

Medicaid Encounter Data: The Next National Data Set

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Medical claim data, referred to as “encounter data” in Medicaid programs, is the single most important analytical tool for health plans and health programs. Without accurate and timely data, it is not possible to analyze costs, utilization, or trends; evaluate benefits; or determine the quality of services being provided to members. Health plans store their claim data in repositories that allow them to access the data for these types of analysis, but these repositories are not available to outside parties who may also need the data for analytical purposes. As Medicaid managed care becomes the primary provider of Medicaid benefits, states and the Centers for Medicare and Medicaid Services (CMS) have need of this information for similar purposes. This led to the development of complex encounter data submission processes that allow the health plans, or managed care organizations (MCOs) as they are commonly called in Medicaid, to push the claim data to the state’s repository. The development of these processes and the systems to collect this data has taken years and is still in its infancy in many states. CMS has accelerated this process through some recently mandated changes and plans to standardize the data files. This article discusses the need for and challenges of collecting Medicaid encounter data as well as the future of Medicaid encounter data—the next national data set.

WHY WE ARE HERE

The Medicaid program covers more than 20 percent of the U.S. population and accounts for more than 16 percent of all U.S. health care spending.¹ For many years, just like other medical programs, Medicaid was administered on a fee-for-service basis, usually by states that built their own claim payment systems or through an administrative services only (ASO) arrangement where a third-party administrator pays claims. The states had access to all of the claim data, since it was stored in a single repository. Recently, states have been shifting the administration of their Medicaid benefits to MCOs in order to improve the access and quality of care, create more stable funding streams, and reduce costs in the programs. In full-risk managed care arrangements, the state pays the MCOs a capitated per-member-per-month (PMPM) rate, and the MCO assumes the risk of the plan costs. This change reduces states’ visibility into the claim data, since the data is now housed by the MCOs. To regain access to

the data, states now require MCOs to submit claim information as encounter data to the state or third-party intermediary for collection in a repository that the state can access. Often there will be more than one MCO in a state, so the state requires all of the MCOs to submit the encounter data in the same format.

WHY STATES NEED THE DATA

In 2013, 38 states operated risk-based managed care programs that enrolled approximately 70 percent of the Medicaid beneficiaries in those 38 states.² In fiscal year 2013, almost 30 percent of all Medicaid dollars were paid through MCOs with individual state percentages ranging from 0 percent to almost 80 percent.³ All indications are that the overall percentage of Medicaid MCO spending will continue to increase in future years.

As the fiduciaries of the Medicaid programs, states have the responsibility of program oversight and integrity, which results in the need to collect complete and accurate encounter data. Section 1903(m)(2)(A)(xi) of the Social Security Act specifies that in order to receive federal funding for their Medicaid programs, states must include in their contracts with MCOs a provision that the MCO must report “patient encounter data” for physician claims to the state in a timeframe and level of detail specified by the secretary.⁴ This was strengthened under Sections 6402(c)(3) and 6504(b)(1) of the Patient Protection and Affordable Care Act to mandate that states collect and routinely report accurate, complete, and timely encounter data in order to receive federal funding for managed care payments under their Medicaid programs.⁵ CMS implemented this requirement in rule 42 CFR 438.818(a), which would require states to submit to CMS “sufficient and timely enrollee encounter data to CMS ... in the format required by the Medicaid Statistical Information System

Medicaid provides health coverage to millions of Americans, including eligible low-income adults, children, pregnant women, elderly adults, and people with disabilities. Medicaid is administered by states, according to federal requirements. The program is funded jointly by states and the federal government.

[Source: Medicaid.gov overview]

(MSIS)” or risk losing their Medicaid federal funding. Further rule 42 CFR 438.5(c) requires states to use encounter data for capitation rate-setting for managed Medicaid populations.

With the continued loss of historical fee-for-service data and the implementation of these rules, state Medicaid agencies are working to collect encounter data from the MCOs and store it in a single repository. This is preferable for many reasons:

- Data is easily accessible from a single source.
- Data is validated at intake and stored in a format consistent with fee-for-service.
- Claim detail allows for state review of anomalies and understanding of utilization patterns and services provided.
- Claims may be priced consistent with fee-for-service delivery for understanding of MCO payment variation.
- Health care management may be monitored and compared among the contracted health plans and alternative delivery systems.

