



Delaware Center for
Health Innovation

Increasing access to claims data to support health innovation

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Introduction

PURPOSE OF THIS PAPER

Since its inception in 2014, the Delaware Center for Health Innovation (DCHI) has been convening stakeholders to shape innovations that support the Triple Aim: improved health, health care quality and experience, and affordability for all Delawareans.

DCHI has embraced the goal that our health care system should evolve from a fee-for-service system that incentivizes volume to a value-based system that rewards health care providers for supporting improvements in quality and affordability of care. Toward that end, DCHI recently adopted a consensus paper for outcomes-based payment that outlined several key design principles, including that “providers accepting financial risk for a population should have access to claims data as necessary to effectively manage that risk.”¹ To explore approaches to improving access to claims data, DCHI recently convened a working group of stakeholders including payers, providers, state agencies, and consumers to discuss the issue. The following paper draws upon these working group discussions, as well as the experience of other states who have created an all-payer claims database (APCD).

The paper is organized into three parts: (1) a description of the principle uses for claims data and potential implementation options; (2) a discussion of the legal and operational considerations for creating an APCD; and (3) a set of recommendations for the path forward.

DELAWARE HEALTH INNOVATION PLAN

In 2013, the Delaware Health Care Commission convened stakeholders across the state—including consumers, providers, payers, community organizations, academic institutions, and state agencies—to work together to build a strategy to achieve the Triple Aim. That work culminated in Delaware’s State Health Care Innovation Plan followed by the award of a four-year, \$35 million State Innovation Model Testing Grant from the Center for Medicare and Medicaid Innovation to support the implementation of the plan. Combined with additional investments by purchasers, payers, and providers of care in Delaware, grant funds are intended to support changes in health care delivery to create more than \$1 billion in value through 2020. DCHI was established in the summer of 2014 to work with the Delaware Health Care Commission and Delaware Health Information Network (DHIN) to guide the implementation of the strategy as described in the Innovation Plan as a partnership between the public and private sectors.

¹ DCHI Consensus Paper: Outcomes-based payment for population health management, January 2016.

AN ALL-PAYER CLAIMS DATABASE AS AN ENABLER OF HEALTH INNOVATION

Approximately 20 states in the U.S. have implemented an APCD or are in the process of implementing one.² Consistently, states have identified the opportunity to address the Triple Aim as part of the rationale for forming an APCD. Early adopters argue that a fully enabled APCD has the potential to improve transparency, identify variation in cost and utilization, uncover key drivers of variation, and support a more fact-based assessment of the value of health care services to all stakeholders.

In Delaware, discussions about improving access to claims data and transparency are not new. For several years, members of the Delaware Cancer Care Consortium—among others—have advocated for the creation of an APCD to support quality improvement initiatives. In 2013, the Delaware State Health Innovation Plan described that “limited information transparency persists across the system on key metrics such as quality and cost at a provider level, hindering the ability of patients and providers to make effective value-based decisions about their own care.”³ This sentiment was echoed in the recent recommendations of the State Employee Health Plan Task Force to “investigate methods for promoting cost transparency for [State Employees Health Plan] members.”⁴ Stakeholders, including the DCHI Healthy Neighborhoods Committee and public health agencies, have also recognized the broad utility of claims data to improve population health. Additionally, stakeholder groups including the Delaware Healthcare Association and a number of practicing physicians have reached out to DCHI to express support for increasing access to claims data through an APCD, particularly for the purpose of having a central, third-party provide visibility into utilization across the continuum of care.

Uses of claims data to enable innovation

In our efforts to identify opportunities to increase access to claims data, we considered four broad uses for this information: (1) population health improvement; (2) value-based purchasing; (3) provider risk-sharing; and (4) consumer shopping for care. Following, we briefly describe the current state of limited access to claims data, and consider five approaches to increasing access including creation of an APCD and other alternatives. Afterwards, we examine each of the four broad use cases, including a description of the scope and level of granularity of data that is required to support each.

CURRENT STATE

Traditionally, provider billing offices have claims data for the services those providers deliver themselves, but not for services delivered by other providers to the same patient

² APCD Council website, Accessed February 2016.

³ Delaware State Health Innovation Plan, December 2013.

⁴ State Employee Health Plan Task Force report, December 2015.

population. Five Delaware-based Accountable Care Organizations (ACOs) and/or Clinically Integrated Networks (CINs) participating in the Medicare Shared Savings Program (as of January 2016) are now eligible to receive claims data for attributed Medicare beneficiaries, and some of these provider organizations have already implemented their own (or third-party) analytic capabilities to identify opportunities for improvement within these Medicare populations. Apart from this, however, access to claims information in Delaware is currently fragmented and provides limited transparency into costs, utilization, and quality across providers and payers.

