

# Data Support Considerations in Medicaid Accountable Care Organization Programs

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## IN BRIEF

Medicaid accountable care organizations (ACOs) need data on their attributed populations to successfully improve health outcomes and manage patients' total cost of care. This includes data on members' health status; emergency department and inpatient utilization; and risk scores, ideally accounting for social risk factors — such as homelessness, past incarceration, and child protection involvement. State Medicaid agencies have developed a number of approaches to provide data to organizations participating in Medicaid ACO programs. This technical assistance brief, made possible by The Commonwealth Fund, outlines what types of data Medicaid ACOs need to successfully operate and details how several states provide data to organizations participating in ACOs.

**D**ata is an essential element of a Medicaid accountable care organization (ACO) program. It enables organizations — providers, payers, and states — to evaluate and improve performance. States implementing Medicaid ACO programs can provide data that enables participating ACOs to better understand their patient population and tailor health care services to more effectively improve health outcomes. With data support from states and/or managed care organizations, ACOs can: (1) identify the needs of their attributed beneficiaries; (2) understand the total cost of care (TCoC) and quality improvement opportunities of attributed beneficiaries; and (3) stratify their patient population to target care coordination for beneficiaries who could benefit most.

States with Medicaid ACO programs have taken different approaches to supplying ACOs with data and supporting data use. One approach is to provide raw data, typically claims or encounter data, or data from health information exchanges (HIEs), and allow ACOs to analyze it to inform their decisions. States can also conduct their own analyses of raw data and provide analyzed data in an easily usable form to all participating ACOs. Doing so promotes standardization across the ACO program and can help ACOs that lack the capacity to analyze the data themselves. For the most part, states are still in the early stages of ACO data approaches. Early state experiences highlight opportunities for further development in this critical area.

This brief reviews three types of data support that states can provide to help ACOs improve their performance: (1) patient attribution; (2) cost and quality; and (3) care management information. It concludes with lessons and challenges related to sharing data for Medicaid ACO programs, based on state experiences to date.

## 1. Patient Attribution

Given that ACOs are accountable for the cost and quality of care provided to a targeted set of patients, determining which Medicaid beneficiaries are part of that population and which are not is a critical first step in the operation of a Medicaid ACO. Moreover, this is a calculation that cannot be performed by the ACO itself, since it does not have access to data on *all* Medicaid beneficiaries.

States, on the other hand, have detailed methodologies to attribute patients to ACOs, usually focusing on beneficiary choice or beneficiaries’ prior utilization of health care resources (Exhibit 1).<sup>1</sup> Attribution can also focus geographically, by region<sup>2</sup> or community.<sup>3</sup>

**Exhibit 1: State Provision of Data to Medicaid ACOs**

State	Raw Data	Attribution Frequency	Risk Calculation	Quality Updates	Total Cost of Care Updates
<b>Maine</b>	State provides raw data with a monthly claims lag	Quarterly	All TCoC reports include risk adjustments so benchmark TCoC is on the same risk basis as the performance period TCoC	Quarterly	Quarterly
<b>Massachusetts</b>	State provides monthly extracts of claims data	Monthly	Provide member risk scores monthly; lists of emergency department (ED) utilizers quarterly; member-related condition categories quarterly; top 15 percent of members by cost; adherent / non-adherent for quality measures	Quarterly	Quarterly
<b>Minnesota</b>	State provides raw data, monthly, with no claims lag	Monthly	Johns Hopkins ACG, monthly, three-month claims lag	Clinical and encounter data provided monthly	Quarterly
<b>Rhode Island</b>	State does not provide raw utilization data	Monthly	Required, not specified	Quarterly	Quarterly

While all states provide ACOs with an attribution list, with information to help ACOs identify eligible individuals, the delivery timing varies. Maine provides quarterly attributed beneficiary lists to their Medicaid ACOs, and Massachusetts and Minnesota provide lists monthly. Rhode Island receives monthly attribution lists from managed care organizations (MCOs), listing each member attributed to the state’s Accountable Entity (AE) ACO program. Beneficiaries enrolled in Rhode Island’s health home program for individuals with severe and persistent mental illness are attributed to the AE based on their health home enrollment. States can also provide additional information such as cost and quality performance for attributed beneficiaries that ACOs can use to inform care coordination decisions. Massachusetts provides member risk score information and relevant information from beneficiaries’ claims data to its ACOs. Minnesota also calculates risk scores and TCoC for beneficiaries, and provides those data points to Integrated Health Partnerships (IHPs, the state’s Medicaid ACO program), along with attributed patient lists.<sup>4</sup>

## 2. Cost and Quality Performance

ACO programs use financial incentives to create a business case for providers to improve health care quality and slow cost growth in ways that meet the needs of their patients and community. To succeed, ACOs must have access to relevant data to manage the cost of care and develop targeted quality improvement activities for their attributed population. Whereas most ACOs do not have access to necessary data, most states or MCOs do. This means that the state or MCO should furnish

cost and quality data, either in the form of raw claims or encounter data and/or via analytic reports that show ACOs their performance on cost and quality measures.