WHAT STATES DO WITH ENCOUNTER DATA

States have multiple uses for encounter data, which may be classified in three primary groups:

- Financial.
- Program oversight.
- MCO contract monitoring.

Financial uses

Financially speaking, encounter data is useful for budget forecasting and capitation rate development, though there are many other ways for states to utilize the data.

Budget forecasting

Medicaid funding is approximately 20 percent of most state budgets, the second-largest state expenditure after education. Development of state budgets tends to be a highly political annual or biennial process. State leaders often look to Medicaid spending levels when overall budget shortfalls need to be addressed.⁶ Development of the Medicaid component of a state budget requires solid historical data, so that trends in population growth and benefit spending can be broken down and analyzed—which points to the crucial role for encounter data.

During the budgetary process, encounter data can be used in combination with fee-for-service and other Medicaid spending categories and analyzed in multiple ways:

- Reviewing utilization, unit cost, and service mix changes.
- Quantifying mandatory versus optional Medicaid services.

Enrollee encounter data means the information relating to the receipt of any item(s) or service(s) by an enrollee under a contract between a state and an MCO, PIHP, or PAHP.

- Evaluating differences in morbidity profiles of populations over time and across programs.
- Understanding the efficiency and savings potential of managed care programs relative to fee-for-service.

Capitation rate development

Capitation rates are the premiums paid to MCOs for managing care and paying medical services for Medicaid beneficiaries. Recently, CMS has placed increasing emphasis on the use of encounter data as the primary data source underlying capitation rates. Relying heavily on the encounter data to produce actuarially sound rates incentivizes MCOs to provide timely and complete data to the states to align benefit cost with premium payments.

Increasingly, MCO payments include risk-adjusted capitation rates. Risk adjustment in Medicaid tends to be budget neutral, shifting capitation payment dollars among MCOs to reflect the relative risk of each MCO’s enrolled population. However, most risk adjustment models require comprehensive encounter data to reflect risk profiles adequately. It is in each MCO’s best interest to submit timely and complete encounter data to maximize revenue.

Other financial uses

Some states have various funding arrangements with MCOs that result in transfers of gains or losses between the state and the MCO. These come in the form of:

- Gain sharing.
- Risk corridors.
- Minimum medical loss ratio guarantees.
- Administration maximums.
- Profit margin maximums.
- Reinsurance or stop loss for large claims, high member claims, or for single claims like high-cost drugs.
- Reconciliations, such as reconciling for retroactive member claim costs.

To administer these funding arrangements, states need encounter data; otherwise they must rely on the MCOs to provide the data in an alternate format.

Program oversight

In order to properly monitor managed care programs, states must use encounter data to conduct a multitude of analyses.

Policy analysis

Several types of analyses are common when states consider changes to Medicaid policy:

- *Carving benefits into or out of managed care.* Encounter data may be reviewed to understand utilization patterns or cost of services relative to expected fee-for-service delivery of benefits. Common services that may be considered for a carve-out include pharmacy, behavioral health, dental, and non-emergency transportation services. States may choose to segregate benefits for many reasons, including, but not limited to, more optimal funding arrangements negotiated by the state, advocacy initiatives for certain populations or benefits, or contracts with entities that specialize in a limited set of benefits.
- *Adding or eliminating an optional service to the Medicaid benefit package.* As state budgets cycle through expansion and contraction periods, optional benefits may be added or eliminated from year to year. Encounter data are used to summarize the utilization and cost of services provided under managed care at a detailed level. Optional benefits include services such as dental, chiropractic, podiatry, optometry, personal care, physical therapy, or occupational therapy. Note that coverage is only optional for adults, as children would qualify for all of these services under the mandatory Early and Periodic Screening, Diagnostic, and Testing (EPSDT) benefit.⁷
- *Understanding of underlying social issues.* State politicians and advocacy groups frequently request that state Medicaid agencies provide summaries of information related to social issues that affect members of the community. This may include issues such as the over-utilization of certain pharmaceutical products, the impact of behavioral health services in an area, the frequency of avoidable services such as visits to an emergency room, or the prevalence of certain disease categories in a subset of the Medicaid population.

QUALITY REVIEW AND FEDERAL REPORTING

Encounter data enables measurement of managed care program integrity and quality outcomes.

