

Michigan Department of Health and Human Services

**State Fiscal Year 2023
External Quality Review
Encounter Data Validation
Aggregate Report
for Prepaid Inpatient Health Plans**

February 2024



Table of Contents

1. Executive Summary	1-1
Introduction	1-1
Methods	1-1
Information Systems Review Findings	1-2
Recommendations	1-2
Administrative Profile Findings	1-3
Recommendations	1-5
2. Overview and Methodology	2-1
Overview	2-1
Methodology.....	2-2
Information Systems Review	2-2
Administrative Profile	2-3
3. Information Systems Review Findings	3-1
Encounter Data Sources and Systems	3-1
Claims/Encounter Data Flow	3-1
Information Systems Infrastructure	3-3
Collection, Use, and Submission of Provider Data	3-6
Collection, Use, and Submission of Enrollment Data.....	3-7
Payment Structures of Encounter Data.....	3-8
Bundle Payment Structures	3-9
TPL Data	3-9
Zero-Paid Claims.....	3-10
Services From Providers With PIHPs Under Capitation Arrangement	3-10
Encounter Data Quality Monitoring.....	3-11
Encounter Data Quality Monitoring by the PIHPs' Subcontractors	3-11
Encounter Data Collected by the PIHPs.....	3-14
Feedback From MDHHS.....	3-16
Challenges and Changes Noted by the PIHPs.....	3-17
4. Administrative Profile Results and Findings	4-1
Encounter Data Summary.....	4-1
Member Composition.....	4-2
Encounter Data Completeness.....	4-4
Monthly Encounter Volume by Service Month	4-4
Monthly Encounter Volume per 1,000 Member Months by Service Month	4-7
Payment Amounts Per Member Per Month	4-9
Percentage of Duplicate Encounters.....	4-11
Encounter Data Timeliness.....	4-12
Lag Between PIHP Payment Date and Submission to MDHHS.....	4-13
Encounter Data Lag Triangles.....	4-15
Field-Level Completeness and Accuracy	4-15

Encounter Referential Integrity	4-18
Member Enrollment	4-21
5. Discussion	5-1
Conclusions	5-1
Information Systems Review Conclusions.....	5-1
Administrative Profile Conclusions	5-2
Recommendations	5-4
Information Systems Review	5-4
Administrative Profile	5-5
Study Limitations	5-5
Information Systems Review	5-5
Administrative Profile	5-6
Appendix A. PIHPs Included in This Report.....	A-1
Appendix B. Blank Questionnaire for MDHHS.....	B-1
Appendix C. Blank Questionnaire for PIHPs	C-1
Appendix D. Results for Region 1–NorthCare Network.....	D-1
Appendix E. Results for Region 2–Northern Michigan Regional Entity.....	E-1
Appendix F. Results for Region 3–Lakeshore Regional Entity	F-1
Appendix G. Results for Region 4–Southwest Michigan Behavioral Health	G-1
Appendix H. Results for Region 5–Mid-State Health Network.....	H-1
Appendix I. Results for Region 6–Community Mental Health Partnership of Southeast Michigan.....	I-1
Appendix J. Results for Region 7–Detroit Wayne Integrated Health Network.....	J-1
Appendix K. Results for Region 8–Oakland Community Health Network	K-1
Appendix L. Results for Region 9–Macomb County Community Mental Health.....	L-1
Appendix M. Results for Region 10 PIHP	M-1

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. During state fiscal year (SFY) 2023, MDHHS contracted with Health Services Advisory Group, Inc. (HSAG), to conduct an encounter data validation (EDV) study.

Methods

In alignment with Centers for Medicare & Medicaid Services (CMS) external quality review (EQR) *Protocol 5. Validation of Encounter Data Reported by the Medicaid and CHIP [Children's Health Insurance Program] Managed Care Plan: An Optional EQR-Related Activity*, February 2023 (CMS EQR Protocol 5),¹⁻¹ HSAG conducted the following two core evaluation activities for the EDV study:

- Information systems (IS) review—assessment of MDHHS' and the MCEs' information systems and processes. The goal of this activity is to examine the extent to which MDHHS' and the MCEs'/waiver agencies' IS infrastructures are likely to collect and process complete and accurate encounter data. This activity corresponds to Activity 1: Review State Requirements and Activity 2: Review the MCP's [Managed Care Plan's] Capability in CMS EQR Protocol 5.
- Administrative profile—analysis of MDHHS' electronic encounter data completeness, timeliness, and accuracy. The goal of this activity is to evaluate the extent to which the encounter data in MDHHS' data warehouse are complete, accurate, and submitted by the MCEs and waiver agencies in a timely manner for encounters with dates of service from October 1, 2021, through September 30, 2022. This activity corresponds to Activity 3: Analyze Electronic Encounter Data in CMS EQR Protocol 5.

HSAG conducted the EDV study for 47 MCEs/waiver agencies. This report, however, presents results and findings for the prepaid inpatient health plans (PIHPs)¹⁻² under the Michigan Behavioral Health Managed Care Program.

