Michigan Department of Health and Human Services

State Fiscal Year 2024 External Quality Review Encounter Data Validation Aggregate Report

for Medicaid Health Plans

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HSAG HEALTH SERVICES ADVISORY GROUP

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1. Executive Summary

Introduction

Accurate and complete encounter data are critical to the success of a managed care program. Therefore, the Michigan Department of Health and Human Services (MDHHS) requires its contracted Medicaid managed care entities (MCEs) and waiver agencies to submit high-quality encounter data. MDHHS 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. During state fiscal year (SFY) 2024, MDHHS contracted with Health Services Advisory Group, Inc. (HSAG), to conduct an encounter data validation (EDV) review.

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 Managed Care Plan: An Optional EQR-Related Activity*, February 2023 (CMS EQR Protocol 5),[1] HSAG conducted a medical record review (MRR) activity, which is an analysis of the State's electronic encounter data completeness and accuracy, by comparing the State's electronic encounter data to the information documented in the corresponding members' medical records.

HSAG conducted the EDV review for 47 MCEs. This report, however, presents results and findings for the Medicaid health plans (MHPs) under the Comprehensive Health Care Program.

MHPs Included in the Review

Table 1-1 presents the names and abbreviations for the MHPs associated with the Comprehensive Health Care Program included in the SFY 2024 EDV activity.

Table 1-1—MHPs Included in the Review

Name	Abbreviation
Aetna Better Health of Michigan	AET
Blue Cross Complete of Michigan	BCC
HAP CareSource	HCS

[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/sites/default/files/2023-03/2023-eqr-protocols.pdf Accessed on: June 5, 2024.

Name	Abbreviation
McLaren Health Plan	MCL
Meridian Health Plan of Michigan	MER
Molina Healthcare of Michigan	MOL
Priority Health Choice	PRI
UnitedHealthcare Community Plan	UNI
Upper Peninsula Health Plan	UPP

Key Findings From Medical Record Review

Medical Record Procurement

HSAG requested a total of 3,699 cases for procurement from all participating MHPs. While all MHPs completed and submitted tracking sheets associated with the requested cases, 5.8 percent included no medical record documentation associated with the requested cases. This resulted in an overall submission rate of 94.2 percent (i.e., 3,485 cases) having an accompanying medical record documentation. Additionally, among the 3,485 records received with dates of service from the sample cases, 1,617 records (46.4 percent) had a second date of service submitted to HSAG, as indicated in the tracking sheet.

Encounter Data Completeness

Table 1-2 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 MDHHS' encounter data. Lower omission rates are preferable for both measures, as they indicate consistent and comprehensive documentation across both data sources.

Table 1-2—Encounter Data Completeness Summary

Key Data Elements	Medical Record Omission*		Encounter Data Omission*	
	All MHP Rate	MHP Range	All MHP Rate	MHP Range
Date of Service	4.7%	0.7% – 13.6%	4.3%	1.8% – 6.2%
Diagnosis Code	8.9%	3.9% – 15.9%	2.5%	0.9% – 3.5%
Procedure Code	14.1%	3.7% – 22.8%	4.4%	2.7% – 5.8%
Procedure Code Modifier	21.6%	14.3% – 30.8%	1.1%	0.0% – 1.8%

* Lower rates indicate better performance.

Findings: The analysis revealed that the medical record omission rates exceeded the encounter data omission rates for all four key data elements (i.e., *Date of Service, Diagnosis Code, Procedure Code*, and *Procedure Code Modifier*). Notably, the dates of service in the encounter data were generally supported by the members' medical records, as evidenced by a medical record omission rate of 4.7 percent. However, *Procedure Code* (14.1 percent) and the *Procedure Code Modifier* (21.6 percent) data elements in the encounter data were inadequately supported by the medical records.

Conversely, encounter data omission rates for all four key data elements (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*), were well supported by the encounter data extracted from MDHHS' data warehouse. All four data elements demonstrated omission rates of less than 5.0 percent when compared to the information found in the medical records.

Encounter Data Accuracy

Table 1-3 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 MDHHS' encounter data and the corresponding members' medical records. The key data elements *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* were evaluated for accuracy if the individual data element was present in both MDHHS' encounter data and the medical records. Higher accuracy rates for each data element reflect better performance and stronger alignment between the two data sources. Additionally, HSAG calculated the all-element accuracy rate, which represents the percentage of dates of service where all evaluated data elements (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) were accurate and fully supported by the corresponding medical records.

Table 1-3—Encounter Data Accuracy

Data Element	All MHP Rate	MHP Rate	Error Type Percentages
Diagnosis Code[1]	99.7%	99.6% – 99.9%	Inaccurate Code: (96.8%) Specificity Error: (3.2%)
Procedure Code[2]	98.0%	96.9% – 99.6%	Inaccurate Code: (95.9%) Higher Level of Service in Medical Record: (0.0%) Lower Level of Service in Medical Record: (4.1%)
Procedure Code Modifier	99.9%	99.7% – 100%	—
All-Element Accuracy[3]	74.5%	70.6% – 85.5%	—

"—" Denotes the error type analysis was not applicable to the data element.
[1] Inaccurate coding and specificity errors in service records were collectively considered as the denominator for the error type rates.
[2] Inaccurate coding, codes with higher levels of service, and codes with lower levels of service in service records were collectively considered as the denominator for the error type rates.
[3] 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 for each data element.

Findings: Key data elements present in both MDHHS' encounter data and the medical records were evaluated independently for accuracy. The results indicate high accuracy rates across the data elements:

- Diagnosis Codes: 99.7 percent
- Procedure Codes: 98.0 percent
- Procedure Code Modifiers: 99.9 percent

Nearly 75.0 percent of the dates of service present in both data sources accurately represented an all-element accuracy rate across all three data elements (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) when compared to the members' medical records.

At the MHP level, the all-element accuracy rates varied, ranging from 70.6 percent to 85.5 percent. The primary contributors to overall all-element inaccuracies were medical record omissions, encounter data omissions, and element inaccuracy from all three data elements. The *Procedure Code* data element demonstrated the highest contribution to accuracies, while the *Procedure Code Modifier* data element showed the least.

Recommendations

To improve the quality of encounter data submissions from the MHPs, HSAG offers the following recommendations to assist MDHHS and the MHPs in addressing opportunities for improvement:

- The results from the MRR indicated that the physician visit encounters submitted by the MHPs and maintained in MDHHS's data warehouse were relatively complete and accurate when compared to the members' medical records, with few exceptions. As such, HSAG recommends MDHHS to continue its current efforts in monitoring encounter data submissions and addressing any identified data issues with the MHPs' encounter data submissions.
- The MHPs experiencing challenges procuring requested records from their contracted providers should ensure the contracted providers' accountability in responding to medical record requests for the purposes of auditing, inspection, and oversight. HSAG recommends that the MHPs consider strengthening and/or enforcing their contract requirements with providers to ensure compliance with documentation requests.
- The medical record omission rates for *Procedure Code* and *Procedure Code Modifier* data elements were relatively high across all MHPs. As such, MHPs should investigate the root causes of these omissions and consider performing periodic MRRs of submitted claims to verify appropriate coding and data completeness, where appropriate. Findings from these reviews should be used to provide targeted education and training for providers regarding encounter data submissions, medical record documentation, and coding practices.
- HSAG recommends increased collaboration between MDHHS and MHPs:
  - Conducting regular communication forums and workshops to discuss challenges and share best practices in data submission and setting performance benchmarks to encourage continuous improvement.

  - Developing improvement plans for MHPs with lower accuracy rates and pilot programs focusing on high-risk data elements like *Procedure Codes* and *Procedure Code Modifiers*.
- During the process of generating sample cases for the EDV review, HSAG encountered significant challenges with the completeness and accuracy of provider information within MDHHS' encounter data. Specifically, the data often lacked fully populated National Provider Identifiers (NPIs), which are crucial for accurately identifying providers who meet the criteria for a specific service category. Additionally, the encounter data did not include detailed provider taxonomy codes, which are vital for determining the eligibility of providers for specific services relevant to the review. The lack of detailed taxonomy information hindered HSAG's ability to categorize and analyze data based on the provider specialty and service type. To address these challenges and improve the integrity of future data analyses, HSAG proposes the following strategic recommendations. MDHHS should:
  - Mandate the inclusion of complete NPIs and provider taxonomy codes in all encounter data submissions.
  - Introduce robust data verification processes at the point of entry. This step will help in early detection and rectification of incomplete or inaccurate provider data, maintaining the integrity of the database.
  - Develop a centralized, easily accessible repository for provider data that can be referenced and updated regularly. This will facilitate more efficient data linkage and retrieval, improving the ease and reliability of data analysis.
  - Implement a regular review and feedback system to monitor the improvements in data quality post-implementation of these changes. This will not only help in measuring the success of the implemented strategies but also in making continuous improvements.

By adopting these recommendations, MDHHS and the MHPs can enhance the quality and consistency of encounter data, reduce discrepancies, and support more accurate analysis.

2. Overview and Methodology

Overview

Pursuant to Title 42 of the Code of Federal Regulations (42 CFR) §438.242, MDHHS must ensure that each of its contracted Medicaid MCEs maintains a health information system that collects, analyzes, integrates, and reports data on areas including, but not limited to, utilization, claims, grievances and appeals, and disenrollments for other than loss of Medicaid eligibility. MDHHS must also review and validate encounter data collected, maintained, and submitted by the MCEs to ensure that the encounter data are complete and accurate representation of the services provided to its Medicaid members. Accurate and complete encounter data are critical to the success of a managed care program. Therefore, MDHHS requires its contracted Medicaid MCEs to submit high-quality encounter data. MDHHS 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.

During SFY 2024, MDHHS contracted with HSAG, to conduct an EDV activity. In alignment with CMS EQR Protocol 5, HSAG conducted an MRR activity which is an analysis of the State's electronic encounter data completeness and accuracy by comparing the State's electronic encounter data to the information documented in the corresponding members' medical records.

HSAG conducted the EDV for 47 MCEs. Table 2-1 displays the MCE programs and number of MCEs included in the EDV review. This report, however, presents results and findings for the MHPs under the Comprehensive Health Care Program. The primary objective was to evaluate completeness and accuracy of the electronic encounter data by comparing MDHHS' encounter data to the information documented in the members' medical records.

Table 2-1—Michigan Medicaid Managed Care Programs

Managed Care Program	MCE Type	Number of MCEs
Comprehensive Health Care Program (CHCP)	MHPs	9
Healthy Kids Dental Program	Dental Health Plans (DHPs)	2
MI Health Link Program	Integrated Care Organizations (ICOs)	6
Behavioral Health Managed Care Program	Prepaid Inpatient Health Plans (PIHPs)	10
MI Choice Waiver Program	Waiver Agencies	20

Methodology

Medical Record Review

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 members' 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 MDHHS' encounters. Following the information systems review and administrative profile analysis conducted during the SFY 2023 EDV activity, HSAG determined that the quality of MDHHS' encounter data was sufficient to proceed with the MRR activity.

The MRR activity evaluated encounter data completeness and accuracy through a review of medical records for physician services rendered from October 1, 2022, through September 30, 2023. This review answered the following question:

- *Are the data elements in Table 2-2 found on the professional encounters complete and accurate when compared to information contained within the medical records?*

Table 2-2—Key Data Elements for MRR

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

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

- Identified the eligible population and generated samples from data extracted from the MDHHS data warehouse.
- Provided technical assistance to the MHPs to support the procurement of medical records from providers, as appropriate.
- Reviewed medical records against MDHHS' encounter data.
- Calculated review indicators and submitted EDV results to MDHHS.

Review Population

To be eligible for the MRR, a member had to be continuously enrolled in the same MHP during the review period (i.e., from October 1, 2022, through September 30, 2023) and had to have at least one physician visit during the review period. In addition, members with Medicare or other insurance coverages were excluded from the eligible population since these members may have received services that were documented in their medical record but not represented in MDHHS' encounter data.

In this report, HSAG refers to "physician visits" as the services that met all criteria in Table 2-3.

Table 2-3—Criteria for Defining Physician Visits

Data Element	Criteria
Provider Taxonomy Classification	Allergy & Immunology Clinic/Center Clinical Nurse Specialist Dermatology Family Medicine General Practice Internal Medicine Midwife Nurse Practitioner Obstetrics & Gynecology Otolaryngology Pediatrics Physician Assistant Podiatrist Preventative Medicine Registered Nurse Urology
Place of Service	02–Telehealth Provided Other than the Patient's Home 10–Telehealth Provided in Patient's Home 11–Office 17–Walk-in Retail Health Clinic 20–Urgent Care Facility 49–Independent Clinic 50–Federally Qualified Health Center 71–Public Health Clinic 72–Rural Health Clinic
Procedure Code	If all detail lines for a visit have the following procedure codes, the visit was excluded from the review since these procedure codes are for services outside of the scope of work for this review (e.g., durable medical equipment [DME], dental, vision, and ancillary providers). • A procedure code starting with "B," "E," "D," "K," or "V." • 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).

Data Element	Criteria
	• 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 member enrollment and encounter data extracted from the MDHHS data warehouse. HSAG first identified all members who met the review population eligibility criteria, and then used random sampling to select 411 members[2] from the eligible population for each MHP. If an MHP had less than 411 cases eligible for the review, all eligible cases were included in the activity. Then, for each selected sampled member, HSAG used the SURVEYSELECT procedure in SAS®,[3] to randomly select one professional visit[4] that occurred during the review period (i.e., from October 1, 2022, through September 30, 2023).

