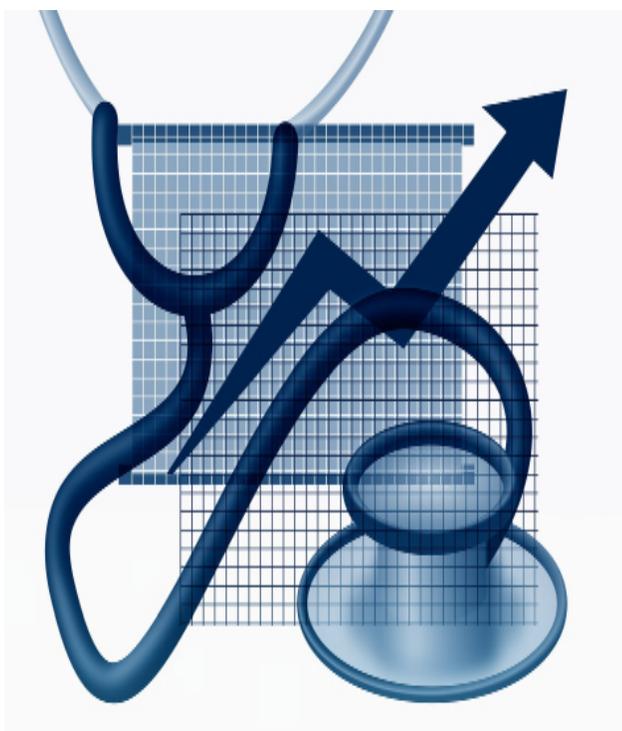# Understanding Medicaid Claims and Encounter Data and Their Use in Payment Reform

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The Case for Payment Reform

Though Medicaid comprises a major portion of state budgets, the ability to direct Medicaid spending toward high value care through payment reform is relatively new. Increasingly sophisticated data infrastructures and analytics have made this development possible. Traditionally, Medicaid has reimbursed providers through fee-for-service payments. Because fee-for-service payments do not link pay with accountability for outcomes however, they can incent providers to deliver a high volume of services in lieu of high value services, leading to wasteful, unnecessary spending and poorly coordinated care. The concept of high value care encompasses both cost and quality, and is considered fundamental to payment reform today.[1] Transforming the way states pay Medicaid providers through value-based incentives holds tremendous opportunity to both slow the growth of spending and improve patient care.[2]

Key Considerations

1) Traditional fee-for-service payment arrangements incent high volume care while payment reform can incent high value care and achieve cost savings.

2) Payment reform is a data-driven endeavor.

3) States can use the data they already collect as Medicaid payers (claims and encounter data) to support payment reform.

4) States should assess the quality and accuracy of their data sets, including the relative degree to which their data is generated by fee-for-service payment systems, which produce claims data, versus capitated payment systems, which produce encounter data.

5) Though data may be subject to time delays, inaccuracies, and incompleteness, states can mitigate these barriers to their effective use.

6) States may work with external contractors for data management and analytics related to payment reform, however active management of external contractors remains necessary.

7) States have put claims and encounter data to use for delivery and payment reforms in several ways such as identifying high-need, high-cost patients for care coordination; and measuring, supporting, and rewarding provider performance.

Understanding the Data

Data is fundamental to payment reform efforts. Paying providers differently to meet cost and quality goals requires good data to develop the payment model; identify high-need, high-cost patients for care coordination; and monitor performance measures and outcomes. To advance payment reform, states can start by maximizing how they utilize the data they already collect as Medicaid payers. Understanding the data sources, including their potential challenges and limitations, is an essential first step to that end. In order to provide this understanding, this brief will explore data generated by Medicaid payments in the fee-for-service and managed care settings.

Fee-for-Service: Claims Data

Medicaid programs that operate a fee-for-service system pay providers directly for their services. In order to receive payment, providers bill the Medicaid program for payment by submitting a claim. The data from these claims create a snapshot of services provided to Medicaid beneficiaries from both in-patient and outpatient care, as well as other services including pharmacy and home health care. There is variability across Medicaid agencies in terms of the quality and accuracy of their claims data. Each state must assess the reliability, validity, and potential limitations of its own data. It also takes time to accumulate accurate, complete claims data. Sometimes providers may not bill for a service until many months after service delivery. Furthermore, claims with errors require additional time for correction. Medicaid officials report it can take up to one year to obtain accurate, complete claims data. When using the information for provider feedback and payments based on performance, the need for accuracy and completeness must be balanced with the need for timeliness.