- *Calculating quality measures.* States use detail claims data inputs to calculate certain measures that allow for comparison of performance across health plans or delivery systems. For beneficiaries enrolled in managed care, this claims data

source is encounter data. The Healthcare Effectiveness Data and Information Set (HEDIS) includes several quality measures defined and maintained by the National Committee for Quality Assurance (NCQA), and many of these measures are commonly used directly or modified for use in monitoring Medicaid programs.⁸ Quality measures are used for a variety of reasons, such as internal monitoring, pay-for-performance initiatives, federal reporting, or public reporting.

- *Measuring network access and adequacy.* States use encounter data as a resource to review member utilization of services by geographic area or provider type to determine if patterns suggest that availability or access may be an issue. This helps program administrators ensure that Medicaid beneficiaries can receive necessary medical services. Federal standards are currently under revision to establish well-defined access standards for Medicaid, so this information may become a federal reporting requirement in the future as evidence of compliance.
- *Federal reporting.* States are required by federal law to report benefit experience to CMS. Paid expenditures are reported quarterly for all Medicaid covered benefits. For states that operate managed care programs under the authority of a waiver, either 1915(b) managed care waivers or 1115 research and demonstration waivers, additional reporting is required to illustrate cost-effectiveness of the program relative to fee-for-service benefit administration.⁹

MCO contract monitoring

States have extensive contracts with the MCOs that provide Medicaid services for their members. States manage MCO contracts by monitoring many of the contract requirements through review of encounter data such as:

- EPSDT requirements for children.
- Timely claim payment requirements.
- Quality measure benchmark requirements.
- Reimbursement levels relative to fee-for-service.
- Network access and adequacy.
- Validating that services are consistent with the Medicaid State Plan and benefits covered by the MCO contract.
- Monitoring in-lieu-of services that an MCO substitutes as a cost-effective alternative to a state plan service.

Additionally, states monitor the MCO administration and interaction with providers through the encounter data by reviewing claim denial reasons, physician enhancement payments, and provider add-on payments.

CHALLENGES IN SUBMITTING AND COLLECTING ENCOUNTER DATA

Encounter data sets are large and complex, so there are multiple challenges involved in collecting the data in a standardized format. These challenges arise both on the MCO side in trying to submit data and on the state side in trying to collect the data.

Reporting challenges: File formats

Encounter claim data is most commonly submitted in the HIPAA-compliant 837 and National Council for Prescription Drug Programs (NCPDP) file formats. The 837 file format is used for Institutional, Professional, and Dental services while the NCPDP file format is used for Pharmacy services. There are approximately 1,000 fields on an 837 file. To add to the complexity, there are multiple versions of these 837 files, including some state proprietary versions. MCOs that operate in more than one state may face additional complications when a state deviates from standard use of specific fields within the 837 file format. These variations increase the probability that encounter data will be rejected, as MCOs must modify their reporting to align with each state-specific system's submission requirements. This does not necessarily indicate that the data they are reporting is of low quality. Substantial cooperation among MCOs and state resources is often required to resolve data format problems.

Reporting challenges: Rejected encounters

Even if MCOs submit their encounters, states may still reject them. State encounter systems usually contain elaborate front-end edits to reject encounters that the state labels as invalid. This can happen for a variety of reasons, some that the MCO can fix and others that require action by the state or by providers.

As mentioned above, there are almost 1,000 fields on an 837 file. Some fields are required and some are not, depending on the individual state's encounter submission process. The format that providers use to submit claims for payment to the MCOs differs from the format that the MCO sends to the state. To receive payment for a claim, providers do not necessarily have to file all of the data elements that the state may require for the same encounter from the MCO. These missing elements are a common reason for rejection of encounters by the state.

All encounters must contain information on the provider of the service. In most, if not all, states, providers must register their National Provider Identifier (NPI) to be a valid Medicaid provider. The list of registered providers in a state is called the "roster." When the state receives an encounter, the NPI on the encounter is cross-referenced against the roster to seek a match. If there is no match, the encounter will be rejected. Unfortunately, in some states, the provider does not necessarily have to be on the roster for the MCO to pay the claim, so the providers do not

always have an incentive to register. There are also other reasons for variances between the encounter and the roster:

- *Out-of-state providers.* Often Medicaid members cross state lines to receive services when they live in border counties. These providers may be registered with their state's Medicaid program but not the neighboring state.
- *Members of multiple physician practices.* Some physicians work for more than one physician practice. The provider may have registered under one practice NPI but not the others.
- *Taxonomy codes.* Some states require providers to be registered under their various areas of practice. It is not unheard of for a state to allow up to 15 taxonomy codes for one NPI. If the provider is billing for a service that does not coincide with the registered taxonomy codes, the encounter will be rejected.
- *One provider on the encounter is not registered.* The 837 file has fields for each of the following:
 - Billing provider.
 - Rendering provider.
 - Referring provider.