Additionally, to evaluate whether any dates of service were omitted from the MDHHS data warehouse, HSAG reviewed a second date of service rendered by the same billing or rendering provider (i.e., based on billing or rendering NPI) during the review period. The providers selected the second date of service, which was closest to the sampled date of service, from the medical records for each sampled member. If a sampled member had no second visit with the same provider during the review period, HSAG evaluated only one date of service for that member. As such, the final number of cases reviewed were between 411 and 822 for each MHP.

Medical Record Procurement

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

[2] The sample size of 411 is based on a 95 percent confidence level and a margin of error of 5 percent.
[3] 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.
[4] To ensure that the MRR included all services provided on the same date of service, encounters with the same date of service and same rendering provider were consolidated into one visit for sampling purposes.

All electronic medical records HSAG received were maintained on a secure HSAG network, 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 implemented a thorough Health Insurance Portability and Accountability Act of 1996 (HIPAA) compliance and protection program in accordance with federal regulations that included recurring training as well as policies and procedures that address physical security, electronic security, and day-to-day operations.

Review of Medical Records

In order to successfully complete the review, the 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 the tool testing to ensure that the abstracted data are complete and accurate. Based on the EDV methodology, clinical guidelines, and the tool design/testing results, the CRT drafted an abstraction instruction document specific to the review for training purposes. Concurrent with record procurement activities, the CRT trained its review staff on specific review 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 review. Interrater reliability among reviewers, as well as reviewer accuracy, were evaluated regularly throughout the review. 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 the MDHHS encounter data could be found in the member's medical record. If found, the reviewers documented whether the date of service was valid; if not found, the reviewers reported the date of service as a *medical record omission*. If found, the reviewers then reviewed the services provided on the selected date of service and validated the data elements listed in Table 2-2. All reviewers entered their findings into the electronic tool to ensure data integrity.

After the reviewers evaluated the sampled date of service, they determined if the medical record contained documentation for a second date of service in the review period. If the documentation for a second date of service was available, the reviewers evaluated the services rendered on this date and validated the data elements in Table 2-2 associated with the second date of service. If the documentation contained more than one second date of service, the reviewers selected the date closest to the sampled date of service to validate. If the second date of service was missing from the MDHHS data warehouse, it was reported as an *encounter data omission*. The missing values associated with this visit were listed as an omission for each key data element, respectively.

Review Indicators

Once the MRR was completed, HSAG analysts exported information collected from the electronic tool, reviewed the data, and conducted the analysis. Table 2-4 displays the review indicators that were used to report the MRR results.

Table 2-4—Review Indicators

Review Indicator	Denominator	Numerator
Medical Record Procurement Rate: Percentage of medical records submitted. Additionally, the reasons for missing medical records were presented.	Total number of requested sample cases.	Number of requested sample cases with medical records submitted for either the sampled date of service or the second date of service.
Second Date of Service Submission Rate: Percentage of sample cases with a second date of service submitted in the medical records.	Number of sample cases with medical records submitted.	Number of sample cases with a second date of service submitted in the medical records.
Medical Record Omission Rate: Percentage of data elements (e.g., *Date of Service*) identified in MDHHS' data warehouse that are not found in the members' medical records. HSAG calculated this review indicator for each data element listed in Table 2-2.	Total number of data elements (e.g., *Date of Service*) identified in MDHHS' data warehouse (i.e., based on the sample dates of service and the second dates of service that are found in MDHHS' data warehouse).	Number of data elements (e.g., *Date of Service*) in the denominator but not found in the medical records.
Encounter Data Omission Rate: Percentage of data elements (e.g., *Date of Service*) identified in members' medical records, but not found in MDHHS' data warehouse. HSAG calculated this review indicator for each data element listed in Table 2-2.	Total number of data elements (e.g., *Date of Service*) identified in members' medical records (i.e., based on the medical records procured for the sample dates of service and second dates of service).	Number of data elements (e.g., *Date of Service*) in the denominator but not found in MDHHS' data warehouse.
Diagnosis Code Accuracy: Percentage of diagnosis codes supported by the medical records. Additionally, the frequency count of associated reasons for inaccuracy were presented.	Total number of diagnosis codes that met the following two criteria: • For dates of service (i.e., including both the sample dates of service and the second dates of service) that exist in both MDHHS' encounter data and the medical records.	Number of diagnosis codes supported by the medical records.

Review Indicator	Denominator	Numerator
	• Diagnosis codes present for both MDHHS' encounter data and the medical records.	
Procedure Code Accuracy: Percentage of procedure codes supported by the medical records. Additionally, the frequency count of associated reasons for inaccuracy were presented.	Total number of procedure codes that met the following two criteria: • For dates of service (i.e., including both the sample dates of service and the second dates of service) that exist in both MDHHS' encounter data and the medical records. • Procedure codes present for both MDHHS' 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 (i.e., including both the sample dates of service and the second dates of service) that exist in both MDHHS' encounter data and the medical records. • Procedure code modifiers present for both MDHHS' encounter data and the medical records.	Number of procedure code modifiers supported by the medical records.
All-Element Accuracy Rate: Percentage of dates of service present in both MDHHS' encounter data and the medical records, with the same values for all data elements listed in Table 2-2.	Total number of dates of service (i.e., including both the sample dates of service and second dates of service) that are in both MDHHS' encounter data and the medical records.	The number of dates of service in the denominator with the same diagnosis codes, procedure codes, and procedure code modifiers for a given date of service.

3. Medical Record Review Results

Background

Medical records are considered the "gold standard" for documenting Medicaid members' access and quality of services. The MRR assessed data quality by investigating the completeness and accuracy of MDHHS' encounters compared to the information documented in the corresponding medical records for Medicaid members. 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 members' corresponding medical records (i.e., medical record omission). This section also presents findings from HSAG's evaluation of accuracy of diagnosis codes, procedure codes, and procedure code modifiers submitted by the MHPs' contracted providers to the MHPs and subsequently submitted to MDHHS based on documentation contained in members' medical records.

Medical Record Procurement Status

As described in the "Overview and Methodology" section of this report, the final sample in the evaluation consisted of 411 cases randomly selected for each MHP. Additionally, to evaluate whether any dates of service were omitted from MDHHS' electronic encounters, HSAG reviewed a second date of service rendered by the same provider during the review period. The providers were requested to submit medical record documentation pertaining to an additional date of service occurring closest to the sampled members' selected date of service, if available. If a sampled member had no second visit with the same provider during the review period, HSAG evaluated only one date of service for that member. As such, the final number of cases reviewed were between 411 and 822 cases total for each MHP.

MDHHS-based 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*, and *Procedure Code Modifier*) 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), and procedure code modifier(s) associated with the date of service were treated as medical record omissions.

Table 3-1 shows the medical record procurement status for each of the participating MHPs, detailing the number of medical records requested as well as the number and percentage of medical records submitted by each MHP as indicated in the submitted tracking sheets.

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

MHP	Number of Medical Records Requested	Number of Medical Records Submitted[1]	Percent of Medical Records Submitted
AET	411	401	97.6%
BCC	411	409	99.5%
HCS	411	337	82.0%
MCL	411	388	94.4%
MER	411	379	92.2%
MOL	411	352	85.6%
PRI	411	407	99.0%
UNI	411	404	98.3%
UPP	411	408	99.3%
All MHPs	**3,699**	**3,485**	**94.2%**

[1] The number of medical records submitted was based on the MHPs' responses in the submitted tracking sheets.

Key Findings: Table 3-1

- HSAG requested the procurement of records for a total of 3,699 cases from all participating MHPs. While all MHPs completed and submitted tracking sheets associated with the requested cases, 5.8 percent included no medical record documentation associated with the requested cases. An overall submission rate of 94.2 percent (i.e., 3,485 cases) had medical record documentation submitted, with MHP-specific rates ranging from 82.0 percent (**HCS**) to 99.5 percent (**BCC**).
- Cases without medical records contributed to the medical record omission results detailed in the "Encounter Data Completeness" section of this report. Specifically, if medical records were not submitted for a sampled date of service, all associated data elements (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) were reported as medical record omissions. Consequently, MHPs with relatively lower medical record submission rates would be more likely to exhibit higher medical record omission rates, reflecting poorer performance for each key data element.

Table 3-2 highlights the major reasons medical record documentation was not submitted at the overall level. Detailed tables for each MHP are provided in the MHP-specific appendices.

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

Non-Submission Reason	All MHPs	
	Number	Percent
Record was not located at this facility.	3	1.4%
Member was not a patient of this practice.	6	2.8%

Non-Submission Reason	All MHPs	
	Number	Percent
Member was a patient of this practice; however, no documentation was available for date of service.	5	2.3%
Non-responsive provider or provider did not respond in a timely manner.	171	79.9%
Provider refused to release records.	2	0.9%
Facility was permanently closed.	5	2.3%
Other.	22	10.3%
Total*	**214**	**100%**

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

Key Findings: Table 3-2

- Of the 3,699 requested sample cases, 214 medical records (5.8 percent) were not submitted for various reasons. These non-submission reasons may indicate that MHPs may have incorrect provider information, or inconsistencies between the information stored in the provider's office versus MDHHS encounter data, or instances where an encounter was submitted to MDHHS despite the member not accessing care. The most frequent reason (79.9 percent) for missing medical records was "*Non-responsive provider or provider did not respond in a timely manner.*"
  - Among the 171 cases where MHPs cited "*Non-responsive provider or provider did not respond in a timely manner*" as the reason for non-submissions:
    - **HCS** accounted for 62 cases (36.3 percent).
    - **MOL** accounted for 51 cases (29.8 percent).
    - **MCL** accounted for 23 cases (13.5 percent).
    - **MER** accounted for 22 cases (12.9 percent).

Table 3-3 displays the number and percentage of cases with one additional date of service selected and submitted for the review.

Table 3-3—Medical Record Submission Status: Second Date of Service

MHP	Number of Medical Records Submitted[1]	Number of Medical Records Submitted with a Second Date of Service	Percent of Medical Records with a Second Date of Service
AET	401	170	42.4%
BCC	409	172	42.1%
HCS	337	170	50.4%
MCL	388	232	59.8%

MHP	Number of Medical Records Submitted[1]	Number of Medical Records Submitted with a Second Date of Service	Percent of Medical Records with a Second Date of Service
MER	379	100	26.4%
MOL	352	210	59.7%
PRI	407	164	40.3%
UNI	404	212	52.5%
UPP	408	187	45.8%
All MHPs	**3,485**	**1,617**	**46.4%**

[1] The number of medical records submitted was based on the MHPs' responses in the submitted tracking sheets.

Key Findings: Table 3-3

- Among the 3,485 records received with dates of service from the sample cases, 1,617 records (46.4 percent) had a second date of service submitted to HSAG, as noted in the tracking sheet. The rates of second date of service submissions varied among MHPs, ranging from 26.4 percent (**MER**) to 59.8 percent (**MCL**). It is important to note that a 100 percent submission rate for the second date of service is not expected, as members may not have had a second date of service with the same rendering provider within the study period.

Encounter Data Completeness

HSAG evaluated encounter data completeness by identifying differences between key data elements from MDHHS' encounters and the corresponding members' records submitted for the analysis. These key data elements included *Date of Service*, *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*. 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 the providers, MHPs, and MDHHS.

A medical record omission occurs when an encounter data element (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code*, or *Procedure Code Modifier*) is not supported by documentation in a member's medical record or the medical record could not be found. Medical record omissions suggest opportunities for improvement within the provider's internal processes, such as billing and record documentation.

An encounter data omission occurs when an encounter data element (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code*, or *Procedure Code Modifier*) is documented in a member's medical record but is not present in the associated electronic 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, MHPs, and MDHHS.

HSAG evaluated the medical record omission and the encounter data omission rates for each MHP using the date of service selected by HSAG and an additional date of service selected by the provider if one was available. If more than one additional date of service was available from the medical record, the provider was instructed to select the one closest to HSAG's selected date of service. **For both rates, lower values indicate better performance.**

Date of Service Completeness

Table 3-4 displays the percentage of dates of service identified in the encounter data that were not supported by the members' medical records (i.e., medical record omission) and the percentage of dates of service from the members' medical records that were not found in the encounter data (i.e., encounter data omission). HSAG conducted the analyses at the date-of-service level. Detailed tables for each MHP are provided in the MHP-specific appendices.

Table 3-4—Medical Record Omission and Encounter Data Omission for Date of Service

MHP	Medical Record Omission		Encounter Data Omission	
	Dates of Service Identified in the Encounter Data	Percent Not Supported by Members' Medical Records*	Dates of Service Identified in Members' Medical Records	Percent Not Found in the Encounter Data*
AET	564	2.8%	563	2.7%
BCC	546	0.7%	578	6.2%
HCS	553	13.6%	500	4.4%
MCL	606	4.1%	612	5.1%
MER	492	6.9%	481	4.8%
MOL	579	10.7%	551	6.2%
PRI	556	1.3%	567	3.2%
UNI	612	1.6%	613	1.8%
UPP	570	1.1%	589	4.2%
All MHPs	**5,078**	**4.7%**	**5,054**	**4.3%**

* Lower rates indicate better performance.

