

Introduction

Accurate and complete encounter data are critical to the success of any managed care program. State Medicaid agencies rely on the quality of encounter data submissions from their contracted health plans in order to monitor and improve the quality of care; establish performance measure rates; generate accurate and reliable reports; and obtain utilization and cost information. The completeness and accuracy of these data are essential in the state’s overall management and oversight of its Medicaid managed care program and in demonstrating its responsibility and stewardship.

During State Fiscal Year (SFY) 2016–17, the Agency for Health Care Administration (AHCA) contracted with Health Services Advisory Group, Inc. (HSAG) to conduct an encounter data validation (EDV) study. The goal of the study is to examine the extent to which encounters submitted to AHCA by its contracted Statewide Medicaid Managed Care (SMMC) plans, including Managed Medical Assistance (MMA) and Specialty plans, collectively referred to as plans, are complete and accurate. Table 1 presents the contracted plans with the associated plan abbreviation and shortened name, included in the study.

Table 1—List of Contracted Plans

| Plan Name | Plan Abbreviation | Shortened Name |
|---|-------------------|-------------------------------|
| MMA | | |
| Amerigroup Florida, Inc. | AMG-M | Amerigroup |
| Better Health, Inc. | BET-M | Better Health |
| Aetna Better Health of Florida, Inc. | COV-M | Aetna |
| Humana Medical Plan, Inc. | HUM-M | Humana |
| Molina Healthcare of Florida, Inc. | MOL-M | Molina |
| Prestige Health Choice | PRS-M | Prestige |
| South Florida Community Care Network, dba Community Care Plan | NBD-M | CCP |
| Simply Healthcare Plans, Inc. | SHP-M | Simply |
| Sunshine State Health Plan, Inc. | SUN-M | Sunshine |
| UnitedHealthcare of Florida, Inc. | URA-M | United |
| Wellcare d/b/a Staywell Health Plan of Florida, Inc. | STW-M | Staywell |
| Specialty | | |
| Children’s Medical Services Network | CMS-S | Children’s Medical Services-S |

| Plan Name | Plan Abbreviation | Shortened Name |
|----------------------------------|-------------------|----------------|
| Clear Health Alliance | CHA-S | Clear Health-S |
| Magellan Complete Care | MCC-S | Magellan-S |
| Sunshine State Health Plan, Inc. | SUN-S | Sunshine-S |

The SFY 2016–17 EDV study is a follow-up to the dental services component of the encounter data validation study conducted in SFY 2015–16. The study is designed to produce actionable and valuable findings that will lead to recommendations that improve known areas of discrepancies in the encounter data submitted to AHCA by the plans. The analytic methodology described in this document includes administrative and comparative analyses of plan-submitted encounters, and a review of clinical records, the eligibility file, and other available data sources. The SFY 2016–17 EDV study will focus its review on all dental encounters with dental procedure codes (CDT) for children under the age of 21.

In order to assess the quality of the dental claim type and to address the specific research questions, the study will include two evaluation components:

- Administrative and comparative data analysis of encounter data, and
- Clinical record review.

Methodology

Administrative and Comparative Analyses of Plan and State Medicaid Data

During the fourth contract year, HSAG will perform an administrative and comparative data analysis between AHCA’s encounter data and the plans’ administrative data. This step corresponds to a validation activity described in the CMS Protocol—i.e., analyses of plan electronic encounter data for accuracy and completeness. The goal of the analysis will be to evaluate the extent to which encounters submitted by the plans and maintained in Florida’s Medicaid Management Information System (MMIS) are accurate and complete when compared to data stored in the plans’ data systems. More specifically, encounters submitted by the plans with a date of service between January 1, 2016 and June 30, 2016, will be included in the validation. Additionally, since dental services are the focus of the SFY 2016–17 study, all dental encounters with dental procedure codes (CDT) will be assessed for the administrative-based analyses.

HSAG proposes the following steps to complete the administrative and comparative analyses of the encounter data:

1. Prepare a data submission requirements document to guide the extraction of data from the State’s data warehouse; provide technical assistance to AHCA to ensure the integrity of the data.

2. Conduct a preliminary file review to confirm accuracy of the data submitted by AHCA for the study.¹ If data issues are identified from the initial data submission that warrant resubmission, a second review of the resubmitted data will be performed.
3. Prepare a data submission requirements document to guide the plans in extracting data from their data systems; provide technical assistance to the plans to ensure the integrity of the data.
4. Conduct a preliminary file review to confirm the accuracy of the data submitted by the plans for the study.²
5. Conduct administrative data analyses.
6. Conduct comparative data analyses.
7. Synthesize study findings and draft aggregate report and recommendations.

