HFS
Illinois Department of
Healthcare and Family Services

2025–2026 Encounter Data Validation Aggregate Report

July 2026

HSAG HEALTH SERVICES ADVISORY GROUP

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HFS Illinois Department of Healthcare and Family Services

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1. Executive Summary

Purpose

A medical or clinical record is considered the "gold standard" for documenting Medicaid customers' access to and quality of healthcare services. These medical records contain information about customers' experience with a healthcare provider, such as documenting the date the encounter occurred, the diagnosis code, and if any procedures were performed. Additionally, accurate and complete encounter data are critical to assessing quality, monitoring program integrity, and making financial decisions.

Since completeness and accuracy of these data are essential to the success of the Illinois Department of Healthcare and Family Services' (HFS') overall management and oversight of its contracted HealthChoice Illinois managed care plans, during fiscal year (FY) 2025, HFS contracted Health Services Advisory Group, Inc. (HSAG) to conduct an encounter data validation (EDV) medical record review (MRR) study. The goal of the MRR was to:

Evaluate the extent to which HFS' encounter data are complete and accurate when compared to information contained in customers' medical records.

HSAG evaluated this goal by examining five key data elements between the HFS submitted encounter data and the health plan procured medical records—*Date of Service*, *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*.

HFS relies on the quality of these encounter data submissions to accurately and effectively monitor and improve the program's quality of care, generate accurate and reliable reports, develop appropriate capitated rates, and obtain complete and accurate utilization information.

Methodology

In alignment with the Centers for Medicare & Medicaid Services (CMS) External Quality Review (EQR) *Protocol 5. Validation of Encounter Data Reported by the Medicaid and CHIP [Children's Health Insurance Program] Managed Care Plan: An Optional EQR-Related Activity*, February 2023 (CMS EQR Protocol 5),[1] HSAG conducted the MRR for the following six health plans:

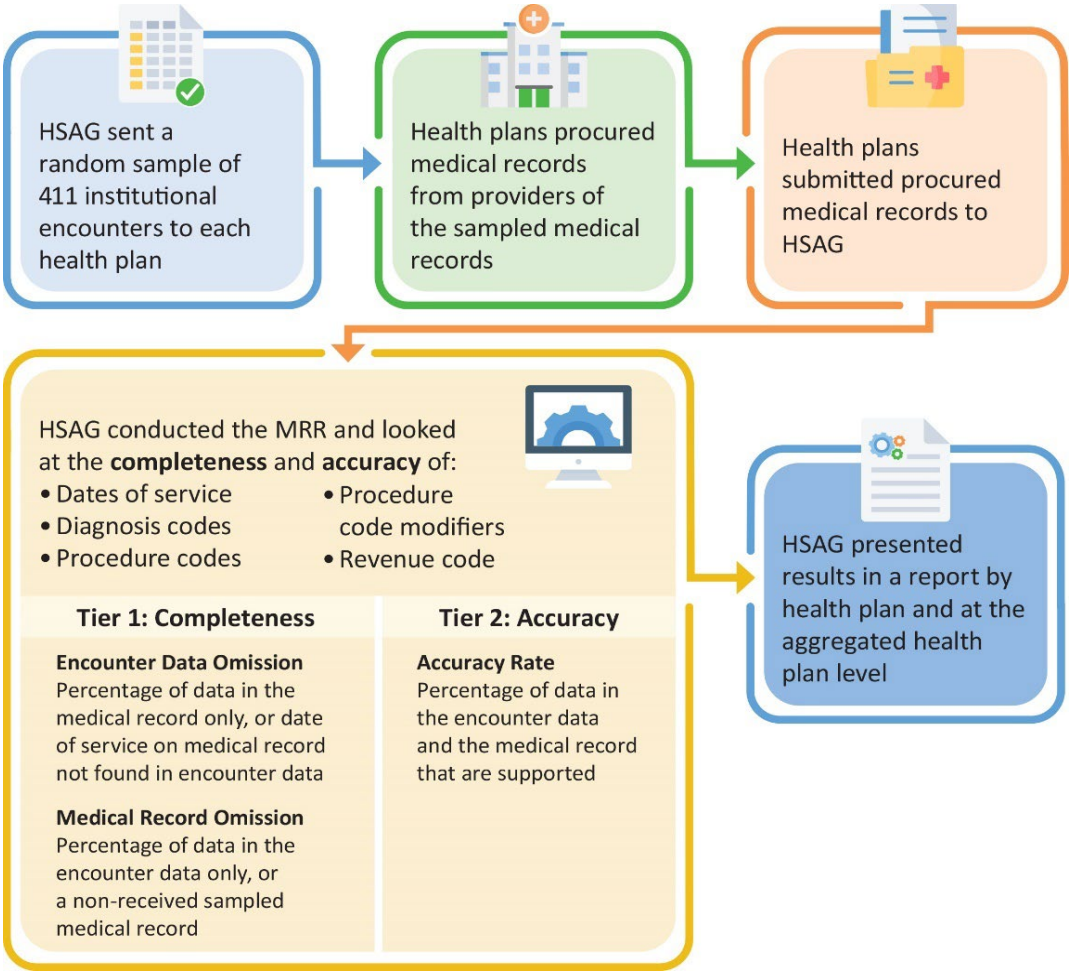
- Aetna Better Health (Aetna)
- Blue Cross Community Health Plans (BCBSIL)

[1] Department of Health and Human Services, Centers for Medicare & Medicaid Services. *Protocol 5. Validation of Encounter Data Reported by the Medicaid and CHIP Managed Care Plan: An Optional EQR-Related Activity,* February 2023. Available at: https://www.medicaid.gov/medicaid/quality-of-care/downloads/2023-eqr-protocols.pdf. Accessed on: June 11, 2026.

- CountyCare[2]
- Meridian
- Molina Healthcare of Illinois (Molina)
- YouthCare HealthChoice Illinois (YouthCare)

As described in Figure 1-1, HSAG randomly sampled eligible outpatient institutional encounters rendered between July 1, 2023, through June 30, 2024, for eligible customers. Health plans worked with their contracted providers to procure the sampled medical records. Health plans submitted all documentation to HSAG, whose experienced medical record reviewers compared the information in the encounter data to information documented in the medical records. HSAG then calculated the rates of completeness and accuracy for the key data elements across HFS HealthChoice Illinois managed care plans.

Figure 1-1—MRR Methodology



[2] Serves Cook County only.

Key Findings and Recommendations

Medical Record Procurement

Overall, the health plans submitted 92.1 percent of the 2,466 requested medical records. HSAG reviewed more than 99.9 percent (2,271) of the submitted records. HSAG did not review one record because the requested date of service was not included in the submission. Procurement rates ranged from 82.0 percent (Molina) to 99.8 percent (BCBSIL). Among all health plans, the most common reason medical records were not procured was non-responsive providers or providers not responding in a timely manner (67.5 percent).

Key Conclusion #1: Two in three of the non-submitted sampled medical records were due to a non-responsive provider.

- **Recommendation:** HFS should work with health plans to emphasize provider accountability for timely responses to medical record requests, as non-responsive providers were a major contributor to procurement challenges.

Encounter Data Completeness

Table 1-1 displays the medical record and encounter data omission rates for each key data element. Omissions identified in the medical records (where service information in the encounter data is not supported by the medical records) and omissions identified in the encounter data (where services documented in the medical records are absent from the encounter data) highlight discrepancies in the completeness of HFS' encounter data. Rates 10 percent or lower are preferable for both measures as they indicate consistent and comprehensive documentation across both data sources.

If a medical record is received, medical record omissions could be due to the provider not correctly documenting the services performed in the medical record, even though an encounter was submitted indicating that the service occurred. Additionally, the provider may not have provided the service(s) found in the encounter data. Medical records that were not submitted contribute to the medical record omission rates for all data elements.

Encounter data omission could be due to the provider's billing office making a coding error or not submitting the procedure codes or modifiers, despite performing the services. Additionally, although HSAG expects a six-month lag between the date of service and submission of encounter data to HFS, it is possible that a longer lag occurred between when the service occurred and when the record was submitted to HFS. If an encounter was submitted to HFS after HFS submitted encounter data to HSAG, then the key data elements contained in the corresponding medical record would be considered an encounter data omission since HSAG did not have the corresponding encounter data.

Table 1-1—Encounter Data Completeness Summary

Key Data Element	Medical Record Omission*		Encounter Data Omission*	
	All Health Plan Rate	Health Plan Range	All Health Plan Rate	Health Plan Range
Date of Service	7.9%	0.2%–18.0%	—	—
Diagnosis Code	9.8%	1.8%–20.5%	0.1%	0.0%–0.2%
Procedure Code	12.2%^	2.6%–23.2%	0.5%	0.1%–0.8%
Procedure Code Modifier	14.7%^	4.9%–22.4%	0.1%	0.0%–0.7%
Revenue Code	12.3%^	2.8%–24.8%	<0.1%	0.0%–0.1%

* Lower rates indicate better performance.
^Red text indicates rates greater than 10.0 percent.
"—" denotes that the measure was not applicable to a given data element.

Key Conclusion #2: The medical record omission rates (i.e., percentage of records found in the encounter data that were not supported by customers' medical records) exceeded 10.0 percent for three of the five data elements. Notably, most medical record omissions were due to missing medical records. The *Procedure Code Modifier* data element had the highest rate of medical record omission compared to the other key data elements.

- **Recommendation:** HFS should work with health plans to emphasize the importance of MRRs for EDV activities and ensure providers submit requested documentation in a timely manner to support future data requests.
- **Recommendation:** Health plans should investigate the root causes of identified omissions and consider performing periodic MRRs for submitted claims to verify appropriate coding and data completeness, as appropriate. Findings from these reviews should be used to provide targeted education and training to providers on encounter data submissions, medical record documentation, and coding practices.
- **Recommendation:** HFS and the health plans should conduct regular communication forums and workshops to discuss challenges, share best practices in data submission, and set performance benchmarks to encourage continuous improvement.

Key Conclusion #3: Encounter data omission rates were low across all health plans, indicating that services documented in the medical record generally aligned with the corresponding encounter data.

Encounter Data Accuracy

Table 1-2 displays the element accuracy rates for each key data element and the all-element accuracy rates. HSAG evaluated the accuracy of encounter data for dates of service that were present in both HFS' encounter data and the corresponding customers' medical records. HSAG evaluated key data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) for

accuracy if the individual data element was present in both HFS' encounter data and the medical records. Accuracy rates 90.0 percent or higher for each data element reflect better performance and stronger alignment between the two data sources.

Additionally, an all-element accuracy rate was calculated, which represents the percentage of dates of service where all evaluated data elements were accurate and fully supported by the corresponding medical records.