Managed Care: Encounter Data

In a capitated payment system, unlike fee-for-service, the Medicaid program does not pay providers directly for services to beneficiaries. Instead, the Medicaid agency pays managed care organizations (MCOs) a monthly capitation payment for each beneficiary enrolled in each MCO. The MCOs then pay providers for services delivered to Medicaid enrollees. Depending on the terms of the contract between the MCO and the provider, a MCO may pay the provider for these services through fee-for-service or through capitation. In this type of payment system the MCO is responsible for providing the Medicaid agency with encounter data, which is comparable to claims data, that details the specific services provided to an enrollee by a provider. States contracting with MCOs can collect and use encounter data effectively, but should be aware of variations in data usability.[3]

When utilizing encounter data, states should anticipate possible time lags, as well as varying levels of completeness and detail that may make it difficult to know exactly what services were provided. In addition, multiple MCOs may be present in a state, each with differing reporting requirements, which could result in varying levels of detail. There is also variation across MCOs in terms of methods of paying providers (e.g. fee-for-service versus capitation) that impact the level of detail and completeness of the encounter data available.[4] There are some steps that states can take to ensure that encounter data is as timely and complete as possible including working directly with MCOs to educate them on what Medicaid needs to support payment reforms, as well as adding managed care contract language that includes fines for not meeting Medicaid data reporting expectations.[5]

Federal Reporting and Match

Medicaid Statistical Information System (MSIS) reporting requirements will be changing with the implementation of T-MSIS (Transformed-Medicaid Statistical Information System).[6] These changes will contain additional data sets and monthly reporting, as well as other measures to increase data reliability and completeness, including encounter data.[7] States are currently required to submit both fee-for-service claims and managed care encounter data to the Centers for Medicare & Medicaid Services (CMS) through MSIS on a quarterly basis. New regulations currently under consideration would institute stronger penalties for the failure to submit encounter data.[8] This means that state efforts to more effectively manage encounter data for payment reform could also help states meet federal reporting requirements on encounter data.

CMS requires submission of T-MSIS data by states as a condition for approval for enhanced federal funding of state data systems known as MMISs (Medicaid Management Information Systems). A 90 percent federal match is available for MMIS design, development, installation, or enhancement and a 75 percent federal match is available for their maintenance and operations.[9] States' investments in their data systems can also yield other mechanisms for controlling costs beyond payment reform, such as an increased ability to monitor and ensure Medicaid program integrity.

Analyzing the Data

Some Medicaid programs may lack sufficient in-house capacity to perform the analysis necessary for data-driven payment reform efforts and may need to rely on one or more contractors. Key considerations in contracting for data analytics include the following:

• Active management by Medicaid of external contractors is required. Scheduling regular contact with contractors can ensure the appropriate flow of information and identification of issues in a timely fashion.

• Many large contractors work for multiple states and there may be duplication of efforts across states. States may wish to explore possibilities for pooling their purchasing power to gain economies of scale.

• Contracting with a state academic institution is an opportunity to strengthen and leverage an in-state relationship that could have benefits for future projects.

Putting the Data to Work: State Examples

Though there are challenges and limitations associated with claims and encounter data as described above, there is also tremendous potential for their effective use in payment reform. Medicaid claims and encounter data have a number of uses that can support delivery and payment reforms including identification of high-need, high-cost patients for care coordination; and measuring, supporting, and rewarding provider performance.

Across the country, nearly every state is engaged in health care delivery and payment reform efforts to promote high quality care and reduce costs.[10] Examples from states leading the way in these efforts, including Arkansas, Michigan and Missouri, are used to illustrate some of the important uses of claims and encounter data to inform Medicaid delivery and payment reform efforts.