Development of Data Submission Requirements for AHCA data and file review

Based on the approved scope of work, HSAG will submit a data submission requirements document to AHCA to obtain all claim/encounter records, for those plans included in this study, with dates of service between January 1, 2016, and June 30, 2016, and submitted to AHCA before December 1, 2016. If AHCA's data contains the processing history for specific services, HSAG will only include the final adjudicated records as of December 1, 2016, in the extracted data. These data files will be reviewed and prepared for the comparative analyses with claims/encounters submitted by the plans. As needed, HSAG will provide technical assistance to the State to assist in the preparation of all submitted data.

Development of Plan Data Submission Requirements and Provision of Technical Assistance

Based on HSAG's review of the encounter data submission documents provided by AHCA, HSAG will develop a data submission requirements document for this study and coordinate technical assistance sessions with the plans to describe the EDV study and the data requirements of the study. To conduct this study, HSAG will request all claim/encounter records extracted from each plan's data system with dates of service between January 1, 2016, and June 30, 2016, and submitted to AHCA before December 1, 2016. The plans should include only the final adjudicated records submitted to AHCA as of December 1, 2016, in the extracted data.

The data submission requirements document will be based on the data elements evaluated in this study. These documents will include a brief description of the SFY 2016–17 EDV study, the review period, encounter data types, required data elements, and information regarding the submission of the requested files. The documents will be distributed to the plans in January 2017.

¹ To ensure the project is completed on time, HSAG will be limited in the number of times it can process and review the encounter data submitted by AHCA and the plans. Each organization will only be allowed to submit its data two times. For each submission, HSAG will conduct a cursory review to (1) ensure it conforms to the data submission requirements and (2) meets a minimum level of quality (e.g., reasonably populated fields). Following the initial feedback from HSAG, AHCA and the plans will be allowed to resubmit their data one time. If issues continue to exist in the resubmitted data, their information will either be excluded from the study or used "as is" based on a final decision by AHCA.

The technical assistance sessions will occur approximately one week after the distribution of the data submission requirements document, allowing the plans time to review and prepare their questions for the sessions. During the technical assistance sessions, HSAG will introduce the SFY 2016–17 EDV study to the plans and review the data submission requirements to ensure that all questions related to data preparation and extraction are addressed. Depending on the number of questions and the type of clarification needed, HSAG may update and distribute a final version of the data submission requirements document to the plans following the technical assistance sessions. The plans will have approximately one month to extract and prepare the requested data files for submission to HSAG.

Preliminary File Review

All claims and encounters submitted by the plans to HSAG will undergo a preliminary file review to determine whether any potential data issues identified in the data files would warrant a resubmission. HSAG will perform a preliminary file review that will focus on the following indicators:

- Data were extracted based on the data requirements documents.
- Percentage present: Required data fields are present on the file and have information in those fields.
- Percentage valid: Data in the fields are of the required types—e.g., numeric fields have numbers, character fields have characters.
- Percent valid values: The values are the expected values—e.g., valid ICD-10 codes in the diagnosis field.
- An evaluation of the percentage of unique claim identifiers that matched between the data extracted from AHCA’s data warehouse and the plans’ data submitted to HSAG.

Based on the results of the preliminary file review, HSAG may generate a preliminary file review report to highlight the major data issues to assist the plans with their resubmissions.²

Administrative Analyses

Capturing, sending, and receiving encounter data has historically been difficult and costly for the plans and states alike. The encounter data collection process is lengthy and includes steps where data can be lost or errors can be introduced into the submitted data elements. Assessment of the completeness and accuracy of encounters will provide insight into areas that need improvement for these processes, as well as quantifying the general reliability of encounter data. The administrative analyses will be performed based on evaluating key data elements as individual units of assessment.

² To ensure the project is completed on time, HSAG will be limited in the number of times it can process and review the encounter data submitted by AHCA and the plans. Each organization will only be allowed to submit its data two times. For each submission, HSAG will conduct a cursory review to (1) ensure it conforms to the data submission requirements and (2) meets a minimum level of quality (e.g., reasonably populated fields). Following the initial feedback from HSAG, AHCA and the plans will be allowed to resubmit their data one time. If issues continue to exist in the resubmitted data, their information will either be excluded from the study or used “as is” based on a final decision by AHCA.

The administrative analyses will include the following evaluation methods:

- The volume of submitted claims/encounters was reasonable.
- Key encounter data fields contained complete and/or reasonable values.
- Other anomalies associated with the data extraction and submission were documented.