In some cases, states conduct the quality calculations internally and inform ACOs of their performance, as Minnesota does. For the small fee-for-service population in New Jersey’s Medicaid program, the state provides its ACOs with claims data for the attributed zip codes. The ACOs work collaboratively with Rutgers University, the evaluator of the Medicaid ACO program as specified by law, to compare the claims data to a benchmark and to conduct cost and quality calculations.<sup>5</sup> Rhode Island’s MCOs and AEs meet bi-monthly and review key financial and quality utilization information to identify areas of opportunity. Rhode Island is developing its own dashboard inclusive of key performance indicators.

Timely receipt of cost and quality data is a key factor influencing ACOs’ efforts to manage beneficiaries’ TCoC. Massachusetts provided ACOs with an ACO-specific variance analysis based on historical member data. This analysis shows, for each rating category and category of service, where the ACO’s historical cost was higher or lower than market. The analysis, while not an exhaustive breakdown of each ACO’s costs, suggested potential areas to improve TCoC management. With timely delivery of this information, ACOs can be more flexible in responding to changes in quality and cost, and provide better care to their beneficiaries. Massachusetts and Minnesota provide ACOs with this TCoC data quarterly. Maine provides quarterly TCoC and quality reports, but also maintains an online dashboard that updates TCoC data monthly, as does Colorado (see sidebar). Rhode Island and its AEs gets a quarterly TCoC report from the MCOs to supplement information shared at the aforementioned bi-monthly meeting.

#### Data Dashboards

Some states maintain online dashboards that ACOs can use to access data relevant to their program activities. These data dashboards enable participating ACO organizations to log in and use data to evaluate their efforts and receive updates. Some also provide customized reports highlighting particular areas of interest to ACOs. Specific state uses of dashboards include:

- **Maine** maintains a dashboard, updated monthly, that contains beneficiary utilization data, and is the same portal used in the state’s health homes, behavioral health homes, and opioid health homes programs.
- **Colorado’s** Accountable Care Collaborative maintains a web portal that allows providers to access monthly performance reports on quality measures and average TCoC.<sup>6</sup>



### 3. Care Management Information

One of the main ways that ACOs can improve care for beneficiaries while managing costs is through better care management. Many patients require only minimal care management, but for those with complex medical and social needs, additional care coordination can help improve their quality of life and reduce utilization of expensive interventions such as ED use. There are a variety of data reporting approaches that states can use to support ACO care management activities as well as efforts to address social determinants of health.

The first step in any care management program is to identify patients at the highest risk for future health care needs, particularly populations with modifiable risks, i.e., those that can be reduced through care management interventions.<sup>7</sup> States with fee-for-service claims data or MCO encounter data can: (1) provide that data to ACOs to conduct their own analysis; (2) encourage MCOs to identify high- or rising-risk individuals; or (3) use the data to calculate risk information for the ACOs. In its attribution lists, Massachusetts and Maine provide their Medicaid ACOs with beneficiary risk and utilization measures to help identify individuals who would benefit the most from additional care coordination. Rhode Island requires risk stratification based on the state’s MCO methodology, but if approved a plan can use its own stratification approach. Using the state’s or plan-approved stratification methodology, Rhode Island’s plans use in-house tools to identify rising- and high-risk Medicaid beneficiaries and provide data to AEs. AEs that are also Medicare and commercial ACOs can use their own rising- and high-risk identification tools if the state has approved the tool. Rhode Island also plans to measure its AEs on the percent of their attributed population that have been screened for social determinants of health.

In addition, Maine and Massachusetts provide ACOs with information on beneficiaries’ total cost to facilitate ACOs’ care coordination activities. Maine provides each member’s TCoC in the past 12 months. Massachusetts provides information on: (1) the top 15 percent of pediatric and top 15 percent of adult beneficiaries by total cost; (2) those with ED visits and inpatient stays within the last year; (3) members with DxCG-related condition categories; and (4) those who are adherent or non-adherent for certain quality measures. Minnesota provides participating IHPs with Medicaid claims data to help IHPs better understand resource use and identify areas for targeted interventions. These include: (1) provider alert reports listing ED visits and hospitalizations; (2) a care management report that includes a range of risk scores, chronic condition flags, and utilization indicators; (3) utilization files for the past 12 months updated on a rolling basis; and (4) quarterly information on each IHP’s performance against TCoC targets by provider and service category. Minnesota also adjusts population-based payments – designed to provide additional care coordination resources to IHPs – to account for social risk factors such as homelessness, past incarceration, and child protection involvement.<sup>8</sup>

