 2010. CIVHC was originally a public-private partnership operating as part of HCPF, but transitioned fully to non-profit status in May 2011 and now operates as a 501(c)(3). The APCD is governed by an Advisory Committee of 26 health care stakeholders within Colorado. The committee meets quarterly and advises on how best to carry out the APCD mandate while maintaining compliance with relevant data privacy and security laws such as the Health Insurance Portability and Accountability Act (HIPAA) and the Health Information Technology (HITECH) Act.

Colorado's enabling legislation mandates certain carriers to submit claims data, and as a result, the APCD currently includes historical and current data from 16 commercial plans along with Medicaid. Five additional carriers are currently in the process of aligning efforts with the APCD and are submitting test files in preparation for complete data submissions. Collected data includes claims from fully insured large and small group plans, as well as individual plans.[55] CIVHC does not currently have authority to collect claims from self-funded plans. The APCD currently contains about 146 million claims (2009-2012) that represent about 3.2 million Coloradans (about half of Colorado's insured population).[56] CIVHC recently achieved Qualified Entity (QE) certification from HHS to begin collecting Medicare claims, and as such, expects to begin public reporting based on Medicare data in 2015.

Funding. The Colorado APCD's annual operating budget is approximately $2.4 million. Since the APCD's inception, the Colorado legislature has never appropriated funds for the APCD. Furthermore, CIVHC does not impose assessment fees on payers to supplement revenue. Rather, the APCD is funded largely by private grants from the Colorado Trust and the Colorado Health Foundation, with each organization granting approximately half of the total funding. These grants are set to expire in 2016, after which time it is CIVHC's goal for the APCD to become completely self-sustaining through increased data sales and other project-specific

---

[55] CIVHC gained legislative authority to enable the submission of claims data from the small group market in 2013.

[56] CIVHC, *Colorado's All Payer Claims Database 2013 Annual Report: Health Care Data to Support Improving Care, Lowering Costs and Improving the Health of Coloradans*, February 28, 2014.

grants. CIVHC employs about seven full-time employees (FTEs) who are fully or partially dedicated to the APCD's operations and data analytics.

Vendor Responsibilities. CIVHC contracts with Treo Solutions for data management functions, such as intake from payers, data integrity checks, personally identifying information (PII) encryption, data extracts and certain data analytic functions. In addition, CIVHC has business partnerships with two vendors (3M and AVER Informatics) to license episode of care analytic capabilities, entering into revenue sharing contracts with these companies as part of its future sustainability plan. According to CIVHC's 2013 annual report to the Colorado Governor, about 56 percent of the APCD's annual budget covers the data warehouse vendor and other contractors. [57]

Uses of Data. CIVHC collaborates with multiple organizations to produce public-facing reports and a consumer-facing website. CIVHC allows outside users to request restricted datasets, although CIVHC's Data Release Committee must approve all requests for data that contain PII.[58] The committee receives dataset requests from the full spectrum of health care stakeholders in Colorado—providers, payers, and other health service researchers. The following examples of uses of APCD data by outside organizations were included in its 2013 annual report to the Governor:

- An evaluation of care efficacy for Medicaid patients by combining claims with clinical data for approximately 100,000 patients over a four-year period

- An analysis of "episode of care" (bundled) pricing opportunities

- A non-profit health care association informing its statewide members of payment reform opportunities focused on value-based reimbursement strategies

- A group of orthopedic physicians using claims to evaluate opportunities for bundled payments and negotiations with health plans

CIVHC launched a consumer-facing price comparison tool on the in summer 2014 that enables consumers to shop for high-value health care. Called "CO Medical Price Compare," the interactive website currently displays estimated prices for four inpatient medical events (uncomplicated vaginal births, cesarean births, knee joint replacement and hip joint replacement) by facility, with plans to add more than 30 additional services, including outpatient and diagnostic tests, by the end of 2015.[59] Median prices, inclusive of facility, physician and ancillary costs, paid to hospitals across all commercial carriers and Medicaid are available for each medical event. Consumers may also view their estimated out-of-pocket costs

---

[57] See, "Colorado's All Payer Claims Database 2013 Annual Report: Health Care Data to Support Improving Care, Lowering Costs and Improving the Health of Coloradans."

[58] The Data Release Committee meets monthly and typically reviews one to two data requests each month.

[59] See http://civhc.org/News-Events/News/Consumers-Able-to-Shop-for-Health-Care-in-Colorado.aspx/

based on their insurance plan's deductible and coinsurance percentage. Hospitals have an opportunity to review the information and make corrections before it is publicly reported on the website.

CIVHC also provides APCD data to and conducts analyses for certain state government agencies. For example, CIVHC conducted an analysis using APCD data on behalf of the Colorado Department of Health and Environment related to child vaccination rates. The Colorado Division of Insurance intends to use a portion of its Centers for Medicare and Medicaid Services (CMS) Rate Review-Cycle III grant funds ($3,549,123 in total) to utilize APCD data to supplement its rate review process. Among these efforts, CIVHC recently responded to a request for proposal to collaborate with the Colorado Regional Health Information Organization to create a claims-clinical data portal for physician use as part of Colorado's Comprehensive Primary Care Initiative (CPCI). [60] The claims-clinical data portal would be used by the 73 physician organizations participating in CPCI to monitor their performance and their patients' health outcomes—a tool that could ultimately improve the quality of patient care. CIVHC explained they are interested in further collaboration with regional or state health information exchanges (HIE).

Lessons Learned:

- Launching a consumer-facing site is a valuable endeavor, but requires a great deal of time and effort. For example, developing a Master Provider Index proved very difficult.

- The number of self-funded plans is great and increasing in Colorado. Legislation or regulation should clearly state whether administrative service organizations (ASOs) or third party administrators (TPAs) must submit data from these plans.

- Be collaborative with stakeholders. Payers in Colorado appreciate that they are treated like partners and that they do not have to pay assessments to support the APCD. They are willing to pay for data extracts from the APCD because the datasets have already been cleaned and validated and it furthers their own business intelligence analytics.

- Vendors must have clear objectives for data release procedures.

---

[60] CPCI is a multi-payer initiative in Colorado fostering collaboration between Medicare and commercial payers to strengthen primary care. Medicare will work with commercial and State health insurance plans and offer bonus payments to primary care doctors who better coordinate care for their patients.

Kansas
Name of APCD System: Kansas Health Insurance Information System and the Data Analytic Interface
APCD Status: Operational
Legislation Passed: 2009
Year Created: 2010
Earliest Collected Data: 2005
Administered by State or Non-Profit: State (Department of Health Care Finance and the Kansas Insurance Department)

Kansas maintains a multi-payer claims database, known as Kansas Health Insurance Information System (KHIIS), sponsored jointly by the Division of Health Care Finance (DHCF) and the Kansas Insurance Department (KID). Kansas has collected health insurance information of varying forms since 1995, but legislation created KHIS in 2009, which required commercial payers with more than one percent of the total premium volume in the state to submit claims to KID. A data warehouse maintained by DHCF called the Data Analytic Interface (DAI) combines the commercial claims from KHIIS (2007 onward) with claims from Kansas's Medicaid and Children's Health Insurance Plan, as well as from the State Employee Health Plan (2005 onward). The DAI does not currently include claims from self-funded plans, although the KID is hoping to begin collecting these claims in the future. Currently, about 70 commercial carriers submit data to the DAI.

Funding and Administration. The DAI's annual budget is approximately $1 million, funded by revenue from three separate streams—Medicaid funds comprise about 90 percent of the budget while State general revenue funds and assessments placed on health plans by KID together comprise the remaining 10 percent.[61] DAI does not sell data extracts to outside users. No state employees are dedicated full-time to the DAI. The majority of DAI's data storage and management functions are contracted to Truven Health Analytics. The DAI's start-up costs in 2010 were approximately $6.4 million.

Uses of Data. Data contained in the DAI are used for a variety of research purposes by DHCF and KID staff, as well as by researchers from University of Kansas and the Kansas Health Institute. Access to all of the collected data, in particular the commercial payer data, is limited to select individuals and tightly controlled by KID and DHCF. For example, DHCF, as the Kansas Medicaid agency, uses the DAI to produce regular reports that monitor the expenditures and enrollment in each of KanCare's health plans, including detailed spending summaries by service and population category. Because KID owns the commercial claims that are fed into DAI from KHIIS, regulations specify that DHCF and outside researchers must attain approval from the Insurance Commissioner to use the data for analytic purposes. A

---

[61] KID assesses insurance carriers in Kansas annually for maintenance and expenses of the Department. A DHCF official explained that these assessments are not solely used to support the DAI.