Comparative Analyses

For the comparative analyses, HSAG will evaluate the extent to which values populated for the following key data elements in AHCA's data warehouse match those in the plans' submitted files. Key data elements to be evaluated as part of the comparative analyses include:

- Recipient ID
- Dates of service
- Provider ID and NPI
- CDT procedure code
- Tooth number
- Mouth quadrant
- Tooth surface

The comparative analyses will be divided into two analytic sections. First, HSAG will assess record-level data completeness for each encounter data type, using the following metrics:

- The number and percentage of records present in the plans' submitted files but not in Florida's MMIS (record omission).
- The number and percentage of records present in Florida's MMIS but not in the plans' submitted files (record surplus).

Second, based on the number of records that exist in both data sources, HSAG will examine completeness and accuracy for each selected data element as listed above. The analyses will focus on an element-level comparison using the following metrics:

- The number and percentage of records with an exact value match in both plans' submitted files and Florida's MMIS (element agreement).
- The number and percentage of records with values present in the plans' submitted files but not in Florida's MMIS (element omission).
- The number and percentage of records with values present in Florida's MMIS but not plans' submitted files (element surplus).

Clinical Record Review

Clinical records (e.g., dental records) are considered the “gold standard” for documenting Medicaid enrollees’ access to and quality of services. This second component of the EDV study will assess the completeness and accuracy of AHCA’s encounters through a review of these records. For SFY 2016–17, HSAG will perform a review for the plans listed in Table 1. HSAG will work with AHCA to define an appropriately robust sampling strategy.

Key data elements associated with dental services that will be evaluated in the clinical record review include:

- Date of service
- CDT procedure code

Eligible Population

To be eligible for the clinical record review, an enrollee must be under the age of 21, enrolled in a plan as of June 30, 2016, and must have had at least one dental visit during the study period (January 1, 2016 – June 30, 2016). In addition, the enrollee must have been continuously enrolled in the same plan between January 1, 2016, and June 30, 2016 with no gaps.

Study Protocol and Sampling Strategy

Encounter data, enrollment data, and provider data from AHCA used in the comparative analyses, will be used to select the record review samples. HSAG will employ a two-stage stratified sampling design to ensure that (1) an enrollee is selected only once, and (2) one date of service associated with the sampled enrollee is selected. First, HSAG will identify all enrollees by plan based on the total enrollees receiving dental services. HSAG will then randomly select the enrollees by plan based on the required sample size. Once the sample enrollees are selected, HSAG will identify all dental encounters associated with these sampled enrollees. From these encounters, one date of service will be randomly selected as the final sampled encounter per sampled enrollee. The final sample used in the evaluation will consist of a minimum of 113 cases randomly selected per plan. If a plan has less than 113 cases that are eligible for the study, all of the eligible cases will be included and the number of cases for the remaining plans will be adjusted accordingly to ensure 1,696 total cases to be reviewed. An additional 25 percent oversample (or 28 cases per plan) will be sampled to replace records not procured. As such, plans with an adequate number of cases eligible for the study will be responsible for procuring a minimum of 141 total sampled enrollees’ dental records per plan (i.e., 113 sample and 28 oversample) from their contracted providers for services that occurred during the study period.

Data Collection/Record Abstraction

Upon receiving the sample list, the plans will be responsible for coordinating the clinical record procurement process with their contracted providers. To improve the procurement rate, HSAG will include a review of the project and procurement protocols during two one-hour technical assistance calls

with the participating plans. HSAG will work with the plans to monitor the submission of the records from the providers.

Concurrent with the record procurement activities, HSAG will begin training the review staff on the specific study protocols and conducting inter-rater reliability and rater-to-standard testing. All reviewers must achieve a 95 percent accuracy rate before they are allowed to review clinical records and collect data for the study. Trained HSAG reviewers will conduct a record review of each sampled enrollee's submitted clinical records. Reviewers will use an electronic record abstraction tool and evaluate the documentation to determine whether the data elements extracted from the electronic encounter file are supported by the dental records.

Clinical Record Review Indicators

Once the abstraction is complete, HSAG analysts will export the data and conduct analyses for each plan. In general, four clinical related indicators of data completeness and accuracy will be reported:

- **Dental record omission**—the percentage of sampled dates of service identified in the electronic encounter data that were not found in the enrollees' dental records. This rate will also be calculated for each key data element.
- **Encounter data omission**—the percentage of key data elements from enrollees' dental records that were not found in the electronic encounter data.
- **Coding accuracy**—the percentage of key data elements associated with sampled dates of service from the electronic encounter data that were correctly coded based on the enrollees' dental records.
- **Overall accuracy**—the percentage of dates of service with all data elements coded correctly among all the validated sampled dates of service from the electronic encounter data.

Reporting of Results

Based on the findings from the comparative analyses and the clinical record review, HSAG will prepare an aggregate EDV report. The main section will focus on the presentation of statewide average results with plan variations. The plan-specific results will be listed in the appendix for each plan. The comparative analyses and clinical record review findings will be provided along with recommendations to improve the quality of encounter data.