### Minnesota’s Data Analytics Grants

State officials from Minnesota note that one of the most valuable investments made during the IHP program implementation was small grants of up to \$500,000 to help participating organizations develop data analytics capability. Over the program’s first three years, 11 IHPs received grants to enhance their capacity in a number of ways, often supplementing existing IHP requirements:

- Several focused on augmenting state claims-based information;
- Eight helped integrate IHP data into a data warehouse for deeper analysis;
- Eight enhanced analytics to improve beneficiary care coordination;
- Three developed new measures of risk for attributed populations; and
- Three implemented real-time alerts for provider networks.



## Lessons and Challenges

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### *Time Lag*

TCoC calculations — along with many quality measures focused on utilization — rely on claims or encounter data. There can be a significant time lag for usable utilization data, which limits the ability of ACOs to refine programs that are not achieving desired results. States are moving toward providing more real-time data to ACOs, such as Admission, Discharge, and Transfer feeds and ED notification, if these data are not already available through HIEs. Minnesota's IHPs will be able to receive information from the Medicaid Encounter Alerting Service, which provides real-time event notification for organizations to support increased care coordination.

### *Data Quality*

To be used by ACOs, data must be clean and reliable, and states must ensure that anything it delivers to ACOs meets those criteria. There is often wide variation in the quality of encounter data that MCOs deliver to a state, and if it is drawn from multiple MCOs with different reporting conventions, cleaning it can be a heavy lift. Relying on ACOs to clean the data and align sources from multiple MCOs can result in inconsistencies across a program. States can clean the data before distributing to ACOs, either through raw data feeds or curated claims extract reports.

### *Provider Readiness*

Managing the data required by a Medicaid ACO program can be a substantial undertaking. Offering various levels of data support can meet the needs of ACO program participants that have a wide range of data capacity. For example, sophisticated hospital systems (that also serve as MCOs) can manage raw data feeds and may have extensive data analytics capacity. Small provider groups conversely may lack those capabilities, but could benefit from reports prepared by a state that focus on relevant information. Maine and Minnesota provide web portals that can be used by both large systems with data analytics capacity and smaller groups that receive more tailored data.

### *Incorporating Managed Care Organizations*

MCOs now cover 80 percent of beneficiaries in state Medicaid programs, and operate in 48 states.<sup>9</sup> Some of the data analytics that ACOs must perform can be conducted more easily by MCOs since they already have all the encounter data for their beneficiaries, and an MCO may also have health information technology infrastructure. State policymakers must decide how to delineate responsibilities between MCOs and ACOs, and an understanding of the data analytic capability of a state's MCOs can aid in making those decisions. Rhode Island's quality approach and electronic health record is currently in development, but the goal is to have data on encounter-based measures flow from MCOs to AEs and clinical quality data flow from AEs to MCOs. This data arrangement will allow each organization to use its strength in a "win-win" relationship.

### *Trial Calculations*

Some states have also provided limited datasets to applicants considering participation in Medicaid ACO programs, so they can determine whether they have the data analytics capacity to successfully participate. Minnesota provides applicants with mock data to conduct trial calculations.<sup>10</sup> Colorado's Accountable Care Collaborative application process offered limited datasets to applicants.<sup>11</sup> This can increase the quality of care for beneficiaries attributed to Medicaid ACOs by ensuring that

participating organizations are not surprised by the data analytic requirements of the program, and make organizations more comfortable in electing to participate.

### **Regulations in Conflict**

No provider is unfamiliar with 42 C.F.R. Part 2,<sup>12</sup> which prohibits the disclosure of patient records involving treatment for substance use disorder without the patient’s consent and limits certain types of care coordination activities in which ACOs may want to engage. Moreover, when providing raw claims or encounter data to ACOs, any information on services covered by 42 C.F.R. Part 2 must be removed from the dataset before being transmitted to the ACO. Maine and Massachusetts provide raw claims data feeds to their Medicaid ACOs, but must first remove any 42 C.F.R. Part 2 claims. Massachusetts then provides a summary file of the aggregated costs and quantity of removed claims.

## **Conclusion**

The requirements for a successful ACO program have been characterized as a three-legged stool: quality, payment, and data. The data “leg” is distinct, however, in that it allows the ACO program to improve the other two, achieving the goals set by policymakers. Beneficiary raw data are generated by and live in different parts of the health care sector, belonging to different stakeholders in the relationships that constitute Medicaid ACO programs. By ensuring that the right kinds of data are provided to ACOs at the right times, states can empower participating ACO organizations to more effectively coordinate services and support financial incentive efforts to reward providers for better quality care. In doing so, ACO participants can fulfill the promise of delivery system reform by improving care and controlling associated costs.