Key Findings: Table 3-4

- Overall, 4.7 percent of the dates of service in the encounter data were not supported by the members' medical records (i.e., medical record omission), with MHP-specific rates ranging from 0.7 percent (**BCC**) to 13.6 percent (**HCS**).
  - **HCS** exhibited the highest medical record omission rate for dates of service at 13.6 percent compared to other participating MHPs. This trend aligns with the relationship between medical

record submission rates and medical record omission rates, where MHPs with a relatively lower medical record submission rates typically demonstrate higher medical record omission rates, reflecting poor performance across key data elements.

- Overall, 4.3 percent of the dates of service in the medical records were not found in MDHHS' encounter data (i.e., encounter data omission), with MHP-specific rates ranging from 1.8 percent (**UNI**) to 6.2 percent (**BCC** and **MOL**).
  - For encounter data omission, the denominator consists of the total number of dates of service identified in the medical records, while the numerator represents dates of service with no evidence of submission in the encounter data. If no second date of service was available in the medical records, then it would not contribute to the numerator.

Diagnosis Code Completeness

Table 3-5 displays the percentage of diagnosis codes identified in the encounter data that had no supporting documentation in the members' medical records (i.e., medical record omission) and the percentage of diagnosis codes from the members' 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 3-5—Medical Record Omission and Encounter Data Omission for Diagnosis Code

MHP	Medical Record Omission		Encounter Data Omission	
	Number of Diagnosis Codes Identified in Encounter Data	Percent Not Documented by Members' Medical Records*	Number of Diagnosis Codes Identified in Members' Medical Records	Percent Not Found in the Encounter Data*
AET	1,520	7.2%	1,437	1.9%
BCC	1,564	5.9%	1,525	3.5%
HCS	1,531	15.9%	1,330	3.2%
MCL	1,583	8.5%	1,483	2.3%
MER	1,263	10.5%	1,166	3.0%
MOL	1,552	14.4%	1,369	3.0%
PRI	1,449	5.2%	1,402	2.1%
UNI	1,753	7.7%	1,632	0.9%
UPP	1,324	3.9%	1,306	2.6%
All MHPs	**13,539**	**8.9%**	**12,650**	**2.5%**

* Lower rates indicate better performance.

Key Findings: Table 3-5

- Overall, 8.9 percent of the diagnosis codes in the encounter data had no supporting documentation in the members' medical records (i.e., medical record omission), with MHP-specific rates ranging from 3.9 percent (**UPP**) to 15.9 percent (**HCS**).
  - The medical record omission rate for diagnosis codes was partially influenced by both medical record non-submission and medical record omission for the *Date of Service* data element. In the analysis, 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.
    - Approximately 48.2 percent of medical record omissions for diagnosis codes were due to either HSAG not receiving the medical records or the medical records not supporting the specified date of service.
  - Among records wherein diagnosis codes were considered as medical record omissions:
    - 83.0 percent were due to medical record omissions from the initial sampled date of service.
    - 17.0 percent were due to medical record omissions from the second date of service.
  - MHPs with higher medical record submission rates generally exhibited lower medical record omission rates for diagnosis codes. Additionally, MHPs with higher medical record omission for dates of service also tended to have higher medical record omission for diagnosis codes.
  - For cases with medical records to validate the date of service, diagnosis codes frequently included in the encounter data but not supported in the members' medical records included:
    - Z6852: Body mass index pediatric, 5th percentile to less than 85th percentile for age (Frequency = 31)
    - Z7182: Exercise counseling (Frequency = 30)
    - Z23: Encounter for immunization (Frequency = 29)
    - Z713: Dietary counseling and surveillance (Frequency = 29)
- Overall, 2.5 percent of the diagnosis codes identified in the medical records were not found in MDHHS' encounter data (i.e., encounter data omission), with MHP-specific rates ranging from 0.9 percent (**UNI**) to 3.5 percent (**BCC**).
  - The overall encounter data omission rate for the *Diagnosis Code* data element (2.5 percent) was lower than the overall encounter data omission rate for the *Date of Service* data element (4.3 percent). This suggests that omission of dates of service from the encounter data was not the primary factor contributing to the diagnosis code encounter data omission. Other potential contributing factors included:
    - Coding errors from provider billing offices occurred.
    - Differences related to Michigan-specific billing and reimbursement guidelines.

Procedure Code Completeness

Table 3-6 displays the percentage of procedure codes from the members' medical records that had no supporting documentation in the members' medical records (i.e., medical record omission) and the percentage of procedure codes from the members' 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 3-6—Medical Record Omission and Encounter Data Omission for Procedure Code

MHP	Medical Record Omission		Encounter Data Omission	
	Number of Procedure Codes Identified in Encounter Data	Percent Not Documented by Members' Medical Records*	Number of Procedure Codes Identified in Members' Medical Records	Percent Not Found in the Encounter Data*
AET	1,315	14.7%	1,170	4.1%
BCC	1,317	10.7%	1,249	5.8%
HCS	1,309	22.8%	1,043	3.1%
MCL	1,247	14.7%	1,114	4.5%
MER	1,107	15.3%	991	5.3%
MOL	1,413	20.0%	1,197	5.6%
PRI	1,167	8.8%	1,105	3.7%
UNI	1,406	12.7%	1,261	2.7%
UPP	929	3.7%	936	4.4%
All MHPs	**11,210**	**14.1%**	**10,066**	**4.4%**

* Lower rates indicate better performance.

Key Findings: Table 3-6

- Overall, 14.1 percent of the procedure codes identified in the encounter data were not supported by the members' medical records (i.e., medical record omission), with MHP-specific rates ranging from 3.7 percent (**UPP**) to 22.8 percent (**HCS**).
  - 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.
    - Approximately 30.9 percent of medical record omissions for procedure codes were due to either HSAG not receiving the medical records or the medical records not supporting the specified date of service.
  - Among records wherein procedure codes were considered medical record omissions:
    - 82.9 percent were due to medical record omissions from the initial sampled date of service.

  - 17.1 percent were due to medical record omissions from the second date of service.
- For cases with medical records to validate the date of service, procedure codes that were frequently omitted from the members' medical records included:
  - 90460: Immunization administration through 18 years via any route of administration, with counseling by physician (Frequency = 133)
  - 90461: Additional immunization administration through 18 years via any route of administration, with counseling by physician (Frequency = 46)
  - 96127: Developmental and Behavioral Screening and Testing (Frequency = 44)
- Other potential contributors for the procedure code medical record omission included:
  - Providers did not document services in the medical record, despite submitting the procedure codes to the MHP.
  - Providers submitted codes to the MHPs for services not actually performed.

- Overall, 4.4 percent of the procedure codes identified in the medical records were not found in the encounter data (i.e., encounter data omission), with MHP-specific rates ranging from 2.7 percent (**UNI**) to 5.8 percent (**BCC**).
  - The overall encounter data omission rate for the *Procedure Code* data element (4.4 percent) exceeded the overall encounter data omission rate for the *Date of Service* data element (4.3 percent), indicating that the omission of dates of service from the encounter data was one factor contributing to procedure code encounter data omissions. Other potential contributors for procedure code encounter data omissions included:
    - Providers made coding errors or did not submit the procedure code, despite performing the services.
    - Differences related to Michigan-specific billing and reimbursement guidelines.
    - Lag occurred between service provision and encounter submission to the MHPs or MDHHS.
  - For cases with medical records to validate the date of service, procedure codes frequently included in the members' medical records but not found in MDHHS' encounters included:
    - 99213: Established patient office or other outpatient visit, 20-29 minutes (Frequency = 73)
    - 90461: Additional immunization administration through 18 years via any route of administration, with counseling by physician (Frequency = 66)
    - 90472: Immunization administration (includes percutaneous, intradermal, subcutaneous, or intramuscular injections); each additional vaccine (single or combination vaccine/toxoid (Frequency = 62)
    - 99214: Established patient office or other outpatient visit, 30-39 minutes (Frequency = 57)

Procedure Code Modifier Completeness

Table 3-7 displays the percentage of procedure code modifiers identified in the encounter data that had no supporting documentation in the members' medical records (i.e., medical record omission) and the percentage of procedure code modifiers from the members' 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 3-7—Medical Record Omission and Encounter Data Omission for Procedure Code Modifier

MHP	Medical Record Omission		Encounter Data Omission	
	Number of Procedure Code Modifiers Identified in Encounter Data	Percent Not Documented by Members' Medical Records*	Number of Procedure Code Modifiers Identified in Members' Medical Records	Percent Not Found in the Encounter Data*
AET	457	20.8%	366	1.1%
BCC	455	14.3%	395	1.3%
HCS	478	30.8%	334	0.9%
MCL	382	22.0%	303	1.7%
MER	386	21.5%	303	0.0%
MOL	485	26.6%	358	0.6%
PRI	419	17.7%	349	1.1%
UNI	483	21.1%	388	1.8%
UPP	256	16.4%	217	1.4%
All MHPs	**3,801**	**21.6%**	**3,013**	**1.1%**

* Lower rates indicate better performance.

Key Findings: Table 3-7

- Overall, 21.6 percent of the procedure code modifiers identified in the encounter data were not supported by the members' medical records (i.e., medical record omission). Medical record omission rates among MHPs varied substantially, ranging from 14.3 percent (**BCC**) to 30.8 percent (**HCS**).
  - The high medical record omission rate for the *Procedure Code Modifier* data element could have been attributed to several factors:
    - Medical record non-submission: When medical records were not submitted, associated procedure codes and procedure code modifiers were treated as medical record omissions.
    - Omitted procedure codes: When procedure codes were omitted, their associated procedure code modifiers were also omitted.

  - Incomplete documentation: Providers did not document evidence related to the modifiers in the medical records, despite submitting the modifiers to the MHPs.
  - Approximately 23.9 percent of medical record omissions for procedure code modifiers were due to either HSAG not receiving the medical records or the medical records not supporting the specified date of service.
- Among records wherein procedure code modifiers were considered medical record omission, 76.5 percent were due to medical record omissions from the initial sampled date of service, whereas 23.5 percent were due to medical record omissions from the second date of service.
- The procedure code modifiers most frequently found in the encounter data but not documented in the members' medical records was "25" (significant, separately identifiable evaluation and management [E/M] service by the same provider on the same day of the procedure or other service), which accounted for 44.3 percent of the omissions.

- Overall, only 1.1 percent of the procedure code modifiers identified in the medical records were not found in MDHHS' encounter data (i.e., encounter data omission), with MHP-specific rates ranging from 0.0 percent (**MER**) to 1.8 percent (**UNI**).

Encounter Data Accuracy

HSAG evaluated encounter data accuracy for dates of service that existed in both MDHHS' encounters and the corresponding members' medical records, with values present in both data sources for the evaluated data element. HSAG considered the encounter data elements (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) accurate if documentation in the medical record supported the values contained in the electronic encounter data. **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 members' medical records. In addition, errors found in the diagnosis coding were separated into two categories: inaccurate coding and specificity errors. An 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]). A specificity error occurred when the documentation supported a more specific code than was listed in MDHHS' 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 MHP are provided in the MHP-specific appendices.

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

MHP	Accuracy Results		Error Type Rate[1]	
	Number of Diagnosis Codes Present in Both Sources	Accuracy Rate	Percent From Inaccurate Coding	Percent From Specificity Error
AET	1,410	99.9%	100%	0.0%
BCC	1,471	99.7%	75.0%	25.0%
HCS	1,288	99.8%	100%	0.0%
MCL	1,449	99.7%	100%	0.0%
MER	1,131	99.8%	100%	0.0%
MOL	1,328	99.6%	100%	0.0%
PRI	1,373	99.7%	100%	0.0%
UNI	1,618	99.7%	100%	0.0%
UPP	1,272	99.9%	100%	0.0%
All MHPs	**12,340**	**99.7%**	**96.8%**	**3.2%**

[1] Inaccurate coding and specificity errors in medical records were collectively considered as the denominator for the error type rates.

Key Findings: Table 3-8

- Overall, 99.7 percent of the diagnosis codes were accurate when they were present in both the encounter data and the medical records, with each MHP having rates of at least 99.6 percent.
- For diagnosis coding accuracy, the errors were predominantly due to inaccurate errors (96.8 percent) rather than discrepancies associated with specificity errors (3.2 percent).

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 members' medical records. In addition, errors found in the procedure coding were separated into three categories:

- **Higher level of service in the medical record**: Evaluation and Management (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 encounter submitted 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**: 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.

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 MHP are provided in the MHP-specific appendices.

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

MHP	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
AET	1,122	97.4%	100%	0.0%	0.0%
BCC	1,176	97.8%	96.2%	0.0%	3.8%
HCS	1,011	96.9%	96.8%	0.0%	3.2%
MCL	1,064	98.1%	85.0%	0.0%	15.0%
MER	938	97.8%	100%	0.0%	0.0%
MOL	1,130	98.5%	100%	0.0%	0.0%
PRI	1,064	98.2%	94.7%	0.0%	5.3%
UNI	1,227	97.6%	100%	0.0%	0.0%
UPP	895	99.6%	50.0%	0.0%	50.0%
All MHPs	**9,627**	**98.0%**	**95.9%**	**0.0%**	**4.1%**

[1] 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.