State submission policies vary on which of these fields are required for encounter acceptance. If a required provider is not on the roster correctly, the encounter may be rejected.

The natural operations of the managed Medicaid program create situations that cause encounters to be rejected due to an edit. Some of these are just timing issues, but others will not resolve themselves over time. Examples are:

- *Duplicate claims.* State systems usually contain a front-end edit to reject encounters that appear to be duplicates, though they may be valid adjusted claims or recovered claims.
- *Procedure not covered by state.* One of the advantages of implementing managed care to replace fee-for-service benefit administration is that MCOs can provide services for members that are not covered under the Medicaid State Plan. These services must be provided in lieu of a State Plan-covered service and must be at least as cost-effective as the covered service. State Medicaid Management Information Systems (MMISs) are often designed for fee-for-service data, applying front-end edits that may reject encounters for services the system does not recognize as covered under the State Plan.
- *Retro-member adjustments.* States provide enrollment information to MCOs using the HIPAA-compliant 834 enrollment file format for members who are enrolled with the MCO.

States may retroactively dis-enroll members from an MCO for various reasons. These retroactive changes may create timing issues for encounter submissions if the member does not appear as eligible on the state’s system. MCOs are required under contract to pay claims for members on the 834 file, but once a member is retroactively dis-enrolled, the MCO may be able to recoup the claim payment from the provider.

Collection challenges: State issues

The challenges of getting good quality encounter data into a usable format are not limited to the MCOs. Some issues fall on the limitations and legacy practices of state adjudication processes and systems. Many state MMISs date back about 40 years to when federal regulations mandated the mechanization of claims processing and storage systems. When these systems were originally developed, states received 90 percent federal financial participation (FFP) for their development and implementation. In recent years, some states have begun contracting with third parties to operate their MMISs, and others are just beginning to update systems to more modern hardware and software.¹⁰

The key problem with legacy MMIS warehouses is that they were not designed to intake encounter data from MCOs. They were designed to accept claims directly from Medicaid providers and to adjudicate payments for those claims based on fee-for-service reimbursement rules. This leads to many difficulties when collecting encounters into the system:

- *Non-standard claim formats.* When HIPAA mandated the regulation of electronic claim filing, states required some Medicaid providers to continue submitting non-standard (and non-compliant) claim forms to the state. When MCOs begin working with these providers, the providers must change the way they have always billed for Medicaid services because they must submit HIPAA-compliant forms to MCOs. This requires training for the providers as well as a trial-and-error period as the state works out how to collect the same information it has always received in a different format. This tends to be more of an issue for providers, which mostly offer Medicaid-covered or state-funded services such as mental health rehabilitation option services or long-term services and supports.
- *Claim adjudication edits.* MMISs were designed with strict fee-for-service provider reimbursement edits to appropriately adjudicate and pay claims. The way providers bill MCOs to receive payment is not consistent with the way providers have historically been required to bill states. When states begin receiving encounter data from multiple entities, the state must experiment with rejection reasons and determine where adjudication edits can be relaxed. The goal is for the MMIS to receive all necessary information for understanding the encounter, but not require the same strict information as if the claim were being paid under fee-for-service. For example, the

last name of the billing provider may be required for a fee-for-service claim, but because of the inconsistency of receiving encounters from multiple entities, the state may turn off the edit that validates this field for encounter data.

- *Sub-capitated encounters.* An MCO may contract with vendors who manage a subset of benefits on an at-risk basis for the MCO’s members. These vendors typically specialize in providing efficient ancillary services such as dental, vision, or transportation. The MCO pays a PMPM capitated premium to the vendor, and the vendor is at-risk for providing all covered services under its contract. Under this alternative payment arrangement, payment is not contingent on the claim encounters submitted to the MCO, so many encounters for services provided may be of poor quality or nonexistent. Because of the payment structure, sub-capitated encounters may not include pricing information, and the state’s MMIS may in turn zero-out the utilization or potentially report the encounter utilization in summarized format without an expenditure attributed to it.
- *Other non-standard funding arrangements.* MCOs may have global or bundled case rate payments that they pay for certain episodes of care. Services provided under these arrangements tend to have issues with encounter data similar to the sub-capitated claim encounters noted above.