### **ABOUT THE CENTER FOR HEALTH CARE STRATEGIES**

The Center for Health Care Strategies (CHCS) is a nonprofit policy center dedicated to improving the health of low-income Americans. It works with state and federal agencies, health plans, providers, and community-based organizations to develop innovative programs that better serve people with complex and high-cost health care needs. For more information, visit [www.chcs.org](http://www.chcs.org).

### **ADDITIONAL RESOURCES**

State-based Medicaid ACOs are becoming increasingly prevalent, with more states pursuing this model as a way to improve health outcomes and control costs. CHCS’ Medicaid Accountable Care Organization Resource Center, made possible through The Commonwealth Fund, houses practical resources to help states design, implement, and refine ACO programs. Visit [www.chcs.org/aco-resource-center](http://www.chcs.org/aco-resource-center).

## **ENDNOTES**

<sup>1</sup> See, e.g., Minnesota Department of Human Services (2017), Patient Attribution Method for 2018 IHP Model, available at: [https://mn.gov/dhs/assets/2017-ihp-rfp-appendix-d\\_tcm1053-294444.pdf](https://mn.gov/dhs/assets/2017-ihp-rfp-appendix-d_tcm1053-294444.pdf).

<sup>2</sup> Oregon Health Authority (2016), Coordinated Care Organization Service Areas, available at: [https://aix-xweb1p.state.or.us/es\\_xweb/DHSforms/Served/le8116.pdf](https://aix-xweb1p.state.or.us/es_xweb/DHSforms/Served/le8116.pdf).

<sup>3</sup> See New Jersey Public Law 2011, Chapter 114 (2011). Available at [http://www.nileg.state.nj.us/2010/Bills/PL11/114\\_.pdf](http://www.nileg.state.nj.us/2010/Bills/PL11/114_.pdf).

<sup>4</sup> Minnesota Department of Human Services. (2018). Integrated Health Partnerships Contract, § 3.6.2. Available at: [https://mn.gov/dhs/assets/2018-ihp-track-2-contract-template\\_tcm1053-327867.pdf](https://mn.gov/dhs/assets/2018-ihp-track-2-contract-template_tcm1053-327867.pdf).

<sup>5</sup> See NJ P.L. 2011, Chapter 114. Available at: [http://www.nileg.state.nj.us/2010/Bills/PL11/114\\_.pdf](http://www.nileg.state.nj.us/2010/Bills/PL11/114_.pdf).

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<sup>6</sup> Colorado Department of Health Care Policy and Financing. (2016). Business Intelligence and Data Management system contract. Available at: <https://www.colorado.gov/pacific/sites/default/files/Truven%20-%20BIDM%20Contract.pdf>.

<sup>7</sup> Agency for Healthcare Research and Quality (2015). Care Management: Implications for Medical Practice, Health Policy, and Health Services Research. Care Management Issue Brief. Available at: <https://www.ahrq.gov/sites/default/files/publications/files/caremgmt-brief.pdf>.

<sup>8</sup> R. Matulis. "Prioritizing Social Determinants of Health in Medicaid ACO Programs: A Conversation with Two Pioneering States." Center for Health Care Strategies blog post, May 2, 2018. Available at: <https://www.chcs.org/prioritizing-social-determinants-health-medicaid-aco-programs-conversation-two-pioneering-states/>.

<sup>9</sup> Total Medicaid Managed Care Enrollment. (2018). Kaiser Family Foundation: State Health Facts. Available at: <https://www.kff.org/medicaid/state-indicator/total-medicaid-mc-enrollment/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D#note-1>.

<sup>10</sup> Minnesota Department of Human Services. (2018). FAQs: 2018 Integrated Health Partnerships RFP. Available at: [https://mn.gov/dhs/assets/2018-ihp-rfp-faq\\_tcm1053-308424.pdf](https://mn.gov/dhs/assets/2018-ihp-rfp-faq_tcm1053-308424.pdf).

<sup>11</sup> See Colorado Department of Health Care Policy & Financing. (2017). Solicitation 2017000265, Appendix HH, Data Sets. Available at: <https://www.colorado.gov/pacific/sites/default/files/Appendix%20HH%20Data%20Sets.pdf>.

<sup>12</sup> 42 C.F.R. Part 2 – Confidentiality of Substance Use Disorder Patient Records. Available at: <https://www.law.cornell.edu/cfr/text/42/part-2>.