Key Findings: Table 3-9

- Among the MHPs, 98.0 percent of the procedure codes were accurate when present in both MDHHS' encounter data and the medical records. Accuracy rates across MHPs ranged from 96.9 percent (**HCS**) to 99.6 percent (**UPP**).
- For the procedure coding accuracy, 95.9 percent of the identified errors were associated with the use of inaccurate procedure codes not supported by the National Correct Coding Initiative (NCCI). Secondly, 0.0 percent of the identified errors resulted from providers submitting codes for a lower level of service than was documented in the medical records (i.e., procedure code was considered in error due to a higher level procedure code having been documented in the medical record). Lastly, 4.1 percent of the identified errors resulted from providers submitting codes for a higher level of service than was documented in members' medical records (i.e., the procedure code was considered an error due to a lower level of service having been documented in the medical record).

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 members' 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 where 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 system) was present, but the documentation did not support telemedicine services.

Table 3-10—Accuracy Results and Error Types for Procedure Code Modifier

MHP	Number of Procedure Code Modifiers Present in Both Sources	Accuracy Rate
AET	362	99.7%
BCC	390	100%
HCS	331	100%
MCL	298	100%
MER	303	99.7%
MOL	356	100%
PRI	345	99.7%
UNI	381	100%
UPP	214	100%
All MHPs	**2,980**	**99.9%**

Key Findings: Table 3-10

- Overall, 99.9 percent of the *Procedure Code Modifiers* were accurate when the *Procedure Code Modifiers* were present in both MDHHS' encounter data and the submitted medical records. All MHPs had high levels of accuracy for the *Procedure Code Modifiers*, with MHP rates of at least 99.7 percent. Notably, six of the nine MHPs achieved a 100 percent accuracy rate.

All-Element Accuracy

Table 3-11 displays the percentage of dates of service present in both MDHHS' encounter data and the medical records with the same values for all key data elements listed in Table 2-2. 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 MDHHS' 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 3-11—All-Element Accuracy

MHP	Number of Dates of Service Present in Both Sources	All Element Accuracy Rate[1]
AET	548	74.6%
BCC	542	73.1%
HCS	478	71.3%
MCL	581	75.9%
MER	458	71.8%
MOL	517	70.6%
PRI	549	76.1%
UNI	602	70.6%

MHP	Number of Dates of Service Present in Both Sources	All Element Accuracy Rate[1]
UPP	564	85.5%
All MHPs	**4,839**	**74.5%**

[1] 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 for each data element.

Key Findings: Table 3-11

- Overall, 74.5 percent of the dates of service present in both data sources (i.e., encounter data and medical records) were accurate across all key data elements (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*). MHP-specific rates ranged from 70.6 percent (**MOL** and **UNI**) to 85.5 percent (**UPP**).
- The overall all-element inaccuracies were caused by the medical record omission, encounter data omission, and element inaccuracy from all three data elements.

4. Discussion

Conclusions

The MRR activity evaluated encounter data completeness and accuracy through a review of medical records for physician services rendered from October 1, 2022, through September 30, 2023. The evaluation focused on four key data elements:

- *Date of Service*
- *Diagnosis Code*
- *Procedure Code*
- *Procedure Code Modifier*

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

- *Medical record omission rate*: the percentage of dates of service identified in the electronic encounter data that were not found in the members' medical records. This rate was also calculated for *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*.
- *Encounter data omission rate*: the percentage of dates of service from members' medical records that were not found in the electronic encounter data. This rate was similarly calculated for *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*.
- *Accuracy rate of coding*: the percentage of diagnosis codes, procedure codes, and procedure code modifiers associated with validated dates of service from the electronic encounter data that were correctly coded based on the members' medical records.
- *All-element accuracy rate:* the percentage of dates of service with all data elements coded correctly among all the validated dates of service from the electronic encounter data.

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 Elements	Medical Record Omission*		Encounter Data Omission*	
	All MHP Rate	MHP Range	All MHP Rate	MHP Range
Date of Service	4.7%	0.7% – 13.6%	4.3%	1.8% – 6.2%
Diagnosis Code	8.9%	3.9% – 15.9%	2.5%	0.9% – 3.5%
Procedure Code	14.1%	3.7% – 22.8%	4.4%	2.7% – 5.8%
Procedure Code Modifier	21.6%	14.3% – 30.8%	1.1%	0.0% – 1.8%

* Lower rates indicate better performance.

The final sample cases included in the evaluation consisted of 3,699 cases randomly selected per MHP, along with any second dates of service submitted for each sampled member. Two indicators were evaluated for encounter data completeness (i.e., medical record omission and encounter data omission) for each of the data elements (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*).

Overall, the medical record omission rates were higher than the encounter data omission rates across all key data elements (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code* and *Procedure Code Modifier*). The encounter data *Dates of Service* were generally supported by the members' medical records, as evidenced by the medical record omission rate of 4.7 percent, whereas the *Diagnosis Code* (8.9 percent) data element in the encounter data was moderately supported by the medical records. Conversely, the *Procedure Code* (14.1 percent) and the *Procedure Code Modifier* (21.6 percent) data elements in the encounter data were inadequately supported by the medical records.

Variation among MHPs in medical record omission rates for all four data elements was relatively substantial. The *Procedure Code* element had the largest variation, with a difference of 19.1 percentage points between the lowest and highest rates. The range of medical record omission rates among the remaining data elements were 16.5 percentage points for *Procedure Code Modifier*, 12.9 percentage points for *Date of Service*, and 12.0 percentage points for *Diagnosis Code*.

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

- Medical records were not submitted for the study.
- Providers did not document the services performed in the medical records, despite submitting claims or encounters.
- Providers did not provide the service(s) reflected in the encounter data.

The encounter data omission rates reveal that all four key data elements (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*), when found in the medical records, were well supported by the encounter data extracted from MDHHS's data warehouse. As displayed in Table 4-1, the encounter data omission rates for all four data elements were notably low, with rates below 5.0 percent.

The variations in encounter data omission rates among MHPs were minimal, with rates ranging from as low as 1.8 percentage points (*Procedure Code Modifier*) to a high of 4.4 percentage points (*Date of Service*).

The potential reasons for encounter data omissions included the following:

- Provider billing offices made coding errors or failed to submit the procedure codes or modifiers despite performing the specific services.
- Differences related to Michigan-specific billing and reimbursement guidelines.
- A lag occurred between provider's performance of the service and the submission of the encounter to the MHP and/or MDHHS.

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

Data Element	All MHP Rate	MHP Rate	Error Type Percentages
Diagnosis Code[1]	99.7%	99.6% – 99.9%	Inaccurate Code: (96.8%) Specificity Error: (3.2%)
Procedure Code[2]	98.0%	96.9% – 99.6%	Inaccurate Code: (95.9%) Higher Level of Service in Medical Record: (0.0%) Lower Level of Service in Medical Record: (4.1%)
Procedure Code Modifier	99.9%	99.7% – 100%	—
All-Element Accuracy[3]	74.5%	70.6% – 85.5%	—

"—" Denotes the error type analysis was not applicable to the data element.
[1] Inaccurate coding and specificity errors in service records were collectively considered as the denominator for the error type rates.
[2] Inaccurate coding, codes with higher levels of service, and codes with lower levels of service in service records were collectively considered as the denominator for the error type rates.
[3] 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 for each data element.

In general, when key data elements were present in both MDHHS' encounter data and the medical records, and were evaluated independently, the data elements were found to be accurate. As displayed in Table 4-2, 99.7 percent of diagnosis codes, 98.0 percent of procedure codes, and 99.9 percent of procedure code modifiers were accurate when found in both sources.

The accuracy rate for the *Diagnosis Code* and *Procedure Code* data elements can be affected by different types of errors. The errors affecting the *Diagnosis Code* data element were mostly due to the use of an inaccurate code (96.8 percent) rather than discrepancies associated with specificity errors (3.2 percent). Similarly, the errors affecting the *Procedure Code* data element were mostly due to the use of inaccurate codes not supported by the NCCI coding standards (95.9 percent), whereas, only a few errors involved providers submitting higher-level service codes than that supported in the members' medical records (4.1 percent).

Nearly 75.0 percent of the dates of service present in both data sources accurately represented all three data elements (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) when compared to the members' medical records. The overall all-element inaccuracies were caused by the medical record omission, encounter data omission, and element inaccuracy from all three data elements.

Recommendations

To improve the quality of encounter data submissions from the MHPs, HSAG offers the following recommendations to assist MDHHS and the MHPs in addressing opportunities for improvement:

- The results from the MRR indicated that the physician visit encounters submitted by the MHPs and maintained in MDHHS's data warehouse were relatively complete and accurate when compared to the members' medical records, with few exceptions. As such, HSAG recommends MDHHS to continue its current efforts in monitoring encounter data submissions and addressing any identified data issues with the MHPs' encounter data submissions.
- The MHPs experiencing challenges procuring requested records from their contracted providers should ensure the contracted providers' accountability in responding to medical record requests for the purposes of auditing, inspection, and oversight. HSAG recommends that the MHPs consider strengthening and/or enforcing their contract requirements with providers to ensure compliance with documentation requests.
- The medical record omission rates for *the Procedure Code Modifier* and *Procedure Code* data elements were relatively high across all MHPs. As such, MHPs should investigate the root causes of these omissions and consider performing periodic MRRs of submitted claims to verify appropriate coding and data completeness, where appropriate. Findings from these reviews should be used to provide targeted education and training for providers regarding encounter data submissions, medical record documentation, and coding practices.
- HSAG recommends increased collaboration between MDHHS and MHPs:
  - Conducting regular communication forums and workshops to discuss challenges and share best practices in data submission and setting performance benchmarks to encourage continuous improvement.
  - Developing improvement plans for MHPs with lower accuracy rates and pilot programs focusing on high-risk data elements like *Procedure Codes* and *Procedure Code Modifiers*.
- During the process of generating sample cases for the EDV review, HSAG encountered significant challenges with the completeness and accuracy of provider information within MDHHS' encounter data. Specifically, the data often lacked fully populated NPIs, which are crucial for accurately identifying providers who meet the criteria for a specific service category. Additionally, the encounter data did not include detailed provider taxonomy codes, which are vital for determining the eligibility of providers for specific services relevant to the review. The lack of detailed taxonomy information hindered HSAG's ability to categorize and analyze data based on the provider specialty and service type. To address these challenges and improve the integrity of future data analyses, HSAG proposes the following strategic recommendations. MDHHS should:
  - Mandate the inclusion of complete NPIs and provider taxonomy codes in all encounter data submissions.
  - Introduce robust data verification processes at the point of entry. This step will help in early detection and rectification of incomplete or inaccurate provider data, maintaining the integrity of the database.

  - Develop a centralized, easily accessible repository for provider data that can be referenced and updated regularly. This will facilitate more efficient data linkage and retrieval, improving the ease and reliability of data analysis.
  - Implement a regular review and feedback system to monitor the improvements in data quality post-implementation of these changes. This will not only help in measuring the success of the implemented strategies but also in making continuous improvements.

By adopting these recommendations, MDHHS and the MHPs can enhance the quality and consistency of encounter data, reduce discrepancies, and support more accurate analysis.

Review Limitations

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

- Accurate evaluation of the completeness and accuracy of MDHHS' encounter data depends on the ability of the MHPs to procure members' complete and accurate medical records. Therefore, validation results may have been affected by a MHP's inability to successfully obtain medical records from its provider network (e.g., non-responsive provider) or if the submitted medical records were incomplete (e.g., submission of a visit summary instead of the complete medical record).
- Study findings of the MRR relied solely on the documentation contained in members' medical records; therefore, results are dependent on the overall quality of physicians' medical records. For example, a physician may have performed a service but not documented it in the member'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 versus 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 October 1, 2022, through September 30, 2023. As such, the results may not reflect the current quality of MDHHS' encounter data.
- The findings from this study are associated with physician visits and may not be applicable to other claim types.

Appendix A. Results for Aetna Better Health of Michigan

This appendix contains detailed MRR results for **AET**.

Medical Record Review Results

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

Number of Medical Records Requested	Number of Medical Records Submitted[1]	Percent of Medical Records Submitted
411	401	97.6%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

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

Non-Submission Reason	Number	Percent
Record was not located at this facility.	0	0.0%
Member was not a patient of this practice.	0	0.0%
Member was a patient of this practice; however, no documentation was available for date of service.	1	10.0%
Non-responsive provider or provider did not respond in a timely manner.	8	80.0%
Provider refused to release records.	0	0.0%
Facility was permanently closed.	1	10.0%
Other.	0	0.0%
Total	**10**	**100%**

Table A-3—Medical Record Submission Status: Second Date of Service

Number of Medical Records Submitted[1]	Number of Medical Records Submitted with a Second Date of Service	Percent of Medical Records with a Second Date of Service
401	170	42.4%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

Table A-4—MRR: Encounter Data Completeness

	Medical Record Omission		Encounter Data Omission	
Data Element	Denominator	Percent*	Denominator	Percent*
Date of Service	564	2.8%	563	2.7%
Diagnosis Code	1,520	7.2%	1,437	1.9%
Procedure Code	1,315	14.7%	1,170	4.1%
Procedure Code Modifier	457	20.8%	366	1.1%

* Lower rates indicate better performance.

