State Health Reform Assistance Network
Charting the Road to Coverage

ISSUE BRIEF
June 2014

Applicability of All-Payer Claims Databases for Rate Review and Other Regulatory Functions

*Prepared by **Julia Lerche** and **Ross Winkelman**, Wakely Consulting Group*

Background

As part of its work with the Robert Wood Johnson Foundation's State Health Reform Assistance Network (*State Network*), Wakely has worked with states on ways to strengthen rate review functions, and this paper is intended to describe the potential uses of all-payer claims databases (APCDs) for rate review and other regulatory functions. Building on a discussion with a number of states at a *State Network* convening in early 2014, this paper includes descriptions of uses for APCDs and ranks the level of effort necessary to use the APCD for that purpose and the relative value in doing so. These rankings are subjective and assume typical circumstances. State-specific conditions may vary from those assumed in our rankings which may affect the level of effort and value of a particular use, perhaps significantly.

All-payer claims databases are large databases that collect and compile medical, pharmacy, and sometimes dental claims, eligibility, and provider files from public and private payers. APCDs are currently being used for a variety of functions, including population health analysis, comparative analysis of provider and facility quality, cost management for Medicaid and other public programs, support for provider payment reform initiatives, and consumer transparency tools.

Insurance regulators in most states are charged with ensuring that health insurance rates in the individual and small group markets are not inadequate, excessive, or unfairly discriminatory. Regulators typically have limited data upon which to benchmark carrier performance, efficiently analyze longitudinal or cross-issuer data, or perform independent analysis of health insurance claims to support rate review. Regulators have many potential opportunities to leverage APCDs to improve upon and add value to the work they do on behalf of consumers. These opportunities include enhancing the rate review process, performing market analysis to inform policy decisions, and bending the cost curve/improving quality of care by promoting transparency and competition. This paper also addresses the limitations of pursuing these opportunities. Table 1 outlines the analyses to be discussed and provides a summary of expected level of effort and value of each analysis. In many cases, these will vary by state.

For more information, please contact Julia Lerche at *julia.lerche@wakely.com* or 919.279.0366.

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TABLE 1: SUMMARY ASSESSMENT OF POTENTIAL USES OF APCD FOR REGULATORS

Potential Use	Expected Effort	Expected Value
Support for Rate Review		
Validation of underlying claims and enrollment	High	Low
Validation of rating factors	High	Varies
Trend analysis	High	Low to Medium for rate review
Risk scores to validate risk adjustment and morbidity changes	High	Low to Medium
Support for Analyses to Inform Policy		
Determining geographic rating areas	Medium	Low
State-specific age curve	Medium	Low
State-specific AV calculator	Medium	High for low-cost states
State-run risk adjustment	High	High for improving APCD quality
Monitoring risk selection and morbidity changes	Medium	Medium
Monitoring network adequacy and compliance with other requirements	Medium	Medium to High
Responding to legislative inquiries	Varies by analysis	Medium to High
Responding to media inquiries	Varies by analysis	Low to Medium
Bending the Cost Curve/Improving Quality		
Supporting active rate negotiations	High	High, if political will
Improving consumer transparency	High	High

General limitations of APCDs

When determining how APCDs can be leveraged for regulators, it is important to keep in mind and work towards addressing APCD challenges, including the items in the following list. The list below is intended to highlight APCD limitations and challenges specific to the analyses discussed in this paper. It is not intended to be a complete list of limitations and challenges related to APCDs.

- **Data lags:** Frequency of data submission varies by state, ranging from monthly to annual. Additionally, APCDs typically have a three to six month cycle for data submission, loading, and validation before the data are available for use.
- **Data completeness:** Data submission may not be required of all issuers, for example issuers with small books of business may not be included, or ancillary services outside of the medical plan, such as dental, may not be included in the database. Data may also not be available for all residents, for example, a state may not have the regulatory authority to require an out-of-state insurer to submit data for residents covered by employer-sponsored plans.
- **Data quality:** APCDs, especially in their early stages, tend to experience data quality issues that need to be accounted for in any analysis that is performed. With the right management of the APCD, these data quality issues tend to decrease as the APCD matures. Using an APCD for a state-run risk adjustment program would also quickly increase data quality.
- **Basis/reconciliation:** APCD claims data may not be reported on the same basis as claims data used in regulatory reporting. For example, payments made outside of the claims system (for example, capitations such as vision, dental, or global risk arrangements) are not often reflected in APCD claims. Additionally, regulators will need to consider whether "paid through" dates match in the different data sources.
- **Lacking critical data fields needed for regulatory monitoring:** As noted above, many state APCDs do not collect capitation cost data. They also may not include premium information, administrative fees, plan codes, or plan design information that may be needed for normalization. Though much of this information is now available in standardized formats (using federal Qualified Health Plan templates) for Affordable Care Act (ACA)-compliant individual and small group plans, the information is likely not available for grandfathered business and transitional plans, large group, and self-funded business, creating different reporting structures across markets. States will also need to consider how to track members and groups over time as they switch carriers or move from self-funded to

insured group plans. Member IDs, if available, are typically encrypted and may not be linkable to other databases. Additionally, it may be challenging to add the standardized fields given existing APCD structures and enabling legislation.