DHCF official explained that because insurance markets in Kansas are concentrated in certain geographic areas, analyses of DAI data are prohibited from disclosing certain types of county-level information that may indirectly identify carriers. Payers must submit unencrypted PII with their claims and Truven is responsible for encrypting and removing PII as necessary for data extracts used by outside researchers.

A stakeholder group called the Data Consortium existed from 2006 through 2011 that was very involved with public reporting based on DAI data. However, no public reports based on commercial claims have been produced by DHCF since the Consortium disbanded. DAI data are not used to support rate review at this time. However, KID received a $3,130,296 CMS Rate Review-Cycle III grant and intends to use a portion of these funds to improve the transparency of commercial claims submitted to KHIIS and to enhance the rate review process. This project will be conducted in collaboration with the University of Kansas and the Kansas Health Institute.

Lessons Learned:

- If multiple state agencies are involved with an APCD, ensure that all players have a common understanding of how the data will be used. Furthermore, collaboration among agencies that own the data is necessary to facilitate fluid data sharing across agencies.

- Communicate regularly with all data submitters so that data intake problems can be addressed quickly as they arise.

- Maintain a central repository of all data-use agreements to track those who have access to claims data and help protect against a data breach.

Maryland
Name of APCD System: Maryland Medical Care Data Base
APCD Status: Operational
Legislation Passed: 1999
Year Created: 2000
Earliest Collected Data: 1998
Administered by State or Non-Profit: State (Maryland Health Care Commission)

Maryland's APCD is one of the oldest in the nation. Called the Medical Care Data Base (MCDB), it is administered by the Maryland Health Care Commission (MHCC), a state agency comprised of four distinct but related Centers. The Center for Health Care Facilities Planning and Development and the Center for Quality Measurement and Reporting focus their attention on dealing with provider organizations, addressing cost, quality, and access in those sectors. The Center for Information Services and Analysis conducts broad studies, using both Maryland databases such as the MCDB and national surveys, but also has specific responsibilities relating to physician services. The Center for Health Information and Innovative Care Delivery has responsibilities that cut across sectors to facilitate the adoption of electronic health records and to enable the private and secure transfer of personal health information (PHI) among sectors.

Maryland legislation requires all payers whose total premiums collected in the State exceed $1 million to submit claims to the MCDB.[62] As a result, MHCC collects data on fully insured lines of business from approximately 10 insurance carriers in the State. MHCC collects data from large carriers on self-insured plans as they are able to report, including for plans participating in the Federal Employee Health Benefit program. At this time, MHCC does not collect data from TPAs or pharmacy benefit managers (PBM), but the Commission is in the midst of revising regulations to include these two groups in the 2014 submitting period, which will likely boost their count of submitting entities to approximately 20 in all. Furthermore, the MCDB contains claims from Maryland's Medicaid program as well as for Medicare beneficiaries in Maryland— MHCC collects Medicare Advantage (Part C) data from commercial payers, along with Parts A, B and D data from Medicare (via CMS's contractor, ResDAC).

Funding. The MCDB's operating budget is currently funded through the annual MHCC budget, which is largely supported by assessment fees placed on health care entities in the State, including hospitals and health systems, health insurance carriers and medical boards of physicians and nurse practitioners.[63] MHCC does not currently sell any datasets for additional revenue; however they intend to explore this option in the future. MHCC received CMS Rate Review-Cycle III grant funds ($2,896,277), which they intend to use to fund certain data management costs. Officials from MHCC explained that the majority of the APCD's budget is

---

[62] The database is comprised of three separate parts: 1) the Hospital Inpatient and Outpatient Discharge Database, 2) the Professional Services Database, and 3) Prescription Drugs Database.

[63] The assessment fees are used to support MHCC's budget broadly, and are not specific to the MCDB only.

dedicated to covering vendor contracts, as staff costs are not reported separately. About 3 FTEs currently work on the APCD full-time, as well as several MHCC staff who work on projects related to the MCDB.

Vendor and Payer Responsibilities. MHCC contracts with SSS as a data collector and aggregator. Submitting entities provide data to SSS, who then collects, edits and warehouses the data. SSS is also responsible for a range of analytics using the data, providing a number of comprehensive reports to MHCC (e.g., per capita spending in certain markets). According to MHCC, the SSS contracts range from $800,000 to $1,000,000 annually.

Payers are currently required to submit claims files annually, although MHCC explained that they are moving to quarterly submissions this year. MHCC collects certain data fields beyond what is typically includes in formatted claims—for example, coverage type—so that they can run additional analyses with the data. Payers absorb substantial administrative costs to develop data the annual submission files. MHCC does not collect PII from payers; the only required identifying information is member ID numbers that payers must encrypt before submission to SSS.

Uses of Data. Maryland has been setting hospital reimbursement rates paid to hospitals by Medicare, Medicaid, and commercial payers since 1974.[64] Rates have historically been based on hospital discharge files alone. In January 2014, Maryland received approval from CMS in to begin holding hospitals accountable for the total costs of care for their patients by setting caps on reimbursements. Moving forward, the APCD will be used as an important tool to evaluate hospitals' expenditures and performance measures under this new hospital rate setting methodology. The new methodology sets caps on hospital reimbursement rates that hold hospitals accountable for the total costs of caring for their patients, including outpatient services. In addition, the new rate program requires hospitals to reduce hospital-acquired infection rates and readmission rates (within one month after discharge). MHCC officials explained that the APCD will be used to measure hospital readmission rates, as well as both inpatient and outpatient expenditures to help set future rates.

MHCC is asked by the legislature to produce ad hoc reports of health care expenditures and utilization using the APCD. MHCC also provides MCDB data extracts to other various state agencies when needed, for example Maryland's Medicaid agency. MHCC also uses the MCDB to help support the Maryland Multi-Payer PCMH initiative as well. MHCC began the PCMH pilot study in 2011 and has contracted with SSS to assess physician groups' performance along certain utilization measures like reductions in avoidable hospitalizations and readmissions. Physicians participating in the PCMH initiative receive shared-savings incentive payments if they meet the prescribed performance measures.

---

[64] Maryland is the only state that sets hospital rates.

Maryland also plans to use its MCDB to analyze per-enrollee health services utilization and spending for plans sold inside and outside the Health Benefit Exchange for use by the Maryland Insurance Administration, the Health Benefit Exchange, and MHCC. They also plan to analyze spending by enrollee demographic group and geographic location.

With the recent award of Cycle III Grant Funding, it is MHCC's intention of to push for increased transparency of data, allowing certain provider and insurer groups to access the data for research use. MHCC also plans to create a data mart for state agencies like the Maryland Insurance Administration to access MCDB data and reports. Grant funds will also be used to enable MHCC to hire an actuary to assist with rate review.

MHCC plans to apply for QE certification in 2014. In preparation for its application, MHCC is using an outside vendor to assess the readiness of MCDB data for public reporting of practitioner performance measures. They have formed a workgroup to develop the physician quality measures that will be used for provider-specific reporting.

Lessons Learned:

- Engage your stakeholder community throughout the process of considering PCD implementation.

- It is important to manage expectations of what the database can accomplish and to set clear goals in the beginning of the development process.

- Financing and sustainability is a challenge, as PCD costs grow over time.

- Providing timely data is a challenge, as it can take a long time to clean and validate data before it is released for outside use.

Massachusetts
Name of APCD System: Massachusetts All-Payer Claims Database
APCD Status: Operational
Legislation Passed: 2008
Year Created: 2008
Earliest Collected Data: 2006
Administered by State or Non-Profit: State (Massachusetts Center for Health Information and Analysis)

The Massachusetts APCD is administered by the Massachusetts Center for Health Information and Analysis (CHIA), the successor agency to the Division of Health Care Finance and Policy (DHCFP). CHIA is an independent state agency vested with the responsibility of monitoring the health care system and providing a health data hub, of which the APCD is a main component. A primary goal of the Massachusetts APCD is to promote administrative simplification that benefits carriers as well as state agencies by centralizing all data submissions from carriers and housing this information in one location. Overall, the APCD is viewed as a foundational element in health care delivery system reform in Massachusetts.

Data Submission. Massachusetts began collecting payer claims in 2008, retroactively to July 2006. Carriers with $250,000 or more in annual premiums are required by legislation to submit data. Payers in Massachusetts submit data on a monthly basis and APCD data are made available to other state agencies in Massachusetts. In all, approximately 120 payers submit data to the APCD, including commercial carriers, TPAs, Medicare and Medicaid. In addition, specialty carriers and administrators of "carved-out" services, including pharmacy, mental health, dental and vision services, also submit data. Of the many submitting entities, 15 commercial payers and Medicaid account for approximately 99 percent of all data housed in the Massachusetts APCD.