To date, Commercial payers and Medicaid Managed Care Organizations have not made raw claims data available to providers. For Commercial and Medicaid populations, some providers are receiving “gaps in care” and other performance reports from some payers. However, this information is organized differently by each payer and does not enable providers to integrate analyses across patient populations covered by different payers, limiting the ability of providers to glean comparative insights across their full patient panels. This approach also impedes providers from applying their own analytic tools to claims data, which may be more readily integrated into provider clinical and operational workflows (e.g., queuing of patients for outreach and care coordination), as has already been done by some ACO/CINs in Delaware for Medicare beneficiaries.

OPTIONS FOR FUTURE STATE

Looking forward, we considered five potential approaches to increase access to claims data, including but not limited to the creation of an APCD: (a) an APCD with contracted unit price information; (b) an APCD without contracted unit price information; (c) centralized reporting of payer-executed analyses; (d) claims data sharing between payers and providers; and (e) payer-specific performance reporting, as currently supported by most payers. Our assessment of these options is summarized below (Exhibit 1) as then further discussed in the context of each of the four use cases.

Overall, we find that there are multiple approaches to supporting each of the four use cases. We believe that an APCD with contracted unit price information would support the broadest range of potential uses. We also believe that—even in the presence of a fully functioning APCD—payers may continue to provide their own proprietary tools for consumers and physicians to access claims data to the extent that doing so may be a source of competitive advantage in improving quality of care and controlling costs.

EXHIBIT 1

Potential implementation options mapped to use cases

- ① Population health improvement
 - ② Value-based purchasing
 - ③ Provider risk sharing
 - ④ Consumer shopping for care
- May be fully enabled
 - May be partially enabled
 - Not possible to enable

| | Description | Considerations | Use Cases |
|----------|---|---|-----------|
| | | | ① ② ③ ④ |
| A | APCD with contracted unit prices <ul style="list-style-type: none"> ▪ All payers submit post-adjudicated claims data to central database ▪ Centralized analysis or data extracts to 3rd parties for specific authorized uses ▪ Analysis/extract may either reflect unit prices, or regional averages depending on specific use case | <ul style="list-style-type: none"> ▪ Access to data subject to specific authorized uses only ▪ Insights amplified by aggregation across payers and providers ▪ Affords insight into all drivers of cost variation ▪ Some use cases may allow for masking of proprietary information ▪ Consumer shopping may be better enabled by payers themselves based on ability to estimate of out-of-pocket (OOP) liability | ● ● ● ● |
| B | APCD without contracted unit price information <ul style="list-style-type: none"> ▪ All payers submit claims data without contracted prices to central hub ▪ Centralized analysis or data extracts to 3rd parties for specific authorized uses ▪ Analyses use Medicare rates or RVUs in lieu of contracted unit prices | <ul style="list-style-type: none"> ▪ Access to data subject to specific authorized uses only ▪ Insights amplified by aggregation across payers and providers ▪ Affords insight into only select drivers of cost variation | ● ○ ● ○ |
| C | Centralized reporting of payer-executed analyses <ul style="list-style-type: none"> ▪ Payers independently analyze claims data to generate standardized outputs ▪ Analytic outputs are aggregated centrally, compiled for reporting | <ul style="list-style-type: none"> ▪ Uses constrained to centrally defined analyses ▪ Multiple producers of data/ analytics require close monitoring and clear formats to ensure consistent reporting | ○ ● ● ● ● |
| D | Data sharing between payers and providers <ul style="list-style-type: none"> ▪ Risk-bearing providers receive claims information directly from payers ▪ Providers conduct analyses themselves or through 3rd-party vendors | <ul style="list-style-type: none"> ▪ Insights constrained by size of population included ▪ Requires each risk-bearing provider to operationalize data extraction, transformation, and loading separately with each payer | ○ ● ● ● ○ |
| E | Payer-specific performance reporting <ul style="list-style-type: none"> ▪ Payers independently provide providers and/or consumers with analytic reports or performance measures for quality, utilization, and cost | <ul style="list-style-type: none"> ▪ Consumer shopping enabled by payer estimate of OOP liability ▪ Other insights constrained by size of population included ▪ Uses constrained to analyses as defined by payers ▪ Providers may receive multiple reports from different payers complicating integration into their workflow | ○ ○ ● ● |

1. Population Health Improvement

As previously mentioned, members of the Delaware Cancer Care Consortium have long called for creation of an APCD to support quality and health improvement efforts. Similarly, DCHI’s Healthy Neighborhoods model for population health improvement may be enhanced by access to claims data spanning Medicare, Medicaid, and commercially-insured populations in a standard format that would support priority-setting, design of interventions, and evaluation of impact across communities.