Table 1-2—Encounter Data Accuracy Summary

Key Data Element	All Health Plan Rate	Health Plan Range	Error Type
Diagnosis Code	99.9%	99.8%–100%	Inaccurate Code: 75.0% Specificity Error: 25.0%
Procedure Code	99.9%	99.8%–100%	Inaccurate Code: 85.7% Higher Level of Service in Medical Record: 0.0% Lower Level of Service in Medical Record: 14.3%
Procedure Code Modifier	100%	100%–100%	—
Revenue Code	100%	100%–100%	—
All-Element Accuracy*	87.6%^	79.0%–91.2%	—

* The denominator for the element accuracy rate for each data element was defined differently from the denominator for the all-element accuracy rate. Therefore, the all-element accuracy rate cannot be derived from the accuracy rate from each data element.
"—" denotes that the error type analysis was not applicable to a given data element.
^Red text indicates rates lower than 90.0 percent.

Key Conclusion #4: The medical records strongly supported the encounter data across the four data elements where the dates of service between the medical record and the encounter data matched. Rates among all health plans were at least 99.9 percent, indicating that providers document and submit encounters appropriately.

Key Conclusion #5: The overall all-element accuracy rate was 87.6 percent. While individual element accuracy rates were high, the all-element accuracy rate reflects the combined effect of completeness and accuracy across all elements for a given date of service. Since there were higher rates of medical record omission among the *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code* data elements, the all-element accuracy rates were lower than the individual element rates.

2. Overview and Methodology

Overview

Accurate and complete encounter data play a vital role in ensuring the success of a managed care program. Therefore, HFS requires its contracted HealthChoice Illinois managed care plans to submit high-quality encounter data. State Medicaid agencies rely on the quality of encounter data submissions from contracted health plans to accurately and effectively monitor and improve the quality of care, generate accurate and reliable reports, develop appropriate capitated rates, and obtain complete and accurate utilization information. The completeness and accuracy of these data are essential to HFS' overall management and oversight of its health plans.

During FY 2025, HFS contracted HSAG to conduct an EDV study. HSAG's approach to conducting EDV studies is tailored to address the specific needs of its clients by customizing elements outlined in the CMS EQR Protocol 5. In alignment with the CMS EQR Protocol 5, HSAG conducted an MRR to evaluate the extent to which HFS' encounter data are complete and accurate when compared to information documented in customers' medical records.

HSAG conducted an MRR for outpatient institutional encounters for the following six health plans:

- Aetna
- BCBSIL
- CountyCare
- Meridian
- Molina
- YouthCare

Methodology

As outlined in the CMS EQR Protocol 5, MRR is a complex and resource-intensive process. Medical and clinical records are considered the "gold standard" for documenting Medicaid customers' access to and quality of healthcare services. However, due to the resource-intensive nature of an MRR, HSAG recommends that an MRR be conducted once there is a sufficient level of quality for HFS' encounters.

The MRR activity evaluated encounter data completeness and accuracy through a review of medical records for outpatient institutional services rendered from July 1, 2023, through June 30, 2024. This study answered the following question:

- Were the data elements in Table 2-1 found on the finalized outpatient institutional encounters complete and accurate when compared to information contained in the medical records?

Table 2-1—Key Data Elements for MRR

Key Data Element	Outpatient Institutional
Date of Service	✓
Diagnosis Code	✓
Procedure Code (Current Procedural Terminology [CPT]/Healthcare Common Procedure Coding System [HCPCS])	✓
Procedure Code Modifier	✓
Revenue Code	✓

To answer the study question, HSAG conducted the following steps:

- Identified the eligible population and generated samples from data extracted from HFS' data warehouse.
- Assisted health plans with procurement of medical records from providers, as appropriate.
- Reviewed medical records against HFS' encounter data.
- Calculated study indicators and submitted study results to HFS in a report.

Study Population

To be eligible for the MRR, a customer must have been continuously enrolled in the same health plan during the study period (i.e., from July 1, 2023, through June 30, 2024) and must have had at least one outpatient institutional service during the study period. In addition, customers with Medicare or other insurance coverage were excluded from the eligible population since these customers may have received services that were documented in their medical record but not represented in HFS' encounter data.

In this report, HSAG refers to outpatient institutional services as the services that meet all criteria in Table 2-2.

Table 2-2—Criteria for Outpatient Institutional Services Included in the Study

Data Element	Criteria
Outpatient Institutional Services	
RecordIDCd	O—Outpatient
Provider Type	• Ambulatory Surgical Treatment Centers • General Hospitals • Rehabilitation Hospitals • Waiver Service Provider—Disability (Department of Human Services [DHS]/Division of Rehabilitation Services [DRS]) • Waiver Service Provider—Elderly (Department on Aging [DOA])

Data Element	Criteria
	• Waiver Service Provider—HIV (Human Immunodeficiency Virus)/AIDS (Acquired Immunodeficiency Syndrome) (DHS/DRS) • Waiver Service Provider—Traumatic Brain Injury (TBI) (DHS/DRS)
Provider Specialty	001—General Hospital—Adult and Child 003—General Hospital—Children Section 015—Perinatal Level III Center
Procedure Code	If all detail lines for a visit have the following procedure codes, the visit was excluded from the study since these procedure codes were for services outside of the scope of work for this study (e.g., durable medical equipment [DME], dental, and ancillary providers). • A procedure code starting with "B," "E," "D," or "K" • Procedure codes between A0021 and A0999 (i.e., codes for transportation services) • Procedure codes between A4206 and A9999 (i.e., codes for medical and surgical supplies, miscellaneous, and investigational) • Procedure codes between T4521 and T4544 (i.e., codes for incontinence supplies) • Procedure codes between L0112 and L4631 (i.e., codes for orthotic devices and procedures) • Procedure codes between L5000 and L9900 (i.e., codes for prosthetic devices and procedures) • Procedure codes with an "F" in the fifth digit

Sampling Strategy

HSAG used a two-stage sampling technique to select samples based on the enrollment and encounter data extracted from the HFS data warehouse. HSAG first identified all customers who met the study population eligibility criteria and then used random sampling to select 411 customers[3] from the eligible population for each health plan. Then, for each sampled customer, HSAG used the SURVEYSELECT procedure in SAS®,[4] to randomly select one outpatient institutional service[5] that occurred in the study period (i.e., from July 1, 2023, through June 30, 2024). Since it is not expected for customers to have

[3] As described in the CMS EQR Protocol 5, the sample size of 411 is based on a 95 percent confidence level and a margin of error of 5 percent.

[4] SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registration.

[5] To ensure that the MRR included all services provided on the same date of service, HSAG consolidated encounters with the same date of service and same billing provider into one visit for sampling.

multiple outpatient institutional services with the same provider within the study period, HSAG did not evaluate a second date of service for these records.

Medical Record Procurement

Upon receiving the final sample lists from HSAG, the health plans were responsible for procuring the sampled customers' medical records from their contracted providers for services that occurred during the study period. In addition, the health plans were responsible for submitting the documentation to HSAG. To improve the procurement rate, HSAG conducted a one-hour technical assistance session with the health plans to review the EDV project and the procurement protocols after distributing the sample lists. The health plans were instructed to submit medical records electronically via a Secure Access File Exchange (SAFE) site to ensure the protection of personal health information. During the procurement process, HSAG worked with health plans to answer questions and monitor the number of medical records submitted. For example, HSAG provided an initial submission update when 40 percent of the records were expected to be submitted and a final submission status update following completion of the procurement period.

All electronic medical records HSAG received were maintained on a secure site, which allowed HSAG's trained reviewers to validate the cases from a centralized location under supervision and oversight. As with all MRR and research activities, HSAG has implemented a thorough Health Insurance Portability and Accountability Act of 1996 (HIPAA) compliance and protection program in accordance with federal regulations that includes recurring training as well as policies and procedures that address physical security, electronic security, and day-to-day operations.

Review of Medical Records

To successfully complete the study, the HSAG project lead worked with the Case Review Team (CRT) beginning with the methodology phase. The CRT was involved in the tool design phase, as well as tool testing to ensure that the abstracted data were complete and accurate. Based on the study methodology, clinical guidelines, and the tool design/testing results, the CRT drafted an abstraction instruction document specific to the study for training. Concurrently with record procurement activities, the CRT trained its review staff on specific study protocols and conducted interrater reliability and rater-to-standard testing. All reviewers were required to achieve a 95 percent accuracy rate prior to reviewing medical records and collecting data for the study. Interrater reliability among reviewers, as well as reviewer accuracy, were evaluated regularly throughout the study. Issues and decisions raised during this evaluation process were documented in the abstraction instruction document and communicated to all reviewers in a timely manner.

During the MRR activity, HSAG's trained reviewers collected and documented findings in an HSAG-designed electronic data collection tool. The tool was designed with edits to assist in the accuracy of data collection. The validation included a review of specific data elements identified in sample cases and compared to corresponding documentation in the medical record.

HSAG's trained reviewers first verified whether the sampled date of service from HFS' encounter data could be found in the customer's medical record. If so, the reviewers documented that the date of service was valid; if not, the reviewers reported the date of service as a medical record omission. The reviewers then reviewed the services provided on the selected date of service and validated the data elements listed in Table 2-1. Reviewers entered all findings into the electronic tool to ensure data integrity.

Study Indicators

Once the MRR was completed, HSAG analysts exported information collected from the electronic tool, reviewed the data, and conducted the analysis. Table 2-3 displays the study indicators that HSAG used to report the MRR results.

Table 2-3—Study Indicators

Study Indicator	Denominator	Numerator
Medical Record Procurement Status		
Medical Record Procurement Rate: Percentage of submitted medical records and the reasons for missing records.	Total number of requested sample cases.	Number of requested sample cases with medical records submitted for the sampled date of service.
Encounter Data Completeness		
Medical Record Omission Rate: Percentage of data elements (e.g., Date of Service) identified in HFS' data warehouse that were not found in the customers' medical records. HSAG calculated the study indicator for each data element listed in Table 2-1.	Total number of data elements (e.g., Date of Service) identified in HFS' data warehouse (i.e., based on the sample date of service that is found in HFS' data warehouse).	Number of data elements (e.g., Date of Service) in the denominator not found in the medical records.
Encounter Data Omission Rate: Percentage of data elements (e.g., Diagnosis Code) identified in customers' medical records that were not found in HFS' data warehouse. HSAG calculated the study indicator for each data element listed in Table 2-1.	Total number of data elements (e.g., Diagnosis Code) identified in customers' medical records (i.e., based on the medical records procured for the sample date of service).	Number of data elements (e.g., Diagnosis Code) in the denominator not found in HFS' data warehouse.
Encounter Data Accuracy		
Diagnosis Code Accuracy: Percentage of diagnosis codes supported by the medical records and reasons for inaccuracy.	Total number of diagnosis codes that met the following two criteria:	Number of diagnosis codes supported by the medical records.