- **Release guidelines:** Use of APCDs may be limited to certain analyses by statute, and there may be barriers to regulatory use. Additionally, issuers and providers are usually sensitive about the analysis of provider contracting levels.
- **Normalization is challenging:** In order to perform meaningful claims analysis, claims should be normalized for relative risk scores, geography, plan design, network, etc. Without normalization, it may be difficult to isolate the specific changes trying to be measured. For example, unit price trends may be affected by network changes that impact provider mix.

Potential regulatory uses of APCDs

SUPPORT FOR RATE REVIEW

As noted above, insurance regulators in most states are responsible for reviewing and approving health insurance rates in the individual and small group markets. Typically, this work is performed without the benefit of data that allow for independent analysis or benchmarking. A list of some possible uses of APCDs to support rate review is provided below, with a high level assessment of the feasibility of each use. It is important to recognize that the feasibility and benefits of using an APCD will be specific to each state and this assessment is only intended to support discussion of potential uses.

Validation of underlying claims and enrollment

The first use that comes to mind for many regulators is validation of claims and enrollment data underlying a rate filing. This use may be challenging for several reasons. First is consideration that the basis for claims data may be different between the two sources. Claims used for rate filings usually reflect back-end settlements and other adjustments that may be made after the claim has been paid. APCDs may not include these adjustments. Additionally, the APCD may need to add data elements to allow the regulator to isolate the relevant claims data for each rate filing (e.g., grandfathered vs. transitional vs. ACA-compliant plans).

Timing may also be an issue depending on when rates must be reviewed. For example, 2014 rates for the Federally-Facilitated Marketplaces (FFM) were due at the end of April/early May of 2013. For 2015, rates for the FFMs are not due until the end of June 2014, with reviews occurring in July/August. This timeframe may actually provide sufficient time for APCD claims data to be available. States with State-Based or Partnership Marketplaces, however, may have earlier schedules which could result in timing challenges if regulators want to utilize APCD data.

Health plan completion, reconciliation, and filtering of the data to accurately reflect the population expected to enroll in the plans that are the subject of the rate filing are complex processes that change over time and require judgment. These complexities may outweigh any gain in oversight from using an APCD in this way.

Expected Effort: High
Expected Value: Low

Validation of rating factors

Regulators may also want to use APCDs to validate rating factors used by issuers, including geographic, network, and plan design factors.

Although historical analyses of geographic and network relativities may be informative, they may not be the best predictors of projected factors as issuer networks and provider contracts change. Should a state wish to perform this analysis, careful consideration should be taken with respect to normalizing the claims for other effects. For example, analysis of geographic factors would require normalization for other effects such as morbidity (risk adjustment), network, contracting, benefit design, member and provider behavior, and others.

Although APCD data could be used for modeling plan design changes (cost-sharing and covered benefits) and calculating benefit relativities, those data may be of limited value relative to the federal Actuarial Value Calculator or other commercially

available models. The APCD may be useful in estimating the impact of network changes, such as introduction of tiered or narrow networks, or to compare actual savings to estimated savings from a prior rate filing.

Expected Effort: High
Expected Value: Varies

Trend analysis

Similar to the rating factor discussion above, although trend analysis may provide valuable information for various purposes, it may be of limited use in substantiating projected trends included in issuer rate filings because historical trends are not always good predictors of future trends. Regulators may, however, use trend analysis to compare historical trends across issuers to identify issuers that may have opportunities to improve their management of health care costs and utilization.

One of the key challenges of performing trend studies is properly normalizing for underlying cost drivers across time periods, including changes in plan design, contracting, issuer and provider mix, population, and service mix. Analyzing trends in the midst of all of the ACA changes creates additional challenges. However, over the long run, performing regular trend studies will help inform public policy and provide regulators with information they have historically relied on the issuers to provide. The initial effort would be very high, but subsequent updates could be very valuable and accomplished with reasonable effort.