Community leaders of population health and quality improvement initiatives may use claims data to augment available clinical and public health data to understand the prevalence of illness and injury within the broader state population and in specific communities. At a more granular level, access to claims data can help illuminate gaps in care for patients by tracking services delivered by different care providers. This would support both providers and population health initiatives in outreach and system improvement. These parties could also use claims data to understand utilization patterns that contribute to a clearer picture of differences in access to care and quality of care.

In contrast with an APCD, analysis by individual payers may fail to uncover differences in health, access to care, quality or utilization across Medicare, Medicaid, and Commercially insured populations. The data analytics and insights provided by individual payers are limited to their membership and the results may not be applicable across populations or provide sufficient detail for aggregation and comparison. In addition, analyses for specific providers may be less statistically reliable due to lower patient volumes reflecting only a fraction of a provider's patient panel.

APCDs have been used by several other states to better understand public and population health. For example, Vermont Blueprint for Health has utilized APCD data and other data resources to create community profiles with demographic, cost, utilization, quality and health risk information.⁵ Vermont was also able to assess the impact of their community health teams and patient-centered medical home program on utilization and costs.⁶ Colorado used its APCD data to identify potential savings from reducing Cesarean section rates⁷, and Rhode Island published an analysis of preventable hospitalizations and identified more than \$800 million in potential cost savings⁸ from public and community health interventions.

Most uses of claims data for population health improvement could be supported by an APCD with or without unit price information. For example, claims data which does not reflect contracted rates could be augmented with Medicare fee schedules and/or Relative Value Units to allow for cost- or resource-weighting of utilization patterns. However, analysis based on post-adjudicated claims data with complete price information would more fully reflect the cost of care (in addition to health, quality of care, and utilization patterns). Also, an APCD established with post-adjudicated data could support summary analyses fully leveraging the underlying unit price information while blinding contracted unit price information in any outputs, to the extent this is necessary or desired.

2. Value-Based Purchasing and Policy Development

Other states have used an APCD to create standard reporting of cost drivers and patterns of utilization across different populations. For example, The Center for Health Information and Analysis (CHIA), which manages the APCD in Massachusetts, has used claims data to conduct a relative price analysis comparing providers, hospital groups and

⁵ Vermont Blueprint for Health. Hospital Service Area Profiles, accessed March 2016.

⁶ Jones et al., Vermont's Community-Oriented All-Payer Medical Home Model Reduces Expenditures and Utilization While Delivering High-Quality Care. Population Health Management, 2015.

⁷ Center for Improving Value in Health Care (CIVHC). Opportunities to bend the cost curve: Reduce Cesarean rates in Colorado, July 2014.

⁸ Health Facts Rhode Island website, accessed February 2016.

health plans.⁹ Additionally, CHIA published a market trend analysis of high deductible plans in the state illustrating that high-deductible plans were increasing in the market and associated with greater out of pocket costs for consumers but lower overall costs.¹⁰ In Oregon, data from the APCD has been used to track progress against goals for enrollment, utilization, and spending as part of their health care transformation effort.¹¹

The State Employee Health Plan, other self-insured employers, and other purchasers of health insurance may similarly benefit from analysis of a more comprehensive claims dataset to understand the factors contributing to the cost and quality of care. Policy makers can use claims data to provide transparency into insurance rates and market trends, to determine the areas of focus for strategic investment, and to evaluate implementation of policies. For these purposes, purchasers and policy makers in Delaware have previously relied largely on claims analysis conducted by health insurers or by third-party actuarial firms on an ad hoc basis. A more comprehensive dataset that includes all (or the substantial majority) of Delawareans provides an increased sample size to support greater insights into cost drivers or utilization patterns that span Commercial, Medicaid, and Medicare populations.

3. Provider Risk Sharing

Today, most providers have access to claims information only for care they directly deliver to patients themselves. With the shift from fee-for-service to outcomes-based payment models, providers are assuming responsibility for the quality and efficiency of healthcare. Frequently, this includes not only the care a provider delivers directly to patients, but all of the services associated with an episode of care (e.g., bundled payment for total joint replacement) or all of the care received by a population over a fixed period of time (e.g., total cost of care for 12 months), sometimes spanning multiple providers.

Access to a complete claims dataset in a standard format will support provider efforts to integrate care across the continuum and provide an enhanced view of utilization, including care delivered by all providers treating those patients. Transparency on cost, utilization, and quality performance may help practices to identify key drivers for improvement. This is especially important for providers who are shouldering financial risk for an episode of care or for the total cost of care for a population. Increased transparency around cost drivers may also help to boost provider confidence when entering into risk-sharing arrangements with payers. Claims data could put providers on a “level playing field” with health plans with whom they negotiate these agreements.

⁹ Center for Health Information and Analysis (CHIA). Relative Price: Health care provider price variation in the Massachusetts commercial market, February 2015.

¹⁰ CHIA. Massachusetts high deductible health plan membership, 2015.

¹¹ Oregon Health Authority. Leading Indicators for Oregon’s health care transformation, April 2015.