Study Indicator	Denominator	Numerator
	• For dates of service that exist in both HFS' encounter data and the medical records. • Diagnosis codes present for both HFS' encounter data and the medical records.	
Procedure Code Accuracy: Percentage of procedure codes supported by the medical records and reasons for inaccuracy.	Total number of procedure codes that met the following two criteria: • For dates of service that exist in both HFS' encounter data and the medical records. • Procedure codes present for both HFS' encounter data and the medical records.	Number of procedure codes supported by the medical records.
Procedure Code Modifier Accuracy: Percentage of procedure code modifiers supported by the medical records.	Total number of procedure code modifiers that met the following two criteria: • For dates of service that exist in both HFS' encounter data and the medical records. • Procedure code modifiers present for both HFS' encounter data and the medical records.	Number of procedure code modifiers supported by the medical records.
Revenue Code Accuracy: Percentage of revenue codes supported by the medical records.	Total number of revenue codes that met the following two criteria: • For dates of service that exist in both HFS' encounter data and the medical records. • Revenue codes present for both HFS' encounter data and the medical records.	Number of revenue codes supported by the medical records.
All-Element Accuracy Rate: Percentage of dates of service present in both HFS' encounter data and the medical records with the same values for all data elements listed in Table 2-1.	Total number of dates of service that are in both HFS' encounter data and the medical records.	**Outpatient Services:** The number of dates of service in the denominator with the same diagnosis codes, procedure codes, procedure code modifiers, and revenue codes for a given date of service.

3. Medical Record Review Results

Background

Medical and clinical records are considered the "gold standard" for documenting Medicaid customers' access to and quality of services. The MRR assessed data quality by investigating the completeness and accuracy of HFS' encounters compared to the information documented in the corresponding Medicaid customers' medical records.

This section presents findings from HSAG's MRR to examine the extent to which services documented in medical records were not present in the encounter data (i.e., encounter data omission), as well as the extent to which services documented in the encounter data were not present in the customers' corresponding medical records (i.e., medical record omission).

This section also presents findings from HSAG's evaluation of accuracy of diagnosis codes, procedure codes, procedure code modifiers, and revenue codes submitted by the health plans' contracted providers to the health plans and consequently submitted to HFS based on documentation contained in customers' medical records.

Medical Record Procurement Status

As described in the Overview and Methodology section, the final sample in the evaluation consisted of 411 randomly selected customers who had an eligible outpatient institutional service for each health plan.

Sampled encounters for which a corresponding medical record was not submitted were included in the analysis to underscore the impact that these non-submissions had on key data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) associated with encounter data completeness. For example, when no medical record was submitted for an encounter based on the requested date of service, the subsequent diagnosis code(s), procedure code(s), procedure code modifier(s), and revenue code(s) associated with the date of service were treated as medical record omissions. Therefore, a health plan with a lower medical record submission rate would be expected to have a higher (i.e., poorer) medical record omission rate for each key data element.

Table 3-1 shows the medical record procurement status for each health plan, detailing the number of medical records requested and the number and percentage of medical records submitted, and the number and percentage of records reviewed.

Table 3-1—Medical Record Procurement Status: Requested Date of Service

Health Plan	Number of Records Requested	Submitted Records		Reviewed Records	
		Number	Percent	Number	Percent
Aetna	411	396	96.4%	396	100%
BCBSIL	411	410	99.8%	410	100%
CountyCare	411	399	97.1%	399	100%
Meridian	411	364	88.6%	363	99.7%
Molina	411	337	82.0%	337	100%
YouthCare	411	366	89.1%	366	100%
All Health Plans	**2,466**	**2,272**	**92.1%**	**2,271**	**>99.9%**

Key Findings: Table 3-1

- Health plans procured 92.1 percent of all sampled services.
- BCBSIL had the highest medical record procurement rate (99.8 percent).
- Three health plans had procurement rates less than 90.0 percent: Meridian (88.6 percent), Molina (82.0 percent), and YouthCare (89.1 percent).
- HSAG reviewed all submitted medical records except for one, resulting in a review rate greater than 99.9 percent across all health plans. HSAG did not review one record Meridian submitted because the requested date of service was not included in its submission.

Table 3-2 highlights the major reasons medical record documentation was not submitted across all health plans. Detailed tables for each health plan are provided in the health plan-specific appendices.

Table 3-2—Medical Record Non-Submission Reasons: Requested Date of Service

Non-Submission Reason	All Health Plans	
	Number	Percent
Non-responsive provider or provider did not respond in a timely manner	131	67.5%
Customer was a patient of this facility; however, no documentation was available for requested date of service	20	10.3%
Other	16	8.2%
Customer was not a patient of this facility	15	7.7%
Medical record was not located at this facility	11	5.7%
Provider refused to release records	1	0.5%
Total*	**194**	**100%**

*The sum of rates from all non-submission reasons may not equal 100 percent due to rounding.

Key Findings: Table 3-2

- Across all health plans, about 8.0 percent of medical records were not procured. Nearly two-thirds of non-procured records were due to non-responsive providers or providers not responding in a timely manner.
- Notably, 10.3 percent of non-procured records were due to the facility not having documentation for the requested date of service.
- "Other" reasons health plans were unable to procure medical records commonly included a practice being unable to retrieve records after a data breach or a third-party agency requesting payment.

Encounter Data Completeness

HSAG evaluated encounter data completeness by identifying differences between the key data elements outlined in Table 2-1 from HFS' encounter data and the corresponding customers' records submitted for the analysis. Medical record omission and encounter data omission represent two aspects of encounter data completeness through their identification of vulnerabilities in the processing of claims documentation and communication among providers, health plans, and HFS.

A medical record omission occurs when an encounter data element is not supported by documentation in a customer's medical record, or the medical record was not submitted. Medical record omissions suggest opportunities for improvement within the provider's internal processes, such as billing and record documentation. For medical record omissions, the denominator is the number of sampled key data elements, and the numerator is the sum of the number of submitted medical records with key data elements that do not match the encounter data plus the number of key data elements from medical records that health plans did not submit.

An encounter data omission occurs when an encounter data element is documented in a customer's medical record but is not present in HFS' encounter data. Encounter data omissions also suggest opportunities for improvement in the areas of submission of claims and encounters and/or the transmission of medical service data between providers, health plans, and HFS. For encounter data omissions, the denominator is the number of key data elements identified in the medical records, and the numerator is the number of key data elements with no evidence of submission in the encounter data.

HSAG evaluated the medical record omission and the encounter data omission rates for each health plan using the date of service selected by HSAG.

In Table 3-3 through Table 3-7, HSAG classified the medical record omission and encounter data omission rates based on the following:

- High performance: Rates equal to or less than 10.0 percent.
- Low performance: Rates greater than 10.0 percent, which are in red text and marked with a caret (^) symbol.

Lower completeness rates for each data element indicate better performance.

Date of Service Completeness

Table 3-3 displays the percentage of dates of service identified in the encounter data that were not supported by the customers' medical records (i.e., medical record omission). HSAG conducted the analyses at the date of service level.

Table 3-3—Medical Record Omission for Date of Service

Health Plan	Medical Record Omission	
	Date of Service Identified in Encounter Data	Percent Not Supported by Customers' Medical Records*
Aetna	411	3.6%
BCBSIL	411	0.2%
CountyCare	411	2.9%
Meridian	411	11.7%^
Molina	411	18.0%^
YouthCare	411	10.9%^
All Health Plans	**2,466**	**7.9%**

*Lower rates indicate better performance.
^Red text indicates rates greater than 10.0 percent.

Key Findings: Table 3-3

- Overall, 7.9 percent of dates of service in the encounter data were not supported by the submitted medical records (i.e., medical record omission). Rates across health plans varied widely, ranging from 0.2 percent for BCBSIL to 18.0 percent for Molina.
- Meridian, Molina, and YouthCare had the highest medical record omission rates for the *Date of Service* data element, with rates exceeding 10.0 percent. Since the medical record omission rate is linked to the procurement rate, all non-submitted records and submitted records that were not reviewed contributed to this finding.

Diagnosis Code Completeness

Table 3-4 displays the percentage of diagnosis codes identified in the encounter data that had no supporting documentation in the customers' medical records (i.e., medical record omission) and the percentage of diagnosis codes from the customers' medical records that were not found in the encounter data (i.e., encounter data omission). HSAG conducted the analysis at the diagnosis code level.

Table 3-4—Medical Record Omission and Encounter Data Omission Rates for Diagnosis Code

Health Plan	Medical Record Omission		Encounter Data Omission	
	Number of Diagnosis Codes Identified in Encounter Data	Percent Not Supported by Customers' Medical Records*	Number of Diagnosis Codes Identified in Customers' Medical Records	Percent Not Found in Encounter Data*
Aetna	1,118	5.5%	1,058	0.1%
BCBSIL	1,053	1.8%	1,036	0.2%
CountyCare	1,211	6.4%	1,135	0.1%
Meridian	1,079	14.8%^	921	0.2%
Molina	1,063	20.5%^	847	0.2%
YouthCare	927	10.4%^	831	0.0%
All Health Plans	**6,451**	**9.8%**	**5,828**	**0.1%**

*Lower rates indicate better performance.
^Red text indicates rates greater than 10.0 percent.

Key Findings: Table 3-4

- Overall, 9.8 percent of diagnosis codes in the encounter data were not supported by the submitted medical records (i.e., medical record omission), with health plan rates ranging from 1.8 percent (BCBSIL) to 20.5 percent (Molina).
  - The medical record omission rate for the *Diagnosis Code* data element was partially influenced by medical record non-submission and, consequently, by medical record omission for the *Date of Service* data element. When no medical records were submitted for a sampled date of service, all diagnosis codes associated with that date of service were treated as medical record omissions.
  - Among records for which diagnosis codes were considered medical record omissions, 77.5 percent were due to HSAG not receiving medical records or the medical records not supporting the sampled date of service.
  - For cases with submitted and reviewed medical records, the diagnosis codes most frequently included in the encounter data, but not supported by the customers' medical records were:
    - Z20.822—Contact with and (suspected) exposure to COVID-19 (frequency = 6)
    - Z00.129—Encounter for routine child health examination without abnormal findings (frequency = 5)
    - F17.210—Nicotine dependence, cigarettes, uncomplicated (frequency = 3)
    - I10—Essential (primary) hypertension (frequency = 3)
    - J45.909—Unspecified asthma, uncomplicated (frequency = 3)
    - Z23—Encounter for immunization (frequency = 3)
  - Other potential contributors to diagnosis code medical record omission included:

  - Data entry errors resulting in an incorrect diagnosis code being transmitted to the health plan.
  - The physician may have noted the diagnosis, but the clinical note was not finalized before the diagnosis code was sent to the health plan.