STRATEGIES TO IMPROVE ENCOUNTER DATA REPORTING AND ACCEPTANCE

As many states have moved to managed care and have a long history of working through the challenges outlined above, some lessons have been learned, and best practices have begun to emerge.

Improve state technology and process

In order to collect and maintain good quality encounter data, states must continue to invest in the development and operation of a regular monitoring process. States that have been successful at the collection of accurate, complete, and timely encounter data have set up such processes, investing in data teams and/or consultants who are responsible for regularly reviewing encounter submissions. Monitoring includes comparing summarized encounter data with MCO financial data by organizing the two different sources into a standard format.

In order to incentivize contracted MCOs to submit complete encounters, states may link the results of these reports to the financial arrangements in the MCO contracts. For example, the state may withhold a percentage of capitation payments that MCOs can earn back by submitting complete and accurate encounter records. Completeness and accuracy may be estimated by summarizing encounter payments PMPM and measuring the variance from the PMPM cost reported by the MCOs in their

financial data or cost report information. States may also require external quality review audits of encounter data versus reported financial data by a neutral third party.

Best practice would suggest that state executive personnel and their actuaries meet on-site with MCO executive personnel and data teams to conduct an initial review during the planning and implementation stage of new encounter submission processes. This reinforces the importance of the process and provides an opportunity for all stakeholders to ask questions and become prepared for the ongoing monitoring process.

Improve state/MCO partnership for results

States want to operate successful managed care programs on behalf of their enrolled members, and MCOs want to provide efficient and quality care to those members while earning a risk-based margin. Bringing the stakeholders together for a partnership at the beginning of the encounter data collection and monitoring process reinforces these goals and, over time, should result in successful processes for states to collect, maintain, and report encounter data. Successful partnerships involve:

- Working together on barriers to submission/acceptance of encounter data.
- Educating the other side to learn expectations and limitations on both sides.
- Collaborating on holding providers accountable.
- Establishing data dashboard summaries.

MCO strategies to improve submissions

Due to contractual requirements, MCOs may establish up-front edits in their claims systems and/or pre-submission edits for the encounter data files. The claim system edits will reject a claim before it enters the claim-processing system if there is a missing or invalid field on the claim that will prevent it from flowing through the state's encounter system edits. The claim rejects to the provider with a reason code that indicates the missing or invalid field, and the provider must resubmit the claim correctly to the MCO. Pre-submission encounter file edits mirror the edits the state has established. These claims are set aside and run through an automatic or manual correction process. This is often a time-consuming, labor-intensive, and expensive process for the MCOs.

MCOs are often challenged with educating providers on their responsibilities to ensure that the provider claim can be converted into an accepted encounter. This is not always required for the provider to receive payment on a claim, so MCOs often include requirements for submitting a clean claim in their provider contracts and provider manuals. Some states allow MCOs to reject claims with missing information while others do not.

MCOs often work with providers to get them registered correctly on the state roster or to educate providers that chronically file claims lacking necessary information.

Some missing or incorrect 837 claim file field elements may be corrected through an algorithm that maps the correct field element. For example, MCOs may be able to map a missing NPI to an encounter using a provider's Medicaid ID number.

The growth of value-based and alternative payment methods for providers may exacerbate the problem of missing data elements for encounter submission. Capitated providers were, and in some places still are, common funding arrangements with physicians and ancillary vendors. These arrangements do not encourage accurate encounter reporting and have created their own challenge to MCOs submitting complete encounter data to states. Many MCOs are dismantling their capitated arrangements to avoid the negative financial impacts associated with poor encounter submissions.

