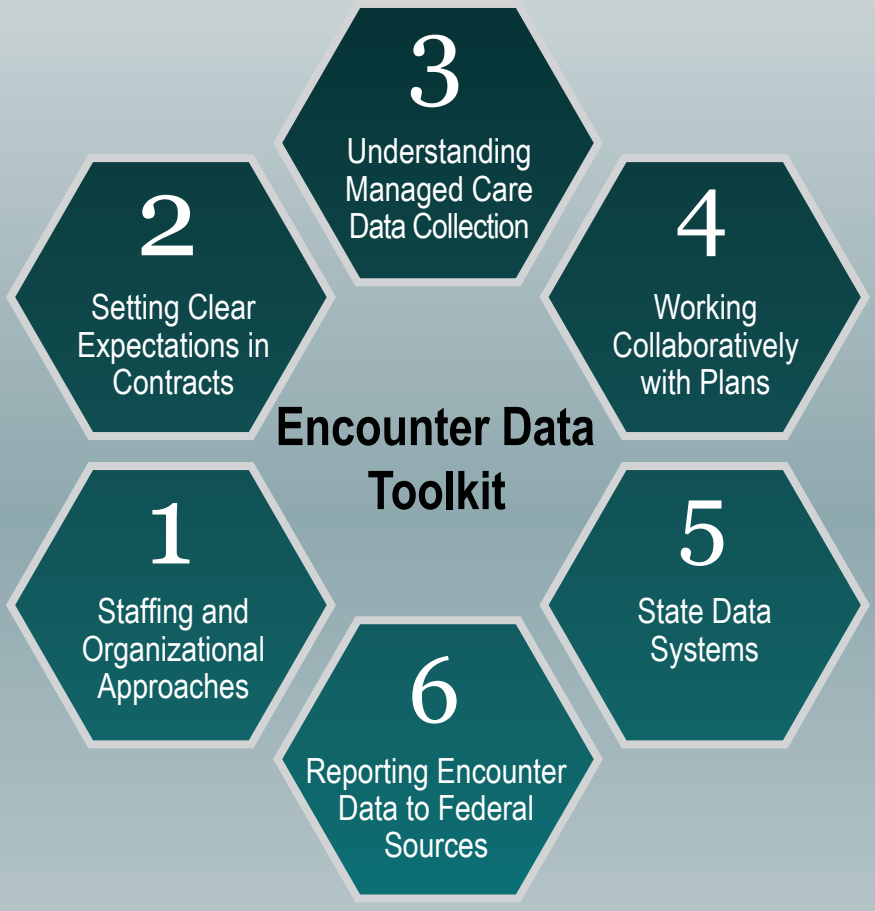

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Encounter Data Toolkit

Final

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Contents

Medicaid Managed Care Encounter Data: A Toolkit for Data Collection, Validation, and Reporting

Introduction and Purpose

This toolkit provides a practical guide to collecting, validating, and reporting Medicaid managed care encounter data. It is designed as a step-by-step guide for state Medicaid staff responsible for managing the daily operations involved in encounter data, as well as for senior managers and policymakers who oversee this function. It contains case studies, checklists, and links to resources that provide helpful tips and tools.

States are required by federal law to report encounter data to CMS as part of their quarterly Medicaid Statistical Information System (MSIS) submissions. Since 1999, states have been required to submit managed care encounter data as well as fee-for-service (FFS) claims information to CMS (Section 4753(a)(1) of the Balanced Budget Act of 1997). Regulations issued in 2002 (42 CFR 438.242) require contracted managed care organizations (MCOs) to collect encounter data, ensure that the data are accurate and complete, and make that data available to the state. Recent legislation (Section 6505(b) of the Affordable Care Act of 2010) strengthens the requirement for Medicaid MCOs to provide patient encounter data to states and permits the federal government to withhold federal matching payments to states "with respect to any amounts expended for medical assistance for individuals for whom the State does not report enrollee encounter data to MSIS in a timely manner" (ACA, Section 6402(c)).

This toolkit is one of several initiatives sponsored by the Centers for Medicare & Medicaid Services (CMS) to help state Medicaid agencies (1) comply with federal encounter data reporting requirements, (2) improve the accuracy and completeness of the data, and (3) strengthen states' capacity to analyze and use the data to evaluate and monitor managed care program outcomes.

What are Medicaid encounter data?

Encounter data are the records of services delivered to Medicaid beneficiaries enrolled in managed care plans that receive a capitated, per-member-per-month payment. These records allow the Medicaid agency to track the services received by members enrolled in managed care. The state is not responsible for processing a claim or paying the provider for the rendered service. Encounter data typically come from billed claims that providers submit to managed care plans to be paid for their services.

Encounter data are similar to FFS claims data, but encounter data (1) are not tied to per-service payment from the state to the managed care organization (MCO), because the state is not paying for individual services, and (2) do not include a Medicaid-paid amount, although many states collect the amounts MCOs pay providers on the encounter records. MCOs may pay more or less than the Medicaid FFS rate.

Why are encounter data important?

Managed care is the predominant delivery system for Medicaid. In 2013, 38 states operated risk-based managed care programs that enrolled approximately 70 percent of Medicaid beneficiaries. Encounter data are essential for measuring and monitoring managed care plan quality, service utilization, finances, and compliance with contract requirements. The data are also a critical source of information used to set capitation rates and perform risk adjustment to account for differences in beneficiary health status across plans.

Organization of the Toolkit

This toolkit presents a guide to six essential building blocks of strong Medicaid managed care encounter data systems:

1. Medicaid agency staffing and organization
2. Contract requirements
3. Understanding plan data systems
4. Working with plans to improve data collection and reporting
5. State systems to collect and validate data
6. Federal reporting

Each of the six sections in the toolkit describes the goal or aim of one of the building blocks and the specific activities or resources needed to achieve that goal. A box at the beginning of each section summarizes the goal, content, and how the information may be useful to managers, policymakers, and technical staff. Each section also includes a set of exhibits, such as case studies that illustrate how the activities work in practice, as well as protocols, checklists, and other resources. A conclusion at the end explains how state officials can obtain one-on-one technical assistance, and lists some additional resources.

When relevant, the toolkit explains which activities are important when developing new MCO programs and which can help improve encounter data for existing MCO programs.

Note on Information Sources

Information for this toolkit comes from several sources. It is based on Mathematica Policy Research's extensive experience in analyzing managed care encounter data submitted by states to CMS. It was also informed by interviews with state Medicaid agency staff conducted for a 2011 report on encounter data (Byrd et al. 2011), as well as by recent discussions with staff in state Medicaid agencies and External Quality Review Organizations (EQROs). In addition, it draws on documents and resources found on Medicaid agency websites.

Section 1:
Staffing and Organizational Approaches

Section at a Glance:

Aim: Create an effective staff and organizational structure for encounter data collection, validation, and reporting

Audience and Purpose:

- **Division managers and supervisors:** When assigning staff responsibilities for working with encounter data, considering adding additional staff, and considering professional development and training needs
- **Technical staff:** When determining strategies for working collaboratively across their agency regarding encounter data issues

Exhibits:

- **1.1** Encounter Data Team Capabilities Assessment Tool
- **1.2** Arizona Encounter and Data Quality Manager Job Description
- **1.3** New Jersey's Encounter Data Unit

To lay the foundation and devise a strategy for successful encounter data reporting, states should bring together an appropriate mix of staff with the necessary skill sets to collect, validate, and report the data. States should analyze the skills and knowledge areas individual staff members bring to their encounter data team and address any gaps through new hires, training, collaboration with other departments, or contracting with vendors with the required expertise.

This section discusses how states can (1) build a strong team of encounter data staff, (2) create an effective organizational structure for those staff, and (3) develop mechanisms to ensure clear communication across all encounter data stakeholders.

Activity 1: Build a strong team of skilled encounter data staff

States new to managed care must first determine whether existing agency staff can perform the activities required to process encounter data, or if new staff need to be hired. Some skills and knowledge needed to work with encounter data overlap with skills that are used for processing FFS data, whereas others differ. Many states new to managed care initially choose to use a vendor or their EQRO to perform the majority of encounter data processing and validation. Over time, these states typically take over many of these functions as state staff became increasingly knowledgeable. Even when a state relies on an external organization to handle its encounter data needs, it is important for state staff to build their skills and knowledge to properly oversee this work.

All states, whether new to managed care or not, should take an inventory of the skills and knowledge of current staff to identify gaps that need to be filled through training or hiring. Staff who work with encounter data often have diverse educational and professional backgrounds, including in computer science, public policy, and statistics. It is rare for a single individual to have every skill necessary for successful encounter data work; more commonly, a successful encounter data team needs to bring together a group of individuals with the required knowledge and skills.

States can assemble the range of skills and knowledge by assigning one or more staff members to take primary responsibility for encounter data and bringing others onto the encounter data team to play supporting roles. To the degree possible, it is best to avoid having only one staff person with a critical skill or knowledge on a key topic. Cross-training can reduce the risk of losing essential knowledge should an employee leave the agency or become unavailable. The following skills and knowledge areas are needed to work with encounter data.

Skills

- **Programming.** Programming skills in the software used by the state (for example, SAS or COBOL) to process and store data, create automated data edits, and analyze data output.
- **Quantitative analysis.** Ability to perform statistical and quantitative data analysis, for example, to create utilization metrics, such as the percentage of children ages 0 to 5 years with immunizations, from data files. [Note: Although data validation and quantitative analysis skills often overlap, the former involves looking at raw data to assess its validity, whereas the latter involves the use of the data for analysis.]
- **Technical assistance.** Ability to work with managers and IT staff at health plans and providers to answer questions about data submission and data standards and to troubleshoot issues.
- **Verbal and written communication.** Strong written and oral communications skills to provide clear instructions to health plan staff, for example through Encounter Data Companion Guides, and to have productive conversations with plans when data issues arise.

Knowledge Areas

- **Information systems.** Understanding data transfer from MCO to state systems and potential problems that may arise.
- **Data privacy and security.** Understanding privacy rules under the Health Insurance Portability and Accountability Act (HIPAA), standard data release rules, and industry-accepted data security practices to enable protection of confidential patient information while allowing state entities to utilize the data.
- **Managed care policy.** Expertise on services and populations covered, benefit limits and exclusions, eligibility and enrollment policy, and service delivery in a managed care system.
- **Contracts.** Development and enforcement of contract requirements to ensure high quality data submissions (see Section 2).
- **Claims coding and formats.** Knowledge of CPT, HCPCS, revenue and other typical medical billing codes, as well as standard claim formats, such as the X12.
- **Statistics.** Ability to assess if data are complete and accurate based on expected utilization of the population and to create performance metrics.
- **Clinical training or experience.** Ability to evaluate whether beneficiaries are getting clinically appropriate care, create performance metrics measuring health outcomes, and communicate with providers.

Exhibit 1.1 can be used to assess your team's current skills and knowledge.

Exhibit 1.2 features excerpts from **Arizona** AHCCCS' job description for a managerial-level employee with responsibility for encounter data.

Exhibit 1.1. Encounter Data Team Capabilities Assessment Tool

			State Staff			Contractors and Vendors		
% FTE Devoted to Encounter Data			Jane Smith	Juan Garcia	etc.	EQRO	Actuary	Fiscal Agent
Skills	Programming and Data Analysis	SAS, COBOL, etc.	40%	20%				
		Creating automated data edits	X					
		Analyzing data output	X					
		Performing statistical and quantitative analysis						
		Creating performance metrics	X					
	Technical Assistance	Working with plans and providers on data reporting		X				
		Facilitating workgroups and meetings		X				
	Communi-cations	Writing manuals, memos, and other technical documents		X				
		Effectively communicating with external parties in writing		X				
		Effective oral communication with health plans and providers		X				
Knowledge Areas	Information Systems	Procedures for data transfer between systems						
		Medicaid Management Information Systems (MMIS)	X					
	Data Privacy and Security	HIPAA and data release rules		X				
		Industry-accepted data security practices	X	X				
	Managed Care Policy	Services and populations covered, benefit limits and exclusions	X					
		Eligibility and enrollment	X					
		Service delivery in managed care systems						
	Contracts	Development of managed care contracts		X				
		Oversight and enforcement of managed care contracts		X				
	Claims Coding and Formats	CPT, HCPCS, revenue codes	X					
		CMS 1500 and X12						
	Clinical Training or Experience	Measuring health outcomes	X					
		Evaluating medical records	X					

Exhibit 1.2. Arizona—Encounter and Data Quality Manager Job Description (excerpts)

Major Responsibilities:

- Plan and analyze activities related to the processing of encounter data and data validation studies to enhance accuracy and throughput.
- Direct and review work of subordinate staff in the receipt, analysis, tracking, and reporting of encounter data submitted by AHCCCS Contractors; performance, reporting, and communication of encounter data validation studies.
- Organize and coordinate services and communication among AHCCCS divisions and health plan administration for the purpose of identifying, resolving, and monitoring encounter and data validation, management issues.
- Attend internal and external meetings as the agency encounter expert, to answer questions, provide recommendations, and participate in problem solving and decision making related to encounter data, submissions, and processing.
- Act as project manager for medium to large-scale projects as related to encounter processing and data validation operations.
- Interpret various administrative rules, regulations, policies, and procedures pertaining to encounter data collection.
- Oversight of design; development, implementation, analysis, and reporting of medical performance and quality studies; and medical audits.