¹⁻¹ Department of Health and Human Services, Centers for Medicare & Medicaid Services. *Protocol 5. Validation of Encounter Data Reported by the Medicaid and CHIP Managed Care Plan: An Optional EQR-Related Activity*, February 2023. Available at: <https://www.medicaid.gov/medicaid/quality-of-care/downloads/2023-eqr-protocols.pdf>. Accessed on: Feb 24, 2023.

¹⁻² Refer to Appendix A for a list of PIHPs included in this report.

Information Systems Review Findings

The IS review gathered input from all 10 PIHPs about their encounter data processes. The IS review gathered self-reported qualitative insights from all 10 PIHPs concerning their encounter data processes. The responses indicated that the PIHPs and/or their subcontractors possess the capability to collect, process, and transmit claims and encounter data to MDHHS, aligning with established quality specifications. While each PIHP employed unique methods to ensure accurate and timely data submission, all PIHPs underscored the significance of their encounter data systems and data warehouses. These systems enabled adaptable data review processes to promptly address quality concerns raised by MDHHS. The PIHPs, contractually responsible for all encounter data (including the subcontractors' data), primarily managed submissions to MDHHS; with one PIHP being an exception and not involving subcontractors in this process. Nevertheless, all PIHPs stored data from subcontractors intended for MDHHS. The PIHPs conducted pre- and post-submission reviews of encounter data, with four of them acknowledging certain edits or modifications to the subcontractors' data.

In managing encounter data quality, practices varied among PIHPs. Four PIHPs consistently conducted claim volume checks for subcontractor data, focusing on submission month encounters. Field-level completeness and accuracy checks were widespread, with few exceptions. Some PIHPs maintained timeliness checks on all subcontractor encounters, utilizing MDHHS' minimum monthly requirements. Additionally, a few PIHPs ensured alignment of payment fields in claims with financial reports. Recognizing the efficacy of the labor-intensive medical record review (MRR) method, four PIHPs employed it as an additional data quality check.

Examining data quality within their data warehouses, PIHPs displayed variability in the number and types of checks. Two of the PIHPs reported conducting at least five distinct data quality checks including the MRR.

While the PIHPs generally fulfilled the requirement of submitting complete, timely, and accurate data, there are areas for enhancement (see Recommendations section). According to the questionnaire responses, the main aspect needing improvement pertains to the diverse methods of encounter data monitoring used by the PIHPs, which vary in scope and depth.

Recommendations

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

- **Lakeshore Regional Entity, Mid-State Health Network, Detroit Wayne Integrated Health Network, and Oakland Community Health Network** acknowledged making certain edits or modifications to their subcontractors' data. These PIHPs should collaborate with MDHHS to verify that the modifications done by the PIHPs do not necessitate returning the data to the subcontractors.
- Although some PIHPs conducted claim volume checks for subcontractor data, with a focus on submission month encounters, these PIHPs did not provide information regarding this data quality

check. As such, these PIHPs should consider building or enhancing their monitoring reports for encounters collected by each of their subcontractors to comprehensively assess encounter volume submission:

- **NorthCare Network**
- **Community Mental Health Partnership of Southeast Michigan**
- **Detroit Wayne Integrated Health Network**
- **Oakland Community Health Network**
- While the PIHPs may use MDHHS’ timeliness report to track their minimum monthly requirements, these PIHPs should consider building or enhancing their monitoring reports for encounters collected by each of their subcontractors to comprehensively assess encounter data timeliness:
 - **NorthCare Network**
 - **Detroit Wayne Integrated Health Network**
 - **Oakland Community Health Network**
- **Detroit Wayne Integrated Health Network** should consider building or enhancing its monitoring reports for encounters collected by its subcontractors to evaluate encounter data completeness and accuracy.
- While MRR can be a labor- and resource-intensive process for conducting data quality checks, six PIHPs (**Lakeshore Regional Entity, Detroit Wayne Integrated Health Network, Oakland Community Health Network, Southwest Michigan Behavioral Health, Macomb County Community Mental Health, and Region 10 PIHP**) have indicated its usage as a method for assessing their subcontractors’ data and/or data in their data warehouses. Given the effectiveness of MRR in ensuring accuracy and completeness, HSAG recommends that all other PIHPs consider implementing MRR as part of their data quality checks.
- HSAG recommends that MDHHS continue its collaboration with the PIHPs to address challenges highlighted in the PIHPs’ responses noted in Table 3-9, such as situational errors (i.e., duplicate records), which can lead to entire file rejections; unpredictability of MDHHS’ rule changes, requiring swift system updates; and the PIHPs receiving more than one acknowledgment for a unique batch identifier, necessitating manual intervention and discussions with MDHHS.

Administrative Profile Findings

The administrative profile analyzes MDHHS’ encounter data for completeness, timeliness, and accuracy by evaluating the data across multiple metrics and using supplemental data (e.g., member enrollment and demographic data, and provider data). Results of these analyses can help indicate the reliability of MDHHS’ data to be used in subsequent analyses, such as rate setting and performance measure calculations.