Table A-5—MRR: Encounter Data Accuracy

Data Element	Denominator	Percent	Error Type Percentages
Diagnosis Code[1]	1,410	99.9%	Inaccurate Code: (100%) Specificity Error: (0.0%)
Procedure Code[2]	1,122	97.4%	Inaccurate Code: (100%) Higher Level of Service in Medical Record: (0.0%) Lower Level of Service in Medical Record: (0.0%)
Procedure Code Modifier	362	99.7%	—
All-Element Accuracy[3]	548	74.6%	—

"—" Denotes the error type analysis was not applicable to the data element.
[1] Inaccurate coding and specificity errors in service records were collectively considered as the denominator for the error type rates.
[2] Inaccurate coding, codes with higher levels of service, and codes with lower levels of service in service records were collectively considered as the denominator for the error type rates.
[3] 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 for each data element.

Conclusions

Table A-6 outlines the key findings based on the assessment of encounter data completeness and accuracy, conducted by reviewing medical records for services rendered from October 1, 2022, through September 30, 2023.

Table A-6—MRR Key Findings for AET

Analysis	Key Findings
Medical Record Procurement Status	
Medical Record Procurement Rate	• The medical record procurement rate was **97.6 percent**, indicating that most requested records were successfully procured and submitted.
Second Date of Service Submission Rate	• Among the procured medical records, **42.4 percent** included a corresponding second date of service.
Encounter Data Completeness	
Medical Record Omission Rate	• The *Procedure Code* and *Procedure Code Modifier* had relatively high medical record omission rates at **14.7 percent** and **20.8 percent**, respectively. This indicates that the procedure codes and the modifiers in the encounter data were not adequately supported by the members' medical records.
Encounter Data Omission Rate	• All key data elements exhibited relatively low encounter data omission rates, with the *Procedure Code* having the highest omission rate at **4.1 percent**.
Encounter Data Accuracy	
Diagnosis Code Accuracy Rate	• The *Diagnosis Codes* were accurate in **99.9 percent** of instances where codes were present in both the medical records and encounter data, with all errors attributed to inaccurate coding.
Procedure Code Accuracy Rate	• The *Procedure Codes* were accurate in **97.4 percent** of instances where codes were present in both the medical records and encounter data, with all errors related to inaccurate coding.
Procedure Code Modifier Accuracy Rate	• The *Procedure Code Modifiers* were accurate in **99.7 percent** of instances where modifiers were present in both the medical records and encounter data.
All-Element Accuracy Rate	• Dates of service with accurate values for all key data elements (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) were observed in **74.6 percent** of the dates of service present in both data sources (i.e., encounter data and medical records).

Strengths, Weaknesses, and Recommendations

Based on the results from the MRR, HSAG identified the following areas of strength and opportunities for improvement. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts.

Strengths

Strength #1: A high percentage of *Dates of Service* and *Diagnosis Codes* in the encounter data were supported by the members' medical records, as evidenced by the low medical record omission rates of 2.8 percent and 7.2 percent, respectively.

Strength #2: The *Dates of Service*, *Diagnosis Codes*, *Procedure Codes*, and *Procedure Code Modifiers* identified in the medical records were generally present in the encounter data, as evidenced by the low encounter data omission rates of 2.7 percent, 1.9 percent, 4.1 percent, and 1.1 percent, respectively.

Strength #3: When key data elements were present in both the encounter data and the members' medical records and were evaluated independently, the data element values were found to be accurate with rates of at least 97.4 percent each.

Weaknesses and Recommendations

Weakness #1: More than 14.0 percent of the *Procedure Codes* and more than 20.0 percent of the *Procedure Code Modifiers* identified in the encounter data were not supported by the members' medical records.

Why the weakness exists: The findings where encounter data are not supported by the medical records can stem from several potential reasons, which can involve provider documentation practices (e.g., incomplete or inaccurate documentation, coding errors, lack of detail), data submission (e.g., incorrect coding during data submission or data entry errors), or processing issues (e.g., data mapping or translation issues, errors in data transmission).

Recommendation: AET should investigate the root cause(s) of these omissions, with a focus on both provider documentation practices and data handling processes. Periodic MRRs of submitted claims should be conducted to verify appropriate coding and data completeness, where appropriate. Any findings from these reviews should be used to develop and provide ongoing education and training for providers. Topics should include encounter data submissions, medical record documentation requirements, and coding practices to reduce future omissions and improve data accuracy.

Appendix B. Results for Blue Cross Complete of Michigan

This appendix contains detailed MRR results for **BCC**.

Medical Record Review Results

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

Number of Medical Records Requested	Number of Medical Records Submitted[1]	Percent of Medical Records Submitted
411	409	99.5%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

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

Non-Submission Reason	Number	Percent
Record was not located at this facility.	0	0.0%
Member was not a patient of this practice.	0	0.0%
Member was a patient of this practice; however, no documentation was available for date of service.	0	0.0%
Non-responsive provider or provider did not respond in a timely manner.	0	0.0%
Provider refused to release records.	1	50.0%
Facility was permanently closed.	0	0.0%
Other.	1	50.0%
Total	**2**	**100%**

Table B-3—Medical Record Submission Status: Second Date of Service

Number of Medical Records Submitted[1]	Number of Medical Records Submitted with a Second Date of Service	Percent of Medical Records with a Second Date of Service
409	172	42.1%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

Table B-4—MRR: Encounter Data Completeness

	Medical Record Omission		Encounter Data Omission	
Data Element	Denominator	Percent*	Denominator	Percent*
Date of Service	546	0.7%	578	6.2%
Diagnosis Code	1,564	5.9%	1,525	3.5%
Procedure Code	1,317	10.7%	1,249	5.8%
Procedure Code Modifier	455	14.3%	395	1.3%

* Lower rates indicate better performance.

Table B-5—MRR: Encounter Data Accuracy

Data Element	Denominator	Percent	Error Type Percentages
Diagnosis Code[1]	1,471	99.7%	Inaccurate Code: (75.0%) Specificity Error: (25.0%)
Procedure Code[2]	1,176	97.8%	Inaccurate Code: (96.2%) Higher Level of Service in Medical Record: (0.0%) Lower Level of Service in Medical Record: (3.8%)
Procedure Code Modifier	390	100%	—
All-Element Accuracy[3]	542	73.1%	—

"—" Denotes the error type analysis was not applicable to the data element.
[1] Inaccurate coding and specificity errors in service records were collectively considered as the denominator for the error type rates.
[2] Inaccurate coding, codes with higher levels of service, and codes with lower levels of service in service records were collectively considered as the denominator for the error type rates.
[3] 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 for each data element.

Conclusions

Table B-6 outlines the key findings based on the assessment of encounter data completeness and accuracy, conducted by reviewing medical records for services rendered from October 1, 2022, through September 30, 2023.

Table B-6—MRR Key Findings for BCC

Analysis	Key Findings
Medical Record Procurement Status	
Medical Record Procurement Rate	• The medical procurement rate was **99.5 percent**, indicating that nearly all requested records were successfully procured and submitted.
Second Date of Service Submission Rate	• Among the procured medical records, **42.1 percent** included a corresponding second date of service.
Encounter Data Completeness	
Medical Record Omission Rate	• The *Procedure Code* and *Procedure Code Modifier* had relatively high medical record omission rates at **10.7 percent** and **14.3 percent**, respectively. This indicates that the procedure codes and the modifiers in the encounter data were not adequately supported by the members' medical records.
Encounter Data Omission Rate	• All key data elements exhibited relatively low encounter data omission rates, with the *Date of Service* having the highest encounter data omission rate at **6.2 percent**.
Encounter Data Accuracy	
Diagnosis Code Accuracy Rate	• The *Diagnosis Codes* were accurate in **99.7 percent** of instances where codes were present in both the medical records and encounter data, with most errors attributed to inaccurate coding.
Procedure Code Accuracy Rate	• The *Procedure Codes* were accurate in **97.8 percent** of instances where codes were present in both the medical records and encounter data; most errors were related to inaccurate coding, while some were attributed to providers submitting higher-level service codes than those supported in the medical records.
Procedure Code Modifier Accuracy Rate	• The *Procedure Code Modifiers* were accurate in **100 percent** of instances where modifiers were present in both the medical records and encounter data.
All-Element Accuracy Rate	• Dates of service with accurate values for all key data elements (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) were observed in **73.1 percent** of the dates of

Analysis	Key Findings
	service present in both data sources (i.e., encounter data and medical records).

Strengths, Weaknesses, and Recommendations

Based on the results from the MRR, HSAG identified the following areas of strength and opportunities for improvement. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts.

Strengths

Strength #1: A high percentage of *Dates of Service* and *Diagnosis Codes* in the encounter data were supported by the members' medical records, as evidenced by the low medical record omission rates of 0.7 percent and 5.9 percent, respectively.

Strength #2: The *Dates of Service*, *Diagnosis Codes*, *Procedure Codes*, and *Procedure Code Modifiers* identified in the medical records were generally present in the encounter data, as evidenced by the low encounter data omission rates of 6.2 percent, 3.5 percent, 5.8 percent, and 1.3 percent, respectively.

Strength #3: When key data elements were present in both the encounter data and the members' medical records and were evaluated independently, the data element values were found to be accurate with rates of at least 97.8 percent each.

Weaknesses and Recommendations

Weakness #1: More than 10.0 percent of *Procedure Codes* and more than 14.0 percent of *Procedure Code Modifiers* identified in the encounter data were not supported by the members' medical records.

Why the weakness exists: The findings where encounter data are not supported by the medical records can stem from several potential reasons, which can involve provider documentation practices (e.g., incomplete or inaccurate documentation, coding errors, lack of detail), data submission (e.g., incorrect coding during data submission or data entry errors), or processing issues (e.g., data mapping or translation issues, errors in data transmission).

Recommendation: BCC should investigate the root cause(s) for these omissions, with a focus on both provider documentation practices and data handling processes. Periodic MRRs of submitted claims should be conducted to verify appropriate coding and data completeness, where appropriate. Any findings from these reviews should be used to develop and provide ongoing education and training for providers. Topics should include encounter data submissions, medical record documentation requirements, and coding practices to reduce future omissions and improve data accuracy.

Appendix C. Results for HAP CareSource

This appendix contains detailed MRR results for **HCS**.

Medical Record Review Results

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

Number of Medical Records Requested	Number of Medical Records Submitted[1]	Percent of Medical Records Submitted
411	337	82.0%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

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

Non-Submission Reason	Number	Percent
Record was not located at this facility.	2	2.7%
Member was not a patient of this practice.	3	4.1%
Member was a patient of this practice; however, no documentation was available for date of service.	1	1.4%
Non-responsive provider or provider did not respond in a timely manner.	62	83.8%
Provider refused to release records.	0	0.0%
Facility was permanently closed.	0	0.0%
Other.	6	8.1%
Total*	**74**	**100%**

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

Table C-3—Medical Record Submission Status: Second Date of Service

Number of Medical Records Submitted[1]	Number of Medical Records Submitted with a Second Date of Service	Percent of Medical Records with a Second Date of Service
337	170	50.4%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

Table C-4—MRR: Encounter Data Completeness

	Medical Record Omission		Encounter Data Omission	
Data Element	Denominator	Percent*	Denominator	Percent*
Date of Service	553	13.6%	500	4.4%
Diagnosis Code	1,531	15.9%	1,330	3.2%
Procedure Code	1,309	22.8%	1,043	3.1%
Procedure Code Modifier	478	30.8%	334	0.9%

* Lower rates indicate better performance.

Table C-5—MRR: Encounter Data Accuracy

Data Element	Denominator	Percent	Error Type Percentages
Diagnosis Code[1]	1,288	99.8%	Inaccurate Code: (100%) Specificity Error: (0.0%)
Procedure Code[2]	1,011	96.9%	Inaccurate Code: (96.8%) Higher Level of Service in Medical Record: (0.0%) Lower Level of Service in Medical Record: (3.2%)
Procedure Code Modifier	331	100%	—
All-Element Accuracy[3]	478	71.3%	—

"—" Denotes the error type analysis was not applicable to the data element.
[1] Inaccurate coding and specificity errors in service records were collectively considered as the denominator for the error type rates.
[2] Inaccurate coding, codes with higher levels of service, and codes with lower levels of service in service records were collectively considered as the denominator for the error type rates.
[3] 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 for each data element.

Conclusions

Table C-6 outlines the key findings based on the assessment of encounter data completeness and accuracy, conducted by reviewing medical records for services rendered from October 1, 2022, through September 30, 2023.