Required Knowledge:

- Management theories and techniques, supervisory skills, staff motivation techniques, and performance evaluation and measurement.
- Financial and managerial data analysis methods, including statistics and personal computer (PC) spreadsheet and statistical application software.
- Managed care payment principles, Medicare and Medicaid payment regulations, and state and federal law relating to the AHCCCS program.
- Health care industry coding standards.
- PC and mainframe computer system programming and operations within the context of health care industry usage.
- Claims and encounter processing and data validation requirements mandated by CMS, and contractual arrangements with AHCCCS contractors relating to encounter data submission, data validation, and reinsurance payments.
- AHCCCS and managed care service delivery systems, including the various types of services provided or required, specific service provider types and specialties incorporated into the AHCCCS programs, along with the types of services provided.

Required Skills:

- Must have excellent written and oral communication skills, the ability to work and communicate effectively with a broad spectrum of professionals internally and externally, and the ability to present ideas effectively.
- Project management skills, including development of project objectives, timelines, and monitoring evaluation of its implementation.
- Analysis and problem-solving skills to resolve operational problems and improve system performance.
- Quantitative data analysis skills for analyzing claims and encounter service utilization data, rate impacts, and payment rates.
- Computer application software skills to perform analysis and develop complex analysis models.
- Analysis and synthesis of financial and or managerial data and complex payment issues and the development of analysis and models and recommendations for rate impacts and, as needed, payment rate changes.
- Supervisory skills to effectively manage staff, promote maximum productivity, and provide a positive work environment.
- Skilled in managing multiple tasks, meeting deadlines, and prioritizing workload.

Source: Encounter and Data Quality Manager, State of Arizona Position Description, #AHC1035AHO.

Exhibit 1.3.

New Jersey's Encounter Data Unit

Before 2008, staff members from multiple units within the New Jersey Medicaid agency, including the systems group and the managed care group, were involved on an informal basis with helping MCOs improve encounter data reporting.

In 2008, the state reorganized the staff involved in these ad hoc efforts into a formal encounter data unit. This unit consists of a programmer, an expert in contract language, and a data analyst who are devoted to working on encounter data full time. The unit also collaborates with other agency units, such as the quality assurance group, that play an important role in encounter data analysis.

The state credits the creation of the unit as the turning point in improving the quality of its data.

Activity 2: Create an effective organizational structure for encounter data staff

State staff working with encounter data may be located in various departments or units in the state Medicaid agency. For example, at one time **Michigan** had a separate encounter data unit, but as the state began to make extensive use of encounter data for rate setting, it transferred encounter data staff to the actuarial division. In **Kentucky**, responsibility for encounter data is shared between the managed care policy group and the IT group.

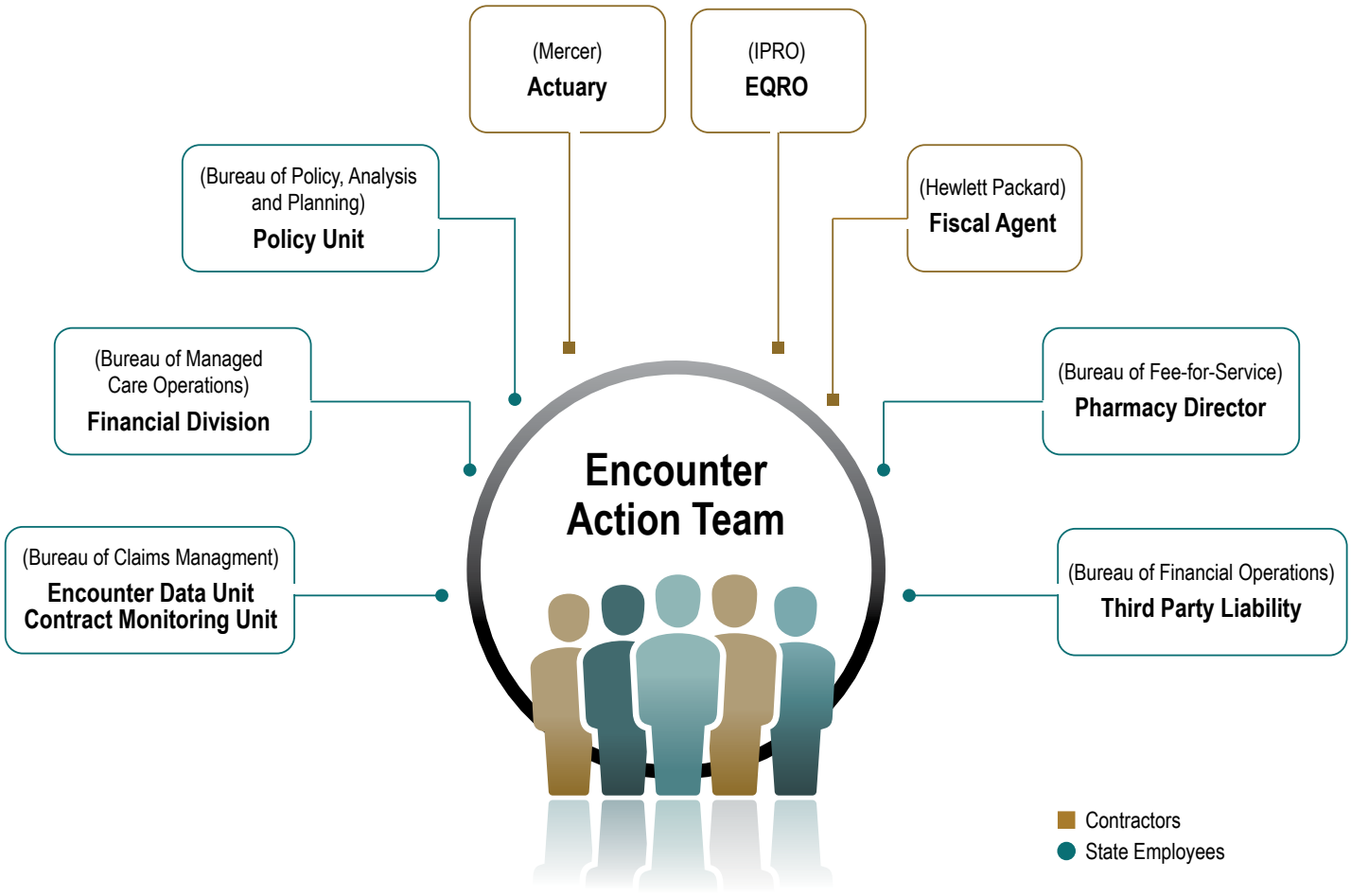
Several states, including **Arizona** and **New Jersey** (see Exhibit 1.3), have separate encounter data units that are solely dedicated to working with encounter data. This model creates efficiencies while also signaling to plans the importance the state places on encounter data. Although restructuring existing divisions or units may not be easy, creating a separate, dedicated encounter data unit is highly recommended. Such units contribute to substantial improvements in collecting accurate and complete encounter data from plans and in using the data effectively for quality monitoring, rate setting, and other critical analytic tasks.

Activity 3: Develop mechanisms to ensure clear communication among all encounter data collaborators, including vendors and contractors, and develop methods for cross-departmental and cross-organizational collaboration

Even when states have a unit dedicated to encounter data, the ability to collect, validate, and use the data requires effective communication across all the departments and staff who work with it. If creating a separate encounter data unit is not possible, workgroups and other types of supporting infrastructure become even more important to ensure regular communication and strong collaboration among all staff and divisions who work with encounter data. Regularly scheduled workgroup meetings, shared computer folders, and informal lines of communication allow all staff involved with encounter data to work together toward common objectives and to share ideas and strategies for ongoing improvement. States use a variety of models, including holding standing weekly or monthly meetings and including encounter data as a recurring agenda item for meetings with stakeholders on managed care issues.

- **Arizona** holds a joint meeting of operational data and finance staff every other month to conduct a comprehensive evaluation of each MCO. At these meetings, staff "connect the dots" across program operations. For example, if an encounter unit manager reports that encounter data reporting is slow, the finance staff will look to see if they notice a corresponding delay in payment to providers.
- **Pennsylvania's** Encounter Action Team brings together state Medicaid staff and vendors to collaborate around encounter data policies and procedures. The team meets biweekly to discuss any issues with encounter data and changes to the state's Medicaid Management Information System (MMIS) (see Figure 1.1).

Figure 1.1 Stakeholders Participating in Pennsylvania's Encounter Action Team



States also use common directories or Sharepoint sites to exchange information. Arizona's encounter data analysts place reports on a common directory that the finance and performance management groups can access. This gives staff outside the encounter data unit access to information at any time, without having to request that a special report be run by their colleagues in the encounter data unit.

Formal feedback loops between frontline data staff and data users can be mutually beneficial. Data validation staff can help users understand anomalies or flaws in the data so they can avoid drawing erroneous conclusions. In addition, data problems may become evident only during analysis, making data users important players in data quality analysis. For example, when calculating utilization statistics for those with serious mental illness, an analyst might find no claims with a diagnosis of depression for a particular plan—which would be highly unusual. This data anomaly might be missed by initial data edits or validation.

- **Minnesota's** data quality unit staff refer to colleagues who are users of the encounter data as some of their primary "customers and informants." The state is currently moving from an ad hoc system, where data users email a data quality unit analyst when they identify a data quality issue, to a formal process, to ensure information is regularly shared.
- **Michigan** schedules regular meetings to discuss encounter data quality with the independent actuary under contract to the state. The actuary uses the data for rate setting and budget forecasting and sometimes finds data quality and completeness issues overlooked by state data analytics staff. State staff uses the input from the actuary to communicate with plans about problems that need attention.

Activity 4: Consider using an external organization, such as an EQRO or actuary to supplement state staff capabilities

If in-house Medicaid staff does not have expertise in data analytics and the state cannot hire permanent staff, using a contractor can help fill the gap in encounter data capabilities. Below are examples of the roles and functions performed by external vendors, such as EQROs and actuaries, either on a regular or ad hoc basis.

- Compare managed care plan data reported to the state to data reported to the Healthcare Effectiveness Data and Information Set (HEDIS)
- Conduct on-site visits to MCOs to explain state data reporting requirements and provide technical assistance in meeting the requirements
- Review medical records to ensure the integrity of claims submitted to plans from providers
- Conduct targeted analyses when anomalies or irregularities are noted in data

> The type of encounter work we do depends on the particular state's needs. For some more experienced states, we serve in a more technical assistance capacity. For others relatively new to managed care, we will perform larger-scale medical record or data analytic validation studies, such as using encounter data to calculate HEDIS measures.
>
> –IPRO

It is important to note that federal regulations authorize a 75 percent federal match for EQRO activities, including encounter data validation. This is compared to the usual 50 percent match for administrative activities. See 42 CFR 438.70.

To find advice on working with an EQRO on encounter data, see the External Quality Review Protocols on CMS's website http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Quality-of-Care-External-Quality-Review.html

Section 2:
Setting Clear Expectations in Contracts

Section at a Glance:

Aim: Create or revise contract language to ensure timely and complete data submission

Audience and Purpose:

Contract managers: When defining and strengthening managed care plan reporting requirements

Technical staff: To assess opportunities to improve data submission requirements

Exhibits:

2.1 Oregon Penalties for "Pending" Encounter Data

2.2 Arizona AHCCCS Encounter Manual

2.3 Contract language excerpts from states with strong data submission requirements

Contracts can be used to set clear expectations for the data and reports that a state requires Medicaid MCOs to submit. Generic contract language that simply requires plans to submit encounter data is insufficient. Like other contract requirements, the language used to describe encounter data reporting should (1) clearly define the state's objectives, (2) articulate measurable indicators of success, and (3) try to limit the number of requirements and focus on those that will achieve the stated objectives. In other words, states must balance the desire to spell out every detail with what MCOs can realistically achieve. **New Jersey**, for example, includes a number of accuracy benchmarks in its contracts but has included only those that are "meaningful yet achievable" so that plans will agree to the contract. Contracts should also define any incentives and sanctions that a state may use to ensure its objectives are met.