Overall, the data were largely complete, timely, and accurate for each PIHP. Across all PIHPs, professional encounter volume was consistent, with a few minor monthly variations. All PIHPs exhibited an increase in monthly volume per 1,000 member months (MM) in March 2022. **Oakland**

Community Health Network had the highest number of professional encounters per 1,000 MM, around 246 encounters per 1,000 MM, whereas **NorthCare Network** and **Macomb County Community Mental Health** had the lowest encounter volume per 1,000 MM, slightly under 100 encounters. For all PIHPs, the professional encounter volume per 1,000 MM was higher than the institutional encounter volume, at around 160 encounters per 1,000 MM compared to 1.3 encounters per 1,000 MM. This extreme variation is likely due to the limited subset of behavioral health services that PIHPs cover. Additionally, institutional encounter volume per 1,000 MM fluctuated greatly each month, with ranges from 0.6 to 3 encounters per 1,000 MM. However, this could be due to the low volume of institutional encounters, where any variation is likely to be accentuated. For institutional encounters, **Southwest Michigan Behavioral Health** had the highest encounter volume, around 2.5 encounters per 1,000 MM, whereas **NorthCare Network** had the lowest volume, around 0.7 encounters per 1,000 MM.

The timeliness evaluation of the MDHHS data varied across PIHPs and category of service. For professional encounter submissions, six out of 10 PIHPs (**NorthCare Network**, **Northern Michigan Regional Entity**, **Community Mental Health Partnership of Southeast Michigan**, **Detroit Wayne Integrated Health Network**, **Macomb County Community Mental Health**, and **Region 10 PIHP**) submitted over 95 percent of professional encounters within 90 days of payment. Compared to professional encounters submission, PIHPs submitted institutional encounters in a much slower manner. Within 90 days of payment, only five out of 10 PIHPs (**NorthCare Network**, **Lakeshore Regional Entity**, **Community Mental Health Partnership of Southeast Michigan**, **Detroit Wayne Integrated Health Network**, and **Macomb County Community Mental Health**) had submitted over 95 percent of institutional encounters.

MDHHS' data were also largely complete and accurate, with all expected data elements populated at high rates for both professional and institutional encounters. For professional and institutional encounters, all data elements expected to be populated were populated at high rates, with all data elements greater than 99.9 percent present or higher. However, across all PIHPs' professional encounters, the billing provider NPI and rendering provider NPI had lower population rates, with an all PIHP rate of 60.8 percent and 30.2 percent, respectively. Additionally, the member identification (ID) field for both professional and institutional data had low validity rates, at 96.2 percent and 92.2 percent, respectively. Finally, the referential integrity results suggested that encounter and enrollment data could largely be linked, with 96.2 percent of all member IDs in the encounter data identified in the enrollment data. Although this is high, 4.8 percent of member IDs could not be found in the enrollment data, indicating that there may be some room for improvement. However, 99.5 percent of provider NPIs identified in the encounter data could be identified in the provider data, and 100 percent of providers in the provider data were identified in the encounter data. This suggests strong integrity between these two files and indicates that all contracted PIHP providers provided services to PIHP members.

Overall, MDHHS' encounter data were largely complete, timely, and accurate. Although there are some areas that MDHHS can work with the PIHPs on improving (see Recommendations section), the high levels of completeness, timeliness, and accuracy suggest that the encounter data can be used in subsequent analyses with a high degree of reliability.

Recommendations

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

- The MDHHS enrollment data contained instances of multiple, overlapping enrollment spans per member, which could be due to the Certified Community Behavioral Health Clinics Demonstration or to members moving to another PIHP region mid-month. HSAG recommends that MDHHS collaborate with the PIHPs to ensure the appropriate member data are captured, allowing for the most complete and accurate data.
- All PIHPs demonstrated lower than expected rates when examining the referential integrity of the member IDs in the encounter data compared to the member IDs in the enrollment data. This also aligns with the lower than expected validity rates for the member ID key data element. Since subsequent analyses may require the ability to link these datasets together, MDHHS should collaborate with PIHPs to determine if the MDHHS enrollment data accurately reflects each PIHP's enrollment data.
- Timely data are crucial to subsequent analyses and if data are not submitted in a timely manner, then subsequent analyses may not include complete information and results may not reflect accurate encounter volume. Therefore, **Lakeshore Regional Entity** and **Oakland Community Health Network** should evaluate the delay when submitting professional encounters to MDHHS after payment; and **Northern Michigan Regional Entity**, **Mid-State Health Network Regional Entity**, **Oakland Community Health Network**, and **Region 10 PIHP** should evaluate the delay when submitting institutional encounters to MDHHS after payment.

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 MCEs and waiver agencies 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 and waiver agencies to ensure that the encounter data are a 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 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 SFY 2023, MDHHS contracted with HSAG to conduct an EDV study. In alignment with CMS EQR Protocol 5, HSAG conducted the following two core evaluation activities for the EDV study:

- IS review—assessment of MDHHS' and the MCEs'/waiver agencies' information systems and processes. The goal of this activity is to examine the extent to which MDHHS' and the MCEs'/waiver agencies' IS infrastructures are likely to collect and process complete and accurate encounter data. This activity corresponds to Activity 1: Review State Requirements and Activity 2: Review the MCP's Capability in CMS EQR Protocol 5.
- Administrative profile—analysis of MDHHS' electronic encounter data completeness, timeliness, and accuracy. The goal of this activity is to evaluate the extent to which the encounter data in MDHHS' data warehouse are complete, accurate, and submitted by the MCEs in a timely manner for encounters with dates of service from October 1, 2021, through September 30, 2022. This activity corresponds to Activity 3: Analyze Electronic Encounter Data in CMS EQR Protocol 5.