Table C-6—MRR Key Findings for HCS

Analysis	Key Findings
Medical Record Procurement Status	
Medical Record Procurement Rate	• The medical procurement rate was **82.0 percent**, indicating that nearly 20.0 percent of the requested records were not successfully procured and submitted. • Of the medical records not submitted, nearly 84 percent were not submitted due to non-responsive providers or provider did not respond in a timely manner.
Second Date of Service Submission Rate	• Among the procured medical records, **50.4 percent** included a corresponding second date of service.
Encounter Data Completeness	
Medical Record Omission Rate	• All key data elements (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) had relatively high medical record omission rates, ranging from **13.6 percent** (*Date of Service*) to **30.8 percent** (*Procedure Code Modifier*). This suggests that the data elements in the encounter data were not adequately supported by the members' medical records. • The high medical record omission rates for all key data elements were partially influenced by medical record non-submission. In cases where no medical records were submitted for a requested case, all associated data elements were categorized as medical record omissions.
Encounter Data Omission Rate	• All key data elements exhibited relatively low encounter data omission rates with the *Date of Service* having the highest omission rate at **4.4 percent**.
Encounter Data Accuracy	
Diagnosis Code Accuracy Rate	• The *Diagnosis Codes* were accurate in **99.8 percent** of instances where codes were present in both the medical records and encounter data, with all errors attributed to inaccurate coding.
Procedure Code Accuracy Rate	• The *Procedure Codes* were accurate in **96.9 percent** of instances where codes were present in both the medical records and encounter data; most errors were related to inaccurate coding, while some were attributed to providers

Analysis	Key Findings
	submitting higher-level service codes than those supported in the medical records.
Procedure Code Modifier Accuracy Rate	• The *Procedure Code Modifiers* were accurate in **100 percent** of instances where modifiers were present in both the medical records and encounter data.
All-Element Accuracy Rate	• Dates of service with accurate values for all key data elements (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) were observed in **71.3 percent** of the dates of service present in both data sources (i.e., encounter data and medical records).

Strengths, Weaknesses, and Recommendations

Based on the results from the MRR, HSAG identified the following areas of strength and opportunities for improvement. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts.

Strengths

Strength #1 The *Dates of Service*, *Diagnosis Codes*, *Procedure Codes*, and *Procedure Code Modifiers* identified in the medical records were generally present in the encounter data, as evidenced by the low encounter data omission rates of 4.4 percent, 3.2 percent, 3.1 percent, and 0.9 percent, respectively.

Strength #2: When key data elements were present in both the encounter data and the members' medical records and were evaluated independently, the data element values were found to be accurate with rates of at least 96.9 percent each.

Weaknesses and Recommendations

Weakness #1: HCS was unable to procure all of the requested medical records from its contracted providers mostly due to providers being non-responsive or providers not responding in a timely manner.

Why the weakness exists: The non-submission reason for non-responsive providers or providers who did not respond in a timely manner may indicate that the contracted providers were unaware of the submission requirements or the deadline.

Recommendation: HCS should ensure its contracted providers' accountability in responding to medical record requests for the purposes of auditing, inspection, and oversight. HSAG recommends **HCS** consider strengthening and/or enforcing its contract requirements with its providers in providing the requested documentation.

Weakness #2: All data elements had more than 13.0 percent identified in the encounter data that were not supported by the members' medical records.

Why the weakness exists: Non-submitted medical records contribute to medical record omissions, as the expected information in the medical records cannot be compared to the encounter data. Additional contributing factors include provider documentation practices (e.g., incomplete or inaccurate documentation, coding errors, lack of detail), data submission (e.g., incorrect coding during data submission or data entry errors), or processing issues (e.g., data mapping or translation issues, or errors in data transmission).

Recommendation: HCS should investigate the root cause(s) for these omissions, with a focus on both provider documentation practices and data handling processes. Periodic MRRs of submitted claims should be conducted to verify appropriate coding and data completeness, where appropriate. Any findings from these reviews should be used to develop and provide ongoing education and training for providers. Topics should include encounter data submissions, medical record documentation requirements, and coding practices to reduce future omissions and improve data accuracy.

Appendix D. Results for McLaren Health Plan

This appendix contains detailed MRR results for **MCL**.

Medical Record Review Results

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

Number of Medical Records Requested	Number of Medical Records Submitted[1]	Percent of Medical Records Submitted
411	388	94.4%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

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

Non-Submission Reason	Number	Percent
Record was not located at this facility.	0	0.0%
Member was not a patient of this practice.	0	0.0%
Member was a patient of this practice; however, no documentation was available for date of service.	0	0.0%
Non-responsive provider or provider did not respond in a timely manner.	23	100%
Provider refused to release records.	0	0.0%
Facility was permanently closed.	0	0.0%
Other.	0	0.0%
Total	**23**	**100%**

Table D-3—Medical Record Submission Status: Second Date of Service

Number of Medical Records Submitted[1]	Number of Medical Records Submitted with a Second Date of Service	Percent of Medical Records with a Second Date of Service
388	232	59.8%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

Table D-4—MRR: Encounter Data Completeness

	Medical Record Omission		Encounter Data Omission	
Data Element	Denominator	Percent*	Denominator	Percent*
Date of Service	606	4.1%	612	5.1%
Diagnosis Code	1,583	8.5%	1,483	2.3%
Procedure Code	1,247	14.7%	1,114	4.5%
Procedure Code Modifier	382	22.0%	303	1.7%

* Lower rates indicate better performance.

Table D-5—MRR: Encounter Data Accuracy

Data Element	Denominator	Percent	Error Type Percentages
Diagnosis Code[1]	1,449	99.7%	Inaccurate Code: (100%) Specificity Error: (0.0%)
Procedure Code[2]	1,064	98.1%	Inaccurate Code: (85.0%) Higher Level of Service in Medical Record: (0.0%) Lower Level of Service in Medical Record: (15.0%)
Procedure Code Modifier	298	100%	—
All-Element Accuracy[3]	581	75.9%	—

"—" Denotes the error type analysis was not applicable to the data element.
[1] Inaccurate coding and specificity errors in service records were collectively considered as the denominator for the error type rates.
[2] Inaccurate coding, codes with higher levels of service, and codes with lower levels of service in service records were collectively considered as the denominator for the error type rates.
[3] 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 for each data element.

Conclusions

Table D-6 outlines the key findings based on the assessment of encounter data completeness and accuracy, conducted by reviewing medical records for services rendered from October 1, 2022, through September 30, 2023.

Table D-6—MRR Key Findings for MCL

Analysis	Key Findings
Medical Record Procurement Status	
Medical Record Procurement Rate	• The medical record rate was **94.4 percent**, indicating that most of the requested records were procured and submitted. • Of the medical records not submitted, all were not submitted due to non-responsive provider or provider did not respond in a timely manner.
Second Date of Service Submission Rate	• Among the procured medical records, **59.8 percent** included a corresponding second date of service.
Encounter Data Completeness	
Medical Record Omission Rate	• The *Procedure Code* and *Procedure Code Modifier* had relatively high medical record omission rates at **14.7 percent** and **22.0 percent**, respectively. This indicates that the procedure codes and the modifiers in the encounter data were not adequately supported by the members' medical records.
Encounter Data Omission Rate	• All key data elements exhibited relatively low encounter data omission rates, with the *Date of Service* having the highest encounter data omission rate at **5.1 percent**.
Encounter Data Accuracy	
Diagnosis Code Accuracy Rate	• The *Diagnosis Codes* were accurate in **99.7 percent** of instances where codes were present in both the medical records and encounter data, with all errors attributed to inaccurate coding.
Procedure Code Accuracy Rate	• The *Procedure Codes* were accurate in **98.1 percent** of instances where codes were present in both the medical records and encounter data; most errors were related to inaccurate coding, while some were attributed to providers submitting higher-level service codes than those supported in medical records.
Procedure Code Modifier Accuracy Rate	• The *Procedure Code Modifiers* were accurate in **100 percent** of instances where modifiers were present in both the medical records and encounter data.

Analysis	Key Findings
All-Element Accuracy Rate	• Dates of service with accurate values for all key data elements (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) were observed in **75.9 percent** of the dates of service present in both data sources (i.e., encounter data and medical records).

Strengths, Weaknesses, and Recommendations

Based on the results from the MRR, HSAG identified the following areas of strength and opportunities for improvement. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts.

Strengths

Strength #1: A high percentage of *Dates of Service* and *Diagnosis Codes* in the encounter data were supported by the members' medical records, as evidenced by the low medical record omission rates of 4.1 percent and 8.5 percent, respectively.

Strength #2: The *Dates of Service*, *Diagnosis Codes*, *Procedure Codes*, and *Procedure Code Modifiers* identified in the medical records were generally present in the encounter data, as evidenced by the low encounter data omission rates of 5.1 percent, 2.3 percent, 4.5 percent, and 1.7 percent, respectively.

Strength #3: When key data elements were present in both the encounter data and the members' medical records and were evaluated independently, the data element values were found to be accurate with rates of at least 98.1 percent each.

Weaknesses and Recommendations

Weakness #1: MCL was unable to procure all of the requested medical records from its contracted providers mostly due to providers being non-responsive or providers not responding in a timely manner.

Why the weakness exists: The non-submission reason for non-responsive providers or providers who did not respond in a timely manner may indicate that the contracted providers were unaware of the submission requirements or the deadline.

Recommendation: MCL should ensure its contracted providers' accountability in responding to medical record requests for the purposes of auditing, inspection, and oversight. HSAG recommends **MCL** consider strengthening and/or enforcing its contract requirements with its providers in providing the requested documentation.

Weakness #2: More than 14.0 percent of the *Procedure Codes* and 22.0 percent of the *Procedure Code Modifiers* identified in the encounter data were not supported by the members' medical records.

Why the weakness exists: Non-submitted medical records contribute to medical record omissions, as the expected information in the medical records cannot be compared to the encounter data. Additional contributing factors include provider documentation practices (e.g., incomplete or inaccurate documentation, coding errors, lack of detail), data submission (e.g., incorrect coding during data submission or data entry errors), or processing issues (e.g., data mapping or translation issues, or errors in data transmission).

Recommendation: MCL should investigate the root cause(s) for these omissions, with a focus on both provider documentation practices and data handling processes. Periodic MRRs of submitted claims should be conducted to verify appropriate coding and data completeness, where appropriate. Any findings from these reviews should be used to develop and provide ongoing education and training for providers. Topics should include encounter data submissions, medical record documentation requirements, and coding practices to reduce future omissions and improve data accuracy.

Appendix E. Results for Meridian Health Plan of Michigan

This appendix contains detailed MRR results for **MER**.

Medical Record Review Results

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

Number of Medical Records Requested	Number of Medical Records Submitted[1]	Percent of Medical Records Submitted
411	379	92.2%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

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

Non-Submission Reason	Number	Percent
Record was not located at this facility.	0	0.0%
Member was not a patient of this practice.	3	9.4%
Member was a patient of this practice; however, no documentation was available for date of service.	0	0.0%
Non-responsive provider or provider did not respond in a timely manner.	22	68.8%
Provider refused to release records.	0	0.0%
Facility was permanently closed.	2	6.3%
Other.	5	15.6%
Total*	**32**	**100%**

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

Table E-3—Medical Record Submission Status: Second Date of Service

Number of Medical Records Submitted[1]	Number of Medical Records Submitted with a Second Date of Service	Percent of Medical Records with a Second Date of Service
379	100	26.4%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

Table E-4—MRR: Encounter Data Completeness

	Medical Record Omission		Encounter Data Omission	
Data Element	Denominator	Percent*	Denominator	Percent*
Date of Service	492	6.9%	481	4.8%
Diagnosis Code	1,263	10.5%	1,166	3.0%
Procedure Code	1,107	15.3%	991	5.3%
Procedure Code Modifier	386	21.5%	303	0.0%

* Lower rates indicate better performance.

Table E-5—MRR: Encounter Data Accuracy

Data Element	Denominator	Percent	Error Type Percentages
Diagnosis Code[1]	1,131	99.8%	Inaccurate Code: (100%) Specificity Error: (0.0%)
Procedure Code[2]	938	97.8%	Inaccurate Code: (100%) Higher Level of Service in Medical Record: (0.0%) Lower Level of Service in Medical Record: (0.0%)
Procedure Code Modifier	303	99.7%	—
All-Element Accuracy[3]	458	71.8%	—

"—" Denotes the error type analysis was not applicable to the data element.
[1] Inaccurate coding and specificity errors in service records were collectively considered as the denominator for the error type rates.
[2] Inaccurate coding, codes with higher levels of service, and codes with lower levels of service in service records were collectively considered as the denominator for the error type rates.
[3] 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 for each data element.

Conclusions

Table E-6 outlines the key findings based on the assessment of encounter data completeness and accuracy, conducted by reviewing medical records for services rendered from October 1, 2022, through September 30, 2023.

Table E-6—MRR Key Findings for MER

Analysis	Key Findings
Medical Record Procurement Status	
Medical Record Procurement Rate	• The medical record procurement rate was **92.2 percent**, indicating that most of the requested records were procured and submitted. • Of the medical records not submitted, nearly 70 percent were not submitted due to non-responsive providers or provider did not respond in a timely manner.
Second Date of Service Submission Rate	• Among the procured medical records, **26.4 percent** included a corresponding second date of service.
Encounter Data Completeness	
Medical Record Omission Rate	• All key data elements, except for *Date of Service*, had relatively high medical record omission rates, ranging from **6.9 percent** (*Date of Service*) to **21.5 percent** (*Procedure Code Modifier*). This suggests that the data elements in the encounter data were not adequately supported by the members' medical records. • The high medical record omission rates for those data elements were partially influenced by medical record non-submission. In cases where no medical records were submitted for a requested case, all associated data elements were categorized as medical record omissions.
Encounter Data Omission Rate	• All key data elements exhibited relatively low encounter data omission rates with the *Procedure Code* having the highest encounter data omission rate at **5.3 percent**.
Encounter Data Accuracy	
Diagnosis Code Accuracy Rate	• The *Diagnosis Codes* were accurate in **99.8 percent** of instances where codes were present in both the medical records and encounter data, with all errors attributed to inaccurate coding.
Procedure Code Accuracy Rate	• The *Procedure Codes* were accurate in **97.8 percent** of instances where codes were present in both the medical records and encounter data, with all errors related to inaccurate coding.