Rather than using generic contract language, states are more likely to receive complete and high quality encounter data by (1) specifying the format and frequency of data files, (2) aligning plan reporting requirements with the state's intended use for the data, and (3) establishing financial incentives to promote compliance with timely and accurate data submission.

Activity 1: Specify the format, frequency, and accuracy requirements for encounter data submissions in the current state–MCO contract

Encounter data submission requirements in contracts should clearly specify the elements listed below. (See Exhibit 2.3 for excerpts from state contracts with strong requirements.)

- **Entity that will receive and process the data.** This is usually either the state or its fiscal agent.
- **File format.** Many states (including **Delaware**, **Michigan**, and **Texas**) use the "837" electronic formats that are also used for FFS data, but some (like **Minnesota**) make slight modifications so that the format fits their needs. Some states also specify the appropriate coding references (for example, ICD-9) and provider ID formats to use (for example, NPI or state-specific) in the contracts.
- **Certification.** MCOs must attest that the data submitted are accurate and complete.
- **Timelines for routine data submission.** Most states allow submission on a monthly basis, although states differ in the maximum length of time between

Exhibit 2.1: Oregon Penalties for Pending Encounter Data Records

To ensure compliance with its detailed requirements for encounter data submission, Oregon uses actions at various levels of severity to respond to plan violations. When data submitted by the plans are incomplete or inaccurate, the encounter data files are considered "pending." The number of pending encounters can trigger other actions, as described below.

Corrective action. Oregon sets thresholds for pending encounters that trigger corrective action against the plan. For example, corrective action occurs when the number of resubmitted encounters that are pending for a second time exceeds 10 percent

In response, plans are required to develop and implement a strategy to correct identified issues within a specific amount of time.

Sanctions. If corrective action fails to solve the problems, Oregon then sanctions plans by applying financial penalties based on the percentage of encounters pending.

Sanction amounts range from $5,000 to $35,000, or 1 percent of the monthly capitation amount. For example, when 5.0 to 9.9 percent of encounters are pending, the plan is sanctioned $15,000.

the date of service and the date plans are required to report the encounter to the state. Timing ranges from 60 days in **New Jersey** to 240 days in **Arizona** and **Delaware**, for example, but with shorter periods of 25–30 days for pharmacy data in **Arizona, Minnesota, Pennsylvania**, and **Texas**. Some states also include language that describes the course of action in the event that a plan cannot submit data on the set timeline.

- **Timelines for modifying or correcting errors in data that have already been submitted.** Although it is less common, some state contracts (like **Oregon**'s) specify the timelines and procedures for modifying previous submissions as well as the sanctions associated with noncompliance (see Exhibit 2.1).
- **Requirements for subcontractors or providers to submit data to the managed care entity.** This includes language specifying how MCOs must submit data for services furnished by a contracting provider, subcontractor, or third-party payer (for example, Medicare). Some states simply require plans to carry over all state reporting requirements to subcontractors; others (for example, **Minnesota** and **Pennsylvania**) specify system requirements and file formats that plans and all subcontractors must have in place to enable encounter reporting. **New Jersey** goes a step further by requiring its plans to develop incentives to encourage sub-capitated providers and subcontractors to report; the state also requires subcontractors to participate in any meetings related to encounter data requirements.
- **Maintenance and continuity of reporting after a contract has ended.** Some states (for example, **New Jersey**) require that after the contract ends, plans continue to report encounter data on services rendered during the contract period, to ensure that data are complete for the final few months of a contract. These requirements include sanctions for failure to comply.
- **Incentives for reporting timely, complete, and high quality data, and sanctions for failure to comply.** Incentives such as "carrots" (rewards) and "sticks" (sanctions) promote greater compliance with reporting requirements (see Activity 3 in this section for more detail).

Some states (for example, **Oregon** and **New Jersey**) include very detailed requirements in their contracts regarding data format. **Oregon** believes this approach allows it to keep close tabs on data submissions. Other states (such as **Arizona, Minnesota, New York, Texas, Washington**, and **Pennsylvania**) spell out their expectations in separate encounter data manuals (see Exhibit 2.2). Such manuals allow states to provide greater detail, more examples, and more frequent updates to requirements, without having to formally amend the contract. After creating a state manual to describe its requirements, **Arizona's** contract language for encounter data became more general than in the past. The state updates the encounter manual quarterly.

Activity 2: Align data submission standards with what is realistic for MCOs and the state

In specifying encounter data submission requirements in the contract, it is important to align the requirements with the state's objectives. States should aim for a "Goldi-locks approach"— requirements should be neither too weak nor too strong, but just right. This often requires states to balance their desire for exhaustive detail with an understanding of the kind of data that MCOs are able to provide and the state will actually use. **New Jersey**, for example, includes a number of accuracy benchmarks in its contracts, but only ones that the state believes are achievable, so that plans will agree to the contract.

To find this balance, the following questions may be useful:

- How much data do you need to achieve program goals and submit accurate federal reports?
- Which fields are essential to satisfy standards for completeness?
- Which fields are critical to meet data quality standards?
- Which fields are necessary for rate-setting, quality measurement, general oversight functions, and ad hoc analyses?
- What factors determine the frequency of encounter data submission?
- Does your state currently require that every service delivered to a Medicaid recipient be documented? Are there any exceptions?

If the existing requirements for contract language seem adequate, but the encounter data that plans submit for existing programs are not meeting your state's standards, consider finding ways to better communicate the state's expectations to the plans. This is discussed in more detail in Section 5.

Activity 3: Use financial incentives

Design baseline incentives. There are different ways to structure financial incentives to encourage MCOs to submit timely, complete, and accurate encounter data. Incentives include both rewards and sanctions. Examples of each are listed below.

- **Rewards** typically include additional payment, favorable enrollment, and other financial and reporting mechanisms. For example, encounter data reporting in **Michigan** is factored into qualifications for bonus payments made to plans, which are taken from withholds. **Michigan** and some states also consider the MCO track record in encounter data reporting when deciding which plans are eligible for auto-assignment of beneficiaries. In addition, it may be useful for the contract to describe how the state intends to use the encounter data. States typically use encounter data to risk-adjust capitation payments, calculate plan-level quality measures, and create comparison reports on plan

Exhibit 2.2: Arizona AHCCCS Encounter Data Manual

The encounter data manual for the Arizona Health Care Cost Containment System (AHCCCS) provides extensive information on the state's requirements for submitting encounter data. The manual is posted on a page of the AHCCCS website called AHCCCS Encounter Resources. In addition to the manual, this page includes an encounter newsletter, companion documents for various claim types (such as 837 Dental and NCPDP Pharmacy), encounter data processing schedules, and contact information for AHCCCS encounter unit staff.

The manual includes information on:

- The purposes of collecting encounter data
- Encounter reporting deadlines
- Encounter data file processing
- AHCCCS validation procedures
- Reference file record layouts and coding formats

To view the AHCCCS Encounter data manual, visit:

http://www.azahcccs.gov/commercial/ContractorResources/encounters/EncounterManual.aspx

performance for decision makers and the public. Although this is not usually viewed as a directly targeted incentive, MCOs have a stronger incentive to comply with reporting requirements when they understand that the accuracy and completeness of encounter data are tied to performance measurement and appropriate reimbursement.

- **Sanctions** tend to be more common than rewards and can include fines and other contractual actions. **Arizona's** AHCCCS program charges plans $5 per institutional omission error and $2 per professional omission error over an allowed error rate of 5 percent. In **New Jersey**, plans are required to meet 28 specific data completeness benchmarks and are fined for any benchmarks they miss. Detailed information on the creation and use of these benchmarks is included in Section 4.

Modify incentives over time. When states first begin requiring plans to submit encounter data, the consequences for submitting late, incomplete, or inaccurate data may be lenient or little used, to give plans a grace period to correct errors. After a managed care program matures and plans are successfully submitting encounter data on a regular basis, states often increase their expectations. Deciding when to apply sanctions can be challenging; however, used judiciously, they can be a critical tool for improving the completeness and quality of encounter data.

For example, **New Jersey** originally warned plans that they would face unspecified "sanctions" for submitting data that did not meet its standards for completeness and accuracy. Over time, the state replaced the term "sanctions" with explicit financial rewards and penalties. As an incentive for submitting timely and accurate data, the state set aside "withholds" from monthly capitation payments, which managed care plans can recoup if they meet reporting targets. As a penalty for submitting too many duplicate files, the state reserved the right to levy fines ("liquidated damages"). **New Jersey's** contract states that MCOs must meet an encounter denial rate and duplicate encounter rate (measured separately) of less than 2 percent each month. **Oregon** uses a stepwise approach that gradually increases the severity of the sanctions (see Exhibit 2.1).

Exhibit 2.3. Contract Language Excerpts from States with Strong Data Submission Requirements[1]

Common Submission Requirements Included in Managed Care Contracts	Excerpts from States with Strong Contract Requirements
File format	Regardless of whether the contractor is considered a covered entity under HIPAA, the contractor shall use the HIPAA Transaction and Code Sets as the exclusive format for the electronic communication of health care claims and encounter record submitted, regardless of date of service. When submitting encounter records, the contractor shall adhere to all HIPAA transaction set requirements as specified in the HMO Systems Guide. *Source: NJ 2013 Contract Section 3.9*
Certification	Contractor shall submit … H.2 Encounter Data Certification and Validation Report Form … Submission of each complete and accurate Encounter Data Certification and Validation Report Form is a material requirement of this exhibit and this contract, as specified in 42 CFR §§ 438.604 and 438.606. Contractor non-compliance as specified above will be considered a breach of contract and subject to sanctions as described in this contract. *Source: OR 2011 Model Contract Exhibit H.*
Timelines for routine data submission	All encounter records except pharmacy transactions must be submitted *and determined acceptable* [emphasis added] by the department on or before the last calendar day of the third month after the payment/adjudication calendar month in which the PH-MCO paid/adjudicated the claim. Pharmacy transactions must be submitted and approved in PROMISePTMP within 30 days following the adjudication date. *Source: PA HealthChoices 2012 Section VIII.B.1.b.ii.* If the MCO is unable to make a submission during a certain month, the MCO shall contact the STATE to notify it of the reason for the delay and the estimated date when the STATE can expect the submission. *Source: MN 2012 MSHO/MSC+ Contract Section 3.5.1*
Timelines for modifying or correcting errors in data that have already been submitted	Contractor must make an adjustment to encounter claims when contractor discovers the data is incorrect, no longer valid, or some element of the claim not identified as part of the original claim needs to be changed except as noted otherwise. If DHS discovers errors or a conflict with a previously adjudicated encounter claim contractor shall be required to adjust or void the encounter claim within 14 calendar days of notification by DHS or if circumstances exist that prevent contractor from meeting this time frame a specified date shall be approved by the encounter data liaison. *Source: Oregon 2011 Model Contract Exhibit H 2.c-d.*

1. All text in this exhibit has been taken directly from state contracts. Strong contract language was identified as passages that (1) clearly and concisely state the objectives of the program and (2) were identified through state interviews as most useful to a state.

Exhibit 2.3. Contract Language Excerpts from States with Strong Data Submission Requirements[1]

Common Submission Requirements Included in Managed Care Contracts	Excerpts from States with Strong Contract Requirements
Requirements for subcontractors or providers to submit data to the managed care entity	Contractor shall submit encounter data, for all services rendered to DMAP members under this contract, including encounters where contractor determined no liability exists. Contractor shall submit encounter data even if the contractor did not make any payment for a claim, including claims for services to DMAP members provided under subcontract, capitation or special arrangement with another facility or program. Contractor shall submit encounter data for all services provided under this contract to DMAP members who also have Medicare coverage, if a claim has been submitted to contractor. *Source: OR 2011 Model Contract Exhibit H 1.a.7* MCO and its subcontractors must utilize the coding sources as defined in this section and follow the instructions and guidelines set forth in the most current versions of ICD-9-CM, HCPCS and CPT. *Source: MN MSHO/MSC+ Contract 2012, Section 3.5.1.* The PH-MCO must maintain appropriate systems and mechanisms to obtain all necessary data from its health care providers to ensure its ability to comply with the encounter data reporting requirements. The failure of a health care provider or subcontractor to provide the PH-MCO with necessary encounter data shall not excuse the PH-MCO's noncompliance with this requirement. *Source: PA HealthChoices 2012 Section VIII.B.1*.
Maintenance and continuity of reporting after a contract has ended	The contractor shall maintain two (2) years active history of adjudicated claims and encounter data for verifying duplicates, checking service limitations, and supporting historical reporting. For drug claims, the contractor may maintain nine (9) months of active history of adjudicated claims/encounter data if it has the ability to restore such information back to two (2) years and provide for permanent archiving in accordance with Article 3.1.2F. Provisions should be made to maintain permanent history by service date for those services identified as "once-in-a-lifetime" (e.g., hysterectomy). The system should readily provide access to all types of claims and encounters (hospital, medical, dental, pharmacy, etc.) for combined reporting of claims and encounters. *Source: NJ 2013 3.4.1.D*. The PH-MCO must also provide the department with substantially all outstanding encounter data. If either the department or the contractor provides written notice of termination, ten percent (10%) of one (1) month's capitation due to the contractor will be withheld. Once the department determines that the contractor has substantially complied with the termination requirements in this section, the withheld portion of the capitation will be paid to the contractor. Source: *PA HealthChoices 2012 Contract Section XI.B.5*.