Improving quality of care through comprehensive data and transparency is a common goal identified in efforts in other states. In Maine, data from their APCD is being used to develop primary care reports for practices that provide information on costs, quality, and utilization.¹² Additional reports are available to help them drill down and identify cost drivers, areas of high utilization and high cost patients. In addition to providing detailed information for practices on their performance, public reporting of high-level quality information allows for peer-to-peer comparison that provides transparency for consumers and is instrumental in quality improvement efforts. In their annual provider quality report, Massachusetts uses claims data to provide transparency around primary care services at an aggregate level, including state performance on a standard set of metrics (potentially unnecessary care, patient experience, patient safety, and care coordination) and identifies areas of variation across providers and patient populations.¹³

To be fully useful to risk-bearing providers, claims data must be post-adjudicated data that includes contracted unit price information. Large provider systems may be able to negotiate with payers to directly transfer post-adjudicated claims data for the population for which they are at risk. However, in a system where multiple provider organizations assume financial risk with multiple payers, it may be more cost efficient for the system to establish an APCD than to support multiple independent claims data exchanges. In addition, an APCD may allow a risk-bearing provider to secure a claims data extract in a standard format and structure across their entire Medicare, Medicaid, and Commercial patient panels, which may not only be more efficient but may also facilitate analyses across patient populations

In Delaware, accountable care organizations and clinically integrated networks have described a preference to receive data extracts on which they can apply their own analytic tools that are integrated into existing workflows. Smaller, independent practices who lack the capabilities to analyze raw claims data may benefit from analytic insights directly from payers or from centralized APCD reports to support their participation in outcomes-based payment models.

4. Consumer Shopping for Care

As the cost of healthcare continues to rise, some consumers face increasing out-of-pocket cost sharing in the form of increased deductibles, co-insurance, and/or co-payments. Until now, limited information about the cost or quality of services has been made available to consumers. However, as the financial burden to consumers increases, those with increasing deductibles or other out-of-pocket cost sharing for care may need information derived from claims data to inform more value-conscious decisions regarding care and choice of provider.

¹² Maine Health Management Coalition website, accessed March 2016.

¹³ CHIA. Performance of the Massachusetts Health Care System: A focus on provider quality, November 2015.

Consumers often do not have access to the actual price paid by an insurance carrier to a health service provider that will directly affect their out-of-pocket costs. Access to claims data allows consumers to determine what their share of the costs would be, often through “shopping tools” such as websites that provide information on the cost of care for a procedure. Studies indicate that price variation across providers can translate to meaningful differences in costs to consumers.¹⁴ For consumers, price transparency can translate to improved understanding of the out-of-pocket costs for a procedure or service and the value of different health insurance benefits packages.

Several states have leveraged access to claims data to support consumer comparisons of costs by different providers. New Hampshire has launched the Health Cost website that allows consumers to compare costs and quality for medical care, dental care, and pharmacy benefits by insurance carrier for different service providers. One specific example from their consumer website is a table that displays the average cost for the 20 most common lab tests by facility with costs ranging from \$11 to \$123 for the same set of tests.¹⁵ Colorado has also used claims data to implement a website geared to consumers that allows them to select a procedure (e.g., total joint replacement) and a location and find the price of the procedure across nearby facilities.¹⁶ The website also includes information on patient experience, hospital quality, and geographical variation in utilization and cost.

While the experience of New Hampshire, Colorado, and other states has demonstrated that consumer tools may be enabled centrally through an APCD, payers may be able to operationalize consumer shopping tools more fully by integrating consumer-specific benefit design information and providing this service directly to their members and consumers selecting a health plan. Therefore, whether Delaware chooses to support APCD-enabled consumer shopping tools or not, it may be equally or more important that we work to improve the sophistication and adoption of consumer shopping tools available through payers.

¹⁴ Health Care Cost Institute. Shopping for Healthcare makes “cents” for consumers, February 2015

¹⁵ New Hampshire Health Costs website, <http://nhhealthcost.nh.gov/lab-work-price-check>, accessed March 2016.

¹⁶ CIVHC website, <https://www.comedprice.org/#/home>, accessed March 2016.

Legal, Operational, and Financing Issues

LEGAL AND REGULATORY ISSUES

Stakeholder discussions within Delaware have raised several legal and regulatory concerns for consideration regarding the formation of an APCD.