HSAG conducted the EDV study for 47 MCEs/waiver agencies. Table 2-1 displays the programs, MCEs/waiver agencies, and number of MCEs/waiver agencies included in the EDV study. This report, however, will present results and findings for the PIHPs²⁻¹ under the Behavioral Health Managed Care Program.

²⁻¹ Refer to Appendix A for a list of PIHPs included in this report.

Table 2-1—Michigan Medicaid Managed Care Programs

Program	MCE/Waiver Agency Type	Number of MCEs/Waiver Agencies
Comprehensive Health Care Program	Medicaid health plans (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	PIHPs	10
MI Choice Waiver Program	Waiver agencies	20

Methodology

Information Systems Review

The IS review seeks to define how each participant in the encounter data process collects and processes encounter data such that the data flow from the PIHPs to MDHHS is understood. The IS review is key to understanding whether the IS infrastructures are likely to produce complete and accurate encounter data. To ensure the collection of critical information, HSAG employed a three-stage review process that included a document review, development and fielding of a customized encounter data assessment, and follow-up with key staff members.

Stage 1—Document Review

HSAG initiated the IS review with a thorough desk review of existing documents related to encounter data initiatives/validation activities currently put forth by MDHHS. Documents requested for review included data dictionaries, process flow charts, data system diagrams, encounter system edits, sample rejection reports, work group meeting minutes, and MDHHS’ current encounter data submission requirements, among others. The information obtained from this review was important for developing the targeted questionnaire to address important topics of interest to MDHHS.

Stage 2—Development and Fielding of Customized Encounter Data Assessment

To conduct a customized encounter data assessment, HSAG first evaluated each PIHP’s most recent Information Systems Capabilities Assessment (ISCA) to assess whether the information was complete and up to date. HSAG developed a questionnaire customized in collaboration with MDHHS to gather information and specific procedures for data processing, personnel, and data acquisition capabilities. Where applicable, this assessment also included a review of supplemental documentation regarding other data systems, including enrollment and provider data. Lastly, this review included specific topics of interest to MDHHS. For example, the reviews included questions regarding how the PIHPs ensure their vendors are submitting complete and accurate encounter data in a timely manner.

The questionnaire for MDHHS had similar domains; however, it focused on MDHHS' data exchange with the PIHPs.

Since the encounter data submission requirements and processes for each program may be different, HSAG sent a PIHP-specific questionnaire to each PIHP to collect information for each program. Additionally, since there were 10 PIHPs included in the study, HSAG distributed the questionnaire via an online tool to streamline collection of the responses.

Stage 3—Key Informant Interviews

After reviewing the completed assessments, HSAG followed up with key MDHHS and PIHP information technology (IT) personnel to clarify any questions from the questionnaire responses.

Overall, the IS reviews allowed HSAG to document current processes and develop a thematic process map identifying critical factors that impact the submission of quality encounter data. From this analysis, HSAG was able to provide actionable recommendations to the PIHPs regarding the existing encounter data systems on areas for improvement or enhancement.

Administrative Profile

The administrative profile, or analysis, of the State's encounter data is essential to gauging the general completeness, timeliness, and accuracy of encounter data, as well as whether encounter data are sufficiently robust for other uses, such as performance measure calculation. The degree of the PIHPs' data file completeness across the PIHPs provides insight into the quality of MDHHS' overall encounter data system and represents the basis for establishing confidence in subsequent analytical and rate setting activities.

HSAG assessed the final paid encounters with service dates from October 1, 2021, through September 30, 2022, and extracted from MDHHS' data warehouse on or before March 31, 2023. In addition, the EDV study used member demographic/eligibility/enrollment data and provider data to evaluate the validity of key data elements in the encounter data. HSAG submitted a data submission requirements document to notify MDHHS of the required data needed for the study. The data submission requirements document was based on the study objectives and data elements evaluated in this study. It included a brief description of the study, criteria for data extraction, required data elements, and information regarding the submission of the requested files. In addition, to assist MDHHS in preparing the requested data files, HSAG performed the following two actions:

- HSAG initially requested a set of test files from MDHHS before MDHHS extracted the complete set of data. The test data were smaller in size (e.g., encounters for one month) and allowed HSAG to detect any data extraction issues before the full data extract was submitted. In addition, the test data helped HSAG prepare for the analyses in advance while waiting to receive the complete data.
- After submitting the draft data submission requirements document to MDHHS, HSAG scheduled a meeting with MDHHS to review the document to ensure that all questions related to data preparation

and extraction were addressed. Afterward, HSAG submitted the final version of the data submission requirements document to MDHHS for review/approval.

Once HSAG received the data files from MDHHS, HSAG conducted a preliminary file review to ensure that the submitted data were adequate to conduct the evaluation. The preliminary file review included the following basic checks:

- Data extraction—extracted based on the data requirements document.
- Percentage present—required data fields were present in the file and had values in those fields.
- Percentage of valid values—the values were as expected (e.g., valid International Classification Diseases, Tenth Revision [ICD-10] codes in the diagnosis field).