1. All text in this exhibit has been taken directly from state contracts. Strong contract language was identified as passages that (1) clearly and concisely state the objectives of the program and (2) were identified through state interviews as most useful to a state.

Exhibit 2.3. Contract Language Excerpts from States with Strong Data Submission Requirements[1]

Common Submission Requirements Included in Managed Care Contracts	Excerpts from States with Strong Contract Requirements
Financial Incentives for reporting timely, complete, and high quality data	If the contractor fails to meet a category of service/encounter group monthly benchmark without providing an acceptable explanation as determined by the Division, they will be subject to a withhold of a portion of the capitation… the amount of withholding shall be dependent on the ratio of approved encounters to the benchmark for that category… If the rate of approved encounters is less than 100%, but greater than or equal to 75% of the required benchmark, it will result in a withhold calculation of .0625%. If the rate of approved encounters is less than 75%, but greater than or equal to 50% of the required benchmark, it will result in a withhold calculation of .125%. If the rate of approved encounters is less than 50%, but greater than or equal to 25% of the required benchmark, it will result in a withhold calculation of .1875%. If the rate of approved encounters is less than 25% of the required benchmark, it will result in a withhold calculation of .25%. *Source: NJ 2013 7.16.4.C.*
Other incentives for reporting timely, complete, and high quality data	DSHS collects and uses this data for many reasons such as federal reporting (42 CFR 438.242(b)(1)); rate setting and risk adjustment; service verification, managed care quality improvement program, utilization patterns and access to care; DSHS hospital rate setting; and research studies. *Source: WA HealthyOptions Section 6.10*
Sanctions for failure to comply	In the event DMAHS finds the contractor to be out of compliance with program standards, performance standards, or the terms or conditions of this contract, the department shall issue a written notice of deficiency, request a corrective action plan, and/or specify the manner and timeframe in which the deficiency is to be cured. If the contractor fails to cure the deficiency as ordered, the department shall have the right to … refuse to consider for future contracting a contractor that fails to submit encounter data on a timely and accurate basis. *Source: NJ 2013 Contract Section 7.15.*

Sources

- Minnesota 2012 MSHO/MSC+ Contract.Available at [http://www.dhs.state.mn.us/main/idcplg?IdcService=GET_FILE&RevisionSelectionMethod=LatestReleased&Rendition=Primary&allowInterrupt=1&noSaveAs=1&dDocName=dhs16_166538]. Accessed November 2013
- New Jersey 2012 Contract. Available at [http://www.state.nj.us/humanservices/dmahs/info/resources/care/hmo-contract.pdf]. Accessed May 23, 2013.

1. All text in this exhibit has been taken directly from state contracts. Strong contract language was identified as passages that (1) clearly and concisely state the objectives of the program and (2) were identified through state interviews as most useful to a state.

- Oregon Provider Services Contract Fully Capitated Heath Plan 2011. Accessed May 23, 2013. [http://www.oregon.gov/oha/healthplan/managed-care/docs/fchp2011.pdf].
- Pennsylvania HealthChoices Agreement 2012. Available at [http://www.dpw.state.pa.us/ucmprd/groups/webcontent/documents/communication/s_002105.pdf]. Accessed May 23, 2013.
- Texas STAR+PLUS Expansion Contract. Available at [http://www.hhsc.state.tx.us/medicaid/STARPLUSExpansionContract.pdf]. Accessed May 23, 2013.
- Washington HealthyOptions. Available at [http://www.hca.wa.gov/medicaid/healthyoptions/documents/ho_contract.pdf]. Accessed May 23, 2013.

If states have updated their contracts or revised their websites, these addresses may no longer be valid.

Section 3:
Understanding Managed Care Data Collection

Section at a Glance:

Aim: Understand what type of data MCOs collect from providers, MCO capabilities to collect and validate data, and MCO processes for assessing the completeness and quality of data submitted by providers

Audience and Purpose:

Policy staff: To decide what types of analyses are feasible given the quality of the data at the plan level and specific data quality requirements a state may set for managed care plans

Technical staff: To anticipate gaps in reporting and opportunities for improved data collection

Exhibits:

3.1 Pennsylvania's Encounter Data Information Survey

State Medicaid staff responsible for collecting and analyzing encounter data should gain a detailed understanding of each plan's data—such as what types of services generate claims or encounters and what types do not, which fields tend to be reliably coded by providers, and any plan-specific field values and their meaning. Understanding how plans collect data and pay providers provides excellent insights that can help to shape state policies and systems for collecting standardized data that will be comparable across plans.

Although states may establish standards regarding data completeness and quality, the capacity to meet state standards and requirements is likely to vary across MCOs and providers. Consequently, understanding each plan's existing capacity and any challenges it faces in collecting data from providers can inform strategies for strengthening the MCOs' ability to meet reporting requirements. This section explains information states can collect from MCOs to obtain a clear picture of each plan's data, including (1) what data elements the plan collects, (2) plan payment arrangements with providers, (3) plan resources for data collection and reporting, and (4) plan processes for ensuring data completeness and accuracy.

Activity 1: Understand the data elements collected by the plan and the plan's payment arrangements with providers

Data elements collected. Although all plans collect data from providers, the specific data elements or fields that plans collect vary, based on the population groups enrolled, services covered in the contract, and methods used to pay providers. Some plans use the data for business operations and management purposes, and therefore specify in great detail the data elements that providers must include on encounter records. Others require providers to supply only the most essential information required by the state in the contract. *If a state wants to ensure plans collect specific data elements, these should be specified in the contract between the state and the plans.* Plans should then relay these requirements to their providers.

States can collect information on plan data submission requirements for contracted providers by asking for a copy of any plan manuals, contracts, or other written documentation.

Payment arrangements. How plans pay providers also plays a significant role in data submission. Fee-for-service payment makes it easier for providers to report complete data on all encounters, whereas capitation and bundled payments are more likely to produce incomplete data submission. As individual plans often use a mix of different payment methods, state staff should collect information on payment methods broken out by provider type and service type. More detail on each payment method and its typical impact on encounter data is outlined below.

- **FFS payment.** To be paid with FFS, providers must submit a claim to the plan for each service they provide to a beneficiary. Under this arrangement, data are typically submitted quickly and accurately. These claims become encounter data when the plan submits the data to the state. Many states require MCOs to include on the encounter data the amounts the MCOs pay to their FFS providers.
- **Capitation payment.** With capitation, the provider receives a lump sum payment each month for each beneficiary, regardless of the amount or type of services rendered. Plans sometimes use capitation payments with primary care providers. Providers are still required to submit data to the plan on every service they provide a patient; however, since submitting the data does not trigger a payment, data may be delayed, incomplete, or inaccurate in some fields.
- **Bundled payment.** With bundled payment, the provider receives a single payment to provide all services associated with an episode of treatment. For example, maternity care is often paid through bundled payments: the provider receives a lump sum to provide a specific set of services during pregnancy, such as a full set of prenatal visits and physician services during delivery. As with capitation payments, providers are required to submit data on every service provided, but the data submitted may be delayed and incomplete.

Capitation and bundled payment arrangements are believed to encourage efficient provision of care by reducing the incentive for providers to provide unneeded services. However, due to their impact on data collection, some plans are moving away from these financing mechanisms. Managed care organizations in **Michigan**, for example, are moving away from capitated payments to their providers and back toward FFS payments, in large part due to the difficulty of receiving complete data. The plan found that if payment was not tied to specific claims, the data tended to be incomplete. Because of the risk of incomplete data for providers paid through capitation and bundled payments, states often need to conduct additional analysis of data submitted by plans using these payment arrangements.

Activity 2: Learn about the human and information technology resources each MCO possesses for data collection and data reporting

- **Claims processing.** To ensure they have an adequate network of providers to deliver Medicaid services throughout the state, managed care organizations may contract with providers that are unable to submit electronic claims. This may be the case in very rural areas or in small practices. In such cases, plans may continue to receive paper claims for services. Some plans have the human resources available to process a paper claim and construct an electronic transaction from it, creating uniform electronic records that they can pass on to the state; others may be limited in this ability. Therefore, the

transmission of encounter records to the state could well be missing claims from these less-sophisticated providers.

- **Information technology.** Health plans use different hardware and software to process claims. The level of technological sophistication often depends on how long the plans have been in business and on whether they value data quality and completeness for their own purposes. Plans may also have proprietary formats for claims processing. It is important for a state to determine whether the claims processing system at each plan has the flexibility to adapt to requirements the state may place on data submissions in the future.

Activity 3: Assess the adequacy of MCO processes for assuring data quality and completeness

Plans should use the data to determine quality and completeness for their own purposes; however, in doing so, some may use methods that would not meet state standards. A state should inquire about the following practices for each plan:

- **Internal data quality measurement standards.** If plans run internal reports to analyze the completeness and quality of the data, understanding these reports could be useful to the state when creating processes and programs to measure and assess the quality of data.
- **Internal data remediation practices.** Understanding the processes that plans use to improve the quality of encounter data can inform state strategies for collaborating with plans (see Section 4). This knowledge may also indicate which plan capabilities need to be strengthened to improve data collection and reporting.
- **Use of supplemental data to capture service use.** Some plans perform outreach to their members in attempts to determine whether they have received prescribed preventive care, such as screenings. If a member reports to a plan that he or she received services that are not documented in the encounter records, such as through an out-of-network provider or a flu shot at a free clinic, plans may document these self-reported services. But allowing plans to include this type of self-reported information in encounter data can be problematic. National organizations that conduct data validation or measure certification, such as IPRO and the National Committee for Quality Assurance (NCQA), consider such data unreliable.
- **External reporting.** Plans that have been operating in the commercial or Medicare market may already be performing high-level data audits and reporting to programs such as the Healthcare Effectiveness Data and Information Set (HEDIS). Your state may already require some plans to go through the accreditation process laid out by NCQA.

Pennsylvania uses a comprehensive survey to obtain information from each plan about its encounter data systems, and follows up with an on-site visit every two years to check on the survey's accuracy and see how the system works in practice (see Exhibit 3.1).

Exhibit 3.1. Pennsylvania's Encounter Data Information Survey

DPW/BDCM/DMCSS
Contracting and Monitoring Unit (CMU)
ContractMonitoringUnit@State.pa.us

MCO Name: _____
CMU Staff Name: _____
Survey Due Date: _____
Scheduled Onsite Date(s):_____

Encounter Data Information Survey

This survey is used to gather information regarding the MCO's Encounter Data, and the MCO's processing of Encounter Data in preparation for an onsite systems review. Please complete the following survey, and return it by the due date.

General. Please provide any Policies and Procedures for processing encounter data.

Submission of Encounter Data

1. Explain in detail the process for submitting encounter data to the Department to include the following information:
    - Where is the data stored?
    - In what format is the data stored?
    - How is the data pulled for submission?
    - Is there any editing done prior to submission? If so, what?
    - Does the MCO do any mapping and/or reformatting of any specific data fields prior to submission to PROMISe?
    - What criteria are used to determine what should be submitted for each submission?
    - Are there criteria used to make sure information previously submitted is not resubmitted? If yes, what are the criteria?
    - Identify what processes are automated and what processes are manual.
2. Explain in detail the process for submitting encounter data from the subcontractor (pharmacy, vision, dental, lab, etc.) to the MCO (from the time it is submitted by the subcontractor until the time it is submitted by the MCO to DPW).
    - Where is the data stored?
    - In what format is the data stored?
    - How is the data pulled for submission?
    - Is there any editing done prior to submission? If so, what?
    - Does the MCO do any mapping and/or reformatting of any specific data fields prior to submission to PROMISe?
    - Identify what processes are automated and what processes are manual.

Reconciliation Process. Please provide any Policies and Procedures and/or other documentation for reconciling the reports/files from the EDI translator, U277 and NCPDP response.