- 1. Voluntary or mandatory participation of private insurers.** The substantial majority of the 20 states who have implemented an APCD have used legislation to mandate collection of post-adjudicated claims information from insurance carriers. ERISA pre-empts state mandates for APCDs from applying to self-insured groups. However, self-insured groups may voluntarily participate in APCDs which are organized based on legislative mandate applicable to fully insured populations. In Delaware, we estimate that a legislative mandate applicable to all state-regulated fully insured business could allow for more than 70% of the Delaware population to be included in an APCD, provided that data for State Employees, Medicaid, and Medicare were also included. We believe that this level of penetration would support all of the aforementioned uses of claims data. We also anticipate that many self-insured employers would, over time, volunteer for their data to be included in the APCD to take advantage of comparative analytic insights.
- 2. Consumer privacy and confidentiality.** Protecting consumer health information is an important consideration in the formation of the APCD in order to build and maintain the trust of consumers. In particular, the protection of patient identifying information at all stages of the data lifecycle (e.g., data collection, storage, and release) must be ensured. Other states address privacy and confidentiality in APCD legislation by including HIPAA protections, exemptions from Freedom of Information Laws, and reference to other applicable privacy and confidentiality laws. Data release policies and data sharing agreements between the APCD warehousing entities and data submitters can be designed to address data security concerns. The DHIN, which currently houses other health data in Delaware, has protections in place to ensure compliance with the protection of health data.
- 3. Non-disclosure clauses in payer-provider contracts.** Several stakeholders expressed concern that existing contracts between payers and providers contain non-disclosure clauses precluding either party from disclosing contracted rates. Additional concerns have been raised about the implications of releasing this proprietary information and its impact on competitive advantage. Legislation may be written to supersede these contractual obligations and provide legal safe harbor for aggregation of data from public and commercial data sources.

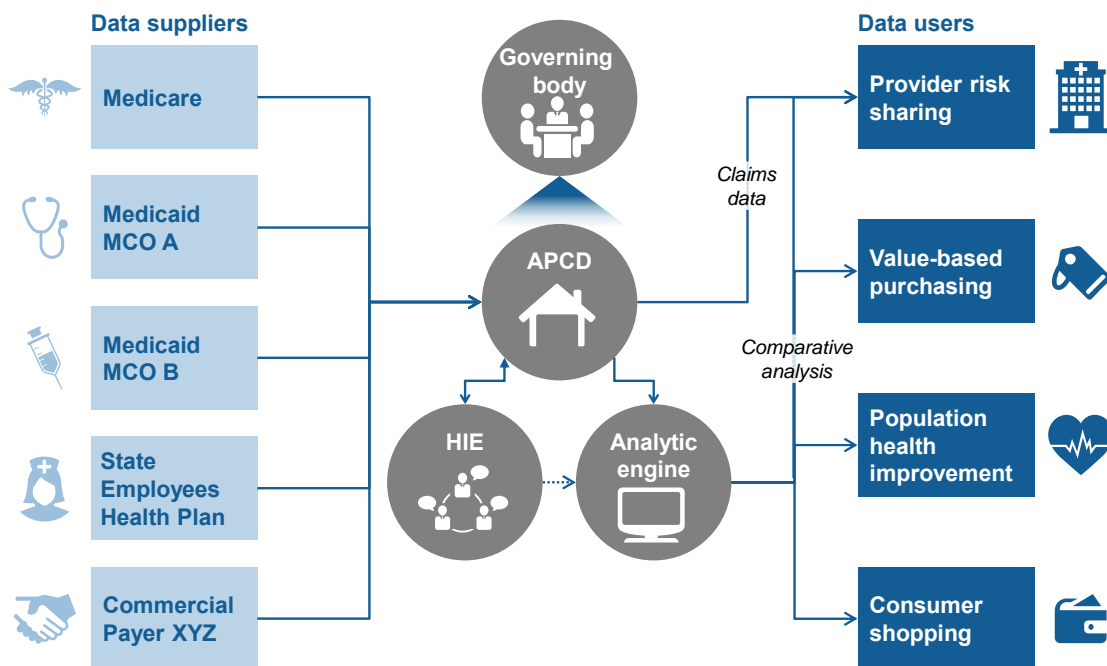
OPERATIONAL FACTORS

Data flows into an APCD from data suppliers (insurance carriers and third-party administrators) through a central data store and then to users through claims data extracts and/or analytics reporting (Exhibit 2). A governing body, advisory council, or another responsible party may be specified in legislation to provide oversight of the APCD include data collection and data release rules. The APCD may or may not be connected to a health information exchange to combine different types of data (e.g., claims and clinical data). Claims data extracts may also be provided directly to users who may then apply their own analytic tools, as has been stated as a preference among some Delaware ACOs. Analytics and reporting capabilities may be applied to the data by the APCD operator or by analytics vendors contracted by the APCD operator.

EXHIBIT 2

Access to Claims Data: Potential Data Flow and Operations

ILLUSTRATIVE



States have implemented APCDs in multiple ways that have evolved with their collective experience. Three components of the implementation of an APCD need to be considered: (1) Governance, (2) Data collection and storage, and (3) Data release and reporting.