Expected Effort: High
Expected Value: Low to Medium for rate review

Risk scores

Regulators may also be looking to use the APCD to calculate risk scores to help support and/or validate issuer estimates of morbidity changes in their covered population, as well as the impact of the federal risk adjustment program on their rating. Federally-calculated risk scores for 2014 (the first year of the risk adjustment program) will not be available until the middle of 2015. Historical and emerging 2014 enrollment and claims data can be valuable in identifying underlying changes in the morbidity of the covered population and differences across issuers.

Perhaps the greatest challenge for states that want to perform this analysis will be the quality of the data submitted and accepted by the APCD. Unless the APCD will be used to make payment transfers across issuers, the data submitted and accepted will likely not be reliable for all issuers. As a result, risk score calculations using an APCD will pick up differences in issuer data quality in addition to differences in morbidity unless and until the APCD is actually used to make payment transfers under a state-based risk adjustment program.

Expected Effort: High
Expected Value: Low to Medium

SUPPORT FOR ANALYSES TO INFORM POLICY

As the Affordable Care Act transforms the health insurance markets in many states, states have some flexibility in how the ACA is implemented. Additionally, regulators in many states will likely want to monitor and react to changes that could have a negative impact on consumers. Below is an exploration of several opportunities for utilizing APCDs to support these activities.

Defining state-specific rating parameters

States have the flexibility to define several parameters related to health insurance rating and plan design.

Geographic rating areas: First, states had the opportunity to define geographic rating areas for 2014 and can submit changes annually for federal approval. In order to perform this analysis, states would need to isolate unit cost differences from morbidity differences across regions. It is also important to note that timing may be challenging for this type of analysis. As an example, geographic rating area proposals for the 2015 plan year were due to the federal government on January 1, 2014. This creates a rather long lag between the historical data available and the applicable rating period.

Expected Effort: Medium
Expected Value: Low

Age curve: Second, states are able to define their standard age curve within the 3:1 required ratio for adults. Though APCDs could be used to develop and justify a state-specific age curve, the analyses may not produce much value given that the curve must still meet the 3:1 ratio requirement. Additionally, states should consider that changing the age curve would likely lead to disruption for individuals in age groups that experience factor changes.

Expected Effort: Medium
Expected Value: Low

Actuarial Value Calculator (AVC): Another potential use of the APCD would be for the development of a state-specific AV calculator, or state-specific continuance table to incorporate into the federal AV calculator. This work will most benefit those states with lower-than-average per capita claims costs, or with Essential Health Benefits that may not be captured in the federal AVC. For states with lower-than-average claims costs, a state-specific AVC would allow for richer plan designs, resulting in higher tax credits for consumers. Use of a state-specific AVC in states with higher than average costs may actually reduce plan values and the value of the tax credits. Additionally, a state-based AVC would allow the state to make sure plans in the same metal level were as comparable in value as possible by capturing more of the state-specific covered benefits. An AVC calibrated to the state costs removes incentives for issuers to focus on designing plans that maximize perceived value (based on the parameters of the federal AVC) and instead focuses them on plan designs that maximize actual value.

Expected Effort: Medium
Expected Value: High for low cost states

State-run risk adjustment

Massachusetts is utilizing its APCD for running its state-based risk adjustment program, and other states, such as Utah, are also exploring this approach. One potential benefit of using the APCD for risk adjustment is that it will likely improve the quality of the submitted data, as it provides a financial incentive for issuers to improve their data quality. Because the risk adjustment program redistributes premiums across issuers within the state, issuers are a key stakeholder in supporting the decision to file and operate a state-based risk adjustment program.

Expected Effort: High
Expected Value: High for improving APCD quality

Monitoring risk selection and morbidity

With all of the changes occurring in the individual and small group markets as a result of the Affordable Care Act, regulators may want to actively monitor these markets for adverse impacts and potential issuer discrimination or risk selection. This oversight might include assessing risk selection and morbidity differences by:

- Marketplace vs. non-Marketplace policies
- Insured vs. self-funded policies (especially in the small group market)
- Market (non-group, small group, large group, Medicaid)
- Issuer
- Metal (AV) level
- Grandfathered vs. transitional vs. ACA-compliant policies

Similar analysis can also be performed to better understand consumer decision-making and identify the potential need for better decision support tools or education.

As noted earlier, utilizing APCDs to calculate risk scores could be of little value if data quality is poor. If data quality is not an issue, this type of analysis has the potential to be useful to regulators in identifying issues in the market, and could

be indicative of discriminatory practices or other practices that may be harmful to consumers or the market at large. The analysis of morbidity changes made possible by APCD data may be critical in informing policy decisions.