- Overall, 0.1 percent of the diagnosis codes identified in the medical records were not found in the encounter data (i.e., encounter data omission). All health plans had rates equal to or less than 0.2 percent.
  - While the overall encounter data omission rate was very low, potential contributing factors may have included:
    - Coding errors from provider billing offices.
    - Differences related to HFS-specific billing and reimbursement guidelines.
  - For cases with medical records available to validate the date of service, the diagnosis code most frequently included in the customers' medical records but not found in HFS' encounter data was:
    - Z23—Encounter for immunization (frequency = 6).

Procedure Code Completeness

Table 3-5 displays the percentage of procedure codes identified in the encounter data that had no supporting documentation in the customers' medical records (i.e., medical record omission) and the percentage of procedure codes from the customers' medical records that were not found in the encounter data (i.e., encounter data omission). HSAG conducted the analysis at the procedure code level.

Table 3-5—Medical Record Omission and Encounter Data Omission Rates for Procedure Code

Health Plan	Medical Record Omission		Encounter Data Omission	
	Number of Procedure Codes Identified in Encounter Data	Percent Not Supported by Customers' Medical Records*	Number of Procedure Codes Identified in Customers' Medical Records	Percent Not Found in Encounter Data*
Aetna	2,036	10.2%^	1,843	0.8%
BCBSIL	1,814	2.6%	1,769	0.1%
CountyCare	1,833	7.0%	1,714	0.6%
Meridian	1,869	17.0%^	1,556	0.3%
Molina	1,780	23.2%^	1,378	0.8%
YouthCare	1,335	13.8%^	1,158	0.6%
All Health Plans	**10,667**	**12.2%^**	**9,418**	**0.5%**

*Lower rates indicate better performance.
^Red text indicates rates greater than 10.0 percent.

Key Findings: Table 3-5

- Overall, 12.2 percent of procedure codes identified in the encounter data were not supported by the customers' medical records (i.e., medical record omission), with rates ranging from 2.6 percent (BCBSIL) to 23.2 percent (Molina).
  - In the analysis, when no medical records were submitted for the sampled date of service, all procedure codes associated with that date of service were treated as medical record omissions. This aligns with the higher medical record omission rates for Meridian, Molina, and YouthCare, all of which submitted less than 90 percent of sampled medical records.
  - Among records for which procedure codes were considered medical record omissions, 64.2 percent were due to HSAG not receiving medical records or the medical records not supporting the sampled date of service.
  - For cases with submitted medical records, the procedure codes most frequently included in the encounter data but not supported in the customers' medical records were:
    - G0378—Hospital observation service, per hour (frequency = 20)
    - G0379—Direct admission of patient for hospital observation care (frequency = 20)
    - 80053—Comprehensive Metabolic Panel (frequency = 12)
    - 85205—Complete Blood Count (CBC) with Automated Differential (frequency = 11)
  - Other potential contributors to procedure code medical record omission included:
    - Providers not documenting the services performed in the medical record, despite submitting the procedure code to the health plan.
    - Providers not performing the service that was submitted to the health plan.
- Overall, 0.5 percent of the procedure codes identified in the medical records were not found in the encounter data (i.e., encounter data omission), with rates ranging from 0.1 percent (BCBSIL) to 0.8 percent (Aetna and Molina).
  - While the overall encounter data omission rate was very low, potential contributing factors may have included:
    - Coding errors from provider billing offices.
    - Differences related to HFS-specific billing and reimbursement guidelines.
  - For cases with medical records available to validate the date of service, procedure codes frequently included in the customers' medical records but not found in HFS' encounter data were:
    - 90471—Immunization Administration for Vaccines/Toxoids, Initial (frequency = 14)
    - 90472—Immunization Administration for Vaccines/Toxoids, Subsequent (frequency = 11)
    - 90460—Immunization administration through 18 years via any route of administration, with counseling by physician (frequency = 6)
    - 90461—Immunization administration through 18 years via any route of administration, each additional vaccine (frequency = 6)

Procedure Code Modifier Completeness

Table 3-6 displays the percentage of procedure code modifiers identified in the encounter data that had no supporting documentation in the customers' medical records (i.e., medical record omission) and the percentage of procedure code modifiers from the customers' medical records that were not found in the encounter data (i.e., encounter data omission). HSAG conducted the analysis at the procedure code modifier level.

Table 3-6—Medical Record Omission and Encounter Data Omission for Procedure Code Modifier

Health Plan	Medical Record Omission		Encounter Data Omission	
	Number of Procedure Code Modifiers Identified in Encounter Data	Percent Not Supported by Customers' Medical Records*	Number of Procedure Code Modifiers Identified in Customers' Medical Records	Percent Not Found in Encounter Data*
Aetna	588	16.0%^	494	0.0%
BCBSIL	425	4.9%	405	0.2%
CountyCare	450	8.2%	413	0.0%
Meridian	358	21.8%^	280	0.0%
Molina	370	22.4%^	287	0.0%
YouthCare	338	17.8%^	280	0.7%
All Health Plans	**2,529**	**14.7%^**	**2,159**	**0.1%**

*Lower rates indicate better performance.
^Red text indicates rates greater than 10.0 percent.

Key Findings: Table 3-6

- Overall, 14.7 percent of the procedure code modifiers identified in the encounter data were not supported by the customers' medical records (i.e., medical record omission), with rates ranging from 4.9 percent (BCBSIL) to 22.4 percent (Molina).
  - The overall medical record omission rate for the *Procedure Code Modifier* data element may have been attributed to several factors, including medical record non-submission, for which associated procedure codes and procedure code modifiers were treated as medical record omissions; omitted procedure codes, for which associated procedure code modifiers were also omitted; and providers not documenting evidence related to the modifiers in the medical records despite submitting the modifiers to the health plans.
  - Among records for which procedure code modifiers were considered medical record omissions, 46.1 percent were due to HSAG not receiving medical records or the medical records not supporting the sampled date of service.
  - For cases with medical records available to validate the date of service, the procedure code modifiers most frequently omitted from the customers' medical records were:

  - UD—Medicaid level of care 13, defined by each state (frequency = 57)
  - TC—Technical component (frequency = 50)
  - 25—Significant, separately identifiable evaluation and management (E&M) service by the same physician or other qualified healthcare professional on the same day of the procedure or other service (frequency = 33)

- Overall, 0.1 percent of procedure code modifiers identified in the medical records were not found in HFS' encounter data (i.e., encounter data omission), with rates ranging from 0.0 percent (Aetna, CountyCare, Meridian, and Molina) to 0.7 percent (YouthCare).
  - While the overall encounter data omission rate was very low, potential contributing factors may have included:
    - Procedure codes omitted from the encounter data; therefore, all corresponding procedure code modifiers were treated as encounter data omissions.
    - Provider coding errors or failure to submit procedure code modifiers despite providing the specific services.

Revenue Code Completeness

Table 3-7 displays the percentage of revenue codes identified in the encounter data that had no supporting documentation in the customers' medical records (i.e., medical record omission) and the percentage of revenue codes from the customers' institutional medical records that were not found in the encounter data (i.e., encounter data omission). HSAG conducted the analysis at the revenue code level.

Table 3-7—Medical Record Omission and Encounter Data Omission Rates for Revenue Code

Health Plan	Medical Record Omission		Encounter Data Omission	
	Number of Revenue Codes Identified in Encounter Data	Percent Not Supported by Customers' Medical Records*	Number of Revenue Codes Identified in Customers' Medical Records	Percent Not Found in Encounter Data*
Aetna	2,228	10.0%	2,006	<0.1%
BCBSIL	2,009	2.8%	1,953	0.0%
CountyCare	2,053	7.0%	1,910	0.1%
Meridian	2,062	16.7%^	1,718	0.0%
Molina	1,963	24.8%^	1,477	0.0%
YouthCare	1,471	13.6%^	1,271	0.0%
All Health Plans	**11,786**	**12.3%^**	**10,335**	**<0.1%**

*Lower rates indicate better performance.
^Red text indicates rates greater than 10.0 percent.

Key Findings: Table 3-7

- Overall, 12.3 percent of revenue codes identified in the encounter data were not supported by the customers' medical records (i.e., medical record omission), with rates ranging from 2.8 percent (BCBSIL) to 24.8 percent (Molina).
  - In the analysis, when no medical records were submitted for the sampled date of service, all revenue codes associated with that date of service were treated as medical record omissions. This aligns with the higher medical record omission rates for Meridian, Molina, and YouthCare, all of which submitted less than 90 percent of sampled medical records.
  - Among records for which revenue codes were considered medical record omissions, 64.0 percent were due to HSAG not receiving medical records or the medical records not supporting the sampled date of service.
  - For cases with medical records available to validate the date of service, the revenue codes most frequently omitted from the customers' medical records were:
    - 0636—Pharmacy 025x extension drugs requiring detailed coding (frequency = 85)
    - 0301—Laboratory chemistry (frequency = 63)
    - 0250—Pharmacy general (frequency = 46)
    - 0260—IV therapy general (frequency = 44)
    - 0300—Laboratory general (frequency = 43)
- Overall, less than 0.1 percent of revenue codes identified in the medical records were not found in HFS' encounter data (i.e., encounter data omission), with rates ranging from 0.0 percent (BCBSIL, Meridian, Molina, and YouthCare) to 0.1 percent (CountyCare).

Encounter Data Accuracy

HSAG evaluated encounter data accuracy for dates of service that existed in both HFS' encounters and the corresponding customers' medical records, with values present in both data sources for the evaluated data element. HSAG considered the encounter data elements accurate if documentation in the medical record supported the values contained in HFS' encounter data.

In Table 3-8 through Table 3-12, HSAG classified the accuracy rates based on the following:

- High performance: Rates equal to or greater than 90.0 percent.
- Low performance: Rates less than 90.0 percent, which are in red text and marked with a caret (^) symbol.

Higher accuracy rates for each data element indicate better performance.

Diagnosis Code Accuracy

Table 3-8 displays the percentage of diagnosis codes associated with validated dates of service from the encounter data that were correctly coded based on customers' medical records.

Errors found in the diagnosis coding were separated into two categories:

- **Inaccurate Coding:** Occurred when the diagnosis code submitted by the provider should have been selected from a different family of codes based on the documentation in the medical record (e.g., R51 [headache] versus the documentation supporting G43 [migraine]).
- **Specificity Errors:** Occurred when the documentation supported a more specific code than was listed in HFS' encounter data (e.g., unspecified abdominal pain [R10.9] when the provider noted during the exam that the abdominal pain was in the right lower quadrant [R10.31]). Specificity errors also include diagnosis codes that do not have the required fourth or fifth digit.

Inaccurate diagnosis coding and specificity errors in the medical records were collectively considered as the denominator for the error type rates in Table 3-8. Detailed tables for each health plan are provided in the health plan-specific appendices.