Based on the preliminary file review results, HSAG followed up with MDHHS to resubmit data, as needed.

Once the final data had been received and processed, HSAG conducted a series of analyses for metrics listed in the sections below. In general, HSAG calculated rates for each metric by encounter type (i.e., 837 Professional [837P] and 837 Institutional [837I]) and PIHP. However, when the results indicated a data quality issue(s), HSAG conducted an additional investigation to determine whether the issue was for a specific category of service (e.g., office or group home), provider type (e.g., psychologist or psychiatrist), or subpopulation. HSAG documented all noteworthy findings in this aggregate report.

Encounter Data Completeness

HSAG evaluated encounter data completeness through the following metrics:

- Monthly encounter volume (i.e., visits) by service month (i.e., the month when services occur or the last date of service [DOS]): If the number of members remains stable and there are no major changes to members' medical needs, the monthly visit/service counts should have minimal variation. A low count for any month indicates incomplete data. Of note, instead of the claim number, HSAG evaluated the encounter volume based on a unique visit key. For example, for an office visit, the visit key is based on the member ID, rendering provider National Provider Identifier (NPI), and date of service.
- Monthly encounter volume (i.e., visits) per 1,000 MM by service month: Compared to the metric above, this metric normalized the visit/service counts by the member counts. Of note, HSAG calculated the member counts by month for each PIHP based on the member enrollment data extracted by MDHHS.
- Paid amount per member per month (PMPM) by service month: This metric will help MDHHS determine whether the encounter data were complete from a payment perspective. Of note, HSAG used the header paid amount or detail paid amount to calculate this metric.
- Percentage of duplicate encounters: HSAG determined the detailed methodology (e.g., data elements and criteria) for defining duplicates after reviewing the encounter data extracted for the study and

documented the method in the final report. This metric will allow MDHHS to assess the number of potential duplicate encounters in MDHHS’ database.

Encounter Data Timeliness

HSAG evaluated encounter data timeliness through the following metrics:

- Percentage of encounters received by MDHHS within 360 days, in 30-day increments, from the PIHP payment date. This metric will allow MDHHS to evaluate the extent to which the PIHPs are in compliance with MDHHS’ encounter data timeliness requirements.
- Claims lag triangle to illustrate the percentage of encounters received by MDHHS within two calendar months, three months, etc., from the service month. This metric will allow MDHHS to evaluate how soon it may use the encounter data in the data warehouse for activities such as performance measure calculation and utilization statistics.

Field-Level Completeness and Accuracy

HSAG evaluated whether the data elements in the final paid encounters were complete and accurate through the two study indicators described in Table 2-2 for the key data elements listed in Table 2-3. In addition, Table 2-2 shows the criteria HSAG used to evaluate the validity of each data element. These criteria are based on standard reference code sets or referential integrity checks against member or provider data.

Table 2-2—Study Indicators for Percent Present and Percent Valid

Study Indicator	Denominator	Numerator
Percent Present: Percentage of records with values present for a specific key data element.	Total number of final paid encounter records based on the level of evaluation noted in Table 2-3 (i.e., at either the header or detail line level) with dates of service in the study period.	Number of records with values present for a specific key data element based on the level of evaluation (i.e., at either the header or detail line level) noted in Table 2-3.
Percent Valid: Percentage of records with values valid for a specific key data element.	Number of records with values present for a specific key data element based on the level of evaluation (i.e., at either the header or detail line level) noted in Table 2-3.	Number of records with values valid for a specific key data element based on the level of evaluation (i.e., at either the header or detail line level) noted in Table 2-3. The criteria for validity are listed in Table 2-3.

Table 2-3—Key Data Elements for Percent Present and Percent Valid

Key Data Element	837P Encounters	837I Encounters	Criteria for Validity
Member ID ^H	√	√	<ul style="list-style-type: none"> In member file Enrolled in a specific PIHP on the date of service Member date of birth is on or before date of service
Header Service From Date ^H	√	√	<ul style="list-style-type: none"> Header Service From Date ≤ Header Service To Date Header Service From Date ≤ Paid Date
Header Service To Date ^H	√	√	<ul style="list-style-type: none"> Header Service To Date ≥ Header Service From Date Header Service To Date ≤ Paid Date
Detail Service From Date ^D	√	√	<ul style="list-style-type: none"> Detail Service From Date ≤ Detail Service To Date Detail Service From Date ≤ Paid Date
Detail Service To Date ^D	√	√	<ul style="list-style-type: none"> Detail Service To Date ≥ Detail Service From Date Detail Service To Date ≤ Paid Date
Billing Provider NPI ^H	√	√	<ul style="list-style-type: none"> In provider data when service occurred Meets Luhn formula requirements
Rendering Provider NPI ^H	√		<ul style="list-style-type: none"> In provider data when service occurred Meets Luhn formula requirements
Attending Provider NPI ^H		√	<ul style="list-style-type: none"> In provider data when service occurred Meets Luhn formula requirements
Referring Provider NPI ^H	√	√	<ul style="list-style-type: none"> In provider data when service occurred Meets Luhn formula requirements
Rendering Provider Taxonomy Code ^H	√		<ul style="list-style-type: none"> In standard taxonomy code set Matches the value in provider data
Attending Provider Taxonomy Code ^H		√	<ul style="list-style-type: none"> In standard taxonomy code set Matches the value in provider data