MCO incentives

States have created various incentives for MCOs to improve their encounter data submissions. Some of the incentives included in contracts today are described below:

- *Using encounter data in rate setting.* States are relying on encounter data for the source of base data to produce MCO capitation rates. Incomplete or inaccurate encounter data submission can lead to capitation rates that do not appropriately reflect the managed Medicaid program.
- *Risk adjusting capitation rates.* The adoption of risk-adjusted rates provides incentives for MCOs to improve their encounter data, since the data supports the calculation of beneficiary risk scores. The core tenet of risk adjustment is to recognize disproportionate shares of risk among MCOs and better match payment to risk profile. A byproduct of risk adjustment is heightened MCO awareness to submit encounter data that ensures that their MCO-specific risk score fully reflects their experience.
- *Contract provisions.* States can improve their encounter data with well-thought-out financial and operational contract requirements. These include financial penalties for not meeting certain service-level agreement (SLA) requirements. These penalties could be in the form of liquidated damages, unearned capitation rate withholds, loss of incentive payments, or loss of enrollment in the auto-assignment process. The most common SLA types in MCO contracts are:
 - Timeliness – Days between submitted encounters and paid date such as “100 percent of encounters submitted by the 25th day following the end of the process month.”

- Completeness – Paid claims dollars compared with encounters accepted such as “within 97 percent of costs reported with three-month runout.”
- Accuracy – Percent of encounters accepted (not rejected by the state) such as “97 percent acceptance on each file submitted.”

SLAs will have measurements for each of these, and MCOs can be penalized for not meeting the measurement levels. There can also be two levels of measurement: one to avoid being in violation of the contract, and the other is a higher measure to receive a financial incentive or avoid a financial penalty.

MCO contract incentives should be designed to encourage the desired behavior. They should also be reviewed within the other state requirements and instructions to be sure that they are not in conflict. The situations described in the call-out boxes below are examples of encounter data requirements with unintended consequences.

While MCO incentives are a useful tool, MCOs do not have the ability on their own to repair a broken system. It is critical that states and MCOs work together to improve encounter collection processes by identifying and eliminating barriers.

HOW CMS IS FORCING THE EVOLUTION OF ENCOUNTER DATA COLLECTION

In 2011, CMS launched a pilot of the Transformed Medicaid Statistical Information System (T-MSIS) project in 12 states. From federal fiscal year 1999 until this announcement, CMS collected fee-for-service Medicaid claims and enrollment data on a quarterly basis, processed it into a standard format, stored it in the Medicaid Statistical Information System (MSIS), and

supported a web-based data mart tool that allowed public users to summarize monthly or quarterly information by federal fiscal year. But as states have transitioned more and more to managed care over time, it became clear that having only fee-for-service data available was much less valuable than it had once been. T-MSIS collects both fee-for-service and encounter data, and it is the future of viable Medicaid data. The CMS goal is to develop data marts through web-based tools, detailed but de-identified public use files for purchase, and full-detail Medicaid Analytic eXtract (MAX) files for research applications.¹¹

T-MSIS: The value proposition

CMS oversight of Medicaid programs is difficult because each state and U.S. territory has its own unique set of benefits, eligibility criteria, funding rules, waivers, etc. With the implementation of T-MSIS, CMS will be able to automate some monitoring functions. The following are key points that CMS and the public will be able to review at a glance, rather than through long inquiries and strenuous validation efforts

- Enrollment will be stratified between Medicaid (Title XIX) and CHIP (Title XXI), and both fee-for-service and encounter claims information will be linked to these tables. This will allow users to easily summarize what services different groups received, which providers served them and how often, what those services cost, and how their service utilization patterns differ by waiver or State Plan or in managed care versus fee-for-service.
- Fraud and abuse auditing will be enhanced with the ability to review a combination of Medicare and Medicaid claims to see where providers appear to be having an “impossible day,” in which they see more patients than possible in one day.