Table 3-8—Accuracy Results and Error Types for Diagnosis Code

Health Plan	Accuracy Results		Error Type Rate[1]	
	Number of Diagnoses Present in Both Sources	Accuracy Rate	Percent From Inaccurate Coding	Percent From Specificity Error
Aetna	1,057	100%	—	—
BCBSIL	1,034	99.9%	0.0%	100%
CountyCare	1,134	99.8%	100%	0.0%
Meridian	919	100%	—	—
Molina	845	99.9%	100%	0.0%
YouthCare	831	100%	—	—
All Health Plans	**5,820**	**99.9%**	**75.0%**	**25.0%**

[1] Inaccurate codes and codes with specificity errors in the medical records were collectively considered the denominator for the error type rates.
"—" indicates the error type rate was not applicable since all codes were coded accurately.

Key Findings: Table 3-8

- Overall, 99.9 percent of diagnosis codes were accurate when they were present in both the encounter data and the medical records, with each health plan having rates of at least 99.8 percent.
- Aetna, Meridian, and YouthCare each had a 100 percent accuracy rate.

- Among all health plans, 75.0 percent of accuracy errors were due to discrepancies between submitted codes and National Correct Coding Initiative (NCCI) coding standards rather than specificity errors. BCBSIL was the only health plan with accuracy errors linked to specificity errors, representing 25.0 percent of all accuracy errors across health plans.

Procedure Code Accuracy

Table 3-9 displays the percentage of procedure codes associated with validated dates of service from the encounter data that were correctly coded based on customers' medical records. In addition, errors found in the procedure coding were separated into three categories:

- **Inaccurate coding:** The documentation in the medical records did not support the procedure codes billed, or an incorrect procedure code was used in the encounter for scenarios other than the two mentioned above.
- **Higher level of service in the medical record:** E&M codes documented in the medical record reflected a higher level of service performed by the provider than the E&M codes submitted in the encounter. For example, a patient was seen by a physician for a follow-up appointment for a worsening earache. The physician noted all key elements in the patient's medical record. The physician also changed the patient's medication during this visit. The encounter submitted showed a procedure code of 99212 (established patient self-limited or minor problem). With all key elements documented and a worsening condition, this visit should have been coded with a higher level of service such as 99213 (established patient low-to-moderate severity).
- **Lower level of service in the medical record:** E&M codes documented in the medical record reflected a lower level of service than the E&M codes submitted in the encounter data. For example, a provider's notes omitted critical documentation elements of the E&M service, or the problem treated did not warrant a high-level visit. This would apply to a patient follow-up visit for an earache that was improving, required no further treatment, and for which no further problems were noted. The submitted encounter showed a procedure code of 99213 (established patient low-to-moderate severity). However, with an improving condition, the medical record describes a lower level of service, or 99212 (established patient self-limited or minor problem).

Inaccurate coding, codes with higher levels of service, and codes with lower levels of service in medical records were collectively considered as the denominator for the error type rates in Table 3-9. Detailed tables for each health plan are provided in the health plan-specific appendices.

Table 3-9—Accuracy Results and Error Types for Procedure Code

Health Plan	Accuracy Results		Error Type Rate[1]		
	Number of Procedure Codes Present in Both Sources	Accuracy Rate	Percent From Inaccurate Coding	Percent From Higher Levels of Service in Medical Records	Percent From Lower Levels of Service in Medical Records
Aetna	1,829	100%	—	—	—

Health Plan	Accuracy Results		Error Type Rate[1]		
	Number of Procedure Codes Present in Both Sources	Accuracy Rate	Percent From Inaccurate Coding	Percent From Higher Levels of Service in Medical Records	Percent From Lower Levels of Service in Medical Records
BCBSIL	1,767	99.9%	100%	0.0%	0.0%
CountyCare	1,704	99.9%	100%	0.0%	0.0%
Meridian	1,551	100%	—	—	—
Molina	1,367	99.9%	50.0%	0.0%	50.0%
YouthCare	1,151	99.8%	100%	0.0%	0.0%
All Health Plans	**9,369**	**99.9%**	**85.7%**	**0.0%**	**14.3%**

[1] Inaccurate codes, codes with a higher level of service, and codes with a lower level of service in the medical records were collectively considered the denominator for the error type rates.
"—" indicates the error type rate was not applicable since all codes were coded accurately.

Key Findings: Table 3-9

- Across all health plans, 99.9 percent of procedure codes were accurate when present in both HFS' encounter data and the medical records. Accuracy rates were similar across health plans, with each health plan having a rate of at least 99.8 percent.
- Aetna and Meridian each had a 100 percent accuracy rate.
- For procedure code accuracy, 85.7 percent of identified errors were due to inaccurate codes. The remaining 14.3 percent of identified errors resulted from providers submitting codes for a higher level of service than was supported and documented in the medical records (i.e., the submitted procedure code was considered inaccurate because the medical record supported a lower level of service). Molina was the only health plan with errors related to this finding.

Procedure Code Modifier Accuracy

Table 3-10 displays the percentage of procedure code modifiers associated with validated dates of service from the encounter data that were correctly coded based on customers' medical records. The errors for this data element could not be separated into subcategories and therefore are not presented in Table 3-10. Example errors for this data element include instances wherein the procedure code modifier left (LT) was used instead of right (RT) to indicate the side of the body on which a service or procedure was performed, or modifier 95 or modifier GT (i.e., services were delivered via an interactive audio and video telecommunications systems) was present, but the documentation did not support telemedicine services.

Table 3-10—Accuracy Results for Procedure Code Modifier

Health Plan	Number of Procedure Code Modifiers Present in Both Sources	Accuracy Rate
Aetna	494	100%
BCBSIL	404	100%
CountyCare	413	100%
Meridian	280	100%
Molina	287	100%
YouthCare	278	100%
All Health Plans	**2,156**	**100%**

Key Findings: Table 3-10

- Overall, 100 percent of procedure code modifiers were accurate when present in both HFS' encounter data and the submitted medical record.

Revenue Code Accuracy

Table 3-11 displays the percentage of revenue codes associated with validated dates of service from the encounter data that were correctly coded based on customers' medical records. The errors for this data element could not be separated into subcategories and therefore are not presented in Table 3-11. Example errors for this data element include instances in which revenue code 0110 (Private Room and Board [one bed]) was used instead of 0120 (semi-private room and board [two beds with two patients]) to indicate a shared room, or revenue code 0200 (Intensive Care Unit) was present, but the documentation did not support intensive care unit services.

Table 3-11—Accuracy Results for Revenue Code

Health Plan	Number of Revenue Codes Present in Both Sources	Accuracy Rate
Aetna	2,005	100%
BCBSIL	1,953	100%
CountyCare	1,909	100%
Meridian	1,718	100%
Molina	1,477	100%
YouthCare	1,271	100%
All Health Plans	**10,333**	**100%**

Key Findings: Table 3-11

- Overall, 100 percent of revenue codes were accurate when present in both HFS' encounter data and the submitted medical record.

All-Element Accuracy

Table 3-12 displays the percentage of dates of service present in both HFS' encounter data and the medical records with the same values for all key data elements listed in Table 2-1. The denominator is the total number of dates of service that matched in both data sources. The numerator is the total number of dates of service with matching values for all key data elements. Higher all-element accuracy rates indicate greater overall completeness and accuracy of HFS' encounter data when compared to the medical records.

It is important to note that the denominator for the element accuracy rate for each data element was defined differently than the denominator for the all-element accuracy rate. Therefore, the all-element accuracy rate could not be derived from the accuracy rate for each data element. Using diagnosis code as an example, each diagnosis code was assigned to one of the four mutually exclusive categories: medical record omission, encounter data omission, accurate, or inaccurate. When evaluating the element accuracy for each key data element, the denominator is the number of values in the categories of accurate and inaccurate. However, for the all-element accuracy rate, the denominator is the total number of dates of service that matched between the medical records and encounter data, and the numerator is the total number of dates of service with the same values for all key data elements. Therefore, for each date of service, if any of the data elements were in the medical record omission, encounter data omission, or inaccurate categories, the date of service was not counted in the numerator for the all-element accuracy rate.

Table 3-12—All-Element Accuracy

Health Plan	Number of Dates of Service Present in Both Sources	All-Element Accuracy Rate
Aetna	396	79.0%
BCBSIL	410	91.2%
CountyCare	399	86.2%
Meridian	363	88.4%
Molina	337	91.1%
YouthCare	366	90.4%
All Health Plans	**2,271**	**87.6%**

Note: The denominator for the element accuracy rate for each data element was defined differently from the denominator for the all-element accuracy rate. Therefore, the all-element accuracy rate could not be derived from the accuracy rate from each data element.

Key Findings: Table 3-12

- Overall, 87.6 percent of dates of service present in both data sources (i.e., encounter data and medical records) contained accurate values for all key data elements—*Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*. Rates ranged from 79.0 percent (Aetna) to 91.2 percent (BCBSIL).
- Unlike Meridian, Molina, and YouthCare, for which lower procurement rates contributed to higher medical record omission rates across all data elements, Aetna had a high medical record procurement rate but elevated medical record omission rates for two data elements (*Procedure Code* and *Procedure Code Modifier*). Since the all-element accuracy rate is based only on reviewed records, Meridian, Molina, and YouthCare had higher all-element accuracy rates than Aetna. This suggests that Aetna's lower all-element accuracy rate was primarily driven by discrepancies between the encounter data and the submitted medical records, rather than by low record procurement.

4. Discussion

Conclusions

The MRR activity evaluated encounter data completeness and accuracy through a review of medical records for outpatient institutional services rendered from July 1, 2023, through June 30, 2024. The evaluation focused on these key data elements: *Date of Service, Diagnosis Code, Procedure Code, Procedure Code Modifier*, and *Revenue Code.*

To report the MRR results, HSAG developed the following study indicators for each key data element:

- **Medical Record Omission Rate:** Percentage of data elements (e.g., *Date of Service*) identified in HFS' encounter data that were not found in the customers' medical records.
- **Encounter Data Omission Rate:** Percentage of data elements (e.g., *Date of Service*) identified in customers' medical records that were not found in HFS' encounter data.
- **Accuracy Rate of Coding:** Percentage of diagnosis codes, procedure codes, procedure code modifiers, and revenue codes associated with validated dates of service from HFS' encounter data that were correctly coded based on the customers' medical record.

Medical Record Procurement Status

HSAG randomly selected a total of 2,466 cases (or 411 per health plan) for evaluation. The overall medical record submission rate was 92.1 percent. Molina had the lowest submission rate at 82.0 percent and BCBSIL had the highest at 99.8 percent, a difference of 17.8 percentage points. Finally, among non-procured medical records, 67.5 percent were due to non-responsive providers or providers not responding in a timely manner. These results may indicate a need for provider education regarding contractual requirements and timely submission of requested medical record documentation.

Encounter Data Completeness

Table 4-1 displays the medical record and encounter data omission rates for each key data element.