Analysis	Key Findings
Procedure Code Modifier Accuracy Rate	• The *Procedure Code Modifiers* were accurate in **99.7 percent** of instances where modifiers were present in both the medical records and encounter data.
All-Element Accuracy Rate	• Dates of service with accurate values for all key data elements (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) were observed in **71.8 percent** of the dates of service present in both data sources (i.e., encounter data and medical records).

Strengths, Weaknesses, and Recommendations

Based on the results from the MRR, HSAG identified the following areas of strength and opportunities for improvement. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts.

Strengths

Strength #1: A high percentage of *Dates of Service* in the encounter data were supported by the members' medical records, as evidenced by the low medical record omission rate of 6.9 percent.

Strength #2: The *Dates of Service*, *Diagnosis Codes*, *Procedure Codes*, and *Procedure Code Modifiers* identified in the medical records were generally present in the encounter data, as evidenced by the low encounter data omission rates of 4.8 percent, 3.0 percent, 5.3 percent, and 0.0 percent, respectively.

Strength #3: When key data elements were present in both the encounter data and the members' medical records and were evaluated independently, the data element values were found to be accurate with rates of at least 97.8 percent each.

Weaknesses and Recommendations

Weakness #1: MER was unable to procure all of the requested medical records from its contracted providers mostly due to providers being non-responsive or providers not responding in a timely manner.

Why the weakness exists: The non-submission reason for non-responsive providers or providers who did not respond in a timely manner may indicate that the contracted providers were unaware of the submission requirements or the deadline.

Recommendation: MER should ensure its contracted providers' accountability in responding to medical record requests for the purposes of auditing, inspection, and oversight. HSAG recommends **MER** consider strengthening and/or enforcing its contract requirements with its providers in providing the requested documentation.

Weakness #2: More than 15.0 percent of the *Procedure Codes* and more than 21.0 percent of the *Procedure Code Modifiers* identified in the encounter data were not supported by the members' medical records.

Why the weakness exists: Non-submitted medical records contribute to medical record omissions, as the expected information within the medical records cannot be compared to the encounter data. Additional contributing factors include provider documentation practices (e.g., incomplete or inaccurate documentation, coding errors, lack of detail), data submission (e.g., incorrect coding during data submission or data entry errors), or processing issues (e.g., data mapping or translation issues, or errors in data transmission).

Recommendation: MER should investigate the root cause(s) for these omissions, with a focus on both provider documentation practices and data handling processes. Periodic MRRs of submitted claims should be conducted to verify appropriate coding and data completeness, where appropriate. Any findings from these reviews should be used to develop and provide ongoing education and training for providers. Topics should include encounter data submissions, medical record documentation requirements, and coding practices to reduce future omissions and improve data accuracy.

Appendix F. Results for Molina Healthcare of Michigan

This appendix contains detailed MRR results for **MOL**.

Medical Record Review Results

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

Number of Medical Records Requested	Number of Medical Records Submitted[1]	Percent of Medical Records Submitted
411	352	85.6%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

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

Non-Submission Reason	Number	Percent
Record was not located at this facility.	0	0.0%
Member was not a patient of this practice.	0	0.0%
Member was a patient of this practice; however, no documentation was available for date of service.	2	3.4%
Non-responsive provider or provider did not respond in a timely manner.	51	86.4%
Provider refused to release records.	1	1.7%
Facility was permanently closed.	1	1.7%
Other.	4	6.8%
Total	**59**	**100%**

Table F-3—Medical Record Submission Status: Second Date of Service

Number of Medical Records Submitted[1]	Number of Medical Records Submitted with a Second Date of Service	Percent of Medical Records with a Second Date of Service
352	210	59.7%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

Table F-4—MRR: Encounter Data Completeness

	Medical Record Omission		Encounter Data Omission	
Data Element	Denominator	Percent*	Denominator	Percent*
Date of Service	579	10.7%	551	6.2%
Diagnosis Code	1,552	14.4%	1,369	3.0%
Procedure Code	1,413	20.0%	1,197	5.6%
Procedure Code Modifier	485	26.6%	358	0.6%

* Lower rates indicate better performance.

Table F-5—MRR: Encounter Data Accuracy

Data Element	Denominator	Percent	Error Type Percentages
Diagnosis Code[1]	1,328	99.6%	Inaccurate Code: (100%) Specificity Error: (0.0%)
Procedure Code[2]	1,130	98.5%	Inaccurate Code: (100%) Higher Level of Service in Medical Record: (0.0%) Lower Level of Service in Medical Record: (0.0%)
Procedure Code Modifier	356	100%	—
All-Element Accuracy[3]	517	70.6%	—

"—" Denotes the error type analysis was not applicable to the data element.
[1] Inaccurate coding and specificity errors in service records were collectively considered as the denominator for the error type rates.
[2] Inaccurate coding, codes with higher levels of service, and codes with lower levels of service in service records were collectively considered as the denominator for the error type rates.
[3] 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 for each data element.

Conclusions

Table F-6 outlines the key findings based on the assessment of encounter data completeness and accuracy, conducted by reviewing medical records for services rendered from October 1, 2022, through September 30, 2023.

Table F-6—MRR Key Findings for MOL

Analysis	Key Findings
Medical Record Procurement Status	
Medical Record Procurement Rate	• The medical record procurement rate was **85.6 percent**, indicating that nearly 15 percent of the requested records were not procured and submitted. • Of the medical records not submitted, approximately 86 percent were not submitted due to non-responsive providers or provider did not respond in a timely manner.
Second Date of Service Submission Rate	• Among the procured medical record, **59.7 percent** included a corresponding second date of service.
Encounter Data Completeness	
Medical Record Omission Rate	• All key data elements (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) had relatively high medical record omission rates, ranging from **10.7 percent** (*Date of Service*) to **26.6 percent** (*Procedure Code Modifier*). • The high medical record omission rates for all key data elements were partially influenced by medical record non-submission. In cases where no medical records were submitted for a requested case, all associated data elements were categorized as medical record omissions.
Encounter Data Omission Rate	• All key data elements exhibited relatively low encounter data omission rates with the *Date of Service* having the highest encounter data omission rate at **6.2 percent**.
Encounter Data Accuracy	
Diagnosis Code Accuracy Rate	• The *Diagnosis Codes* were accurate in **99.6 percent** of instances where codes were present in both the medical records and encounter data, with all errors related to inaccurate coding.
Procedure Code Accuracy Rate	• The *Procedure Codes* were accurate in **98.5 percent** of instances where codes were present in both the medical records and encounter data, with all errors related to inaccurate coding.

Analysis	Key Findings
Procedure Code Modifier Accuracy Rate	• The *Procedure Code Modifiers* were accurate in **100 percent** of instances where modifiers were present in both the medical records and encounter data.
All-Element Accuracy Rate	• Dates of service with accurate values for all key data elements (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) were observed in **70.6 percent** of the dates of service present in both data sources (i.e., encounter data and medical records).

Strengths, Weaknesses, and Recommendations

Based on the results from the MRR, HSAG identified the following areas of strength and opportunities for improvement. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts.

Strengths

Strength #1: The *Dates of Service*, *Diagnosis Codes*, *Procedure Codes*, and *Procedure Code Modifiers* identified in the medical records were generally present in the encounter data, as evidenced by the low encounter data omission rates of 6.2 percent, 3.0 percent, 5.6 percent, and 0.6 percent, respectively.

Strength #2: When key data elements were present in both the encounter data and the members' medical records and were evaluated independently, the data element values were found to be accurate with rates of at least 98.5 percent each.

Weaknesses and Recommendations

Weakness #1: MOL was unable to procure all of the requested medical records from its contracted providers mostly due to providers being non-responsive or providers not responding in a timely manner.

Why the weakness exists: The non-submission reason for non-responsive providers or providers who did not respond in a timely manner may indicate that the contracted providers were unaware of the submission requirements or the deadline.

Recommendation: MOL should ensure its contracted providers' accountability in responding to medical record requests for the purposes of auditing, inspection, and oversight. HSAG recommends HCS consider strengthening and/or enforcing its contract requirements with its providers in providing the requested documentation.

Weakness #2: All data elements had more than 10.0 percent identified in the encounter data that were not supported by the members' medical records.

Why the weakness exists: Non-submitted medical records contribute to medical record omissions, as the expected information in the medical records cannot be compared to the encounter data. Additional contributing factors include provider documentation practices (e.g., incomplete or inaccurate documentation, coding errors, lack of detail), data submission (e.g., incorrect coding during data submission or data entry errors), or processing issues (e.g., data mapping or translation issues, or errors in data transmission).

Recommendation: MOL should investigate the root cause(s) for these omissions, with a focus on both provider documentation practices and data handling processes. Periodic MRRs of submitted claims should be conducted to verify appropriate coding and data completeness, where appropriate. Any findings from these reviews should be used to develop and provide ongoing education and training for providers. Topics should include encounter data submissions, medical record documentation requirements, and coding practices to reduce future omissions and improve data accuracy.

Appendix G. Results for Priority Health Choice

This appendix contains detailed MRR results for **PRI**.

Medical Record Review Results

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

Number of Medical Records Requested	Number of Medical Records Submitted[1]	Percent of Medical Records Submitted
411	407	99.0%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

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

Non-Submission Reason	Number	Percent
Record was not located at this facility.	0	0.0%
Member was not a patient of this practice.	0	0.0%
Member was a patient of this practice; however, no documentation was available for date of service.	0	0.0%
Non-responsive provider or provider did not respond in a timely manner.	3	75.0%
Provider refused to release records.	0	0.0%
Facility was permanently closed.	0	0.0%
Other.	1	25.0%
Total	**4**	**100%**

Table G-3—Medical Record Submission Status: Second Date of Service

Number of Medical Records Submitted[1]	Number of Medical Records Submitted with a Second Date of Service	Percent of Medical Records with a Second Date of Service
407	164	40.3%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

Table G-4—MRR: Encounter Data Completeness

	Medical Record Omission		Encounter Data Omission	
Data Element	Denominator	Percent*	Denominator	Percent*
Date of Service	556	1.3%	567	3.2%
Diagnosis Code	1,449	5.2%	1,402	2.1%
Procedure Code	1,167	8.8%	1,105	3.7%
Procedure Code Modifier	419	17.7%	349	1.1%

* Lower rates indicate better performance.

Table G-5—MRR: Encounter Data Accuracy

Data Element	Denominator	Percent	Error Type Percentages
Diagnosis Code[1]	1,373	99.7%	Inaccurate Code: (100%) Specificity Error: (0.0%)
Procedure Code[2]	1,064	98.2%	Inaccurate Code: (94.7%) Higher Level of Service in Medical Record: (0.0%) Lower Level of Service in Medical Record: (5.3%)
Procedure Code Modifier	345	99.7%	—
All-Element Accuracy[3]	549	76.1%	—

"—" Denotes the error type analysis was not applicable to the data element.
[1] Inaccurate coding and specificity errors in service records were collectively considered as the denominator for the error type rates.
[2] Inaccurate coding, codes with higher levels of service, and codes with lower levels of service in service records were collectively considered as the denominator for the error type rates.
[3] 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 for each data element.

Conclusions

Table G-6 outlines the key findings based on the assessment of encounter data completeness and accuracy, conducted by reviewing medical records for services rendered from October 1, 2022, through September 30, 2023.

Table G-6—MRR Key Findings for PRI

Analysis	Key Findings
Medical Record Procurement Status	
Medical Record Procurement Rate	• The record procurement rate was **99.0 percent**, indicating that nearly all of the requested records were successfully procured and submitted.
Second Date of Service Submission Rate	• Among the procured medical records, **40.3 percent** included a corresponding second date of service.
Encounter Data Completeness	
Medical Record Omission Rate	• All key data elements, with the exception of *Procedure Code Modifier*, had relatively low medical record omission rates, ranging from **1.3 percent** (*Date of Service*) to **17.7 percent** (*Procedure Code Modifier*).
Encounter Data Omission Rate	• All key data elements exhibited relatively low encounter data omission rates with the *Procedure Code* having the largest encounter data omission rate at **3.7 percent**.
Encounter Data Accuracy	
Diagnosis Code Accuracy Rate	• The *Diagnosis Codes* were accurate in **99.7 percent** of instances where codes were present in both the medical records and encounter data, with all errors attributed to inaccurate coding.
Procedure Code Accuracy Rate	• The *Procedure Codes* were accurate in **98.2 percent** of instances where codes were present in both the medical records and encounter data; most errors were related to inaccurate coding, while some were attributed to providers submitting higher-level service codes than those supported in the medical records.
Procedure Code Modifier Accuracy Rate	• The *Procedure Code Modifiers* were accurate in **99.7 percent** of instances where modifiers were present in both the medical records and encounter data.
All-Element Accuracy Rate	• Dates of service with accurate values for all key data elements (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) were observed in **76.1 percent** of the dates of

Analysis	Key Findings
	service present in both data sources (i.e., encounter data and medical records).