Expected Effort: Medium
Expected Value: Medium

Monitoring network adequacy and compliance

As many issuers implement limited and tiered network structures, concerns have been raised about network adequacy. Issuers are also expected to contract with Essential Community Providers (ECP) to ensure in-network access for vulnerable populations. Though network adequacy standards and review approaches vary by state, many regulators identify network adequacy issues by monitoring consumer complaints and/or analysis of in-network provider lists. While these approaches may be informative, states may have an opportunity to leverage APCDs to further quantify network adequacy across issuers and over time. One possible approach is to assess the distance between consumers and the providers they are accessing. Another is to monitor out-of-network utilization to identify if there are certain regions or provider types for which out-of-network utilization is higher than average. Analysis of network adequacy using an APCD has the potential to provide much deeper information on network adequacy than provider listings with geographic access standards. Regulators may also want to consider leveraging their APCDs to monitor compliance with other requirements such as benefit/coverage mandates, parity requirements, etc.

Expected Effort: Medium
Expected Value: Medium to High

Responding to legislative and media inquiries

Regulators frequently receive inquiries from legislators and/or the media to provide data on the insurance market. Often trends, cost drivers, cost shifting across markets and programs, and other data of interest to policymakers are not readily accessible, or may require manual compilation with little ability for appropriate normalization. APCDs provide an opportunity to more quickly and accurately respond to these inquiries. New Hampshire, for example, has actually utilized their APCD to both inform legislation and monitor the impact of legislation.

Expected Effort: Varies by analysis
Expected Value: Medium to High for legislative inquiries; Low to Medium for media inquiries

BENDING THE COST CURVE AND IMPROVING QUALITY

Active rate negotiations

With the implementation of health insurance Marketplaces, states (either through the insurance department or the Marketplace) may be interested in engaging in more active rate negotiations with issuers in an attempt to make insurance more affordable for consumers (beyond just making sure rates are not excessive in relation to the benefits provided). Many state Medicaid and public employee health programs are using claims databases to actively manage their costs, and regulators (or State-Based Marketplaces) could take a similar approach to mitigating rate increases for consumers. Some approaches may include identifying payment variations by geographic area, provider and/or market, and identifying areas of underperformance related to health care quality, as well as population health/disease management. This type of analysis could be used not only for rate negotiations with issuers who are underperforming, but may also help support contracting efforts by smaller or new issuers in the market who may not have credible data or the sophisticated market intelligence available to larger, established issuers.

Expected Effort: High
Expected Value: High, if political will

Consumer transparency tools

Consumer transparency tools that help consumers compare the cost and, in some cases, the quality of various providers may also help reduce costs and improve health care quality. Maine, for example, has a consumer tool that allows consumers to compare estimated provider and facility costs for a handful of common procedures by issuer.[1] Consumers are also provided with a measure of patient complexity and an indication of the level of precision of the cost estimates. The concept is that these tools will empower consumers to be informed shoppers for health care services based on the cost and quality reported for providers, resulting in lower overall system costs and higher quality. These tools may also drive providers to improve quality and lower costs assuming the market is competitive.

Expected Effort: High
Expected Value: High

Case study – New Hampshire

New Hampshire has one of the oldest APCDs in the nation (data collection began in 2005), and the New Hampshire Insurance Department (NHID) has been particularly active in utilizing its APCD. Some examples of analyses the NHID has performed include:[2]

- A calculation of risk scores, average age, and age/gender distributions by issuer and market (including by self-funded and fully insured) based on 2011 claims data, to support rating and risk adjustment estimates under the ACA;
- A comparison of provider discounts by issuer and product for various specialty practice types, and for hospital and non-hospital providers;
- An analysis of the change in patient cost-sharing over a three-year period by product type; and,
- An analysis of the volume and types of care provided outside of New Hampshire for New Hampshire residents.

Conclusion

The number of states with APCDs is growing and regulators should explore opportunities to build upon and leverage the APCDs in their states to support their work. Regulators should be aware of data quality and completeness issues that may affect the accuracy and value of the analyses, but should also acknowledge that these challenges are not insurmountable. Though the expected effort may be high for many of the analyses described in the paper, that effort may be outweighed by the value afforded to consumers and should be further pursued. Regulators should also be careful not to let the perfect be the enemy of the good; as APCDs continue to evolve, improvements in data quality and analytic processes will increase the value proposition for many of these analyses.

Acknowledgements

We would like to extend a special thank you to Tyler Brannen from the New Hampshire Insurance Department for his feedback on this paper.

[1] http://gateway.maine.gov/MHDO/healthcost/

[2] http://www.nh.gov/insurance/reports/index.htm