Table 4-1—Encounter Data Completeness Summary

Key Data Element	Medical Record Omission*		Encounter Data Omission*	
	All Health Plan Rate	Health Plan Range	All Health Plan Rate	Health Plan Range
Date of Service	7.9%	0.2%–18.0%	—	—
Diagnosis Code	9.8%	1.8%–20.5%	0.1%	0.0%–0.2%
Procedure Code	12.2%^	2.6%–23.2%	0.5%	0.1%–0.8%

Key Data Element	Medical Record Omission*		Encounter Data Omission*	
	All Health Plan Rate	Health Plan Range	All Health Plan Rate	Health Plan Range
Procedure Code Modifier	14.7%^	4.9%–22.4%	0.1%	0.0%–0.7%
Revenue Code	12.3%^	2.8%–24.8%	<0.1%	0.0%–0.1%

* Lower rates indicate better performance.
^Red text indicates rates greater than 10.0 percent.
"—" denotes that the measure was not applicable to a given data element.

HSAG evaluated encounter data completeness using two indicators (medical record omission and encounter data omission) across five key data elements: *Date of Service*, *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*. Cases without submitted medical records contributed directly to medical record omissions for all key data elements; therefore, health plans with lower submission rates generally exhibited higher medical record omission rates for each one.

Overall, as displayed in Table 4-1, the medical record omission rate exceeded 10 percent for three data elements (*Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*). The health plan variations were high for the medical record omission rates, with the ranges between health plans consistently exceeding 17 percentage points. Molina consistently had the highest medical record omission rates among all the plans, which is closely linked to it having the lowest medical record submission rate (82.0 percent). Also, while Aetna had a medical record submission rate greater than 90 percent, the medical record omission rates for *Procedure Code* and *Procedure Code Modifier* were still higher than 10 percent.

As determined during the review, some common reasons for medical record omission included:

- The medical record was not submitted for the study.
- The provider did not document the services performed in the medical record despite submitting claims or encounters.
- The provider did not provide the service(s) found in the encounter data.

The encounter data omission rates revealed that most key data elements, when found in the medical records, were well supported by the encounter data extracted from HFS' data warehouse. As displayed in Table 4-1, all data elements had overall omission rates of 0.5 percent or less. Additionally, the health plan ranges for encounter data omissions were narrower than the medical record omission ranges, with ranges not exceeding 0.7 percentage points.

The potential reasons for encounter data omission included the following:

- The provider's billing office made a coding error or did not submit the procedure codes or modifiers despite performing the specific services.
- Differences related to HFS-specific billing and reimbursement guidelines.

- A lag occurred between the provider's performance of the service and the submission of the encounter to the health plan and/or HFS.

Encounter Data Accuracy

Table 4-2 displays the element accuracy rates for each key data element and the all-element accuracy rates.

Table 4-2—Encounter Data Accuracy Summary

Key Data Element	All Health Plan Rate	Health Plan Range	Error Type
Diagnosis Code	99.9%	99.8%–100%	Inaccurate Code: 75.0% Specificity Error: 25.0%
Procedure Code	99.9%	99.8%–100%	Inaccurate Code: 85.7% Higher Level of Service in Medical Record: 0.0% Lower Level of Service in Medical Record: 14.3%
Procedure Code Modifier	100%	100%	—
Revenue Code	100%	100%	—
All-Element Accuracy*	87.6%^	79.0%–91.2%	—

* The denominator for the element accuracy rate for each data element was defined differently from the denominator for the all-element accuracy rate. Therefore, the all-element accuracy rate cannot be derived from the accuracy rate from each data element.
"—" denotes that the error type analysis was not applicable to a given data element.
^Red text indicates rates lower than 90.0 percent.

In general, when evaluated independently, the key data elements present in both HFS' encounter data and the medical records were accurate. As displayed in Table 4-2, 99.9 percent of diagnosis codes and procedure codes, and 100 percent of procedure code modifiers and revenue codes, were accurate when present in both sources.

The accuracy rate for the *Diagnosis Code* and *Procedure Code* data elements can be affected by different types of errors. For the *Diagnosis Code* data element, 75.0 percent of the identified errors were due to inaccurate coding, while 25.0 percent were due to specificity. For the *Procedure Code* data element, 85.7 percent of identified errors were due to inaccurate coding, and 14.3 percent resulted from providers submitting codes for a higher level of service than was supported by the customers' medical records.

Overall, 87.6 percent of dates of service present in both data sources accurately represented all four data elements (i.e., *Diagnosis Code*, *Procedure Code, Procedure Code Modifier*, and *Revenue Code*) when compared with the customers' medical records. At the health plan level, the all-element accuracy rate ranged from 79.0 percent (Aetna) to 91.2 percent (BCBSIL).

Recommendations

To improve the quality of the health plans' encounter data submissions, HSAG offers the following recommendations to assist HFS and the health plans in addressing opportunities for improvement.

- The MRR results indicated that the physician visit encounters submitted by the health plans and maintained in HFS' data warehouse were generally complete and accurate when compared to the customers' medical records, with few exceptions. As such, HSAG recommends that HFS continue its current efforts to monitor encounter data submissions and address any identified data issues with the health plan's encounter data submissions.
- The results of the record review are dependent on the health plans' submission of complete and accurate supporting documentation. To improve medical record submission, HSAG recommends that HFS establish record submission standards. These standards may help ensure that health plans are more responsive in procuring requested records, leading to more representative results of the actual documentation available.
- The overall medical record omission rates for three of the five key data elements were 10.0 percent or higher. Although low procurement rates largely contributed to these higher medical record omission rates, HSAG could not attribute all medical record omissions to non-procured records. Therefore, the health plans should investigate the root causes of these medical record omissions and consider performing periodic MRRs of submitted claims to verify appropriate coding and data completeness, where needed. Findings from these reviews should be used to provide targeted education and training to providers on encounter data submissions, medical record documentation, and coding practices.

Study Limitations

When evaluating the findings presented in this report, it is important to understand the following limitations associated with this study:

- HSAG used the final versions of all claims (i.e., claims with a claim frequency code other than "8") in the analysis to exclude adjudication history. As such, if a claim line contained a claim frequency code of "8" and had not yet been finalized, the values associated with that line were not included in the analysis.
- Accurate evaluation of the completeness and accuracy of HFS' encounter data depends on the health plans' ability to procure customers' complete and accurate medical records. Therefore, validation results may have been affected by a health plan's inability to successfully obtain medical records from its provider network (e.g., non-responsive provider) or by the submission of incomplete medical records (e.g., submission of a visit summary instead of the complete medical record).
- The study findings of the MRR relied solely on the documentation contained in customers' medical records; therefore, the results are dependent on the overall quality of physicians' medical records. For example, a physician may have performed a service but may not have documented it in the

customer's medical record. As such, HSAG would have counted this occurrence as a negative finding. This study was unable to distinguish cases in which a service was not performed from those in which a service was performed but not documented in the medical record.

- The findings from this study are associated with encounters with dates of service from July 1, 2023, to June 30, 2024. Therefore, the results may not reflect the current quality of HFS' encounter data.
- The findings from this study are associated with outpatient institutional encounters and may not be applicable to other claim types.

Appendix A. Results for Aetna Better Health

This appendix contains detailed MRR results, strengths, opportunities for improvement, and recommendations for Aetna Better Health of Illinois (Aetna).

Medical Record Review Results

This section presents findings from the MRR results of the outpatient institutional encounter data maintained by HFS and the health plan.

Medical Record Procurement Status

Table A-1 shows the medical record procurement status detailing the number of sampled medical records requested, the number and percentage of medical records submitted, and the number and percentage of records reviewed for the sampled date of service.

Table A-1—Medical Record Procurement Status: Requested Date of Service

Number of Records Requested	Submitted Records		Reviewed Records	
	Number	Percent	Number	Percent
411	396	96.4%	396	100%

Table A-2 highlights the major reasons medical record documentation was not submitted for the requested date of service.

Table A-2—Medical Record Non-Submission Reasons: Requested Date of Service

Non-Submission Reason	Number	Percent
Customer was a patient of this facility; however, no documentation was available for requested date of service	8	53.3%
Customer was not a patient of this facility	5	33.3%
Non-responsive provider or provider did not respond in a timely manner	2	13.3%
Total*	**15**	**100%**

*The sum of rates from all non-submission reasons may not equal 100 percent due to rounding.

Encounter Data Completeness

Table A-3 displays the encounter data completeness for key data elements.

Table A-3—Encounter Data Completeness

Data Element	Medical Record Omission		Encounter Data Omission	
	Denominator	Percent*	Denominator	Percent*
Date of Service	411	3.6%	—	—
Diagnosis Code	1,118	5.5%	1,058	0.1%
Procedure Code	2,036	10.2%^	1,843	0.8%
Procedure Code Modifier	588	16.0%^	494	0.0%
Revenue Code	2,228	10.0%	2,006	<0.1%

* Lower rates indicate better performance.
"—" denotes that the encounter data omission analysis was not applicable to the data element.
^Red text indicates rates greater than 10.0 percent.

Data Element Accuracy

Table A-4 displays the percentage of key data elements associated with validated dates of service from the encounter data that were correctly coded based on the customers' medical records.

Table A-4—Encounter Data Accuracy

Data Element	Denominator	Percent	Error Type Percentages
Diagnosis Code	1,057	100%	—
Procedure Code	1,829	100%	—
Procedure Code Modifier	494	100%	—
Revenue Code	2,005	100%	—
All-Element Accuracy*	396	79.0%	—

"—" Denotes the error type analysis was not applicable to the data element.
* The denominator for the element accuracy rate for each data element was defined differently from the denominator for the all-element accuracy rate. Therefore, the all-element accuracy rate cannot be derived from the accuracy rate from each data element.

Conclusions

Based on MRR results, HSAG identified the areas of strength and opportunities for improvement that may pertain to the domains of quality, timeliness, and access to services furnished by the health plan. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts. Table A-5 highlights strengths, opportunities for improvement, and recommendations, as applicable, that were identified from the MRR.

Strengths and Opportunities for Improvement

Table A-5—Key Findings

Strength/ Opportunity for Improvement	Description	Domain(s)
+	**Strength:** Aetna submitted 96.4 percent of the sampled medical records, indicating that the contracted providers are responsive to medical record requests.	
+	**Strength:** The medical record omission rates for three data elements (*Date of Service*, *Diagnosis Code*, and *Revenue Code*) were 10.0 percent or less. This indicates that the encounter data for these data elements were largely supported by the submitted medical records.	
+	**Strength:** The encounter data omission rates for all data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were 0.8 percent or less. This indicates that the submitted records contained information that was largely identified in the encounter data.	
+	**Strength:** When key data elements were present in both the encounter data and the customers' medical records, the accuracy rates for all data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were 100 percent.	
−	**Weakness:** The medical record omission rates for two data elements (*Procedure Code* and *Procedure Code Modifier*) were greater than 10.0 percent. **Recommendations:** HSAG recommends that Aetna investigate the root causes of these findings and consider performing periodic MRRs of submitted claims to verify appropriate coding and data completeness. Findings from these reviews should be shared with providers through periodic education and training on encounter data submissions, medical record documentation, and coding practices.	