1. Explain in detail the process for reconciling the following from the EDI translator from the encounter data submitted by the MCO: Accept/Reject transaction file, 997 Report and the ZZZ Report.
2. Explain in detail the process for reconciling the following from the EDI translator from the encounter data submitted by the subcontractor: Accept/Reject transaction file, 997 Report and the ZZZ Report.
3. Explain in detail the process for reconciling the U277 for encounter data submitted by the MCO. Include the process used to reconcile suspended and rejected records. Also identify what processes are automated and what processes are manual.
4. Explain in detail the process for reconciling the U277 for encounter data submitted by the subcontractor. Include the process used to reconcile suspended and rejected records. Also identify what processes are automated and what processes are manual.
5. Explain in detail the process for reconciling the NCPDP response for encounter data. Include the process used to reconcile suspended and rejected records. Also identify what processes are automated and what processes are manual.
6. Please explain the process if discrepancies are identified during the reconciliation process of the U277 or NCPDP response.

Correction Process. Please provide any Policies and Procedures and/or documentation for submitting adjustments.

1. Explain the process for submitting adjustments for encounter data submitted by the MCO.
2. Explain the process for submitting adjustments for encounter data submitted by the subcontractor.
3. How are adjustments differentiated from the original claim in your data warehouse?
4. What has the MCO done to reduce the number of denied encounters?

5. Explain the process for identifying and resubmitting denied encounters by the MCO.
6. Explain the process for identifying and resubmitting denied encounters by the subcontractor.
7. Explain the process for submitting Voids by the MCO.
8. Explain the process for submitting Voids by the subcontractor.

Assessment of Encounter Data Completeness and Timeliness

1. How does the MCO monitor the accuracy and completeness of encounter data submitted by their vendors?
2. How does the MCO monitor the accuracy and completeness of claims and/or encounter data submitted by providers?
3. oes the MCO provide incentives/penalties to submit encounter data for those providers who do not need to bill a claim for payment? If yes, please explain.
4. Does the MCO provide incentives/penalties for subcontractors to submit encounter data? If yes, please explain.
5. How does the MCO monitor the timeliness of encounter data submitted by their vendors?
6. How does the MCO monitor the timeliness of encounter data and/or claims submitted by their providers?
7. How does the MCO ensure that encounter data is submitted to the Department timely?

Reports. Please provide a sample of any internal reports related to encounter data.

Drug Rebate/Supplemental File

1. Please provide Policies and Procedures for the creation of the Drug Rebate Supplemental File.
2. How do you ensure that all ICN's for which you have received a PROMISe response in the previous month are included in the supplemental file?
3. Are you successfully submitting 837P drug encounters?
   a. If yes, what is your procedure for ensuring that these transactions are submitted in your supplemental file?
   b. If no, please provide a timeline and/or workplan outlining your plan to complete this task.
   c. If no, please provide a summary of issues that are preventing you from being successful.

Additional Questions

1. If you have any concerns about encounter data submissions that you would like discussed during the onsite, please list them here:

Section 4:
Working Collaboratively With Plans

Section at a Glance:

Aim: Develop formal communication systems between state staff and managed care plan staff

Audience and Purpose:

Management staff: To establish both official and informal communication avenues with contracted health plans on encounter data requirements and issues

Technical staff: To determine how best to communicate with plans to improve encounter data systems

Exhibits:

To achieve the goals of Medicaid managed care programs, state agencies must work collaboratively with managed care plans on a wide array of policy and operational issues. Such partnerships must extend to encounter data collection and validation in order to develop shared understanding and agreement on data quality standards and to provide a forum for resolving problems in data collection and reporting. As with all partnerships, effective collaboration between states and managed care organizations depends on a commitment by all parties to shared goals, and clear and open communication lines.

This section discusses the type of information exchange that occurs between state officials and MCOs, and methods of communication including meetings, help-desks, and websites.

Activity 1: Anticipate the type of information to be exchanged between the state and MCOs

Information exchanged between state staff and managed care plan staff must cover a wide range of topics and go in both directions (from state staff to plans and vice versa). Topics include:

- **Policy.** Changes made by the state legislature or by CMS that affect service delivery or enrollment and have implications for encounter data collection and reporting; changes in how the plan reimburses providers or provider data reporting requirements
- **Data submission requirements.** Specifications for data format, completeness, or other requirements that may change
- **File submission and reporting schedule.** When and how frequently encounter data files must be sent to the state; notification of plan changes in technology that may delay file submissions
- **Data rejections.** Communication about reasons and remedies when the state's claims processing system rejects encounter records; feedback from the plan to the state if valid encounter records are being rejected

Activity 2: Establish effective and efficient modes of communication with MCOs

There are many ways to ensure regular and open communication between state agency officials and managed care plans. Meetings provide an important opportunity for face-to-face communication with MCOs on a monthly or quarterly basis, and with individual MCOs or with all MCOs as a group (see Exhibit 4.1 for pros and cons of various meeting types). Providing timely information to plans must be weighed against the burden that frequent communication may place on state Medicaid and plan staff. Plans need to understand how a state prefers to receive communications, and the most efficient way to solve a problem. The state should use multiple methods to convey messages, and make clear its preferred methods of communications. **Kentucky**, for example, tries to reduce the burden on staff by clarifying the types of communication that are appropriate for each mode (see Figure 4.1).

Figure 4.1 Communication Between Kentucky Medicaid and Managed Care Plans

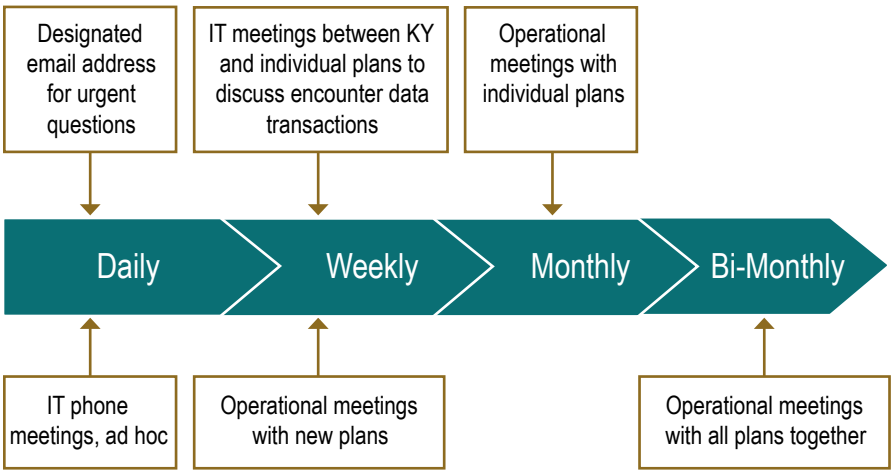


Exhibit 4.1. Frequency and Format of Meetings with Plans—Pros and Cons

Monthly Meetings	Quarterly Meetings
Frequency	
Pro • Effective for very detailed or complicated topics, such as understanding data collection or IT systems. • Appropriate for matters in which the state needs to communicate information quickly (for example, status of pending encounters). • Important when a new plan joins the Medicaid program or a state is beginning managed care implementation. **Con** • Can take a significant amount of state staff time, depending on the number of plans in the program.	**Pro** • Can focus on big-picture issues and serve as a forum for high-level questions better than monthly meetings. • Better for in-person meetings—requires less travel time than monthly meetings. **Con** • Usually require a large block of time, which may be difficult to schedule. • Too infrequent for discussing time-sensitive issues (for example, pending encounters).
Individual Meetings with Each Plan	**Joint Meetings with All Plans**
Format	
Pro • Useful for on-site visits so state staff can see how a plan's data system operates. • More appropriate for discussing confidential or sensitive information (for example, reviewing penalties for poor reporting or sharing details of how plans reimburse providers for different services).	**Pro** • Provide a forum for sharing best practices and lessons learned across plans. • Efficient method for the state to communicate new policy, rules, or regulations.

Indiana sends out a "30-day notice" letter to plans each time there will be a change in the state's claims processing system. The state also communicates these changes during monthly meetings with managed care plan staff who work on data processing and during quarterly meetings with operations and policy staff at the plans.

For issues that cannot wait for formal meetings, several other methods of communication can provide open channels of communication, including written communication, technical assistance help desks, and Internet sites.

1. Written Communication

- **Formal communications.** Substantial policy changes or major system changes should be communicated in written form such as memos, bulletins, and technical manuals, especially when they involve details and instructions that a meeting or a phone conversation cannot fully convey.
- **Bulletins** can be used to convey high-level information to plans, including changes on the horizon or staffing changes. If these follow a schedule, they are a predictable, easily tracked method in which plans expect to receive useful information from the state.

2. Help Desks

- **Technical assistance in-box.** Some states have implemented an email "help desk" or "in-box" in the form of an email address for day-to-day communications involving data questions or troubleshooting during electronic file submissions (as an example: datahelpdesk@state.gov).
- **Telephone help desks.** Sometimes email communication can complicate matters that could be resolved more easily with a phone conversation. Providing a centralized phone number that plans can call may be a more efficient way to troubleshoot problems. This also conveys a strong message to plans that the state will provide timely support if they face difficulties.

"The two most important tools for communicating information to the plans have been the development of the IT mailbox and…the [Sharepoint site] where we publish threshold [edits for encounter data]. We communicate verbally weekly but then we are able to back everything up in writing.

–Kentucky Medicaid official

3. Internet Sites

- **Websites.** Some states establish a centralized website where plans, providers, and other stakeholders can view publicly available information, such as bulletins, tools, and useful links (for an example of **Minnesota's**, see Exhibit 4.2). If it is updated regularly and is easy to navigate, a website can be a reliable location for plans and other stakeholders to find resources and stay current on new developments.
- **Sharepoint sites.** Secure Sharepoint sites or state intranet or internal websites can provide a centralized location for documents and tools that a state may not want to share publicly, such as threshold edits and help desk information. Secure sites are also a venue for plans to upload required documents or questions, decreasing the need to track information from different sources. Frequently asked questions (FAQs) from plans to states can also be posted, so all plans can benefit from the answers.

Exhibit 4.2. Minnesota's MCO Encounter Submissions Website

Minnesota's website for MCO encounter submissions provides basic information about data requirements, clearly marked contact information for submitting questions, and updates for plans, as well as related web pages and links that are clearly accessible.

Section 5:
State Data Systems to Collect and Validate Data

Section at a Glance:

Aim: Develop state data systems and processes to collect, validate, and analyze encounter data reported by plans

Audience and Purpose:

Technical staff: To create data systems and implement data quality checks

Operations staff: To structure incentives and sanctions for reporting data of varying accuracy and completeness and strategies for improving data reporting

Managers: To develop reports on program outcomes for policymakers

Exhibits:

Developing a system to collect and validate encounter data from plans is a complex endeavor. Encounter data systems must perform four core functions: (1) accept and store data files in standardized formats, (2) automatically generate detailed guidance to plans for data submission, (3) assess data for completeness and accuracy, and (4) generate reports that compare data across plans, geographic areas, populations, and over time, and create benchmarks to analyze data quality. Although states use different approaches, they share the same goal—to continually improve the completeness, accuracy, and reliability of encounter data for use in program monitoring and evaluation.

This section explains decisions and processes states put in place to collect, store, and validate encounter data, including (1) data system set-up and file formats, (2) specifying data submission requirements and clearly communicating these requirements to plans in contracts or encounter data companion guides, (3) using front-end edits to check the data, (4) conducting data validation, and (5) using contractors to provide support.

Activity 1: Decide where to store data, establish data file formats, and specify frequency of data submission

Storage. There are two common approaches to housing encounter data: within the states MMIS or in a separate data warehouse. If they have the capacity to receive high volumes of data without triggering major data errors, some states store the encounter data in their current claims processing systems along with FFS data. Storing all Medicaid data in one place allows staff to work within one system, but it may require intensive staff programming efforts to appropriately handle incoming encounter data submissions in a different manner from FFS claims. For example, FFS claims are paid through the data system in addition to being stored in the system for reporting, whereas encounter records are only incorporated in the system for reporting purposes.

When their MMIS systems were unable to accommodate encounter data, several states established separate data warehouses for encounter data as an important interim step. For example, when **Michigan** first implemented managed care, encounter data were stored in a separate data warehouse because the MMIS did not have enough capacity. Starting in 2010, encounter data were integrated with the MMIS, giving the state greater ability to validate encounter data using automated edits and making reporting to federal sources easier (see Section 6 for more details).

When MMIS systems are old, or too many technical difficulties arise when integrating encounter data, another interim option is to create software programs that allow the MMIS to accept all encounter data without edits; states then use the separate data warehouse as the instrument through which to conduct analyses.