Table 1. Medicaid Delivery and Payment Reform Models

Arkansas	Arkansas Patient Centered Medical Homes: Arkansas Medicaid supports patient-centered medical home (PCMH) practices through per member per month (PMPM) payments;[11] additionally, providers are eligible to earn shared savings if they meet cost and quality targets.[12] Arkansas' Episodes of Care is supported by Medicaid and two commercial payers. Payers bundle a set of services for a particular health event such as an upper respiratory infection, called an episode, into one set payment. For each episode, a principal accountable provider is designated; the principal accountable provider is the practice or hospital that is most responsible for the entire scope of care provided in each episode. The episode payment is shared between the principal accountable provider and other providers involved in treating or managing a particular episode; however, only the principle accountable provider[13] is eligible to share in savings or is accountable for excess costs depending on their performance compared to average episode cost and quality metrics.[14]
Michigan	Primary Care Transformation Project (MiPCT): MiPCT is a multi-payer PCMH initiative supported by Medicaid (which makes payments on behalf of the state's Medicaid managed care plans), Medicare, and some commercial payers in the state.[15] Participating practices receive PMPM payments in addition to fee-for-service payments to support team-based care.
Missouri	**Missouri Health Homes**: The health home model is a team-based approach that provides coordinated care to specific populations with chronic health needs or serious mental illness.[16] Missouri has two health home initiatives: the Missouri HealthNet Primary Care Health Home Initiative and the Missouri Community Mental Health Center Healthcare Homes Initiative. Participating practices in both initiatives are supported through PMPM and fee-for-service payments.

Identification of High-Need, High-Cost Patients for Care Coordination

Claims data, showing events like emergency room visits and hospitalizations, along with input from providers, can identify high-need, high-cost patients. Delivery models such as health homes may allocate additional resources to care for these patients in order to improve their overall health and reduce avoidable healthcare costs such as preventable hospitalizations. For example, added care coordination services can help connect patients with specialists, behavioral health providers, and community-based resources:

• In the Arkansas PCMH program, Medicaid claims data are used to identify the top 10 percent of high-priority beneficiaries for which the practice is required to develop care plans that include documentation of the beneficiary's problem, a plan that incorporates contributions from the health care team and beneficiary, as well as follow-up instructions and a progress assessment.[17]

• In Missouri's Primary Care Health Home Initiative, Medicaid claims data are used to compile lists of beneficiaries who are currently eligible to enroll in health homes. These lists are shared with health home providers on a monthly basis; providers can use these lists to do targeted outreach about enrollment.[18]

Measuring, supporting, and rewarding provider performance

Payment reform models can also reward providers and/or hold them accountable for their performance on cost and quality metrics. Claims and encounter data can be used as a tool for measuring provider performance as well as for providing feedback to clinicians to support quality improvement at the practice-level.

 • Under Arkansas' Episodes of Care, principle accountable providers are responsible for their performance on quality metrics and average costs per episode. Claims data, including inpatient, outpatient, home health and prescription drug claims, are used to determine the entire cost per episode of care which is compared against a risk-adjusted average cost per episode of care. If principle accountable providers deliver care below a specific threshold while still meeting quality benchmarks, they are eligible for a 50 percent share of any savings. However, if principle accountable providers' cost per episode is above acceptable thresholds, they are at risk of having to pay back some of their earnings to the state.

 • In the Arkansas PCMH program, Medicaid claims are used to generate quarterly reports[19] that are distributed to practices through a data portal. The reports track performance on specific cost, utilization, and quality metrics such as the percentage of beneficiaries on appropriate asthma medications or the percentage of women ages 50-69 screened for breast cancer. A practice can qualify for shared savings if it can keep its average cost of care below a specific benchmark; however, a practice cannot earn shared savings if it does not meet quality benchmarks, regardless of performance on cost of care.[20] In October 2015, Arkansas' Department of Human Services awarded more than $5 million to 19 PCMH practices collectively credited with quality improvements that saved the state's Medicaid program $34 million in 2014. The awards ranged from $8,568 to $927,643.[21]

 • The Michigan Data Collaborative, a university-based data collection, enrichment and provisioning group serving the Michigan Primary Care Transformation Project (MiPCT), aggregates data from participating payers, including Medicaid managed care encounter data, to produce dashboards on utilization, quality, and standard cost estimates. Physician organizations and their affiliated practices can use these dashboards to better understand their performance against benchmarks on a variety of evidence-based measures. Specific metrics include utilization measures such as risk-adjusted emergency department visits and quality measures assessing appropriate management of diabetes as well as preventive screenings and immunizations. These reports support practices' quality improvement strategy; in addition, they are used to determine eligibility for practices to receive incentive payments based on their performance on program-specific metrics.[22]