Data submissions include seven files (medical claims, pharmacy claims, dental claims, member eligibility, provider, product, and the benefit plan control file), and include unencrypted member PII. Files submitted to the APCD undergo a rigorous editing process before being stored in the data warehouse; CHIA conducts over 1,000 programming edits in-house, including benchmarking data against national standards and checks for data validity. CHIA convenes regular "Technical Advisory Group" meetings with carriers to discuss data definitions and submission standards as well as user group forums to discuss APCD governance issues when appropriate.[65]

---

[65] Center for Health Information and Analysis, "Overview of the Massachusetts All-Payer Claims Database," March 2014. http://www.mass.gov/chia/docs/p/apcd/apcd-overview-2014.pdf

Funding. The APCD is funded entirely through CHIA's annual budget, comprised of legislative appropriations and other revenue sources; no APCD-specific budget information is available.[66] The Massachusetts APCD participates in data sales, but revenue from these efforts is a small share of the agency's total revenues.[67]

Vendor Responsibilities. The Massachusetts APCD is legislatively prohibited from contracting out significant portions of APCD work. Tasks often outsourced to vendors such as data intake, storage, scrubbing and validation are all completed by CHIA employees. CHIA also maintains the analytic capabilities in-house, only utilizing outside vendors for functions such as IT infrastructure and data warehouse architecture.

Uses of Data. Several state agencies use the APCD for ongoing business purposes and research, including the Massachusetts Health Policy Commission, the Department of Public Health, MassHealth (State Medicaid agency), the Division of Insurance, and the Massachusetts Group Insurance Commission. Since 2012, the Massachusetts Health Connector (State Exchange) has used the APCD to develop a Massachusetts-specific risk adjustment model as part of the Commonwealth's implementation of the Affordable Care Act.[68] These partnerships stem from the overall goal of easing administrative burden on state agencies and carriers alike. Because many agencies request varying forms of data from carriers, the APCD is used to provide a centralized repository for carriers and distributes necessary data to appropriate state agencies.

In addition to use by state agencies, outside researchers request access to APCD data as well. All requests must be approved by CHIA's Data Release Committee, which is comprised of representatives from carriers, providers, researchers, and consumers. The committee's responsibility is to ensure that all data releases are in the public interest as defined by CHIA regulations. CHIA has released approximately 30 data extracts for various research projects since the APCD's inception. For example, researchers from the University of Massachusetts have used APCD data to compare characteristics and health outcomes between Massachusetts residents enrolled in high-deductible health plans and those with other types of insurance coverage.

Massachusetts is also planning to leverage its APCD to implement certain initiatives as part of its State Innovation Model (SIM) Plan. Using SIM grant funds, Massachusetts is considering the feasibility of developing an APCD provider portal through which primary care provider organizations may access data and reports on their patient panels. The goal of the portal is to enhance providers' ability to track their patients' utilization and health outcomes, to improve

---

[66] CHIA's FY 2013 operating revenue was $26.8 million; 72 percent is supported by operating assessments on payers, hospitals and ambulatory surgical centers. Source: Center for Health Information and Analysis, 2013 Annual Report.

[67] Data fees totaled about $300,000 in FY 2013. Source: Center for Health Information and Analysis, 2013 Annual Report

[68] Massachusetts is currently the only state that uses a state-specific risk-adjustment model. Source: Center for Health Information and Analysis, "Overview of the Massachusetts All-Payer Claims Database" (March 2014).

care coordination efforts and to monitor costs.[69] A CHIA official told us there are no known plans for linking the APCD with any HIE efforts at this time.

Lessons Learned:

- When considering the development of an APCD, it may be beneficial to consider instead a multi-payer claims database. In Massachusetts, 16 of the approximate 120 carriers make up around 90% of the data in the warehouse. Thus, it may be possible to achieve the same goals if only a small number of carriers make up your market share.

- Determine the specific uses for the APCD data before development to determine all necessary data specifications up-front.

---

[69] For more information on the Provider Portal Initiative, see
http://www.mhalink.org/AM/Template.cfm?Section=MA_Healthcare_Reform&template=/CM/ContentDisplay.cfm&ContentID=24448

Minnesota
Name of APCD System: Minnesota Health Care Claims Reporting System
APCD Status: Operational
Legislation Passed: 2008
Year Created: 2009
Earliest Collected Data: 2008
Administered by State or Non-Profit: State (Minnesota Department of Health)

Minnesota's APCD, the Minnesota Health Care Claims Reporting System, is administered by the Minnesota Department of Health (MDH) and has statutory authority to collect data from carriers and TPAs with $3,000,000 or more in annual paid health care claims, and PBMs with at least $300,000 in annual paid claims. The APCD collects claims for both fully insured and self-insured lines of business. The system went live in 2009 and includes historical data dating back to 2008. The APCD includes Medicaid claims as well as Medicare claims from commercial payers and from HHS. Minnesota was the first state to begin collecting Medicare claims—they collect claims for Medicare Parts C and D from payers and obtain claims for Parts A and B from HHS's contractor, ResDAC. Overall, the APCD contains data from about 65 unique payers, totaling about 4.6 million medical claims.

Funding. Funding for the APCD stems entirely from legislative appropriations. MDH is prohibited from imposing assessments on payers or selling data. MDH officials explained that the APCD is part of a larger health care transformation budget appropriation, thus it is difficult to definitively identify the APCD's annual operating budget. However, the majority of its budget covers vendor contracts, which range between $550,000 and $640,000 per year. Approximately six MDH employees work on the APCD in either an administrative or research capacity.

Data Management. MDH contracts with OnPoint for data management services and with Mathematica Policy Research for support with APCD analytics. Payers are required to submit claims to OnPoint's servers every six months. An extract comprised of the data submissions is provided to MDH on a regular basis. MDH is statutorily prohibited from collecting Social Security Numbers from payers. Rather, payers submit claims that include limited PII (names, city, state, zip code, sex, date of birth), but it must be encrypted before transmission. Officials explained that this presents challenges for patient-provider attribution because it is difficult to know if the database contains duplicate records.

Uses of Data. Minnesota's APCD has recently undergone a shift in its purpose and scope. The enabling legislation, passed in 2008, initially required the APCD to be used to conduct Provider Peer Groupings (PPG) that examine cost and quality of hospitals and clinics for public reporting. However, due to provider and payer concerns surrounding the quality of the data, the results have never been released to the public; rather, MDH shared the results confidentially

with providers who then have the opportunity to check the data and suggest corrections. [70] Recent legislation, passed in March 2014 (*SF2106* and *HF2656*), creates new authority for MDH to use the APCD for expanded purposes and suspends the PPG reporting. The legislation directed MDH to create a workgroup to develop recommendations for a framework that could govern future uses of the APCD. Potential new uses include public reporting of regional variation of health care costs and utilization, evaluation of PCMH demonstrations and other State Innovation Model (SIM) grant programs, and risk adjustment for Minnesota's health insurance exchange (MNsure). In addition, the legislation suspends PPG reports, unless the Legislature reauthorizes it at a future date. MDH will submit a report to the Legislature with the findings from the workgroup by February 2015.

MDH is currently going through the Medicare QE certification process (phase two of four), which would allow it to publicly report Medicare quality metrics for specific providers. MDH's current use of Medicare data is limited to general health services research with results presented in an aggregated manner (i.e., not provider-specific).

Minnesota has received CMS Rate Review-Cycle I and II funding, some of which is focused on studying how an advanced APCD could support existing rate review activities. The APCD does not currently interface with Minnesota's HIE in any way.

Lessons Learned:

- Stakeholder engagement is very important to create a sense of value and secure support from stakeholders.

- Data validation is a major undertaking. Benchmarking claims against third party data (e.g., health plan statistics, disease registries, etc.) is important to ensure data accuracy.

- Having clearly stated intended purposes for how the database will be used is critical. Upfront planning for how to operationalize the goals before development begins is important.

- MDH does not have legislative authority to enforce data submissions from payers. This can create challenges in collecting all mandated data from payers, particularly from smaller payers. Most payers want to be fully represented in the APCD, but MDH must work closely with some payers to encourage full participation.

---

[70] For example, some are concerned that claims data are poor sources of diagnosis codes.

Utah
Name of APCD System: Utah APCD
APCD Status: Operational
Legislation Passed: 2007
Year Created: 2009
Earliest Collected Data: 2007
Administered by State or Non-Profit: State (Utah Office of Health Care Statistics (OHCS))

Utah's APCD is administered by the Utah Office of Health Care Statistics (OHCS) with oversight from the Utah Health Data Committee. [71] Operational since 2009, it collects data from 29 payers—all payers that cover more than 2,500 lives in Utah, including TPAs and PBMs—are legislatively mandated to submit claims. Utah's APCD also contains Utah's fee-for-service Medicaid claims, but OHCS does not currently collect Medicare claims from payers or the federal government.[72] Payers are required to submit medical and pharmacy, as well as member and provider identification information. Over 84 million medical claims alongside 130 million pharmacy claims have been collected since 2009, representing approximately 1.5 million Utah residents.