Note: = Quality, = Timeliness, = Access

Appendix B. Results for Blue Cross Community Health Plans

This appendix contains detailed MRR results, strengths, opportunities for improvement, and recommendations for Blue Cross Community Health Plans (BCBSIL).

Medical Record Review Results

This section presents findings from the MRR results of the outpatient institutional encounter data maintained by HFS and the health plan.

Medical Record Procurement Status

Table B-1 shows the medical record procurement status detailing the number of sampled medical records requested, the number and percentage of medical records submitted, and the number and percentage of records reviewed for the sampled date of service.

Table B-1—Medical Record Procurement Status: Requested Date of Service

Number of Records Requested	Submitted Records		Reviewed Records	
	Number	Percent	Number	Percent
411	410	99.8%	410	100%

Table B-2 highlights the major reasons medical record documentation was not submitted for the requested date of service.

Table B-2—Medical Record Non-Submission Reasons: Requested Date of Service

Non-Submission Reason	Number	Percent
Provider refused to release records	1	100%
Total	**1**	**100%**

Encounter Data Completeness

Table B-3 displays the encounter data completeness for key data elements.

Table B-3—Encounter Data Completeness

Data Element	Medical Record Omission		Encounter Data Omission	
	Denominator	Percent*	Denominator	Percent*
Date of Service	411	0.2%	—	—
Diagnosis Code	1,053	1.8%	1,036	0.2%
Procedure Code	1,814	2.6%	1,769	0.1%
Procedure Code Modifier	425	4.9%	405	0.2%
Revenue Code	2,009	2.8%	1,953	0.0%

* Lower rates indicate better performance.
"—" denotes that the encounter data omission analysis was not applicable to the data element.

Data Element Accuracy

Table B-4 displays the percentage of key data elements associated with validated dates of service from the encounter data that were correctly coded based on the customers' medical records.

Table B-4—Encounter Data Accuracy

Data Element	Denominator	Percent	Error Type Percentages
Diagnosis Code[1]	1,034	99.9%	Incorrect Code (0.0%) Specificity Error (100%)
Procedure Code[2]	1,767	99.9%	Incorrect Code (100%) Higher Level of Service in Medical Record (0.0%) Lower Level of Service in Medical Record (0.0%)
Procedure Code Modifier	404	100%	—
Revenue Code	1,953	100%	—
All-Element Accuracy*	410	91.2%	—

[1] Inaccurate codes and codes with specificity errors in the medical records were collectively considered the denominator for the error type rates.
[2] Inaccurate codes, codes with a higher level of service, and codes with a lower level of service in the medical records were collectively considered the denominator for the error type rates.
"—" Denotes the error type analysis was not applicable to the data element.
* The denominator for the element accuracy rate for each data element was defined differently from the denominator for the all-element accuracy rate. Therefore, the all-element accuracy rate cannot be derived from the accuracy rate from each data element.

Conclusions

Based on MRR results, HSAG identified the areas of strength and opportunities for improvement that may pertain to the domains of quality, timeliness, and access to services furnished by the health plan. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts. Table B-5 highlights strengths, opportunities for improvement, and recommendations, as applicable, that were identified from the MRR.

Strengths and Opportunities for Improvement

Table B-5—Key Findings

Strength/ Opportunity for Improvement	Description	Domain(s)
+	**Strength:** BCBSIL submitted 99.8 percent of the sampled medical records, indicating that the contracted providers are responsive to medical record requests.	
+	**Strength:** The medical record omission rates for all data elements (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were 4.9 percent or less. This indicates that the encounter data for these data elements were largely supported by the submitted medical records.	
+	**Strength:** The encounter data omission rates for all data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were 0.2 percent or less. This indicates that the submitted records contained information that was largely identified in the encounter data.	
+	**Strength:** When key data elements were present in both the encounter data and the customers' medical records, the accuracy rates for all data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were 99.9 percent or more.	

Note: = Quality, = Timeliness, = Access

Appendix C. Results for CountyCare

This appendix contains detailed MRR results, strengths, opportunities for improvement, and recommendations for CountyCare.

Medical Record Review Results

This section presents findings from the MRR results of the outpatient institutional encounter data maintained by HFS and the health plan.

Medical Record Procurement Status

Table C-1 shows the medical record procurement status detailing the number of sampled medical records requested, the number and percentage of medical records submitted, and the number and percentage of records reviewed for the sampled date of service.

Table C-1—Medical Record Procurement Status: Requested Date of Service

Number of Records Requested	Submitted Records		Reviewed Records	
	Number	Percent	Number	Percent
411	399	97.1%	399	100%

Table C-2 highlights the major reasons medical record documentation was not submitted for the requested date of service.

Table C-2—Medical Record Non-Submission Reasons: Requested Date of Service

Non-Submission Reason	Number	Percent
Non-responsive provider or provider did not respond in a timely manner	4	33.3%
Customer was a patient of this facility; however, no documentation was available for requested date of service	3	25.0%
Medical record was not located at this facility	3	25.0%
Customer was not a patient of this facility	1	8.3%
Other	1	8.3%
Total*	**12**	**100%**

*The sum of rates from all non-submission reasons may not equal 100 percent due to rounding.

Encounter Data Completeness

Table C-3 displays the encounter data completeness for key data elements.

Table C-3—Encounter Data Completeness

Data Element	Medical Record Omission		Encounter Data Omission	
	Denominator	Percent*	Denominator	Percent*
Date of Service	411	2.9%	—	—
Diagnosis Code	1,211	6.4%	1,135	0.1%
Procedure Code	1,833	7.0%	1,714	0.6%
Procedure Code Modifier	450	8.2%	413	0.0%
Revenue Code	2,053	7.0%	1,910	0.1%

* Lower rates indicate better performance.
"—" denotes that the encounter data omission analysis was not applicable to the data element.

Data Element Accuracy

Table C-4 displays the percentage of key data elements associated with validated dates of service from the encounter data that were correctly coded based on the customers' medical records.

Table C-4—Encounter Data Accuracy

Data Element	Denominator	Percent	Error Type Percentages
Diagnosis Code[1]	1,134	99.8%	Incorrect Code (100%) Specificity Error (0.0%)
Procedure Code[2]	1,704	99.9%	Incorrect Code (100%) Higher Level of Service in Medical Record (0.0%) Lower Level of Service in Medical Record (0.0%)
Procedure Code Modifier	413	100%	—
Revenue Code	1,909	100%	—
All-Element Accuracy*	399	86.2%	—

[1] Inaccurate codes and codes with specificity errors in the medical records were collectively considered the denominator for the error type rates.
[2] Inaccurate codes, codes with a higher level of service, and codes with a lower level of service in the medical records were collectively considered the denominator for the error type rates.
"—" Denotes the error type analysis was not applicable to the data element.
* The denominator for the element accuracy rate for each data element was defined differently from the denominator for the all-element accuracy rate. Therefore, the all-element accuracy rate cannot be derived from the accuracy rate from each data element.

Conclusions

Based on MRR results, HSAG identified the areas of strength and opportunities for improvement that may pertain to the domains of quality, timeliness, and access to services furnished by the health plan. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts. Table C-5 highlights strengths, opportunities for improvement, and recommendations, as applicable, that were identified from the MRR.

Strengths and Opportunities for Improvement

Table C-5—Key Findings

Strength/ Opportunity for Improvement	Description	Domain(s)
+	**Strength:** CountyCare submitted 97.1 percent of the sampled medical records, indicating that the contracted providers are responsive to medical record requests.	
+	**Strength:** The medical record omission rates for all data elements (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were 8.2 percent or less. This indicates that the encounter data for these data elements were largely supported by the submitted medical records.	
+	**Strength:** The encounter data omission rates for all data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were 0.6 percent or less. This indicates that the submitted records contained information that was largely identified in the encounter data.	
+	**Strength:** When key data elements were present in both the encounter data and the customers' medical records, the accuracy rates for all data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were 99.8 percent or more.	

Note:  = Quality,  = Timeliness,  = Access

Appendix D. Results for Meridian

This appendix contains detailed MRR results, strengths, opportunities for improvement, and recommendations for Meridian.

Medical Record Review Results

This section presents findings from the MRR results of the outpatient institutional encounter data maintained by HFS and the health plan.

Medical Record Procurement Status

Table D-1 shows the medical record procurement status detailing the number of sampled medical records requested, the number and percentage of medical records submitted, and the number and percentage of records reviewed for the sampled date of service.

Table D-1—Medical Record Procurement Status: Requested Date of Service

Number of Records Requested	Submitted Records		Reviewed Records	
	Number	Percent	Number	Percent
411	364	88.6%	363	99.7%

Table D-2 highlights the major reasons medical record documentation was not submitted for the requested date of service.

Table D-2—Medical Record Non-Submission Reasons: Requested Date of Service

Non-Submission Reason	Number	Percent
Non-responsive provider or provider did not respond in a timely manner	25	53.2%
Other	10	21.3%
Medical record was not located at this facility	6	12.8%
Customer was a patient of this facility; however, no documentation was available for requested date of service	5	10.6%
Customer was not a patient of this facility	1	2.1%
Total*	**47**	**100%**

*The sum of rates from all non-submission reasons may not equal 100 percent due to rounding.

Encounter Data Completeness

Table D-3 displays the encounter data completeness for key data elements.

Table D-3—Encounter Data Completeness

Data Element	Medical Record Omission		Encounter Data Omission	
	Denominator	Percent*	Denominator	Percent*
Date of Service	411	11.7%^	—	—
Diagnosis Code	1,079	14.8%^	921	0.2%
Procedure Code	1,869	17.0%^	1,556	0.3%
Procedure Code Modifier	358	21.8%^	280	0.0%
Revenue Code	2,062	16.7%^	1,718	0.0%

* Lower rates indicate better performance.
"—" denotes that the encounter data omission analysis was not applicable to the data element.
^Red text indicates rates greater than 10.0 percent.

Data Element Accuracy

Table D-4 displays the percentage of key data elements associated with validated dates of service from the encounter data that were correctly coded based on the customers' medical records.

Table D-4—Encounter Data Accuracy

Data Element	Denominator	Percent	Error Type Percentages
Diagnosis Code	919	100%	—
Procedure Code	1,551	100%	—
Procedure Code Modifier	280	100%	—
Revenue Code	1,718	100%	—
All-Element Accuracy*	363	88.4%	—

"—" Denotes the error type analysis was not applicable to the data element.
* The denominator for the element accuracy rate for each data element was defined differently from the denominator for the all-element accuracy rate. Therefore, the all-element accuracy rate cannot be derived from the accuracy rate from each data element.