Examples of MCO contract penalties

Example 1 – Unintended Incentive	Example 2 – Workaround		
<p>MCO contract has a Timeliness of Encounters SLA measured as follows: (# of Encounters > 30 days after Paid Date) / (# of Encounters in Files Containing Encounters >30 days After Paid Date)</p> <p>MCO submits 10 encounter files.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Submission Option 1: 1 file of 100,000 Encounters with 10 Encounters >30 days, and 9 files of 100,000 Encounters with no Encounters >30 days Error Rate = 10/100,000 = 0.010%</p> </td> <td style="width: 50%; vertical-align: top;"> <p>Submission Option 2: 10 files of 100,000 with 1 Encounter > 30 days in each one Error Rate = 10/1,000,000 = 0.001%</p> </td> </tr> </table>	<p>Submission Option 1: 1 file of 100,000 Encounters with 10 Encounters >30 days, and 9 files of 100,000 Encounters with no Encounters >30 days Error Rate = 10/100,000 = 0.010%</p>	<p>Submission Option 2: 10 files of 100,000 with 1 Encounter > 30 days in each one Error Rate = 10/1,000,000 = 0.001%</p>	<ul style="list-style-type: none"> Claim is paid on an eligible member. Member is subsequently retro-termed by the state prior to the submission of the encounter. Encounter must be removed before submission to avoid a penalty for accuracy due to a rejected claim.
<p>Submission Option 1: 1 file of 100,000 Encounters with 10 Encounters >30 days, and 9 files of 100,000 Encounters with no Encounters >30 days Error Rate = 10/100,000 = 0.010%</p>	<p>Submission Option 2: 10 files of 100,000 with 1 Encounter > 30 days in each one Error Rate = 10/1,000,000 = 0.001%</p>		

- Agency demonstrations and delivery reform model analytics will be performed on an ongoing basis to review these initiatives as they are occurring rather than years after they end.

MSIS versus T-MSIS: What's new?

CMS has invested significant resources in modernizing its data systems from the old MSIS format to the new T-MSIS format. Some of the improvements in the data and innovative new features include:

- Storing and analyzing the data in an Amazon Web Services cloud.
- Receipt and control of states' data files processed through three tiers of business rules to identify data quality issues.
- Intensive state testing and data reviews prior to approval for official submission.
- Real-time error reports sent back to states to help them identify and fix data quality/gap issues.
- Increasing the sources of data, including managed care plan data and additional provider data.
- Increasing the number of data fields.

Overall, the expectation is that the data from T-MSIS will be a national data set of Medicaid data accessible by the public. There are more stringent requirements for timely submission of data and a better process for validating data to ensure accuracy as shown below:

MSIS Data	T-MSIS Data
Inpatient Claims	Inpatient Claims
Long-Term Care Claims	Long-Term Care Claims
Prescription Claims	Prescription Claims
Other Claims	Other Claims
Beneficiaries (names, SSNs, etc.)	Beneficiaries (names, demographics, etc.)
Encounter Data	Provider – NEW
	Managed Care Plan – NEW
	Third Party Liability – NEW
	Improved Encounter Data

CMS is actively working with states to populate the new T-MSIS. The current timeframes for ongoing and continued population of the database are:

- CMS is accepting states' data now.
- Expect majority of states to begin submitting their data by the end of summer 2016.
- Initial submissions include “catch-up” MSIS files.
- Regular cadence is monthly submissions.

MSIS vs T-MSIS	
“As Is” MSIS	“To Be” MSIS
200+ Elements	550+ Elements
Quarterly Submissions	Monthly
Poor Data Quality	Submissions processed through business rules
Limiting Data Analytics <ul style="list-style-type: none"> • Lack of data integration • State accessibility 	Data Validation Requirements

SUMMARY

Quality encounter data is necessary for successful Medicaid managed care programs. States and MCOs have partnered to work toward solutions for developing and transmitting complete and accurate encounter data. CMS has also begun partnering with states to modernize the federal collection and standardization of encounter data.

Similar to the unique nature of each state Medicaid program, states each have unique data collection file format requirements and methods, which creates unique provider reporting challenges. Limitations such as these make it improbable to report and collect 100 percent of all encounters. Federal regulations may impose penalties when states are unable to submit complete and accurate encounter data to CMS. Now is the time for CMS, states, and MCOs to all work together to break

down roadblocks that may prevent the collection and reporting of quality encounter data.

Encounter data quality can be improved with certain key principles:

- *Standardization of encounter reporting across states.* CMS is working toward this with the requirements of its new proposed regulation and modernization of the T-MSIS claim repository.
- *Modification of MMIS rejection edits.* States may be able to relax front-end edits to better accommodate encounters, recognizing that strict fee-for-service edits may not be appropriate.
- *Modernization of state Medicaid Management Information Systems.* States should continue to invest in updating systems to reflect the evolution of claims data.
- *Collaboration to reduce provider roster issues.* States and MCOs should work together to educate providers and to develop processes that simplify management of provider rosters.
- *Implementation of regular data monitoring.* States can develop dashboard summary reporting requirements to enhance oversight of changes in encounter data quality.
- *Consideration of encounters in value-based payments.* MCOs can establish reporting penalties or incentives when contracting with providers using alternative payment arrangements to ensure complete and accurate encounter submission.
- *Alignment of service-level agreements.* States and MCOs should work together to develop contract requirements that appropriately encourage quality encounter submissions without penalizing for practices that are not in the MCO's control.