Funding. At this time, the APCD is funded entirely by public sources. Current annual legislative appropriations and total budget for the Utah APCD are approximately $494,000 and $585,000, respectively. In addition, the APCD generates Medicaid matching funds, as it is used to conduct analytics for the Utah Department of Health about Medicaid expenditures.[73] OHCS does not collect assessments from payers at this time. OHCS has legislative authority to fine payers up to $10,000 per day for not submitting data in a timely manner, but has yet to impose any fines. The operating budget supports about four full-time equivalent (FTE) staff within OHCS.[74]

Uses of Data. Utah's APCD data are leveraged to understand average costs of treatment for certain diseases, prescription drug utilization patterns, and per capita annual health care costs, among other metrics. Utah was the first state to use its APCD to study longitudinal "episodes of care," which requires them to collect PII data to track patients' utilization of health care services over time. The Utah legislature regularly requests that OHCS conduct reports based on APCD data to inform health policy at the State level.[75] OHCS also allows certain outside

---

[71] The Health Data Committee is comprised of representatives from multiple stakeholder groups—insurance carriers, hospitals, physicians, employers, and health care consumers.
[72] OHCS anticipates pursuing QE-certification in future years. Representatives we spoke with told us they do not intend to request Medicare claims for Parts C (Medicare Advantage) or D (prescription drug coverage) from payers or for MediGap plans until OHCS becomes QE-certified.
[73] Administrative expenditures for Medicaid receive a 50 percent match from the federal government.
[74] OHCS has several staff assigned to the APCD in some capacity, although many work on other projects in addition to APCD.
[75] Public reports are published on the Utah Atlas of Health Care website.

researchers with whom they partner to access APCD data for various projects. They intend to develop a process to allow the broader research community to access the data in the coming months. All requests will have to be approved by the Health Data Committee, and all users who request restricted datasets that contain PII must also obtain Institutional Review Board (IRB) approval from the Department of Health. OCHS intends to begin selling these research datasets in 2015, which will serve as a new revenue source for the APCD. The price of purchasing both the de-identified public-use files and restricted data files will cover staff and vendor time to create custom datasets. The Utah APCD does not currently interface with Utah's HIE, although OHCS representatives said they hope to collaborate with the HIE in the future once it is more mature.

Utah plans to use part of its Rate Review-Cycle III grant funds ($3,255,398) to partner with the Utah Insurance Department, the University of Utah, and two non-profit organizations (HealthInsight and Utah Health Information Network) to enhance the existing capacity and functionality of the APCD, to increase the accuracy and completeness of submissions, and to develop web applications to broadly disseminate price information for selected health services by patient population, geographic area, health care setting and provider. Furthermore, OHCS plans to use a portion of the grant funds to create a secure virtual portal that allows staff from the Department of Health to access APCD data remotely to conduct their own business analytics.

Vendor responsibilities. OHCS contracts with multiple data vendors to administer the APCD. Approximately 80 percent of the APCD's operating budget is used to pay for vendor contracts. Vendor responsibilities include loading and cleaning claims from payers, hashing PII, developing episode groupers, attributing patients and providers for analytic purposes, and providing a copy of the data to OHCS. The APCD data are housed in a monitored and locked server room, to which only a limited number of people have access. As an additional security measure, all PII is encrypted before it is exported from the warehouse for analysis.

Lessons Learned:

- OHCS stressed the importance of gaining stakeholder support. When the APCD was first developed in 2009, they met individually with all payers to answer any questions they had about data submission rules, privacy concerns, etc. OHCS currently hosts monthly task force meetings with payers to discuss APCD updates. It is vital to demonstrate the potential value of APCD data to payers so that they see a benefit to themselves. In Utah, for example, the APCD is used to facilitate the Coordination of Benefits processes with payers. In addition, payers are eager to gain access to restricted APCD datasets in the near future for their own business intelligence purposes.

- Avoid relying too heavily on vendors and maintain frequent communication with them. A previous Utah vendor went out of business in 2012 and another vendor was not meeting expectations, both of which caused significant set-backs for the APCD. OHCS also stressed the importance of requiring vendors to submit documentation of their data management processes to the State. OHCS re-procured their vendor contracts in 2013, and now communicates almost daily with each of them to ensure efficient operations.

- It is critically important to collect PII from payers. The ability to identify patients and providers is necessary to analyze the costs and service patterns associated with various health conditions and to identify variation across providers. This information can ultimately be used to conduct robust population health analytics and inform service delivery practices.

- Flat file submissions are optimal. OHCS said that some payers expend hundreds of thousands of dollars in administrative costs in order to submit their claims to the APCD in the format required by OHCS.

- An APCD should be designed to collect claims from both the Medicaid agency and commercial payers, which often have different file formats and contain different data elements.

Appendix B
High-Level Payer Claims Database Summaries

Section 1: Operational PCDs
Section 2: In-Development PCDs

Section 1: Operational APCDs

California
Name of APCD System: California Healthcare Performance Information System Multi-Payer Claims Database   **APCD Status:** Operational   **Legislation Passed:** None   **Year Created:** 2012   **Earliest Collected Data:** 2013   **Administered by State or Non-Profit:** Public benefit corporation (California Healthcare Performance Information System)

The California Multi-Payer Claims Database (MPCD) is a function of a larger healthcare information center, the California Healthcare Performance Information System (CHPI). CHPI administers the APCD as a voluntary program focused on health care price and quality transparency. Unlike most APCDs, the CHPI MPCD is not created from legislative mandate. As a result, submission to the APCD is completely voluntary on the part of payers in the California market.

CHPI is funded in part by Blue Shield of California, along with each participating health plan on a donation basis. There is no evidence of funding provided by the State. As of January 2013, CHPI has completed data intake of physician quality data, Medicare and commercial claims data from the three largest health plans in the State: Anthem Blue Cross of California, Blue Shield of California, and UnitedHealthcare of California. These major carriers represent over 5 million covered lives in the State. Additionally, CHPI was designated as a Medicare QE through the Medicare Data Sharing Program in February 2013, providing a more robust data set.

Because CHPI does not have legislative authority to collect claims data, CHPI benefits from the California Claims Data Disclosure Law, recently enacted California law which prevents health care providers from contractually prohibiting health plans from reporting medical claims data to a Medicare QE in California. To further bolster their data collection efforts, in 2013 CHPI acquired the nation's largest system for evaluating and publishing medical group ratings based on a patient's experience, the Patient Assessment Survey (PAS). Results from this program are posted on the CHPI website.

With CMS Rate Review-Cycle III grant funds ($5,193,955), the California Department of Insurance intends to investigate geographic differences in medical pricing, and analyze pricing data according to the 19 geographic rating areas established for rate review. It is unclear, however, whether the State will use CHPI's resources for this analysis.

Maine
Name of APCD System: Maine Healthcare Claims Database
APCD Status: Operational
Legislation Passed: 2003
Year Created: 2003
Earliest Collected Data: 2003
Administered by State or Non-Profit: State (Maine Health Data Organization)

The Maine Health Data Organization (MHDO) was established by the Maine legislature in 1996 as an independent executive agency to collect clinical and financial health care information. Within the MHDO, there are multiple health care data initiatives, including the maintenance of an APCD. MHDO has legislative authority to collect claims data from health plans, TPAs and PBMs with 200 or more covered lives. MHDO also has the authority to impose a fine to submitting entities for lack of compliance. Additionally, MHDO requires that all submitting entities pay an assessment fee to help alleviate operational costs.

Each health insurance carrier submits to the MHDO a completed health care claims data set for all members who are Maine residents. General requirements include adjustment records, capitated service claims, claims records, codes, coinsurance and copayments, coordination of benefits claims, denied claims and eligibility records. In order to ensure the protection of PII and PHI and to reduce file transmission times, MHDO requires submitters to compress and encrypt all files before uploading to the data warehouse. This file-level encryption ensures the confidentiality of all data that is submitted to the warehouse, not just certain sensitive fields.

MHDO releases procedure cost information on common medical procedures by payer to the public via a separate website, "MaineHealthCost," based largely on data from the claims database. The drill down capability of this website is robust, allowing consumers to view costs of procedures by various providers and insurance carriers. MHDO reports hospital quality ratings and utilization using their MONAHRQ® website as well, coupling information on cost with information on quality.[76] MHDO data are used to evaluate Maine's Patient Centered Medical Home Pilot Project. As a result, claims can be used to track each patient's frequency of emergency department visits, hospitalizations and imaging services—key metrics used to evaluate participating providers.