> The proprietary format submission was less reliable. After successful conversion to the standard HIPAA electronic transactions in 2005, we found that encounter data reporting and processing was more complete, and errors by MCOs were easier to identify for correction.
>
> –Washington State official

Formats. In recent years, more states have required plans to report every service using HIPAA-compliant, 837 electronic claim transaction files. This increases comparability across plans and makes it easier for states to implement consistent data quality checks across plans as well as across FFS and encounter data. Most plans are accustomed to using 837 formats. Some states still allow plans to report data in proprietary formats or permit them to report aggregate service use, but this increases the burden on states to develop different data validation systems, and complicates the task of comparing data across plans.

If the state specifies formats or flat files that are incompatible with those used by plans, the files submitted by plans may be rejected. As a consequence, encounter data may be rejected because of plans' difficulty meeting the state-specific system submission requirements, not because the data are necessarily of low quality. It may take substantial plan and state resources to work out data format problems.

To support uniformity in submission across plans, states are increasingly tailoring the HIPAA standard 837 Companion Guides to meet their specific needs. The national standards guide provides suggestions for submission, whereas state guides lay out in greater detail the requirements for each field from all plans.

Frequency of data file submissions. Various factors determine how often the state requires plans to submit encounter data files (Exhibit 5.1). Some states allow plans to submit encounter data daily, whereas others ask plans to submit monthly files within a prescribed number of days after the end of the month.

Exhibit 5.1. Factors That Determine Frequency of Encounter Data File Submissions

IT system capacity and volume of data	Very high volumes of data merit more frequent submission so that very large files will not overwhelm a data system
Staff capacity to troubleshoot with plans	If state staff cannot communicate daily with plans, then less frequent submissions may be warranted
Plan capacity	Resource constraints within plans may make daily submission of data too burdensome
Availability of secure lines to submit data	Secure lines to transmit data can be very costly to maintain, dictating frequency and size of submissions
How often the state plans to use the data for reporting	If the state runs analyses monthly, there may be no need to require daily submissions

State examples

- **Arizona** collects approximately 10 to 12 million encounters per month. Managed care is the primary delivery system for nearly all Medicaid beneficiaries and the agency uses the data for many analyses. They have set up secure lines and systems to receive claims transactions daily to accept this large volume and to enable real-time analyses to monitor completeness and quality. Skilled and experienced staff are dedicated to encounter data processing and are able to communicate with plans on a daily basis to discuss data file rejections and processing issues.
- **Washington** requires plans to submit data monthly, but some submit the data more often. Larger plans with more staff can construct and transmit files daily, whereas others prefer to allocate resources to facilitate monthly submissions. The state has formal communications with plans on a monthly basis and conducts routine analyses monthly.

Activity 2: Provide clear guidance to plans for meeting data submission requirements

To provide complete, accurate data, plans must have a clear, detailed understanding of what the state requires in data submissions. The first place to specify requirements is in the contract between the state and the plan (see Section 2); however, the level of detail required to properly submit encounter data requires further guidance.

Most states produce companion guides tailored to their state's needs. **Arizona** provides a variety of guides, including an 837 Companion Guide (Exhibit 5.2) and an Encounter Data Manual (Exhibit 5.3), to fully explain how it expects to receive encounter data. Rather than include specific language in its MC contracts, **Arizona** has found that referencing these guides in the contracts provides more flexibility for data collection over time.

Exhibit 5.2. Arizona Companion Guides—Excerpts and Links (837 Companion Guide)

ELECTRONIC DATA INTERCHANGE (EDI) TECHNICAL DOCUMENTS

AHCCCS Companion Guides are intended to be a technical document describing the specific technical and procedural requirements for interfaces between AHCCCS and its trading partners and are not intended to repeat or take the place of specific information as contained in the TR3 for each transaction.

Note: *Information provided in PDF files.*

- 270/271 Batch Eligibility Request and Response Companion Guide
  - 4010a (note: obsolete 1/1/2012)
  - 5010a
- 276/277 Batch Eligibility Request and Response Companion Guide
  - 5010
- 277 Unsolicited Encounter Status Companion Guide
  - 4010a
- 278 Health Care Services Review – Request for Review and Response Companion Guide
  - 5010 [Under Construction]
- 834/820 Enrollment and Capitation Companion Guide
  - 4010a (note: obsolete 10/1/2011)
  - 5010 (note: obsolete 10/1/2011)
  - 5010a
- 835 Claim Remittance Advice Companion Guide
  - 4010a (note: obsolete 4/1/2012)
  - 5010 [Under Construction]
- 837 Fee for Service Claims Companion Guide
  - 4010a (note: obsolete 1/1/2012)
  - 5010a
- 837 Encounter Companion Guide
  - 4010a (note: obsolete 7/1/2012)
  - 5010a
- NCPDP 5.1 Encounter Companion Guide (note: obsolete 7/1/2012)
- NCPDP Post Adjudicated History Transaction Companion Guide [Under Construction]

Contact

For EDI inquiries, roster issues, or to become an AHCCCS Trading Partner, please email us at: EDICustomerSupport@azahcccs.gov

Exhibit 5.3. Arizona Encounter Data Manual

AHCCCS ENCOUNTER MANUAL

The *Encounter Manual* is a reference guide for contractors outlining how to submit encounter data to the AHCCCS Administration.

Note: *Information provided in PDF files.*

DOWNLOAD ENTIRE MANUAL [ZIP]
Encounter Manual [1.1MB]

DOWNLOAD OR PRINT INDIVIDUAL CHAPTERS [PDF]

- Table of Contents [92KB]
- Chapter 1: Overview [45KB]
- Chapter 2: Encounter Authorizations and Control Documents [61KB]
- Chapter 3: Encounter Processing [85KB]
- Chapter 4: Adjudication System Error Correction [99KB]
- Chapter 5: Data Files and Adjudication Results [703KB]
- Chapter 6: "How To…" [159KB]
- Chapter 7: Supplemental Information [92KB]

Contact

Encounter Unit staff is available Monday through Friday (excluding state holidays) to assist contractors in resolving encounter errors or to research specific encounter issues.

Questions regarding the validator or TI should be submitted to the AHCCCSTIEncounters@azahcccs.gov e-mail address. All other encounter questions, including those concerning mainframe, should be sent to the AHCCCSEncounters@azahcccs.gov email address.

Source: http://www.azahcccs.gov/commercial/ContractorResources/encounters/EncounterManual.aspx, accessed August, 15, 2013.

Exhibit 5.4:
Minnesota's Front-End Edits

Minnesota experienced many difficulties when it began accepting encounter records into its MMIS using their existing FFS edits. They found their system was denying encounter records for reasons that were both valid and invalid (i.e. the records were accurate, but the system incorrectly rejected them). Their response to these difficulties culminated in what they call their True Denial project.

State staff first let all encounter records into the system with edits that would not reject encounters, but would flag them to provide information for both internal staff and MCOs. In parallel, the encounter data quality unit interviewed stakeholders throughout the Medicaid agency and MCOs – especially policy and claims processing staff – to determine priorities and how the logic of the edits for FFS claims would differ for encounter records. They also created an edit review team to consider changes to the MMIS edit logic for encounters.

Minnesota incrementally added meaningful rejection edits and analyzed the data coming into the fields. They found the data varied significantly by MCO because each plan interpreted the general guidelines differently. In response, the state has created its own remark codes—language developed to supplement the standard 837 codes generated during the edit process—to give plans more detailed information about claim rejections. "Before, we were using HIPAA remark codes, which were very general and not helpful. We changed them to be much more specific." With the new set of edits and supplemented communication, the state finds it much easier to detect true errors.

Activity 3: Review data for completeness and quality through automated checks and edits, and transmit results to plans

Encounter data are only useful to the extent they are complete and accurate. To ensure high quality, states need to check the data. Typically, this involves the use of automated "front-end" edits to screen out low quality data, then data validation by agency staff (see Activity 4). Using front-end edits can be a powerful tool to increase data quality, but introducing such edits into an existing claims processing system can be challenging to the state and the plans. Edits that are lacking precision or that set thresholds either too high or too low can create high rejection rates and confusion about why the system is rejecting records. Developing edits and checks specific to encounter data or using a subset of the state's FFS front-end edits can be a way to strike this balance.

Edits can range from basic ones, in which a system rejects only claims where the person receiving the service does not match the state's enrollment file, to very sophisticated ones. **Arizona**, for example, has set up over 500 separate edits on encounter data based on hierarchical logic, such as:

- A580 - Recipient Has Other Coverage That Must Be Billed First
  - Member as identified on the encounter has verified Third Party insurance coverage on file for the encounter dates of service.
- D035 - Recipient Age Exceeds Primary Diagnosis Allowable Max Age
  - The primary diagnosis code as reported on the encounter is not valid for the recipient age per reference data files.
- H199 - Paid Ingredient Cost + Paid Dispense Fee < Total Paid
  - Dispensing fee paid and ingredient cost as reported on the Pharmacy encounter must equal the reported health plan paid amount on the encounter. Please note this edit does not execute when other coverage exists and primary payer paid more than $0.00.

As the number of edits grows, so do the demands on state programming resources. Incorporating new edits into old data systems often involves trial and error and ongoing efforts to troubleshoot and remedy problems. Depending on whether state programming staff has the necessary time and expertise, states can use their own staff or request the state's fiscal agent staff to create programming codes. Another option is the use of off-the-shelf software solutions, which can reduce the level of effort. These include Edifecs, McKesson Claims Xten, 3M Clinical Claims Editor Software, Ingenix Claims Editing System, and OptumInsight Claims Editing System, among others. In most cases, a state can adapt and tailor the software to meet its specific needs.

Most states already use edits when accepting FFS data from providers in Medicaid. Experiences with adapting FFS edits to encounter data vary widely, but many states report that creating edits for encounter data requires tailored solutions that are very different than existing FFS edits (see Exhibit 5.4).

Some states employ edits that generate reports about the accuracy of the encounter data received but do not reject records based on the edits. This can be a useful interim step for states that are just beginning to accept or use encounter records, if the reports provide information to plans that helps them correct problems before the state starts to reject records. An incremental approach creates fewer problems in the long run. If a state begins with relatively few codes and implements new edits periodically, this gives both the state and the plans time to work through mistaken rejections or system errors generated by new edits.

Writing and running software programs to check data completeness and accuracy is only the first step in the process. States must then tell plans about the errors, explain why files that do not pass the edits are rejected, and work with the plans to resolve the problems (see Section 4).

Activity 4: Data Validation using reports and benchmarks

Data that pass the automated front-end edits should then go through a data validation process to determine whether the data are complete and reliable. This analysis should occur at the plan level since data completeness and reliability can vary significantly by managed care plan. Encounter data are used for many purposes, including monitoring managed care enrollees' access to and use of services, creating quality measures, and developing capitation rates. Each use may have different standards for accuracy and reliability. Benchmarks, which set standards for expected utilization volume, may also vary depending on the populations enrolled in managed care plans. In constructing reports and benchmarks, it is important to ask the users of the data what they need to know, with what degree of confidence, and whether it varies by plan, beneficiary group, or type of service. However, some general principles can be derived from state experiences.

Standard versus plan-specific reports and benchmarks. Standardized reports and benchmarks are appropriate for managed care plans serving the same populations and covering the same sets of covered benefits. **New Jersey** has made extensive use of these types of reports and benchmarks (see Exhibit 5.5).

Exhibit 5.5. A Case Study - Benchmarking Encounter Data—Lessons from the Garden State

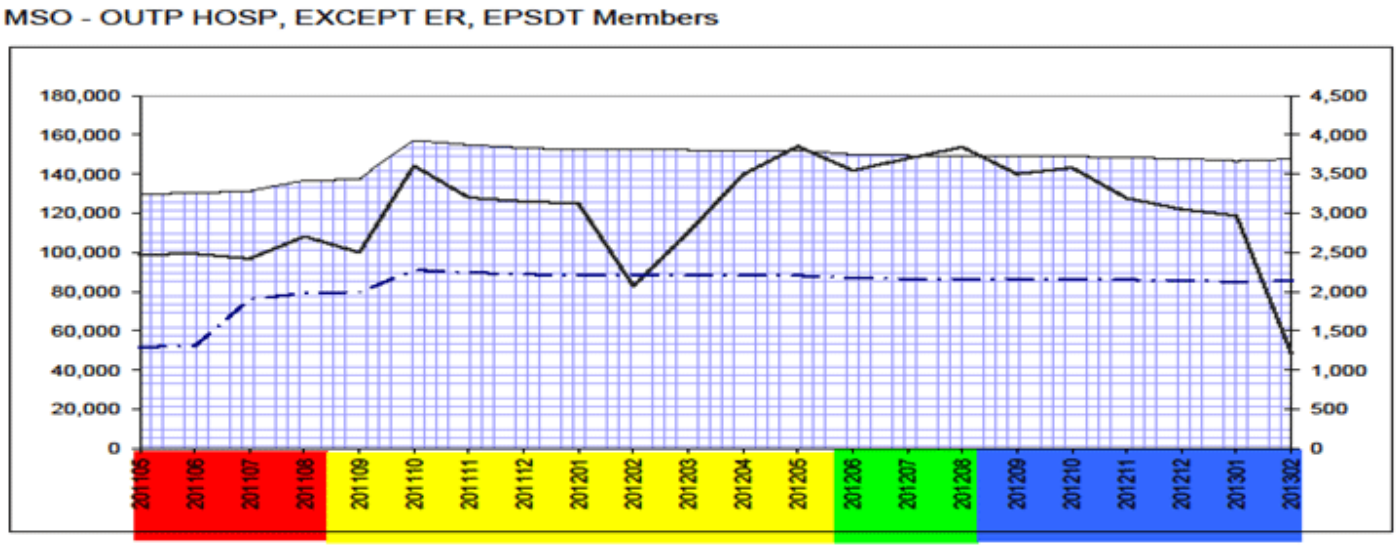
New Jersey developed encounter data benchmarks when it grew frustrated with not knowing whether encounter data submitted by plans were truly complete. The state began by breaking claims into categories of service (COS). They then analyzed the typical volume of claims submitted by the plans on a monthly basis within each of these categories. The state used this information to set 28 "completeness" benchmarks based on an all-plan average. The benchmarks are set at the "minimum acceptable number of services reported in the service month, per one thousand members."