Key Data Element	837P Encounters	837I Encounters	Criteria for Validity
Primary Diagnosis Codes ^H	√	√	<ul style="list-style-type: none"> In national ICD-10-Clinical Modification (CM) diagnosis code sets for the correct code year (e.g., in 2022, code set for services that occurred between October 1, 2021, and September 30, 2022)
Secondary Diagnosis Codes ^H	√	√	<ul style="list-style-type: none"> In national ICD-10-CM diagnosis code sets for the correct code year
Current Procedural Terminology (CPT)/ Healthcare Common Procedure Coding System (HCPCS) Codes ^D	√	√	<ul style="list-style-type: none"> In national CPT/HCPCS code sets for the correct code year (e.g., in 2022, code set for services that occurred in 2022) AND satisfies CMS' Procedure-to-Procedure edits
Primary Surgical Procedure Codes ^H		√	<ul style="list-style-type: none"> In national ICD-10-CM surgical procedure code sets for the correct code year
Secondary Surgical Procedure Codes ^H		√	<ul style="list-style-type: none"> In national ICD-10-CM surgical procedure code sets for the correct code year
Revenue Codes ^D		√	<ul style="list-style-type: none"> In national standard revenue code sets for the correct code year
Diagnosis-Related Group (DRG) Codes ^H		√	<ul style="list-style-type: none"> In national standard All Patients Refined (APR)-DRG code sets for the correct code year
Type of Bill Codes ^H		√	<ul style="list-style-type: none"> In national standard type of code set
National Drug Codes (NDCs) ^D	√	√	<ul style="list-style-type: none"> In national NDC code sets
Submit Date ^D	√	√	<ul style="list-style-type: none"> PIHP Submission Date (i.e., the date when PIHP submits encounters to MDHHS) ≥ PIHP Paid Date
PIHP Paid Date ^D	√	√	<ul style="list-style-type: none"> PIHP Paid Date ≥ Detail Service To Date
Header Paid Amount ^H	√	√	<ul style="list-style-type: none"> Header Paid Amount equal to sum of the Detail Paid Amount
Detail Paid Amount ^D	√	√	<ul style="list-style-type: none"> Zero or positive
Header Third-Party Liability (TPL) Paid Amount ^H	√	√	<ul style="list-style-type: none"> Header TPL Paid Amount equal to sum of the Detail TPL Paid Amount
Detail TPL Paid Amount ^D	√	√	<ul style="list-style-type: none"> Zero or positive

^H Conduct evaluation at the header level

^D Conduct evaluation at the detail level

Encounter Data Referential Integrity

HSAG evaluated if data sources could be joined with each other based on whether a unique identifier (e.g., unique member ID, unique provider NPI) was present in both data sources (i.e., unique member IDs that are in both the encounter and member enrollment files). If an encounter contained more than one NPI (e.g., attending provider NPI and billing provider NPI on an institutional encounter), HSAG included both unique NPIs in the analysis. Table 2-4 lists the study indicators that HSAG calculated.

Table 2-4—Key Indicators of Referential Integrity

Data Source	Indicator
Medical Encounters vs Member Enrollment	<ul style="list-style-type: none"> Direction 1: Percentage of Members With a Medical Encounter Who Were Also in the Enrollment File Direction 2: Percentage of Members in the Enrollment File With a Medical Encounter
Medical Encounters vs Provider File	<ul style="list-style-type: none"> Direction 1: Percentage of Providers in the Medical Encounter File Who Were Also in the Provider File Direction 2: Percentage of Providers in the Provider File Who Were Also in the Medical Encounter File

Encounter Data Logic

Based on the likely use of the encounter data in future analytic activities (e.g., performance measure development/calculation), HSAG developed a logic-based check to ensure the encounter data could appropriately support additional activities.

- Continuous member enrollment to identify the length of time members were continuously enrolled during the measurement year. This assessment provides insight into how well encounter data may be used to support future analyses, such as Healthcare Effectiveness Data and Information Set (HEDIS®)²⁻² performance measure calculations. For instance, many measures require members be enrolled for the full measurement year, allowing only one gap of up to 45 days.

²⁻² HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

3. Information Systems Review Findings

Representatives from all 10 PIHPs completed an MDHHS-approved questionnaire supplied by HSAG. HSAG identified follow-up questions based on the PIHP's original questionnaire responses, and the PIHPs responded to these PIHP-specific questions. To support their questionnaire responses, the PIHPs submitted a wide range of documents with varying formats and levels of detail. MDHHS also completed its state-specific questionnaire. For more details regarding the questionnaires provided to MDHHS and the PIHPs, please refer to Appendix B and Appendix C, respectively.