Through CMS Rate Review-Cycle III grant funds ($2,621,098), Maine plans to expand the capabilities of comparison and analysis on the Maine HealthCost website and develop powerful online analytical tools, improve and refine methodologies and evaluate the feasibility of incorporating Medicare and Medicaid data into its analyses.

---

[76] MONAHRQ® is a desktop software tool that enables organizations - such as state and local data organizations, hospitals, hospital systems and health plans - to quickly and easily generate a health care reporting website.

New Hampshire

Name of APCD System: New Hampshire Comprehensive Health Care Information System
APCD Status: Operational
Legislation Passed: 2004
Year Created: 2005
Earliest Collected Data: 2005
Administered by State or Non-Profit: State / Shared Agency Management (NH Insurance Department and NH Department of Health and Human Services)

The New Hampshire Comprehensive Health Care Information System (CHIS), created in 2005, was one of the first APCDs in the nation. The goal of CHIS, according to the establishing State statute, is to make health care data "available as a resource for insurers, employers, providers, purchasers of health care and State agencies to continuously review health care utilization, expenditures, and performance in New Hampshire." The statute also required that the New Hampshire Insurance Department (NHID) and the New Hampshire Department of Health and Human Services (NH DHHS) partner on the project. The shared responsibilities are defined in statute and expanded on in a Memorandum of Understanding.

NH CHIS contains claims from both New Hampshire Medicaid and commercial health insurance carriers. All carriers with more than $250,000 in annual accident and health insurance premiums in New Hampshire and all TPAs covering more than 200 lives are mandatory submitters. Claims for both self- and fully insured policies must be submitted, and all PII must be encrypted before submission. According to a 2012 report, NH DHHS was considering acquiring approval from CMS to add Medicare claims (through Qualified Entity certification) and requiring Medicare Advantage plans to submit their data.

New Hampshire participates in a number of different data initiatives using CHIS data, including the New England collaborative for statewide all-payer commercial claims data (along with Vermont and Maine). In addition, NH DHHS and NHID use CHIS data for their own internal research purposes as well as to provide consumers with health care cost and quality information. For example, DHHS produces reports that include comparative analysis of disease prevalence, prevention and disease management, utilization and costs of services, and variation in cost and utilization between Medicaid-insured and commercially insured populations. The NHID uses the claims data to better understand the health insurance market in New Hampshire as well as to provide consumers with information about the cost of health care services. NHID developed a public website called "New Hampshire HealthCost" that contains estimated prices for many common inpatient and outpatient procedures, as well as health care quality indicators. In addition, CHIS allows for both public and limited use data sets for outside research use. A Claims Data Release Advisory Committee must review and approve all requests for limited use files.

With its CMS Rate Review-Cycle III grant funds ($3,020,248), New Hampshire proposed to further develop CHIS by integrating Medicaid and Medicare data with commercial insurance claims data and plans to enhance its HealthCost website.

Oregon
Name of APCD System: Oregon All Payer All Claims Database
APCD Status: Operational
Legislation Passed: 2009
Year Created: 2011
Earliest Collected Data: 2010
Administered by State or Non-Profit: State (Office for Health Policy and Research (OHPR))

Oregon's All Payer All Claims (APAC) Database was established by legislation in 2009 and created in 2011. APAC is administered by Office for Health Policy and Research (OHPR), which is part of the Oregon Health Authority. All carriers and TPAs that cover 5,000 or more Oregon lives must submit claims, including PBMs, managed care organizations, care coordination organizations, and entities with Dual Eligible Special Needs Plans. Payers must submit claims for large and small group plans (fully insured and self-insured plans), individual plans, and Medicare Parts C and D plans. APAC also includes claims from Oregon's Medicaid program. As of June 2012, approximately 153 million claims (totaling approximately $27 billion) had been submitted by 37 payers.[77] According to the APCD Council, APAC's start-up budget was $700,000; ongoing annual operating costs are unknown.

According to the enabling legislation, OHPR, applicable contractors, and other entities inside the Oregon Health Authority are to use APAC to perform data analyses and publish reports that assess health care cost, quality, utilization, capacity and distribution of healthcare resources, health care purchasing decisions, the effectiveness of public health programs, and disparities in health care delivery and outcomes. However, to our knowledge, no publicly available reports based on APAC data have been published by OHPR to date. OHPR has a "Privacy and Security Advisory Board" that reviews requests for limited use data files by outside researchers.

The Oregon Department of Consumer and Business Services will invest a portion of its CMS Rate Review-Cycle III grant funds ($3,594,809) in APAC with the goal of enhancing data quality, expanding data analysis and public reporting, and making data more accessible. OHPR will also use and display recognized metrics that standardize comparisons of provider pricing and efficiency by implementing the HealthPartners Total Cost of Care and Total Resource Use Measures. In addition, Oregon plans to support the in-depth analysis of rate filings by a consumer organization.

---

[77] Source: http://www.thelundreport.org/resource/initial_all_payer_all_claims_data_reveals_a_lot_of_unknowns

Tennessee
Name of APCD System: Tennessee APCD
APCD Status: Operational
Legislation Passed: 2009
Year Created: 2010
Earliest Collected Data: 2009
Administered by State or Non-Profit: State (Department of Finance and Administration)

The Tennessee Department of Finance and Administration was directed by legislation in 2009 to create a "Health Information Committee" to oversee the development of an APCD. The Tennessee APCD became operational in 2010. All health insurers (including TPAs) with over $500,000 in annual paid claims, and all PBMs with over $1,000,000 in paid claims must submit data. Claims for all lines of business must be submitted except Medicare supplemental, TRICARE supplemental, or other supplemental health insurance policies. To protect patient identification, payers submit encrypted Member ID numbers; only the member's age, gender, city and zip code are submitted. According to the APCD Council, the estimated annual budget to administer the APCD is $500,000.

According to enabling legislation, the APCD may be accessed only by APCD staff or a designated entity authorized in writing by the Commissioner of Finance and Administration. No publicly available reports based on APCD data were found online. Tennessee did not receive any CMS Rate Review-Cycle III grant funds, but said it will use its Cycle II grant funds ($3,979,002) "to support its APCD and make infrastructure improvements to use additional data in reviewing rates."

Vermont
Name of APCD System: Vermont Healthcare Claims Uniform Reporting and Evaluation System **APCD Status:** Operational **Legislation Passed:** 2008 **Date Created:** 2008 **Earliest Collected Data:** 2007 **Administered by State or Non-Profit:** Quasi-governmental entity (Green Mountain Care Board)

The Vermont Healthcare Claims Uniform Reporting and Evaluation System (VHCURES) became operational in 2008 as a resource for multiple stakeholders to measure performance of Vermont's health care system. Data have been used for analyses of cost, utilization, variations in quality, longitudinal episodes of care, geographic differences across the State, and risk adjustment. For example, data from VHCURES are being used for modeling Accountable Care Organizations (ACO) through the Health Care Reform Commission and developing population based reports on spending and utilization in the commercial population. VHCURES is part of a three-state collaborative to study health care costs and utilization in New England (New Hampshire, Vermont, Maine). Authority for VHCURES was transferred to a quasi-governmental entity called the Green Mountain Care Board (GMCB) in 2013.[78]

Carriers of all major medical health insurance plans with over 200 members, including TPAs and PBMs, must submit claims data annually or more frequently, depending on size. Carriers must submit data for both fully and self-insured plans in the large and small group lines of business, as well as for individual polices and Medicare Parts C and D. VHCURES also includes Vermont Medicaid claims. Unique members IDs are collected to track patient-level utilization over time; therefore, submissions must include unencrypted personal identifiers (SSN if available). VHCURES contracts with OnPoint Health Data for data encryption and other purposes.

VHCURES publishes public-facing reports of health care expenditures and cost variation on its website. External researchers may request unrestricted or restricted sets, but all data release requests must be approved by a review committee. The identity of authorized data users is published on the GMCB website.

Vermont did not receive a CMS Rate Review-Cycle III grant award, and did not state that it planned to apply funds from Cycles I or II toward VHCURES. However, GMCB published a 2011 report on the feasibility of using the APCD to enhance rate review, which found that the

---

[78] GMCB is an independent group of five Vermonters who, with their staff, are charged with ensuring that changes in the health system improve quality while stabilizing costs. In addition to administering VHCURES, the GMCB regulates health insurance rates, hospital budgets and major hospital expenditures in Vermont.

APCD could be used to validate several aspects of rate filings.[79] The study concluded that, because many aspects of the rate filings are derived from claims and enrollment data, VHCURES could be used to validate the source data and key assumptions in the rate filing.