As these obstacles continue to be addressed and overcome, the CMS T-MSIS will become a single-source database for all

Medicaid claims data, bringing together both fee-for-service and encounter experience. This new national data set will allow for quality measurement and understanding of costs and effectiveness of Medicaid programs nationwide, goals that are not currently achievable under our historically fragmented system. ■

ENDNOTES

- ¹ Kaiser Family Foundation (March 9, 2015). Medicaid Moving Forward. Retrieved March 23, 2016, from <http://kff.org/health-reform/issue-brief/medicaid-moving-forward/>
- ² Centers for Medicare and Medicaid Services (November 2013). Encounter Data Toolkit. Retrieved March 23, 2016, from <https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Data-and-Systems/Downloads/Medicaid-Encounter-Data-toolkit.pdf>
- ³ Kaiser Family Foundation (Dec. 2, 2014). Key Findings on Medicaid Managed Care: Highlights from the Medicaid Managed Care Market Tracker. Retrieved March 23, 2016, from <http://kff.org/report-section/key-findings-on-medicicaid-managed-care-report/>
- ⁴ U.S. Social Security Administration. Compilation of the Social Security Laws: Payment to States. Retrieved March 23, 2016, from https://www.ssa.gov/OP_Home/ssact/title19/1903.htm. - 2)(A) Except as provided in subparagraphs (B), (C), and (G), no payment shall be made under this title to a State with respect to expenditures incurred by it for payment (determined under a prepaid capitation basis or under any other risk basis) for services provided by any entity (including a health insuring organization) which is responsible for the provision (directly or through arrangements with providers of services) of inpatient hospital services and any other service described in paragraph (2), (3), (4), (5), or (7) of section 1905(a) or for the provision of any three or more of the services described in such paragraphs unless—(xi) such contract provides for maintenance of sufficient patient encounter data to identify the physician who delivers services to patients and for the provision of such data to the State at a frequency and level of detail to be specified by the Secretary.
- ⁵ Centers for Medicare and Medicaid Services (June 1, 2015). Proposed Rule: Medicaid and Children's Health Insurance Program (CHIP) Programs; Medicaid Managed Care, CHIP Delivered in Managed Care, Medicaid and CHIP Comprehensive Quality Strategies, and Revisions Related to Third Party Liability. Federal Register, Vol. 80, No. 104, pp. 31166-31167. Retrieved March 23, 2016, from <https://www.gpo.gov/fdsys/pkg/FR-2015-06-01/pdf/2015-12965.pdf>
- ⁶ National Association of State Budget Officers (Nov. 19, 2015). Summary: NASBO state expenditure report. Retrieved March 23, 2016, from https://www.nasbo.org/sites/default/files/Summary_State%20Expenditure%20Report.pdf
- ⁷ Medicaid.gov. Benefits. Retrieved March 23, 2016, from <https://www.medicaid.gov/medicaid-chip-program-information/by-topics/benefits/medicaid-benefits.html>
- ⁸ National Committee for Quality Assurance. HEDIS & Performance Measurement. Retrieved March 23, 2016, from <http://www.ncqa.org/HEDISQualityMeasurement.aspx>
- ⁹ Medicaid.gov. Waivers. Retrieved March 23, 2016, from <https://www.medicaid.gov/medicaid-chip-program-information/by-topics/waivers/waivers.html>
- ¹⁰ Medicaid.gov. Medicaid Management Information System (MMIS). Retrieved March 23, 2016, from <https://www.medicaid.gov/medicaid-chip-program-information/by-topics/data-and-systems/mmis.html>
- ¹¹ Medicaid and CHIP Payment and Access Commission (June 2013). Report to the Congress on Medicaid and CHIP. Chapter 4: Update on Medicaid and CHIP Data for Policy Analysis and Program Accountability. Retrieved March 23, 2016, from https://www.macpac.gov/wp-content/uploads/2015/01/Update_on_Medicaid_and_CHIP_Data_for_Policy_Analysis_and_Program_Accountability.pdf



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