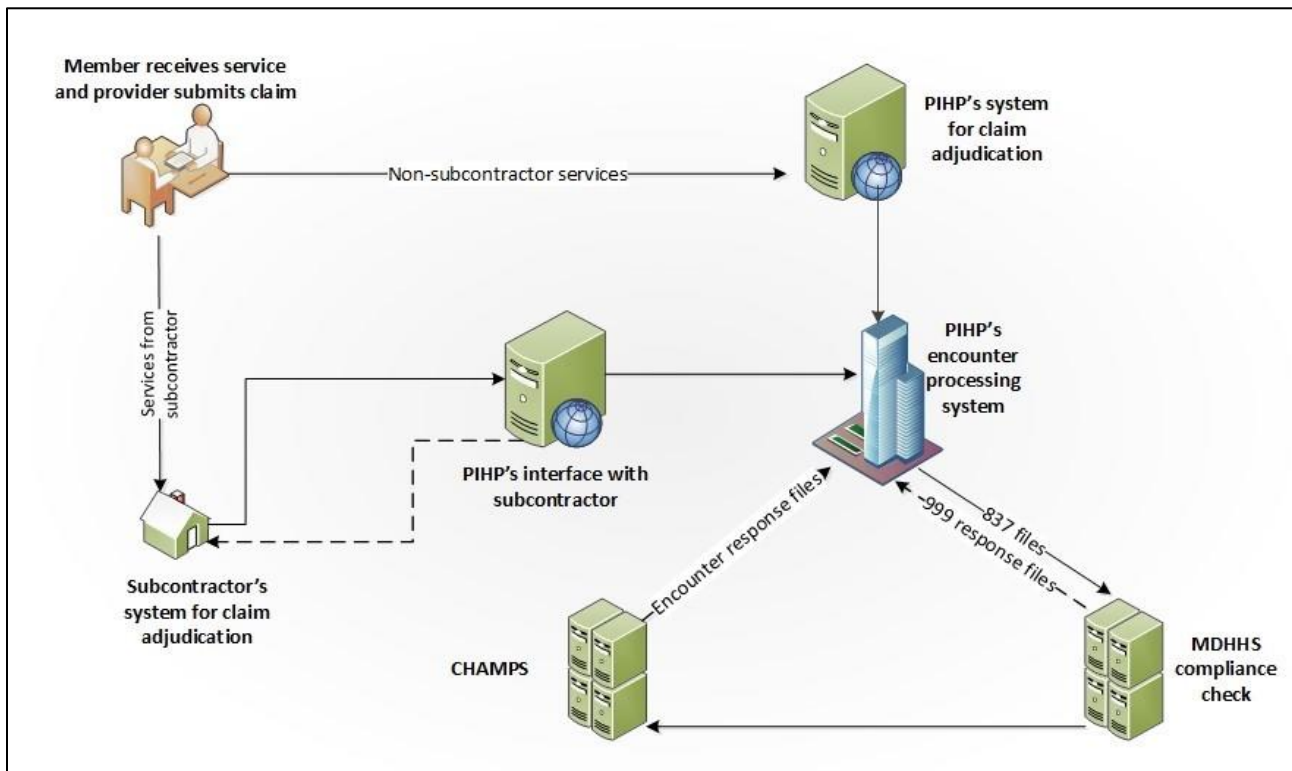
Encounter Data Sources and Systems

This report section provides an overview of the data sources utilized in the claims data to encounter data cycle. It also outlines the systems employed for data processing, any systematic formatting performed before submission (if handled by a third party), and the methods employed to verify data accuracy in terms of provider and member information.

Claims/Encounter Data Flow

Figure 3-1 shows a high-level general process that outlines the path of a PIHP's encounter data from the point when a member receives a service (or services) until MDHHS processes the encounter. Solid lines represent the main transaction paths between each process agent, while dotted lines indicate data transfer feedback loops.

Figure 3-1—Claims/Encounter Data Path From Origin Through Submission to MDHHS



The process of handling claims and encounter data involves several steps, as shown in Figure 3-1. It starts with a member receiving a healthcare service from a provider. Providers then send claims electronically through service activity logs or via paper to a clearinghouse that organizes and formats the claims. The claims are then processed and sent to the PIHP's encounter data system. If a third party is involved, it sends the data to the PIHP's system.

The PIHP and/or its subcontractors are responsible for ensuring that the encounter data are complete, accurate, and properly formatted for timely submission to MDHHS using specific file types (i.e., 837P or 837I). The data may be submitted directly to MDHHS or through a subcontractor or vendor.

When the PIHPs send 837P and 837I files to MDHHS, they are downloaded and run through an Electronic Data Interchange (EDI) translator for compliance checks. MDHHS generates X12 999 response files to send back to the PIHPs. Encounters that pass the compliance checks are stored in the Community Health Automated Medicaid Processing System (CHAMPS) and undergo additional MDHHS edits. For encounters that fail these edits, Encounter Transmission Results Report (ETRR) response files are sent back to the PIHPs to make corrections.

Once the PIHPs receive the response files, they review them, making any necessary corrections and resubmitting the data if needed. If a subcontractor or vendor was involved, it corrects and resubmits the data to the PIHP. This process varies based on the PIHP's agreements with different parties such as healthcare providers, networks, and vendors. Each PIHP has a unique process, and the following section

explores their encounter data processes, focusing on factors that could lead to incomplete or inaccurate data sent to MDHHS.