- 1. Governance.** For APCDs formed based on legislation, the governance structure is often framed within the legislation, including an outline of the authority of the

governing body to determine the use cases for the APCD and to set rules with regards to data collection and reporting. APCD Council experts have advised that the majority of states with APCDs manage concerns regarding transparency into contracted prices through data release governance. In select cases, legislation has restricted data access to specific use cases. More commonly, states have allowed for the APCD oversight body to exercise its own discretion in reviewing and approving requests for access to data.

The specific structures employed by states differ. For example, the Green Mountain Care Board, who has authority over the APCD in Vermont, is a five-member group charged with improving quality and stabilizing costs in the state. In Massachusetts, the Council for Health Information and Analysis Oversight oversees the APCD and develops guidelines for reporting and data collection. In New Hampshire, the authority is designated jointly to the Health and Insurance Commissioners.

Commonly, the governing body or authorized entity will determine the standard data components to be collected and the methods for collection. The governing body also defines rules which specify who has access to the data, which elements they have access to, and for what purpose. Additionally, the group or its authorized entity may determine analyses to be conducted using the data. A comparison of data release rules of several states with early adoption of APCDs (Maine, Massachusetts, Vermont, and New Hampshire) indicated that each released complete claims data including pricing information, but release rules vary; some states provide this information to the public and others provide the data only to authorized users for restricted uses.¹⁷

In New Hampshire, the governing body oversees a rigorous case-by-case review of the purpose behind any request for data, all data elements requested, and data security procedures to ensure the request is not a conflict of interest. In contrast, the primary function of Rhode Island's data release review board is to protect the privacy of consumers and not to otherwise restrict data.

- 2. Data collection and storage.** The Delaware Health Information Network (DHIN) is an existing entity that could serve as the warehouse for an APCD in the state. DHIN has an existing governance structure with relevant authority, statutory protection from Freedom of Information Act (FOIA) requests, and systems in place to protect the privacy and confidentiality of the data that would facilitate implementation. Additionally, DHIN currently receives clinical data and has the capability to receive other types of data (e.g., pharmacy information) that Delaware may choose to link with the APCD.

¹⁷ APCD Council website, accessed February 2016

- 3. Analytics and reporting.** A broad range of analytic capabilities may be applied to the APCD by a centrally enabled resource (e.g., the DHIN/data warehouse) or by third parties. Analytic capabilities and approaches to reporting vary widely across states with an APCD. Some states utilize a standard reporting package, while other states such as Massachusetts have robust, custom reporting capabilities that produce public reports on quality, cost, and utilization. Other states focus less on determining which reports to publish and instead provide custom data extracts for third parties to analyze and provide insight.

The working group reviewed possible uses of data analytics that relate to the primary use cases specified in this consensus paper and found that there was utility for both a standard set of reports and for claims data extracts to be made available to third parties for authorized uses.

- *APCD-generated data extracts for third-party analytics.* Providers assuming financial risk for a population (or considering whether to enter into such arrangements) may prefer to receive claims data extracts against which they can apply their own analytic capabilities, and/or integrate their own data mining with clinical and operational workflows.
- *APCD-generated reporting.* DCHI’s Healthy Neighborhoods program may be effectively supported with a standardized set of reports or profiles created from the APCD. Central reporting may also be important in supporting public reporting of the drivers of costs and quality.
- *Lower priority for APCD.* As described, consumer shopping tools may be built from the APCD. Alternatively, these may be supported by payers themselves who are better able to integrate benefit design information.

FINANCING

Costs to implement an APCD include overhead and governance, data aggregation, and data analytics. Estimated start-up costs range from \$2 - 4 million and ongoing costs after year one are estimated to be about \$1.2 - 2.7 million per year.¹⁸ Data aggregation and analytics generally contributed the highest cost and were most variable across states. Key factors influencing cost include the number of data feeds and data sources, the robustness of the analytic capabilities, and the complexities of the governance structure. Several

¹⁸ Love, D. and Sullivan, E., Cost and Funding Considerations for a Statewide All-Payer Claims Database (APCD), APCD Council, NAHDO, and NHIPP, March 2011; Expert interviews March 2016

different approaches for funding have been utilized by other states for the establishment and maintenance of their APCDs.¹⁹

- **Grant funding.** Several different types of grants have been leveraged for funding: federal grant (CMS State Innovation Models, Center for Consumer Information and Insurance Oversight rate review), local foundation grants, and grants from other partners with an interest in consumer transparency.
- **General appropriations.** Some states have provided core funding for the APCD through state appropriations. This has been particularly true to cover the initial costs, but also for a portion of ongoing costs.
- **Medicaid match.** The federal government has programs to partner with states to provide financial assistance to APCDs that produce analytics that benefit State Medicaid programs. Support can include design and development, maintenance, or operations.
- **Fees for access to data.** Additional revenue can be generated by charging for report production and file preparation for data requestors or through subscription fees. Some states have implemented data access fees as part of their sustainability plans.
- **Partnerships.** Some states have utilized partnerships with other related entities such as a health information exchange (HIE) or a health insurance exchange (HIX) to share infrastructure and costs and leverage funding and grant opportunities.