---

[79] See: http://apcdcouncil.org/sites/apcdcouncil.org/files/VTVHCURESCompassReport_072011.pdf

Washington
Name of APCD System: Washington Health Alliance
APCD Status: Operational
Legislation Passed: bill proposed January 2014
Year Created: 2008
Earliest Collected Data: 2004
Administered by State or Non-Profit: Non-profit, Washington Health Alliance, voluntary

Washington's PCD is a voluntary effort lead by the Washington Health Alliance (WHA), a non-profit collaborative of payers and providers. WHA members submit data and have access to custom reports. As of 2012, there were 18 data suppliers, including participation from all major medical carriers in Washington. Despite strong submitter participation, not all payers submit data for all collected measures. The database also includes Medicaid fee-for-service data and data from managed care plans. A number of self-funded plans participate and go through their TPA to submit data.

General public health care cost and quality information is available through WHA's "Community Checkup" report and website, which is focused on quality data submitted by hospitals, medical groups, and clinics.[80] Large data suppliers have access to custom versions of WHA's Community Checkup report showing how their populations compare to the rest of the region. Members also have access to members-only data on health care costs.

Washington intended to use its CMS Rate Review grant funds ($3,407,553) to develop a State-based APCD by partnering with the WHA. A bill introduced to the Washington legislature in 2014 called for the creation of a state-based APCD, but the state's two largest carriers, Premera Blue Cross and Regence Blue Shield, argued that their reimbursement rates are proprietary information and that the database raised patient privacy concerns. As a result, the claims database provision was stripped from the bill, no longer requiring commercial insurance carriers to share their price information. Instead, the law now calls for the creation of a publicly accessible statewide database with quality information and limited price data on health care providers in Washington.

---

[80] See http://www.wacommunitycheckup.org/

Wisconsin
Name of APCD System: Wisconsin Health Information Organization Data Mart
APCD Status: Operational
Legislation Passed: None
Administered by State or Non-Profit: Non-Profit

The Wisconsin Health Information Organization (WHIO) Data Mart is a voluntary claims database initiative administered by WHIO. The Data Mart was created in 2005 under voluntary efforts from the five largest payers in the Wisconsin, providers and employers. Much like other voluntary APCD initiatives, state government is not directly involved with data collection efforts and no legislative appropriations are allocated for the database. As a result, participating members and subscribers must pay a fee to access the data directly or obtain customized reports.

Data included in the WHIO data mart represents all Medicaid claims and approximately 68 percent of the commercially insured population.[81] Additional insurers, including Wisconsin Medicaid, have contributed claims to subsequent data marts, which are released every six months. Today, the data mart includes claims information for more than 4.1 million people from 16 major payers in Wisconsin including Medicare Advantage plans.

Members and subscribers utilize WHIO data for a variety of research purposes—for example, to identify gaps in care for treatment of chronic conditions, costs per episode of care, population health, preventable hospital readmissions, and variations in prescribing patterns. For example, the Wisconsin Medical Society used the data to evaluate patient-centered medical homes throughout the State in 2012.[82]

Wisconsin received CMS Rate Review-Cycle I and II grant funding, most of which focused on enhancing and collecting detailed rate information for non-group and group markets. Wisconsin will enhance its Rate Tracking System by expanding the scope of information collected and automating the collection that is currently done manually.

---

[81]. The Commonwealth Fund, *Quality Matters Q&A: Building an All-Payer Claims Database—the Wisconsin Model* (May 2013).

[82] Wisconsin Medical Society, *Enhancing Value: Using WHIO Data for Evaluating Patient-Centered Medical Homes* (November 2012).

Section 2: In-Development APCDs

Arkansas
Name of APCD System: N/A
APCD Status (as of 4/9/14): In Development
Legislation passed: None
Administered by State or Non-Profit: State and Non-Profit (Arkansas Center for Health Improvement) are involved in planning

The Arkansas legislature has yet to pass legislation mandating the creation of an APCD. It was explained in the September 30, 2014 CMS Rate Review-Cycle II Narrative that it is the State's intention to draw up regulation on mandatory submission guidelines for submitting entities after an APCD feasibility assessment is conducted. The Arkansas Center for Health Improvement (ACHI) was tasked with assessing the feasibility, as well as post-feasibility development activities for Arkansas's Health Information Hub.

According to ACHI, the intended purpose of creating an APCD will be to measure Marketplace Qualified Health Plan (QHP) quality. Furthermore, the Health Insurance Premium Rate Review Division (HIRRD) of the Arkansas Insurance Department (AID) maintains responsibility of overseeing an already operational rate review process with consumer facing and consumer participation characteristics. Following the completion of the study, ACHI recommended that AID move forward with planning and building a database with multi-functional utility, inclusive of measuring QHP quality.

Arkansas HIRRD submitted a Cycle III Rate Review grant application and was awarded a total amount of $3,134,794. Additionally, Arkansas issued a Request for Proposals in January 2014 seeking a contractor who will be responsible for data collection, data consolidation, data warehousing, quality assurance, secure storage, analyses, linkage to other datasets and reporting.

Connecticut
Name of APCD System: Connecticut APCD
APCD Status (as of 4/9/14): In Development
Legislation Passed: 2012
Administered by State or Non-Profit: State (Connecticut Health Insurance Exchange)

The Connecticut APCD was established through the creation of the Connecticut Health Insurance Exchange, which also administers the APCD. The APCD is in the early stages of development and procurement of a data vendor. It is the intention of the Exchange that the APCD collect data for many different audiences. Consumers, researchers and industry representatives will be able to access data to a certain extent, although rules about data release and use have not yet been established. The Exchange appears to be focused on making the APCD data available for consumer use in assessing cost and quality of health care services to promote economically sound and informed health care decisions. The Exchange also intends to produce standardized reports concerning utilization, cost and quality of services. The State also plans to use the APCD to enhance its existing rate review process.

An APCD Advisory Group meets regularly to provide input on the development of the database. It was suggested through stakeholder engagement that the APCD conform to X12 Standard Format for data submissions. Several states, including Maine, Massachusetts and New Hampshire currently share very similar data collection requirements for their respective APCDs, ensuring interoperability in the future. According to legislation, data required by the APCD will include eligibility files; medical, pharmacy and dental claims; and provider data. Reporting entities that have fewer than 3,000 members enrolled in plans will be exempt from reporting.

Nebraska
Name of APCD System: Nebraska Health Care Data Base
APCD Status (as of 4/9/14): In Development
Legislation Passed: 2014

Nebraska passed the *Health Care Transparency Act* on February 13, 2014, which created a Health Care Data Base Advisory Committee to make recommendations regarding the creation and implementation of the Nebraska Health Care Data Base. According to legislation, the Nebraska Health Care Data Base shall be used to:

   a. Provide information to consumers and purchasers of health care;
   b. Determine the capacity and distribution of existing health care resources;
   c. Identify health care needs and inform health care policy;
   d. Evaluate the effectiveness of intervention programs on improving patient outcomes;
   e. Review costs among various treatment settings, providers, and approaches; and
   f. Improve the quality and affordability of patient health care and health care coverage.

The Advisory Committee has twelve members with representatives from payers (3), providers (3), consumers (1), public health departments (1), employers (2), academia (1), and the Nebraska Health Information Exchange (1). As of November 2014, the Advisory Committee has met four times.

New York
Name of APCD System: New York All Payer Database (APD)
APCD Status (as of 4/9/14): In Development
Legislation Passed: None
Year Created: 2011
Administered by State or Non-Profit: State (Department of Health)

New York is in the initial planning stages of developing its All-Payer Database (APD) and enabling legislation has not been passed. The administrator, the Department of Health, is conducting an extensive external stakeholder engagement process to gather information to establish the APD. Currently, the State intends to collect data from all major public and private payers, including insurance carriers, health plans, TPAs, PBMs, Medicaid and Medicare, and to ultimately integrate it with New York's HIE and other public health databases. Claims from Qualified Health Plans sold on New York's health insurance Marketplace will be the first to be collected, followed by Medicaid managed care plans. Data submission rules and other regulations are currently in development.

New York has developed a planning document that outlines the goals that effective deployment of the APD could achieve to ensure that State health priorities will be addressed.[83] In addition, stakeholders identified other potential benefits of an APD to providers, insurance carriers, employers, and policy makers. The purpose of the use cases is to consider the utility of the database, prior to working through the technical architecture and detailed data specifications.

A portion of New York's CMS Rate Review-Cycle III grant funding will go toward enhancing the rate review process by incorporating health pricing data and benchmarks into the review process. In addition, the State also contributed a portion of its federal exchange development funding for continued activities toward the establishment of an APCD.