Conclusions

Based on MRR results, HSAG identified the areas of strength and opportunities for improvement that may pertain to the domains of quality, timeliness, and access to services furnished by the health plan. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts. Table D-5 highlights strengths, opportunities for improvement, and recommendations, as applicable, that were identified from the MRR.

Strengths and Opportunities for Improvement

Table D-5—Key Findings

Strength/ Opportunity for Improvement	Description	Domain(s)
+	**Strength:** The encounter data omission rates for all data elements (*Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were 0.3 percent or less. This indicates that the submitted records contained information that was largely identified in the encounter data.	
+	**Strength:** When key data elements were present in both the encounter data and the customers' medical records and were evaluated independently, the data element values were accurate, with rates of 100 percent for each.	
−	**Weakness:** Meridian submitted less than 90.0 percent of sampled medical records. Of the medical records not submitted, 53.2 percent were due to non-responsive providers or providers not responding in a timely manner. **Recommendations:** Meridian should relay the importance of MRR activities for EDV to contracted providers. Contracted providers should be held accountable for responding to medical record requests for auditing, inspection, and oversight. HSAG recommends that Meridian consider strengthening and/or enforcing its contract requirements for providers to submit requested documentation to help ensure that future data requests can be met.	
−	**Weakness:** The medical record omission rates for all five data elements (*Date of Service*, *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were greater than 10.0 percent. **Recommendations:** HSAG recommends that Meridian investigate the root causes of these findings and consider performing periodic MRRs of submitted claims to verify appropriate coding and data completeness. Findings from these reviews should be shared with providers through periodic education and training on encounter data submissions, medical record documentation, and coding practices.	

Note: = Quality, = Timeliness, = Access

Appendix E. Results for Molina Healthcare of Illinois

This appendix contains detailed MRR results, strengths, opportunities for improvement, and recommendations for Molina Healthcare of Illinois (Molina).

Medical Record Review Results

This section presents findings from the MRR results of the outpatient institutional encounter data maintained by HFS and the health plan.

Medical Record Procurement Status

Table E-1 shows the medical record procurement status detailing the number of sampled medical records requested, the number and percentage of medical records submitted, and the number and percentage of records reviewed for the sampled date of service.

Table E-1—Medical Record Procurement Status: Requested Date of Service

Number of Records Requested	Submitted Records		Reviewed Records	
	Number	Percent	Number	Percent
411	337	82.0%	337	100%

Table E-2 highlights the major reasons medical record documentation was not submitted for the requested date of service.

Table E-2—Medical Record Non-Submission Reasons: Requested Date of Service

Non-Submission Reason	Number	Percent
Non-responsive provider or provider did not respond in a timely manner	74	100%
Total	**74**	**100%**

Encounter Data Completeness

Table E-3 displays the encounter data completeness for key data elements.

Table E-3—Encounter Data Completeness

Data Element	Medical Record Omission		Encounter Data Omission	
	Denominator	Percent*	Denominator	Percent*
Date of Service	411	18.0%^	—	—
Diagnosis Code	1,063	20.5%^	847	0.2%
Procedure Code	1,780	23.2%^	1,378	0.8%
Procedure Code Modifier	370	22.4%^	287	0.0%
Revenue Code	1,963	24.8%^	1,477	0.0%

* Lower rates indicate better performance.
"—" denotes that the encounter data omission analysis was not applicable to the data element.
^Red text indicates rates greater than 10.0 percent.

Data Element Accuracy

Table E-4 displays the percentage of key data elements associated with validated dates of service from the encounter data that were correctly coded based on the customers' medical records.

Table E-4—Encounter Data Accuracy

Data Element	Denominator	Percent	Error Type Percentages
Diagnosis Code[1]	845	99.9%	Incorrect Code (100%) Specificity Error (0.0%)
Procedure Code[2]	1,367	99.9%	Incorrect Code (50.0%) Higher Level of Service in Medical Record (0.0%) Lower Level of Service in Medical Record (50.0%)
Procedure Code Modifier	287	100%	—
Revenue Code	1,477	100%	—
All-Element Accuracy*	337	91.1%	—

[1] Inaccurate codes and codes with specificity errors in the medical records were collectively considered the denominator for the error type rates.
[2] Inaccurate codes, codes with a higher level of service, and codes with a lower level of service in the medical records were collectively considered the denominator for the error type rates.
"—" Denotes the error type analysis was not applicable to the data element.
* The denominator for the element accuracy rate for each data element was defined differently from the denominator for the all-element accuracy rate. Therefore, the all-element accuracy rate cannot be derived from the accuracy rate from each data element.

Conclusions

Based on MRR results, HSAG identified the areas of strength and opportunities for improvement that may pertain to the domains of quality, timeliness, and access to services furnished by the health plan. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts. Table E-5 highlights strengths, opportunities for improvement, and recommendations, as applicable, that were identified from the MRR.

Strengths and Opportunities for Improvement

Table E-5—Key Findings

Strength/ Opportunity for Improvement	Description	Domain(s)
+	**Strength:** The encounter data omission rates for all data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were 0.8 percent or less. This indicates that the submitted records contained information that was largely identified in the encounter data.	
+	**Strength:** When key data elements were present in both the encounter data and the customers' medical records, the accuracy rates for all data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were 99.9 percent or more.	
−	**Weakness:** Molina submitted 82.0 percent of the sampled medical records. Of the medical records not submitted, 100 percent were due to non-responsive providers or providers not responding in a timely manner. **Recommendations:** Molina should relay the importance of MRR activities for EDV to contracted providers. Contracted providers should be held accountable for responding to medical record requests for auditing, inspection, and oversight. HSAG recommends that Molina consider strengthening and/or enforcing contract requirements for providers to submit requested documentation to help ensure that future data requests can be met.	
−	**Weakness:** The medical record omission rates for all data elements (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were greater than 10.0 percent. **Recommendations:** HSAG recommends that Molina investigate the root causes of these findings and consider performing periodic MRRs of submitted claims to verify appropriate coding and data completeness. Findings from these reviews should be shared with providers through periodic education and training regarding encounter data submissions, medical record documentation, and coding practices.	

Note: = Quality, = Timeliness, = Access

Appendix F. Results for YouthCare HealthChoice Illinois

This appendix contains detailed MRR results, strengths, opportunities for improvement, and recommendations for YouthCare HealthChoice Illinois (YouthCare).

Medical Record Review Results

This section presents findings from the MRR results of the outpatient institutional encounter data maintained by HFS and the health plan.

Medical Record Procurement Status

Table F-1 shows the medical record procurement status detailing the number of sampled medical records requested, the number and percentage of medical records submitted, and the number and percentage of records reviewed for the sampled date of service.

Table F-1—Medical Record Procurement Status: Requested Date of Service

Number of Records Requested	Submitted Records		Reviewed Records	
	Number	Percent	Number	Percent
411	366	89.1%	366	100%

Table F-2 highlights the major reasons medical record documentation was not submitted for the requested date of service.

Table F-2—Medical Record Non-Submission Reasons: Requested Date of Service

Non-Submission Reason	Number	Percent
Non-responsive provider or provider did not respond in a timely manner	26	57.8%
Customer was not a patient of this facility	8	17.8%
Other	5	11.1%
Customer was a patient of this facility; however, no documentation was available for requested date of service	4	8.9%
Medical record was not located at this facility	2	4.4%
Total*	**45**	**100%**

*The sum of rates from all non-submission reasons may not equal 100 percent due to rounding.

Encounter Data Completeness

Table F-3 displays the encounter data completeness for key data elements.

Table F-3—Encounter Data Completeness

Data Element	Medical Record Omission		Encounter Data Omission	
	Denominator	Percent*	Denominator	Percent*
Date of Service	411	10.9%^	—	—
Diagnosis Code	927	10.4%^	831	0.0%
Procedure Code	1,335	13.8%^	1,158	0.6%
Procedure Code Modifier	338	17.8%^	280	0.7%
Revenue Code	1,471	13.6%^	1,271	0.0%

* Lower rates indicate better performance.
"—" denotes that the encounter data omission analysis was not applicable to the data element.
^Red text indicates rates greater than 10.0 percent.

Data Element Accuracy

Table F-4 displays the percentage of key data elements associated with validated dates of service from the encounter data that were correctly coded based on the customers' medical records.

Table F-4—Encounter Data Accuracy

Data Element	Denominator	Percent	Error Type Percentages
Diagnosis Code	831	100%	—
Procedure Code[1]	1,151	99.8%	Incorrect Code (100%) Higher Level of Service in Medical Record (0.0%) Lower Level of Service in Medical Record (0.0%)
Procedure Code Modifier	278	100%	—
Revenue Code	1,271	100%	—
All-Element Accuracy*	366	90.4%	—

[1] Inaccurate codes, codes with a higher level of service, and codes with a lower level of service in the medical records were collectively considered the denominator for the error type rates.
"—" Denotes the error type analysis was not applicable to the data element.
* The denominator for the element accuracy rate for each data element was defined differently from the denominator for the all-element accuracy rate. Therefore, the all-element accuracy rate cannot be derived from the accuracy rate from each data element.

Conclusions

Based on MRR results, HSAG identified the areas of strength and opportunities for improvement that may pertain to the domains of quality, timeliness, and access to services furnished by the health plan. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts. Table F-5 highlights strengths, opportunities for improvement, and recommendations, as applicable, that were identified from the MRR.

Strengths and Opportunities for Improvement

Table F-5—Key Findings

Strength/ Opportunity for Improvement	Description	Domain(s)
+	**Strength:** The encounter data omission rates for all data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were 0.7 percent or less. This indicates that the submitted medical records contained information that was largely identified in the encounter data.	
+	**Strength:** When key data elements were present in both the encounter data and the customers' medical records, the accuracy rates for all data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were 99.8 percent or more.	
−	**Weakness:** YouthCare submitted 89.1 percent of the sampled medical records. Of the medical records not submitted, 57.8 percent were due to non-responsive providers or providers not responding in a timely manner. **Recommendations:** YouthCare should relay the importance of MRR activities for EDV to contracted providers. Contracted providers should be held accountable for responding to medical record requests for auditing, inspection, and oversight. HSAG recommends that YouthCare consider strengthening and/or enforcing contractual requirements for providers to submit requested documentation to help ensure future data requests can be met.	
−	**Weakness:** The medical record omission rates for all data elements (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Revenue Code*) were greater than 10.0 percent. **Recommendations:** HSAG recommends that YouthCare investigate the root causes of these findings and consider performing periodic MRRs of submitted claims to verify appropriate coding and data completeness. Findings from these reviews should be shared with providers through periodic education and training on encounter data submissions, medical record documentation, and coding practices.	

Note:  = Quality,  = Timeliness,  = Access