Potential risks of APCD formation

Apart from the primary uses of claims data discussed previously, we considered potential indirect implications of APCD formation on payer and provider market structure.

Stakeholder raised questions falling into three thematic areas:

- **Payer Market Structure:** Have health insurers exited markets following APCD formation? Or has APCD formation been followed by new entrants or increased competition?
- **Provider Market Structure:** Has increased price transparency been followed by increased physician-hospital integration and/or consolidation of providers?
- **Provider Pricing:** Has increased price transparency led lower-cost providers to increase their prices? Or have higher-cost providers lowered their prices in response?

¹⁹ Porter J, Love D, Costello A, Peters A, Rudolph B. All-Payer Claims Database Development Manual: Establishing a Foundation for Health Care Transparency and Informed Decision Making, APCD Council and West Health Policy Center, February 2015, Expert interviews, March 2016.

To examine these potential effects, we considered eight states that have implemented an APCD with price transparency. We selected four of these states for closer examination based on similarity to Delaware in size, payer concentration, and provider concentration: Maine, New Hampshire, Rhode Island and Vermont. Each of these states has an operational APCD, and has released price transparency information. For each of these four states, we examined market data on payer and provider market shares, and interviewed local APCD experts on their experience, as well as experts from the APCD Council who have had meaningful exposure to APCD efforts across a number of states.

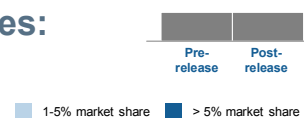
The four states we examined have been collecting post-adjudicated claims data from payers over the past 5-12 years. New Hampshire began collecting data in 2005 and began releasing price information in 2007; the other three states introduced price information within the past 3 years. Based on expert interviews, published studies and a review of key hospital and health insurance market indicators we did not find any evidence of unfavorable market changes arising from APCD formation. We did find anecdotal evidence of increased competition among payers and among providers that may have been at least partly attributable to increased price transparency.

Changes in Payer Market Structure. In each of the four states we examined, similar to Delaware, Blue Cross Blue Shield plans as well as some or all of Aetna, Cigna, and United compete in the Commercial market; United Healthcare and other managed care organizations compete in the Medicaid market. In all four states, the market share leader prior to APCD formation continued to maintain significant market share following APCD formation and release of price information several years later. In none of the states did we find an example of an insurer with material market share (which we defined as 5% or greater share) exiting the market following release of price information by the APCD. In three of the four states, release of price information by the APCD was followed by a major national insurer either entering the market or achieving material market share where they previously were either not in the market or had immaterial market share. (Exhibit 4). Experts described instances where some national insurers had adopted a position against APCD formation in a market where they had a strong market share, but were supportive of APCD formation in another market where they had weak market share, which was inferred by one national expert to be based on a belief that APCD formation may improve their ability to compete with the market share leader.

EXHIBIT 3

Payer market participation in small APCD states: before and after release of price information

PAYERS MOST RELEVANT TO DELAWARE



| Payer | Maine ¹ | New Hampshire ² | Rhode Island ³ | Vermont ⁴ |
|-------------------|--------------------|----------------------------|---------------------------|----------------------|
| Aetna, Commercial | | | | |
| BCBS, Commercial | | | | |
| Cigna, Commercial | | | | |
| UHC, Commercial | | | | N/A |
| UHC, Medicaid | N/A | N/A | | N/A |

1 Maine began collecting APCD data in 2003; price information was publicly available in 2014
 2 New Hampshire began collecting APCD data in 2005; price information was publicly available in 2007
 3 Rhode Island began collecting APCD data in 2010; price information was publicly available 2015
 4 Vermont began collecting APCD data in 2007; price information was publicly available 2013

Source: APCD council website, HealthLeaders Interstudy Reports (2009-2015), NCQA Health Plan report, accessed 4/2016

Changes in Provider Market Structure. Based on discussions with the state APCD experts, we did not find evidence of changes in provider market structure attributable to APCD formation or increased price transparency. Health system concentration and the degree of physicians-hospital integration varies across regions within the four states examined; these differences largely pre-date the release of price information by APCDs; regional differences appear to have largely persisted following the release of price information. Maine has been collecting data since 2003 and began releasing data to the public in 2014. According to an APCD expert in the state, the political environment of rising health care costs and out-of-pocket expenses for consumers has eased providers away from public statements made years ago that they may have to close if the data were released. In a study of New Hampshire, we found similar speculation that increased price transparency could lead to greater hospital consolidation over time. However, we haven't found any evidence that price transparency has contributed to hospital consolidation. The trend toward hospital consolidation that we observe nationwide has been widely attributed to increased levels of competition based on a number of factors, and includes states that have not introduced an APCD.