The benchmarks are not intended to be punitive and were initially set at a level that all plans could meet. Over time, some of the benchmarks have been tightened, but the goal of the benchmarks has remained the same—to draw attention to the completeness of the encounter data reported by each plan to the state.

New Jersey created standard monthly progress reports that visually display how the plans' reporting compares to the benchmarks (Figure 5.5.1). They put significant time and effort into creating these reports in a clear, color-coded, easy-to-understand format. State staff uses the reports for analyses and they are shared with the MCOs.

MCOs have an incentive to meet the prescribed benchmark criteria related to completeness, because capitated payment amounts are withheld from MCOs that fail to meet the criteria. Continued failure to achieve benchmarks can result in converting withheld amounts to financial penalties ("liquidated damages"). MCOs receive another report displaying their performance on all COS in one consolidated chart, making it easy to see the number of times a withhold was applied, if any.

Figure 5.5.1. Example of a New Jersey chart showing one MCO's encounter data on Hospital Outpatient Use (solid black line), relative to the benchmark (dotted blue line), May 2011 to February 2013.



Source: New Jersey Division of Medical Assistance and Health Services, 2013.
Note: Left axis represents member enrollment and right axis represents encounter records.

New Jersey's benchmarks have helped the state improve the quality of its encounter data. States can adapt New Jersey's approach by dividing encounter data into meaningful service categories and then analyzing current reporting by plan within those categories to create customized benchmarks. More information on New Jersey's encounter data benchmarking can be found in the state's current managed care contract, which includes the exact benchmarks by category of service that plans must meet, and details all reporting requirements. The contract is available at: http://www.state.nj.us/humanservices/dmahs/info/resources/care/hmo-contract.pdf.

Exhibit 5.6: Arizona's Use of Financial Reports to Validate Encounter Data

Arizona AHCCCS validates its encounter data by comparing the data submitted by managed care plans with information from financial reports. Plans are required to submit audited financial statements annually and unaudited financial statements each quarter.

Plans must report a wide variety of expense information including medical expenses by service type (for example, inpatient hospital, primary care physician services, pharmacy), and administrative expenses (for example, compensation, data processing, and marketing). Plans also report detailed asset, liability, equity, and revenue information. The state ensures information is submitted in a common format by providing plans with detailed instructions through a Financial Reporting Guide and standard report format: http://www.azahcccs.gov/commercial/Downloads/FinancialReporting/FinancialReportingGuide_AcuteCare.pdf.

AHCCCS staff compare encounter data extracts to financial statements by MCO, risk group, eligibility group, geographic service areas, or category of service. Analysts first look for large variances or odd trends in the data, such as when there is more than a 3 to 5 percent difference between the encounter data and financial statement data. When an initial trend is flagged, analysts will then investigate further by looking at data on a monthly basis, reviewing pending encounters, or discussing discrepancies with the health plans

Plan-specific reports are better suited to situations when an MCO is the only plan serving a group of beneficiaries or covering a service, such as a single state behavioral health organization, or when data quality and completeness vary drastically across plans. For services that are newly added to the benefit package, such as long-term services and supports, it may take several reporting periods to establish standards for data completeness and accuracy until trends and patterns across plans can be detected and compared to historical service utilization patterns.

Service utilization benchmarks. To determine whether encounter data from managed care plans are meeting expected standards regarding volume and utilization, it is important to compare utilization data across similar populations and services. There are several sources for comparison data:

1. **FFS data.** For states transitioning to managed care for some or all populations, FFS data may be the primary (or only) source of benchmark data. For states in which enrollees in the same population groups are in both FFS and managed care plans, FFS data could provide meaningful comparisons of service volume and utilization. If a state receives data from managed care plans regarding payment to their network of providers, it can also be useful to compare it to state FFS expenditures. As fewer enrollees receive FFS care comparisons to FFS data become less meaningful.
2. **Historical data.** Data on trends over time in the use of certain types of service, whether through FFS or managed care, can be useful benchmarks. Comparisons may be made month-to-month (as in **Pennsylvania**) or quarter-to-quarter (as in **Rhode Island**) using encounter data alone to judge data validity. Errors or omissions can become immediately apparent through the front-end edits or via back-end reports that compare current data with historical trends.
3. **State means.** Deriving an all-plan, state-level mean for certain services or utilization standards can help in setting benchmarks for individual plans, as long as the populations enrolled in each plan have similar health status.
4. **National data sources.** National Medicaid data can be used to establish benchmarks for judging whether service use reported in encounter data meets expected levels. Such data are available from the MSIS data mart (http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/MSIS-Mart-Home.html), the Medicaid Analytic eXtract (MAX), and other sources that contain national survey data, such as the Kaiser Family Foundation (http://kff.org/medicaid/). Although comparisons to national sources are not useful for plan-specific benchmarking, they can provide a state with standards for service use and quality measures for the program overall.
5. **Plans' financial reports.** In most states, plans are required to submit financial reports to the state department of insurance (or its equivalent) in order to monitor plan reserves and solvency. Comparing the volume of data and service information in the encounter data to these financial reports can help reveal gaps in encounter data reporting (see Exhibit 5.6). This can only

be done with precision if MCOs are required to report on encounter data the amounts they pay their providers.

6. **Other.** Many managed care plans already report quality indicators into the HEDIS undergo audits as part of the NCQA certification process, among other reporting (detailed more below); states can garner ideas for comparing plan encounter data with these and other sources, to avoid reinventing the wheel.

Activity 5: Explore the possibility of using a contractor

When in-house staff resources or expertise are not sufficient to conduct the type or degree of analyses a state requires on a day-to-day or ad hoc basis, actuaries, fiscal agents, and EQROs can be an important supplement or complement to in-house data analysis staff. **Michigan** finds its relationship with an actuary very useful in supplementing the state's analyses of encounter data, reporting that "our consulting actuaries evaluate the MCO data for reasonableness and credibility using both their national experience and by comparing our 14 Medicaid MCOs' data with each other."

CMS recently released a set of protocols and tools to guide states in how to successfully collaborate with EQROs. Exhibit 5.7 includes a summary of those tools, as well as a link to the full set of resources.

Exhibit 5.7: CMS EQR Protocol 4 Encounter Data Validation

In 2012, CMS released External Quality Review Protocols, on a wide range of topics including validation of encounter data (Protocol 4).

Protocol 4 specifies procedures for assessing the completeness and accuracy of encounter data submitted by MCOs to the state. It also assists in the improvement of processes associated with the collection and submission of encounter data.

Protocol 4 includes five activities:

1. Review state requirements for collecting and submitting encounter data
2. Review the MCO's capability to produce accurate and complete encounter data
3. Analyze MCO electronic encounter data for accuracy and completeness
4. Review medical records for additional confirmation of findings
5. Submit findings

While Protocol 4 is voluntary, the significance of encounter data in payment reform continues to become increasingly important. CMS strongly encourages States to incorporate the validation of encounter data as part of the responsibilities in the State's EQRO contract.

Additionally, federal regulations authorize a 75 percent federal match for EQRO activities, including encounter data validation. This is compared to the usual 50 percent match for administrative activities. See 42 CFR 438.70.

For more information, see http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Quality-of-Care-External-Quality-Review.html.

Section 6:
Reporting Encounter Data to Federal Sources

Section at a Glance:

Aim: Create MSIS files that accurately reflect the state's Medicaid program, and submit them to CMS on a timely basis in the correct format

Audience and Purpose:

Division managers and supervisors: To determine how policy and technical staff can collaborate to create MSIS files that meet federal standards

Technical staff: To understand how to create MSIS files for managed care encounter data, and how they differ from FFS data

Exhibits:

6.1 Sample Process for MSIS File Submission

6.2 Key Differences Between Managed Care and FFS Data in MSIS

6.3 Michigan's Data Quality Reports—Anomalies in Transition to New MMIS

Federal law requires states to submit Medicaid managed care encounter data to CMS in a standard format as part of the MSIS files. Data in the MSIS files are used for a variety of purposes by CMS, state Medicaid agencies, and researchers to analyze managed care program metrics at the national level and to compare performance across state programs. To ensure that a state's data tell an accurate story about its Medicaid managed care program, MSIS data files must be constructed correctly.

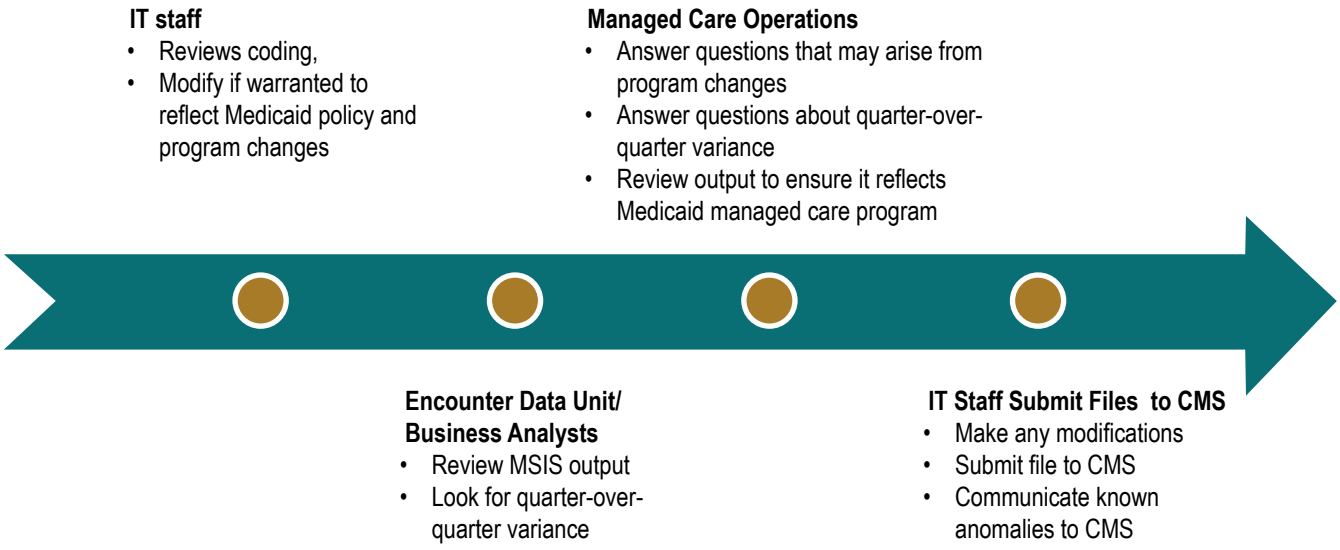
This section describes the three key steps in producing accurate encounter data in MSIS files submitted to CMS: (1) involve policy and technical staff in all steps in the process, (2) map encounter data elements to those in the MSIS data dictionary, and (3) run checks to assess data completeness and accuracy before submitting through your secure connection to CMS.

Activity 1: Involve policy and technical staff in development of MSIS encounter data production specifications and review of files

The tasks and specifications required to produce accurate MSIS files are largely technical, but it is important to involve Medicaid policy and program staff (see Exhibit 6.1). Their knowledge of the state's managed care program features—the populations enrolled, specific services covered, and MCO-provider arrangements—can be very useful in producing accurate MSIS files. For example:

- **Cross-walks.** If the state MMIS uses state-specific service codes, then policy and program staff can help to specify accurate mapping to the national MSIS service categories.
- **Review output files.** Policy and program staff can help in reviewing MSIS files to make sure they do not have obvious errors before sending them to CMS.
- **Post-submission response.** If CMS or its MSIS contractor has questions about the encounter data in MSIS files, policy or program staff may need to be involved in detecting or resolving problems with data quality and validation.