---

[83] See: *New York State All Payer Database Use Cases*. Available at:
http://www.healthreform.ct.gov/ohri/lib/ohri/work_groups/multi-payer/newyorkstateallpayerdatatbaseusecases.pdf

Rhode Island
Name of APCD System: Rhode Island All Payer Database
APCD Status (as of 4/9/14): In Development
Legislation Passed: 2008
Administered by State or Non-Profit: State (four agencies)

Legislation establishing an APCD was passed in 2008, but it did not provide funding for the Department of Health to develop and operate an APCD. Since then, the State has mobilized a series of federal grants to support start-up operations. Following the end of these federal grants, the project's four partner agencies—Department of Human Services, the Office of the Health Insurance Commissioner, the Department of Health and the Health Insurance Exchange—will commit funding and staff to the ongoing operations of the APCD. The APCD began collecting data in 2014 and expects to make data available for use in early 2015. Each of the four partner agencies will use the APCD to support their core business operations, conduct population health measurement, meet requirements of the ACA and enhance the State's understanding of payment and care patterns. In addition, the APCD will improve the understanding of the quality, efficiency and costs of health care in Rhode Island. Rhode Island's legislation stipulates that the APCD data shall be available for research purposes, outside of State government. All requests must be approved by a "Data Release Review Board" that is appointed annually by the Director.[84]

All insurers, TPAs, PBMs or carve-out payers with more than 3,000 Rhode Island members are required to submit monthly claims. The APCD will include claims for all fully and self-insured plans, including small and large group plans, Medicare and Medicaid lines of business. Dental claims and claims for federally qualified health centers will be exempt. Rhode Island's legislation requires payers to submit SSNs, but the State's vendor (OnPoint Health Data) will encrypt them as an intermediate step before they are stored on the APCD servers. Thus, all APCD data records will have unique IDs, but remain anonymous. As an additional security measure, Rhode Island's legislation allows consumers to opt out of the APCD; it is the only State that currently requires insurers to notify covered members of this option.

Rhode Island stated that it intends to use its CMS Rate Review-Cycle III grant funds ($2,733,272) to support the development of a consumer-oriented website that publishes health pricing data. In addition, the State plans to address hospital payment variation and patient-centered medical homes through the rate review process.

---

[84] The Board must include 11 members representing payers, providers, consumers, researchers, and State officials.

Virginia
Name of APCD System: Virginia APCD **APCD Status (as of 4/9/14):** Operational **Legislation Passed:** 2012 **Date Created:** 2014 **Earliest Collected Data:** 2011 **Administered by State or Non-Profit:** State and Non-Profit (Virginia Health Information, contracted by the Virginia Department of Health)

Passed in 2012, Virginia legislation mandated the creation of an APCD and directed the Virginia Department of Health to appoint a non-profit organization to administer a voluntary APCD. The Department of Health selected and has contracted with Virginia Health Information (VHI) as the non-profit to administer the APCD. Despite being voluntary, the APCD has commitment from all of Virginia's major insurance carriers to participate in data submission. In addition, the Virginia Department of Medical Assistance Services will provide claims for Medicaid and Children's Health Insurance Plan (CHIP) beneficiaries.

As of the summer of 2014, a majority of participating payers have completed submission of historic data for 2011, with data submissions for 2012 through 2014 as their next objective. VHI is currently working with Milliman to conduct data quality validation audits, and hopes to make de-identified data extracts available to stakeholders by late 2014 or early 2015.[85]

Participating payers are in the process of submitting patient demographics, diagnosis and procedure codes, provider information, plan payments, member payment responsibility and service dates. Payers must submit actual costs for use by the Virginia Department of Health, but only average prices will be reported for any provider- or carrier-specific information included in any external reports.

Funding for the first 30 months of the APCD is divided amongst the participating health insurance carriers, the Virginia Hospital and Healthcare Association and VHI (40 percent, 40 percent, and 20 percent, respectively). Virginia only received CMS Rate Review-Cycle I grant funding ($1,000,000), and made no commitment to apply funds toward their APCD.

---

[85] Virginia Health Information, "Virginia's All Payer Claims Database (APCD): Summer 2014 Update." Available online at: http://www.vhi.org/flyers/APCD_Flyer_Summer_2014.pdf.

West Virginia
Name of APCD System: West Virginia Health Care Authority Database **APCD Status (as of 4/9/14):** In Development **Legislation Passed:** 2011 **Administered by State or Non-Profit:** State Health Care Authority (HCA)

State legislation passed in 2011 directs the State Health Care Authority to administer the West Virginia Health Care Authority Database (WVHCAD). According to the legislation, any entity with more than 500 covered lives that pays or administers the payment of health insurance claims is a mandatory submitter, while Medicare Supplemental plans are exempt from collection. State agencies may have access to data with personal identifiers, but WVHCAD shall not disclose any data that contain personal identifiers for outside use. According to the APCD Council, $200,000 has been invested for database implementation to date, but, as of September 2014, data collection had not yet begun. West Virginia passed regulations regarding data submission, privacy and security on July 1, 2012.[86]

According to a 2012 APCD Annual Report, West Virginia planned to use its APCD to support risk adjustment and reinsurance in its state-run health insurance Marketplace, as well as to measure provider quality and population health.[87] However, West Virginia ultimately opted to partner with HHS to run its insurance Marketplace and not to run a reinsurance program.

The West Virginia Health Care Authority separately collects and reports hospital charges online. The CompareCare WV website allows consumers to view the average gross technical and average gross professional charges for common inpatient and outpatient services at hospitals across West Virginia. Patient charges for West Virginians enrolled in both the Medicaid program and the Public Employees Insurance Agency have been used to calculate average charges.

According to the CMS Rate Review report of 2012, West Virginia received $3,000,000 to improve information technology infrastructure related to the rate review process.

---

[86] W. Va. St. R. §114A-1 and 114A-2.
[87] See, "All-Payer Claims Database (APCD): 2012 Annual Report," available online at: http://www.legis.state.wv.us/legisdocs/reports/agency/I02_CY_2012_1965.pdf

Appendix C
Stakeholder Input Collected By the Advisory Committee

Overview of Stakeholder Engagement Processes

When considering the development of a large-scale healthcare database initiative, it is essential to engage a wide range of stakeholders to solicit input and foster open dialogue. Stakeholders have valuable knowledge about data initiatives currently underway in the state and know their markets. Stakeholder discussions provide insight into the level of support and engagement that Michigan could expect for a potential statewide payer claims database (PCD) or similar healthcare database effort. In addition to the stakeholder interviews conducted by Navigant during February and March of 2014, the Michigan Health Care Cost and Quality Advisory Committee (the Advisory Committee) held a second, more comprehensive stakeholder engagement process with more than 20 different key stakeholders during July and August 2014.[88]

The Advisory Committee's stakeholder engagement process had two components: a written questionnaire and three Advisory Committee meetings. The questionnaire was tailored to gather feedback on forms of PCD governance, data privacy and security, and the potential uses of a claims database. In conjunction with the questionnaire, the Committee held a series of three stakeholder meetings to discuss the responses submitted by stakeholders and to expand the discussion accordingly. During the meetings, held on July 15, August 12 and August 26, the Advisory Committee reviewed three key topics with stakeholders: database opportunities, obstacles and best practices.

Summarized below is a brief summary of feedback collected by the Advisory Committee.

Stakeholder Questionnaire and Advisory Committee Meetings

The major points expressed by stakeholders throughout the process included the importance of leveraging existing data initiatives and infrastructures in the State if possible, and learning from the successes and failures of other state PCDs. Stakeholders also encouraged continuous

---

[88] The Advisory Committee invited 49 stakeholders to participate in the engagement process. Of the invitees, the following stakeholders participated: Alliance for Health, Blue Cross/Blue Shield of Michigan, Deloitte Services, Delta Dental of Michigan, Greater Detroit Area Health Council, Institute for Healthcare Policy & Innovation (University of Michigan), Institute for Population Health (survey only), Michigan Dental Association, Michigan Association of Health Plans, Michigan Business Professionals Association, Michigan Chamber of Commerce, Michigan Consumers for Health Care, Michigan Data Collaborative, Michigan Food and Beverage Association, Michigan Health and Hospital Association, Michigan Manufacturers Association, Michigan Primary Care Transformation Project, Michigan Purchasers Health Alliance, Michigan Universal Health Care Access Network, National Association of Health Data Organizations, Optum Health, Pacific Business Group on Health (survey only) Priority Health, Small Business Association of Michigan, and University of Michigan Health System.

stakeholder engagement throughout the consideration, development and implementation process.