Changes in Provider Pricing. Experts from the APCD Council with broad awareness across multiple states report that they have not seen any indication of significant provider

price increases in states with APCDs. In New Hampshire, which was the first state to introduce price transparency with the launch of their HealthCost website in 2007, we found anecdotal evidence of price transparency leading to a reduction in provider pricing. A study supported by the California Health Foundation and the Robert Wood Johnson Foundation explored the impact of this initiative.²⁰ This study chronicled an example of a public contract dispute between the highest priced hospital in the state and the largest payer which resulted in a reduction in contracted prices. Apart from such anecdotal evidence, however, we have not found an authoritative study of the impact of price transparency on provider pricing practices.

In summary, we find numerous examples of states that began collecting post-adjudicated claims data 5-10 years ago without any discernible impact on payer or provider market structure. Experience with the release of price transparency information is more recent. If Delaware were to create an APCD, the oversight body responsible for making decisions regarding the release of price information would be well advised to continue to study the experience of other states with price transparency to inform local policy and operations.

Recommendations

Based on the experience of other states, the needs of Delaware, and input from local stakeholders, several recommendations are outlined following, to improve access to claims data in support of health innovation.

- 1. Legislation should be considered to allow for the creation of an APCD and to mandate participation by all state-regulated payers.** Such a mandate may require reporting by the State Employees Health Plan, Medicaid, and all fully-insured populations, while also facilitating reporting by Medicare, and allowing for voluntary participation by self-insured plan sponsors.
- 2. A governing body should be established with authority over the APCD, including representation from all key stakeholder groups.** The governing body should oversee the APCD including data collection rules, and how data is accessed, by whom, and for what purpose. Ensuring that all stakeholders have a voice in the process serves as a safeguard that data will not be released without sufficient cause to meet an important use case. We recommend that the body include at least one consumer representative as well as leaders from at least one commercial payer, at least one practicing primary care physician, at least one practicing specialist provider, at least one leader from a hospital or health system, and at least one public health agency. The governing body should monitor the experience of other states that have

²⁰ Tu H and Gourevitch R. Moving Markets: Lessons from New Hampshire's Health Care Price Transparency Experiment, April 2014

formed an APCD and apply lessons learned as applicable to Delaware.

- 3. The existing DHIN infrastructure should be leveraged to facilitate the formation of the APCD.** DHIN serves as a central enabler of health information technology for the state. The DHIN has an existing governance structure and relationships with stakeholders to facilitate aggregation of claims data.
- 4. Data reported by payers should be post-adjudicated claims data for all types of providers, and should be as up-to-date as possible.** Data should include claims for covered products and services including but not limited to hospital care, physician services, behavioral health, diagnostic testing, and prescription drugs. Data should be as up-to-date as possible, to make the information as actionable as possible, allowing for a reasonable period for the timeframe between services rendered, submission of claims, and payment.
- 5. APCD start-up costs and operational costs should be funded through a combination of sources that maximize federal funding while asking institutional users to bear a reasonable share of costs to access data and reporting.** Several sources of funding will likely be required to build and operate the APCD. To the extent allowable, stakeholder contributions may be leveraged with federal matching funds under the Medicaid program for a portion of start-up and/or operational costs that benefit the Medicaid program. The balance of start-up costs should be funded through one or more public or private grant programs. The balance of operational costs may need to be funded through either grants or access fees.
- 6. DCHI should work with the APCD operator to design and implement a robust standard analytics package to support the work of Healthy Neighborhoods and other population health improvement initiatives.** A key use case for the APCD is to provide communities with access to data for population health initiatives to identify areas of focus. As Healthy Neighborhoods Councils form across the state and begin their work in communities, analytic reports based on data from the APCD can help to assess and track utilization, disease patterns, and quality outcomes.
- 7. Delaware's APCD should release data extracts to risk-bearing providers, with appropriate protections for patient confidentiality.** In line with the position outlined in the DCHI consensus paper on outcomes-based payment for population health, claims data should be made accessible to providers taking on risk. Visibility into gaps in care and drivers of cost and utilization will be important to successful adoption of new payment models.
- 8. Standard reporting on the drivers of cost and affordability, across populations should be made publicly available.** In order to maintain focus on lowering the cost of health care in Delaware, DCHI recommends standard reports on cost drivers be

included in the standard analytics package for the APCD and that those reports be made available to the public.

- 9. The state should encourage payers to improve availability of consumer shopping tools and build capabilities for the future.** As an alternative to APCD-generated shopping tools, DCHI recommends that payers build upon existing consumer tools to include comparative analyses of cost and quality since payers currently have actual costs and consumer-specific information on benefit design. In the future, centrally-enabled shopping tools could be generated from APCD data if necessary to better support consumers.