Exhibit 6.1: Sample Process for MSIS File Submission



Activity 2: Map managed care encounter data to the MSIS data dictionary elements and make necessary modifications

State IT staff should examine the MSIS data dictionary to determine the encounter-specific coding for MSIS encounter data reporting requirements. There are a number of data elements that differ in MSIS depending on whether the data are FFS or encounter, and also by whether they are for the Medicaid program or Separate Children's Health Insurance Program (S-CHIP). For instance, the Medicaid Amount Paid field will differ when the provider was not paid by Medicaid but rather by an MCO. For more examples, see Exhibit 6.2.

Activity 3: Run internal reports on the MSIS file to assess accuracy

Just as states run checks and edits on encounter data submitted by MCOs, they should check MSIS files to assess accuracy and completeness before submitting the files to CMS. Internal data quality reports can be generated on frequencies and volume of services, which should match aggregate counts from all MCO encounter data files in the MMIS. It can also be useful to compare internal reports across MSIS quarters. In addition to spotting unexpected data anomalies such as large changes from one quarter to the next, they can confirm changes the state expects to see due to program changes such as making managed care enrollment mandatory for new populations or adding new geographic regions to the managed care program (see Exhibit 6.3).

Exhibit 6.2: Key Differences Between Managed Care Encounter and FFS Data in MSIS

- ✓ TYPE-OF-CLAIM FIELD:
  States must report capitation payments for Medicaid to TYPE-OF-CLAIM = 2 (Medicaid capitation) and for S-CHIP to TYPE-OF-CLAIM = B (S-CHIP capitation).
- ✓ TYPE-OF-SERVICE FIELD — for Capitation payments:
  States must also report what type of MC plan is receiving the capitation payment by indicating the correct Type-of-Service on the Capitation payment. The Type-of-Service on the Capitation payment must match the Plan-Type designation in the Eligibility file:

PLAN-TYPE in Eligibility File	TYPE-OF-SERVICE in OT Claims File, for Capitation
PLAN-TYPE = 1 (Medical or comprehensive managed care plan, e.g. HMO)	TYPE-OF-SERVICE = 20 (Capitated payments to HMO, HIO, or PACE plans)
PLAN-TYPE = 2 (Dental managed care plan)	TYPE-OF-SERVICE = 21 (Capitated payments to Prepaid Health Plans – PHP)
PLAN-TYPE = 3 (Behavioral managed care plan)	TYPE-OF-SERVICE = 21 (Capitated payments to Prepaid Health Plans – PHP)
PLAN-TYPE = 4 (Prenatal/delivery managed care plan)	TYPE-OF-SERVICE = 21 (Capitated payments to Prepaid Health Plans – PHP)
PLAN-TYPE = 5 (Long-term care managed care plan)	TYPE-OF-SERVICE = 21 (Capitated payments to Prepaid Health Plans – PHP)
PLAN-TYPE = 6 (Program for All-Inclusive Care for the Elderly – PACE)	TYPE-OF-SERVICE = 20 (Capitated payments to HMO, HIO, or PACE plans)
PLAN-TYPE = 7 (Primary care case management managed care plan)	TYPE-OF-SERVICE = 22 (Capitated payments to PCCM)
PLAN-TYPE = 8 (Other managed care plan)	TYPE-OF-SERVICE = 21 (Capitated payments to Prepaid Health Plans – PHP)
Premium Assistance Programs — do NOT report enrollment in Managed Care, use Health Insurance Flag	TYPE-OF-SERVICE = 23 (Capitated Premium Payments to Private Health Insurance)

- ✓ PLAN-ID FIELD:
  The Plan ID a state uses to track the managed care plan should be the same ID across all MSIS files. That is to say, PLAN-ID-1-4 on the Eligibility record should match PLAN-ID-NUMBER in the IP/LT/OT/RX claims files. For instance:

Managed Care Plan and ID	Eligibility File Data Fields	IP Claims File Data Fields	LT Claims File Data Fields	OT Claims File Data Fields	OT Claims File Data Fields
Blue Cross: 555666	PLAN-ID (1-4): 555666	For Type of Claim = 3, PLAN-ID-NUMBER: 555666	For Type of Claim = 3, PLAN-ID-NUMBER: 555666	Type of Claim = 2, capitation payment PLAN-ID-NUMBER: 555666	For Type of Claim = 3, PLAN-ID-NUMBER: 555666
				Type of Claim = 3, encounter records PLAN-ID-NUMBER: 555666	
Healthy Choices: 444222	PLAN-ID: 444222	For Type of Claim = 3, PLAN-ID-NUMBER: 444222	For Type of Claim = 3, PLAN-ID-NUMBER: 444222	Type of Claim = 2, capitation payment PLAN-ID-NUMBER: 444222	For Type of Claim = 3, PLAN-ID-NUMBER: 444222
				Type of Claim = 3, encounter records PLAN-ID-NUMBER: 444222	

- ✓ MEDICAID-AMOUNT-PAID and AMOUNT-CHARGED FIELDs:
  The state does not pay directly for services reported on encounter records, the managed care plans do. For this reason, the MEDICAID-AMOUNT-PAID field should be zero-filled for encounter records (TYPE-OF-CLAIM = 3). The AMOUNT-CHARGED field for encounter records is designed not to capture the amount the provider charged for the service, as for FFS, but rather what the managed care plan paid for the service, when available.

Exhibit 6.3: Michigan's Data Quality Reports—Anomalies in Transition to New MMIS

When Michigan implemented a new MMIS, they anticipated the change would affect MSIS reporting. Staff began conducting analysis of the MSIS files before they submitted them to CMS to explain any data anomalies that might be attributable to new coding or to lags in claims processing due to the change to the new system.

At the end of each quarter, the state runs a series of reports on the volume of claims and payment amounts, by type of service. State staff checks the volume and payment amounts in the MSIS reports against their MMIS system reports to determine consistency. Next, they check the current quarter reports with past quarter reports to compare variance across quarters.

If they find irregularities in the data, they check whether there were:

- Benefit changes
- New populations enrolled
- Lags in claims processing by provider type
- System errors in claims processing

If there are errors, the state corrects them and re-generates the files. If there are no errors but the state detects anomalies, it explains the reasons for the variance from expected values to CMS as part of its file transmission.

Examples of Michigan's communication to CMS on data anomalies:

Eligibility file:
"We reviewed our procedures for selecting beneficiary IDs for the eligibility file [after discovering an anomaly]. A potential problem has been identified with our method for identifying beneficiaries as it pertains to the 1st and 2nd quarters, 2010. It is possible that new beneficiaries were under-reported for these periods. This problem was resolved in 3Q10 but was not corrected for the previous periods. The eligibility files for 1q10 and 2Q10 will be re-filed."

Claims file:
Type of Service (TOS) 21 – Prepaid Health Plan (PHP) (Claim OT)
(Current quarter - Cap Trans change by +27.62%; Payment change by +24.69%)
These variances relate to PIHP capitation payments in the quarter. In 3Q11 four capitation pay-cycles were processed instead of the normal three (monthly). In this quarter the July 2011 capitation payments were processed. This creates the distortion in capitation payment transactions and payments noted above.

Michigan continues to generate these reports, years after the new MMIS implementation. It has found these processes save a significant amount of time and create a strong partnership with CMS in the MSIS data quality and validation process.

Conclusion:
Making Use of Encounter Data and Getting More Help

Using Encounter Data to Evaluate Managed Care Programs

This toolkit is designed to help state Medicaid agencies collect and produce accurate and complete managed care encounter data. However, the value of high-quality encounter data lies in the extent to which it is used to monitor and evaluate managed care program performance, develop actuarially sound capitation rates, assure program integrity by preventing fraud and abuse, and hold managed care organizations accountable for beneficiary health outcomes, at the national and state level.

At the state level, improvements in the accuracy and completeness of encounter data have helped states develop actuarially sound capitation rates, make appropriate risk-adjustments, and compare quality of care between managed care and FFS enrollees. For example, Pennsylvania recently began using their physical health encounter data to distribute money from a risk pool paid into by all MCOs to account for high cost cases. Minnesota has used FFS claims and encounter data to compare the performance of the FFS and managed care delivery systems (See https://edocs.dhs.state.mn.us/lfserver/Public/DHS-6496-ENG). Another toolkit or manual would be required to explain all of the steps involved in these types of analyses.

Where to Get More Help

This toolkit is designed to be used by all states. But state capacity to collect and produce managed care encounter data varies, based on the length of time operating managed care programs, program structure or design, each MCO's experience in collecting and reporting encounter data, and state Medicaid data systems. State officials interested in obtaining state-specific technical assistance and additional information may find the following resources useful.

Technical assistance

Since 2010, Mathematica Policy Research has offered technical assistance to states to improve encounter data collection, validation, and reporting, which will be available at least through September 2014. To request assistance, go to www.Medicaid.gov, scroll to the bottom of the Managed Care page, complete and save the TA request form, and send it to ManagedCareTA@cms.hhs.gov.

Some examples of the TA provided to states in the past include:

- Detailed review of an encounter data manual for a state implementing a new comprehensive managed care program.
- Detailed review of a state's encounter data against MSIS data quality reports generated from each state's MSIS submissions, which can help to identify specific managed care plans that do not meet quality and completeness thresholds.

- Hands-on assistance mapping and cross-walking state data to the MSIS format, which in one state helped to re-classify and recode data elements in a new MMIS.

Publications

- **Collecting, Using, and Reporting Medicaid Encounter Data: A Primer for States**, by Vivian Byrd and James Verdier, Mathematica Policy Research, for the Centers for Medicare & Medicaid Services, October 2011. Designed for states in the early stages of collecting encounter data, it provides basic information and guidance based on experiences of veteran states. http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/Downloads/MAX_PDQ_Task_X_EncounterDataPrimerforStates.pdf
- **Medicaid Analytic eXtract (MAX), 2008 Encounter Data Chartbook**, by Rosemary Borck, Ashley Zlatinov, and Susan Williams, Mathematica Policy Research for the Centers for Medicare & Medicaid Services, January 2013. This chartbook describes service utilization data for Medicaid enrollees in prepaid managed care plans, derived from encounter records. http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/MAX_Chartbooks.html
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- **State Solutions to Encounter Data Challenges: Advanced State Training,** Center for Medicaid and CHIP Services, July 25, 2013. http://www.chcs.org/usr_doc/Encounter_Data_Deep_Dive_Advanced_training_webinar_07_25_13_(2).pdf

Glossary of Terms

- **Behavioral Health** care that includes treatment for mental health issues (such as depression, bipolar disorder, or schizophrenia) and substance abuse. Behavioral health services under Medicaid are often provided through separate managed care or fee-for-service models.
- **Capitation or Capitated Payment** a method of payment for health services in which a managed care plan, practitioner, or hospital is paid in advance a fixed amount to cover specified health services for an individual for a specific period of time, regardless of the amount or type of services provided. In contrast with fee-for-service (see entry below), capitation shifts the financial risk of caring for patients from the payer to the provider.
- **Comprehensive Managed Care** health care plans that provide acute, primary, and specialist care, and sometimes other services and supports, to people in return for a prepaid fee. This group of plans includes health maintenance organizations (HMOs), health insuring organizations (HIOs), and Program of All-Inclusive Care for the Elderly (PACE) plans.
- **Encounter Records** information on the services utilized under managed care. Encounter records do not include payment information for services used.
- **Fee-for-Service (FFS)** a payment mechanism in which payment is made for each service used.
- **Managed Care (MC)** systems and payment mechanisms used to manage or control the use of health care services that may include incentives to use certain providers and case management. A managed care organization (MCO) usually involves a system of providers who have a contractual arrangement with the plan. Health maintenance organizations (HMOs), primary care case management (PCCM) plans, and prepaid health plans (PHPs) are examples of managed care plans.
- **Medicaid Management Information System (MMIS)** the secure data system that each state uses to store electronic Medicaid data, including claims, services, billing, and processing information.
- **Medicaid Analytic Extract (MAX)** a set of person-level data files on Medicaid eligibility, service utilization, and payments. The MAX data are extracted from the MSIS.
- **Medicaid Statistical Information System (MSIS)** the CMS data system containing eligibility and claims data from each state Medicaid program. Electronic submission of data by states to MSIS became mandatory in 1999, in accordance with the Balanced Budget Act of 1997.
- **Prepaid Health Plan (PHP)** a type of managed care plan that provides less than comprehensive services on an at-risk basis. These may include dental care, behavioral health services, long-term care, or other service types.