Strengths, Weaknesses, and Recommendations

Based on the results from the MRR, HSAG identified the following areas of strength and opportunities for improvement. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts.

Strengths

Strength #1: A high percentage of *Dates of Service*, *Diagnosis Codes*, and *Procedure Code* in the encounter data were supported by the members' medical records, as evidenced by the low medical record omission rates of 1.3 percent, 5.2 percent, 8.8 percent, respectively.

Strength #2: The *Dates of Service*, *Diagnosis Codes*, *Procedure Codes*, and *Procedure Code Modifiers* identified in the medical records were generally present in the encounter data, as evidenced by the low encounter data omission rates of 3.2 percent, 2.1 percent, 3.7 percent, and 1.1 percent, respectively.

Strength #3: When key data elements were present in both the encounter data and the members' medical records and were evaluated independently, the data element values were found to be accurate with rates of at least 98.2 percent each.

Weaknesses and Recommendations

Weakness #1: More than 17.0 percent of the *Procedure Code Modifier* identified in the encounter data were not supported by the members' medical records.

Why the weakness exists: The findings where encounter data are not supported by the medical records can stem from several potential reasons, which can involve both provider documentation practices (e.g., incomplete or inaccurate documentation, coding errors, lack of detail) and data submission (e.g., incorrect coding during data submission or data entry errors) or processing issues (e.g., data mapping or translation issues, errors in data transmission).

Recommendation: PRI should investigate the root cause(s) for these omissions, with a focus on both provider documentation practices and data handling processes. Periodic MRRs of submitted claims should be conducted to verify appropriate coding and data completeness, where appropriate. Any findings from these reviews should be used to develop and provide ongoing education and training for providers. Topics should include encounter data submissions, medical record documentation requirements, and coding practices to reduce future omissions and improve data accuracy.

Appendix H. Results for UnitedHealthcare Community Plan

This appendix contains detailed MRR results for **UNI**.

Medical Record Review Results

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

Number of Medical Records Requested	Number of Medical Records Submitted[1]	Percent of Medical Records Submitted
411	404	98.3%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

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

Non-Submission Reason	Number	Percent
Record was not located at this facility.	0	0.0%
Member was not a patient of this practice.	0	0.0%
Member was a patient of this practice; however, no documentation was available for date of service.	0	0.0%
Non-responsive provider or provider did not respond in a timely manner.	1	14.3%
Provider refused to release records.	0	0.0%
Facility was permanently closed.	1	14.3%
Other.	5	71.4%
Total	**7**	**100%**

Table H-3—Medical Record Submission Status: Second Date of Service

Number of Medical Records Submitted[1]	Number of Medical Records Submitted with a Second Date of Service	Percent of Medical Records with a Second Date of Service
404	212	52.5%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

Table H-4—MRR: Encounter Data Completeness

	Medical Record Omission		Encounter Data Omission	
Data Element	Denominator	Percent*	Denominator	Percent*
Date of Service	612	1.6%	613	1.8%
Diagnosis Code	1,753	7.7%	1,632	0.9%
Procedure Code	1,406	12.7%	1,261	2.7%
Procedure Code Modifier	483	21.1%	388	1.8%

* Lower rates indicate better performance.

Table H-5—MRR: Encounter Data Accuracy

Data Element	Denominator	Percent	Error Type Percentages
Diagnosis Code[1]	1,618	99.7%	Inaccurate Code: (100%) Specificity Error: (0.0%)
Procedure Code[2]	1,227	97.6%	Inaccurate Code: (100%) Higher Level of Service in Medical Record: (0.0%) Lower Level of Service in Medical Record: (0.0%)
Procedure Code Modifier	381	100%	—
All-Element Accuracy[3]	602	70.6%	—

"—" Denotes the error type analysis was not applicable to the data element.
[1] Inaccurate coding and specificity errors in service records were collectively considered as the denominator for the error type rates.
[2] Inaccurate coding, codes with higher levels of service, and codes with lower levels of service in service records were collectively considered as the denominator for the error type rates.
[3] 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 for each data element.

Conclusions

Table H-6 outlines the key findings based on the assessment of encounter data completeness and accuracy, conducted by reviewing medical records for services rendered from October 1, 2022, through September 30, 2023.

Table H-6—MRR Key Findings for UNI

Analysis	Key Findings
Medical Record Procurement Status	
Medical Record Procurement Rate	• The medical procurement rate was **98.3 percent**, indicating that most requested records were successfully procured and submitted.
Second Date of Service Submission Rate	• Among the procured medical records, **52.5 percent** included a corresponding second date of service.
Encounter Data Completeness	
Medical Record Omission Rate	• The *Procedure Code* and *Procedure Code Modifier* had relatively high medical record omission rates at **12.7 percent** and **21.1 percent**, respectively. This indicates that the procedure codes and the modifiers in the encounter data were not adequately supported by the members' medical records.
Encounter Data Omission Rate	• All key data elements exhibited low encounter data omission rates, with the *Procedure Code* having the highest omission rate at **2.7 percent**.
Encounter Data Accuracy	
Diagnosis Code Accuracy Rate	• The *Diagnosis Codes* were accurate in **99.7 percent** of instances where codes were present in both the medical records and encounter data, with all errors attributed to inaccurate coding.
Procedure Code Accuracy Rate	• The *Procedure Codes* were accurate in **97.6 percent** of instances where codes were present in both the medical records and encounter data, with all errors related to inaccurate coding.
Procedure Code Modifier Accuracy Rate	• The *Procedure Code Modifiers* were accurate in **100 percent** of instances where modifiers were present in both the medical records and encounter data.
All-Element Accuracy Rate	• Dates of service with accurate values for all key data elements (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) were observed in **70.6 percent** of the dates of service present in both data sources (i.e., encounter data and medical records).

Strengths, Weaknesses, and Recommendations

Based on the results from the MRR, HSAG identified the following areas of strength and opportunities for improvement. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts.

Strengths

Strength #1: A high percentage of *Dates of Service* and *Diagnosis Codes* in the encounter data were supported by the members' medical records, as evidenced by the low medical record omission rates of 1.6 percent, and 7.7 percent, respectively.

Strength #2: The *Dates of Service*, *Diagnosis Codes*, *Procedure Codes*, and *Procedure Code Modifiers* identified in the medical records were generally present in the encounter data, as evidenced by the low encounter data omission rates of 1.8 percent, 0.9 percent, 2.7 percent, and 1.8 percent, respectively.

Strength #3: When key data elements were present in both the encounter data and the members' medical records and were evaluated independently, the data element values were found to be accurate with rates of at least 97.6 percent each.

Weaknesses and Recommendations

Weakness #1: More than 12.0 percent of the *Procedure Codes* and more than 21.0 percent of the *Procedure Code Modifiers* identified in the encounter data were not supported by the members' medical records.

Why the weakness exists: The findings where encounter data are not supported by the medical records can stem from several potential reasons, which can involve both provider documentation practices (e.g., incomplete or inaccurate documentation, coding errors, lack of detail) and data submission (e.g., incorrect coding during data submission or data entry errors) or processing issues (e.g., data mapping or translation issues, errors in data transmission).

Recommendation: UNI should investigate the root cause(s) for these omissions, with a focus on both provider documentation practices and data handling processes. Periodic MRRs of submitted claims should be conducted to verify appropriate coding and data completeness, where appropriate. Any findings from these reviews should be used to develop and provide ongoing education and training for providers. Topics should include encounter data submissions, medical record documentation requirements, and coding practices to reduce future omissions and improve data accuracy.

Appendix I. Results for Upper Peninsula Health Plan

This appendix contains detailed MRR results for **UPP**.

Medical Record Review Results

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

Number of Medical Records Requested	Number of Medical Records Submitted[1]	Percent of Medical Records Submitted
411	408	99.3%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

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

Non-Submission Reason	Number	Percent
Record was not located at this facility.	1	33.3%
Member was not a patient of this practice.	0	0.0%
Member was a patient of this practice; however, no documentation was available for date of service.	1	33.3%
Non-responsive provider or provider did not respond in a timely manner.	1	33.3%
Provider refused to release records.	0	0.0%
Facility was permanently closed.	0	0.0%
Other.	0	0.0%
Total*	**3**	**100%**

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

Table I-3—Medical Record Submission Status: Second Date of Service

Number of Medical Records Submitted[1]	Number of Medical Records Submitted with a Second Date of Service	Percent of Medical Records with a Second Date of Service
408	187	45.8%

[1] The number of medical records submitted was based on the MHP's responses in the submitted tracking sheets.

Table I-4—MRR: Encounter Data Completeness

	Medical Record Omission		Encounter Data Omission	
Data Element	Denominator	Percent*	Denominator	Percent*
Date of Service	570	1.1%	589	4.2%
Diagnosis Code	1,324	3.9%	1,306	2.6%
Procedure Code	929	3.7%	936	4.4%
Procedure Code Modifier	256	16.4%	217	1.4%

* Lower rates indicate better performance.

Table I-5—MRR: Encounter Data Accuracy

Data Element	Denominator	Percent	Error Type Percentages
Diagnosis Code[1]	1,272	99.9%	Inaccurate Code: (100%) Specificity Error: (0.0%)
Procedure Code[2]	895	99.6%	Inaccurate Code: (50.0%) Higher Level of Service in Medical Record: (0.0%) Lower Level of Service in Medical Record: (50.0%)
Procedure Code Modifier	214	100%	—
All-Element Accuracy[3]	564	85.5%	—

"—" Denotes the error type analysis was not applicable to the data element.
[1] Inaccurate coding and specificity errors in service records were collectively considered as the denominator for the error type rates.
[2] Inaccurate coding, codes with higher levels of service, and codes with lower levels of service in service records were collectively considered as the denominator for the error type rates.
[3] 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 for each data element.

Conclusions

Table I-6 outlines the key findings based on the assessment of encounter data completeness and accuracy, conducted by reviewing medical records for services rendered from October 1, 2022, through September 30, 2023.

Table I-6—MRR Key Findings for UPP

Analysis	Key Findings
Medical Record Procurement Status	
Medical Record Procurement Rate	• The medical procurement rate was **99.3 percent**, indicating that nearly all requested records were successfully procured and submitted.
Second Date of Service Submission Rate	• Among procured medical records, **45.8 percent** included a corresponding second date of service.
Encounter Data Completeness	
Medical Record Omission Rate	• All key data elements, with the exception of *Procedure Code Modifier* had low medical record omission rates, ranging from **1.1 percent** (*Date of Service*) to **16.4 percent** (*Procedure Code Modifier*).
Encounter Data Omission Rate	• All key data elements exhibited relatively low encounter data omission rates, with the *Procedure Code* having the highest encounter data omission rate at **4.4 percent**.
Encounter Data Accuracy	
Diagnosis Code Accuracy Rate	• The *Diagnosis Codes* were accurate in **99.9 percent** of instances where codes were present in both the medical records and encounter data, with all errors attributed to inaccurate coding.
Procedure Code Accuracy Rate	• The *Procedure Codes* were accurate in **99.6 percent** of instances where codes were present in both the medical records and encounter data. Of the identified errors, half were due to inaccurate coding, while the other half were attributed to providers submitting higher-level service codes than those supported in the medical records.
Procedure Code Modifier Accuracy Rate	• The *Procedure Code Modifiers* were accurate in **100 percent** of instances where modifiers were present in both the medical records and encounter data.
All-Element Accuracy Rate	• Dates of service with accurate values for all key data elements (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) were observed in **85.5 percen**t of the dates of service present in both data sources (i.e., encounter data and medical records).

Strengths, Weaknesses, and Recommendations

Based on the results from the MRR, HSAG identified the following areas of strength and opportunities for improvement. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts.

Strengths

Strength #1: A high percentage of *Dates of Service*, *Diagnosis Code*, and *Procedure Code* in the encounter data were supported by the members' medical records, as evidenced by the low medical record omission rates of 1.1 percent, 3.9 percent, and 3.7 percent, respectively.

Strength #2: The *Dates of Service*, *Diagnosis Codes*, *Procedure Codes*, and *Procedure Code Modifiers* identified in the medical records were generally present in the encounter data, as evidenced by the low encounter data omission rates of 4.2 percent, 2.6 percent, 4.4 percent, and 1.4 percent, respectively.

Strength #3: When key data elements were present in both the encounter data and the members' medical records and were evaluated independently, the data element values were found to be accurate with rates of at least 99.6 percent each.

Weaknesses and Recommendations

Weakness #1: More than 16.0 percent of the *Procedure Code Modifiers* identified in the encounter data were not supported by the members' medical records.

Why the weakness exists: The findings where encounter data are not supported by the medical records can stem from several potential reasons, which can involve both provider documentation practices (e.g., incomplete or inaccurate documentation, coding errors, lack of detail) and data submission (e.g., incorrect coding during data submission or data entry errors) or processing issues (e.g., data mapping or translation issues, errors in data transmission).

Recommendation: UPP should investigate the root cause(s) for these omissions, with a focus on both provider documentation practices and data handling processes. Periodic MRRs of submitted claims should be conducted to verify appropriate coding and data completeness, where appropriate. Any findings from these reviews should be used to develop and provide ongoing education and training for providers. Topics should include encounter data submissions, medical record documentation requirements, and coding practices to reduce future omissions and improve data accuracy.