Building State Date Infrastructure to Support Delivery and Payment Reform

Payment reform initiatives linked to quality measures such as the examples presented in this brief from Arkansas, Michigan, and Missouri are data-driven endeavors. The examples from these states demonstrate ways that Medicaid claims and encounter data can be utilized as a resource for achieving cost reductions and quality improvements through payment reform. While this brief focused on understanding Medicaid claims and encounter data as a starting point for payment reform efforts, multiple states have, or are developing, all-payer claims databases (APCDs).[23] The ability to aggregate and track claims across public and private payers provided by these databases can support increasingly sophisticated multi-payer reform efforts; however, states without APCDs can still put their Medicaid claims and encounter data to good use.

End Notes

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2. Deborah Bachrach, *Payment Reform: Creating a Sustainable Future for Medicaid* (Hamilton, New Jersey: Center for Health Care Strategies, Inc., 2010).

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5. Rachel Yalowich, *The Kentucky 'Wrap': Decreasing Administrative Costs for Medicaid and FQHCs in MCO Payment* Reconciliation (Portland, Maine: National Academy for State Health Policy, 2016).

6. Centers for Medicare and Medicaid Services, letter to State Medicaid Directors: SMD# 13-004, T*ransformed Medicaid Statistical Information System (T-MSIS) Data*, August 23, 2013.

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8. Julia Paradise and MaryBeth Musumeci, *Proposed Rule on Medicaid Managed Care: A Summary of Major Provisions* (Washington, DC: Kaiser Family Foundation, 2015).

9. Medicaid and CHIP Payment and Access Commission, Chapter 4.

10. National Academy for State Health Policy, "State Delivery System and Payment Reform Map," retrieved on January 15, 2016, http://nashp.org/state-delivery-system-payment-reform-map/; and The Henry J. Kaiser Family Foundation, "Mapping Medicaid Delivery System and Payment Reform," retrieved January 15, 2016, http://kff.org/interactive/delivery-system-and-payment-reform/.

11. Arkansas Health Care Payment Improvement Initiative, "Patient Centered Medical Homes: Practice Support," retrieved January 15, 2016, http://www.paymentinitiative.org/medicalHomes/Pages/Practice-Support.aspx.

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13. Arkanasas Health Care Payment Improvement Initiative, *Principal Accountable Provider (PAP)*, (Little Rock, Arkansas: Arkansas Health Care Payment Improvement Initiative), retrieved March 7, 2016, http://www.paymentinitiative.org/referenceMaterials/Documents/pap.pdf.

14. Arkansas Heatlh Care Payment Improvement Initiative, "Episodes of Care," retrieved January 15, 2016, http://www.paymentinitiative.org/episodesOfCare/Pages/default.aspx.

15. According to the Agency for Healthcare Research and Quality, PCMH is a team-based delivery model rooted in primary care that aims to provide high-quality care that is comprehensive, coordinated, and patient-centered. For more information on the PCMH model, please visit: https://pcmh.ahrq.gov/page/defining-pcmh.

16. States can implement Health Homes as a means to coordinate care for chronically ill Medicaid beneficiaries. Health Homes, created under Section 2703 of the Affordable Care Act, can be implemented by states through an amendment to their state plan. For more information, please visit: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Long-Term-Services-and-Supports/Integrating-Care/Health-Homes/Health-Homes.html.

17. Interview with Dr. William Golden, Medicaid Medical Director, Arkansas Department of Human Services, November 19, 2015. See also: Shelley G. Fedor, *Patient Centered Medical Home Quality Assurance—Validation* (Little Rock, AR: Arkansas Foundation for Medical Care, 2015).

18. Interview with Natalie Fornelli, Manager of Integrated Care, Missouri Department of Mental Health and Kathy Brown, Program Manager, Missouri HealthNet Primary Care Health Home, January 5, 2016.

19. For an example report, please visit: http://www.paymentinitiative.org/referenceMaterials/Documents/PCMH%20Q3%20sample%20report.pdf.

20. Arkansas Health Care Payment Improvement Initiative, "Patient Centered Medical Homes: Shared Savings."

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