Governance. The questionnaire proposed three possible governance structures that could be adopted in the development of a PCD. When given the choice of either a state agency governance, state-private partnership governance or private entity governance, a vast majority of stakeholders favored a State-private partnership governance model because it would ensure that both state government and commercial insurance entities will be fully involved throughout the development and implementation process, alleviating concerns of conflict of interest. Additionally, involving state agencies and private entities will help to build a mutual understanding of the goals and objectives of such an initiative, while creating efficiencies in all areas of database administration. Stakeholders expressed that in a State-private partnership model, the State could effectively play the role of "convener," bringing together other interested stakeholders in the governance process. Stakeholders cited successful partnership models like the Michigan Data Collaborative (MDC) and the Michigan Health Information Network (MiHIN), two existing health claims databases in Michigan.

A smaller contingent of stakeholders recommended a "private non-profit" governance structure, arguing a PCD or similar database should be separated from state government to ensure the greatest opportunity for appropriate and diverse healthcare stakeholder input while shielding it from the political sphere.

When asked for input on potential funding sources, the majority of stakeholders suggested a combination of State appropriations, federal grant funds, data sales and assessments on payers and providers to sustain such an initiative. There was some debate, however, among stakeholders over exactly which funding sources should be included. In particular, the payer community was not supportive of assessments because such fees would result in payers passing these costs on to the consumer through higher premiums. A small number of stakeholders suggested that funding should be provided only through only one or two sources (e.g., federal or state appropriations).

Data Privacy and Security. When considering the optimal level of personally identifiable information (PII) a claims database should contain, most stakeholders favored a balance, arguing that the inclusion of too much PII could pose a security threat while too little would limit the capabilities of the database. About half of stakeholders advocated for the collection of PII including Social Security Numbers (SSN) in order to properly track patients through the continuum of care and tap into the full utility of a claims database. Those stakeholders who argued against the collection of SSNs explained that a PCD can reach meaningful insights by limiting PII collection to other information such as sex, age and zip codes. A small number of

stakeholders suggested requesting already de-identified data from payers, shifting the burden of patient privacy away from the database administrator to the payers.

Most stakeholders argued for a clear and comprehensive set of policies and procedures around privacy and security. A majority voiced that safeguards regarding data storage and release policies must be compliant with federal laws and standards, such as HIPAA and the HITECH Act, and should draw from best practices of current PCDs, carriers and similar large-scale health data initiatives. A key issue raised by multiple stakeholders included the encryption of data during the transmission process to protect PII. Additionally, a contingent of stakeholders argued that data extracts should only be released in aggregated, or summarized form, to further protect PII.

Most stakeholders indicated that whether or not proprietary information, such as contracted rates between payers and providers, should be submitted should be carefully considered, but such information is likely necessary to achieve the goals of a claims database. Some stakeholders stated that the inclusion of the actual "allowed amounts" is critical to achieve true cost transparency. Others explained that the usefulness of this information is limited because contracted rates reflect many unknown factors, including the negotiating leverage of each party. Rather, they suggested that submitting standardized payment amounts, such as averages across providers or Medicare fee schedules, would be a viable alternative that could provide useful information while protecting confidentiality and encourage payer willingness to participate. Stakeholders pointed out that, if the database were to include such information, it would need to comply with federal antitrust guidelines that govern the protection and release of identifiable, proprietary price data.

Data Stewardship. Stakeholders were asked to describe their perspectives regarding the pros and cons of centralized and distributed (or decentralized) claims databases. Stakeholders had mixed opinions on the topic—several expressed a strong belief that only a centralized database would be a viable option, while a few indicated that a distributed database should be pursued. Proponents of a centralized database view it as a more efficient means of collecting standardized data that better supports data integration and comparisons across payers. They also pointed out that it is the only model currently used by other PCDs; thus, the utility of a decentralized model in this context is largely untested.

Proponents of a distributed model described it as a more efficient means of collecting data that is less prone to catastrophic data breach than its centralized counterpart. Some stakeholders believe collecting data only when needed would better protect patient privacy and other sensitive information, would cost less to build and maintain (due to less infrastructure needed to store the data), and would encourage better participation among payers. However, other stakeholders believe a distributed model to be potentially more expensive to maintain over the

long-term because querying data separately from each payer may prove more complex and time-consuming. Stakeholders identified the following pros and cons associated with each database type:

Figure 1: Stakeholder Views on Centralized and Distributed Claims Databases

Pros	Cons
Centralized Database	
- Consistent and easier data access procedures - Better supports data management, consolidation and integration - Minimal impact to the operational systems within the data contributor's environment - Expanded use case opportunity - Increased ability to track patients through continuum of care - Better support national comparisons - Better allows for add-on data sets/sources, such as public health, immunization and EHRs - More efficient data governance - Consistent data quality - Ability to create longitudinal view of patients - Common APCD structure with established best practices	- Duplicates data efforts already underway by payers, providers, other entities - Increased risk of data breach - Increased start-up costs - More oversight required - Higher costs for the State
Distributed Database	
- Leverages the capabilities inherent in keeping data nearest to the location where it is captured and stored - Best protects patient privacy and safeguards sensitive data - More resilient to data breach and hacking - Costs to the state will be lower because of decreased data storage costs - Decreased operational costs over the long-term	- Higher operational burden on the data contributors - Less ability to expand use cases - Complicates efforts to identify episodes of care - Less ability to conduct comparisons - More difficult to ensure consistent data quality - Lack of linkage between various data sets and sources - Potentially higher cost for creating advanced analytics - Higher complexity for conducting longitudinal analysis - Decentralized structure is relatively untested for health insurance claims

Uses of Data. Stakeholders expressed a desire for an PCD initiative to help inform consumers about healthcare costs and quality more generally. This cost and quality information would ideally be comparable across geographic regions and providers. Additionally, a number of stakeholders explained the need for a PCD to tie back to state programs such as Healthy Michigan, MICHILD and Medicaid Managed Care organizations to help evaluate progress towards improved community health.

In an effort to align the goals of stakeholders with a PCD initiative, DIFS presented three capability scenarios of potential databases, asking stakeholders to identify which scenario best complements their own goals. A majority of stakeholders responded that a PCD that enables cost and quality transparency would be most useful towards supporting their goals. By providing this utility, the database could achieve the other scenario goals of evaluating health reform initiatives and measuring health outcomes. Stakeholders further explained that all scenarios have inherent value, but expressed concerns around each scenario regarding the development costs and the protection of PII. Additionally, some expressed concern around the risk of inappropriate reporting of quality metrics, arguing that consumers may misinterpret the data without proper context.

Additional Information Collected During Advisory Committee Meetings

Other State PCD Best Practices. Stakeholders indicated that it is critical to gather best practices from other successful PCD initiatives across the country. Recognizing no one state has a perfect model, stakeholders offered opinions on strong candidates that could provide best practices regarding funding sources, governance models and data uses. New Hampshire, for example, was offered as a strong candidate because of its successful APCD planning and development and the availability of publicly accessible data reports. Another is Colorado's APCD, which was applauded for its successful stakeholder engagement throughout the development process.

Additional stakeholders offered Virginia and Wisconsin as model states when considering a voluntary PCD. According to stakeholders, Wisconsin has a data-rich voluntary PCD that has experienced relative success, and Virginia is in the developmental stages of a voluntary initiative and should be watched for best practices. Stakeholders also briefly mentioned Maine and Massachusetts as states to assess for their successful development and execution of a PCD, as these databases have existed for some time and could provide sound advice.

Duplicative Efforts. Many stakeholders explained that when considering an initiative such as this, it is beneficial to leverage existing data sources and infrastructures. When asked if there are existing efforts in Michigan that could be leveraged, stakeholders offered MDC and the Greater Detroit Area Health Council as possible options. In addition, one organization

mentioned the need to determine the desired functions of the database to avoid duplicating efforts already underway within the State, and emphasized that efforts should be made to minimize the duplication of internal data processing and analytics currently conducted by payers, providers and other entities.

Other Concerns. When asked about concerns around establishing a PCD in Michigan, stakeholders cited the following issues:

- *Need to establish clear use cases.* Stakeholders discussed the need to identify how a claims database would be used in Michigan in order to determine ultimate value of the investment.
- *Cost to taxpayers*. Some stakeholders expressed concern over the costs to the public if the State chooses to allocate public funding to a claims database.
- *Mandatory versus voluntary data submission.* Stakeholders discussed the trade-offs of voluntary participation in a PCD, explaining that a voluntary database may be "more sellable" to payers, but could result in different participants from year-to-year and inconsistent data submissions.
- *Encouraging Consumer Use of the PCD.* Stakeholders raised the concern that it may be a challenge to encourage consumers to make full use of the database, as there is a need to increase health literacy.
- *Standard Measure of Quality.* Stakeholders expressed interest in a standard measure of quality. It was recognized by the stakeholders that cost is, in a certain sense, easier to define than quality, and that quality improvement is an ongoing goal of stakeholders in Michigan.