Information Systems Infrastructure

MDHHS receives 837P and 837I files either directly or indirectly from the PIHPs, which might have been generated by the PIHPs or their subcontractors in different formats. The PIHPs follow various submission frequencies, including daily, weekly, monthly, or other intervals. Once claims are received, the PIHPs use a range of software tools to manage, process, validate, and structure the encounter data files, as illustrated in Table 3-1.

Table 3-1—Primary Software for Encounter Processing

PIHP ¹	Primary Software for Claim Adjudication and Encounter Preparation	Workgroup for Electronic Data Interchange Strategic National Implementation Process (WEDI SNIP) Level for 837P and 837I Encounters
NCN	Peter Chang Enterprise (PCE) Systems	Levels 1 through 7
NMRE	PCE Systems	Level 7
LRE	PCE Systems (“LIDS”)	Levels 1 through 7
SWMBH	Combination of Pyx12 and internal custom SQL logic	Pyx12: Full levels 1 and 2, and partial levels 3 and 5 SQL Logic: Levels 3 through 7
MSHN	PCE Systems and REMI	Modified levels 1 and 2
CMHPSM	None, due to data entry process	None
DWIHN	MH-Win	Levels 1 through 7
OCHN	PCE-ODIN	Levels 1 through 7
MCCMH	PCE Systems	Levels 1 through 7
Region 10	PCE Systems	Levels 1 through 7

¹ For detailed descriptions of each of the PIHP acronyms, please refer to Appendix A.

Duplicate, Denied, and Adjusted Claims

All PIHPs shared their processes to detect and identify duplicate claims, including the key fields used, identification timing, and how they are handled. Generally, common fields such as member ID, service date, provider, and service codes are examined. Table 3-2 shows points in the process and description of common fields examined for duplication across the PIHP.

Table 3-2—Point in the Process and Some Common Fields Used by PIHPs to Examine Claims for Duplication

PIHP	Point in the Process and Field Description
NCN	<ul style="list-style-type: none"> Duplicate claims are identified during the direct provider service activity log (SAL) and claims adjudication process. The PIHP employs SAL and claims adjudication for front-end checks to ensure compliance with billing and reporting requirements. The PIHP compares the current data with previously submitted data for the same member, looking at factors like the date, time, rendering provider, service codes, and other elements.
NMRE	<ul style="list-style-type: none"> Duplicate claims are reviewed prior to accepting the initial claim submission. The criteria for identifying duplicate claims include the individual’s name, social security number (SSN), member ID, service code, dates, times, and the provider.
LRE	<p>When the PIHP receives encounters from the Community Mental Health Services Programs (CMHSPs), it checks for services that can only be provided once per day per client with the same procedure code. If any duplicates are found within the same CMHSP, the PIHP rejects them. If there are duplicates between different CMHSPs or overlapping services with different procedure codes, the PIHP identifies and reports them using Power BI dashboards. These dashboards are also used in quarterly Office of Inspector General (OIG) monitoring reports.</p>
SWMBH	<ul style="list-style-type: none"> To prevent duplicate claims, systems used by CMHSPs and claims processors automatically check for overlapping services. These require details such as start and stop times for each service. These systems also follow state-set rules on how many times certain services can be claimed in a day. In addition to these automatic checks, the PIHP used audits and monitoring to ensure compliance. If any issues are found, issues are fixed and updated.
MSHN	<p>The claims processing system automatically rejects duplicate or overlapping fee-for-service claims, except in cases outlined in MSHN’s substance use disorder (SUD) overlapping rules document.</p>
CMHPSM	<p>The PIHP employs multiple checks for duplicate claims:</p> <ul style="list-style-type: none"> System Validations: The system verifies duplicate fields based on service type in the Confidential Record of Consumer Treatment (CRCT). Adjudication Logic: Specific services cannot be submitted outside best practice time frames. Weekly Duplicate Claim Report: This report identifies duplicates for review. Provider Clarification: Duplicates are returned to providers for clarification and documentation. PCE Logic Errors: Claims with PCE logic errors are not sent to the State.
DWIHN	<p>Incoming claims are checked for duplicates. The PIHP identifies duplicates based on the following fields: Member ID, procedure/revenue code, provider, and date/time of service.</p>
OCHN	<p>OCHN indicated that its system examines all data sources for duplicate encounters, using member information, date of service, procedure code, time, and staff details. When users enter data through SAL or direct claim entry, the system prevents duplicate entries. Providers submitting files receive an error message if a duplicate claim or encounter is detected.</p>

PIHP	Point in the Process and Field Description
MCCMH	<p>The electronic medical record (EMR) system checks for duplicate claims by comparing key information, such as consumer details, provider data, service codes, and dates, against past paid claims, direct provider service logs, and any authorizations. If it finds a duplicate, that claim will not be paid. To ensure accuracy, the MCCMH Finance Department helps the EMR system identify which service codes can overlap. If a claim includes service codes that cannot be performed at the same time, it will not be paid.</p> <p>For SALs, to help maintain accuracy and prevent double payment for services, several checks are used:</p> <ul style="list-style-type: none"> • Same Staff/Same Member/Same Time/Same Service: This is a strict check applied to all SALs, preventing any bypass. • Same Staff/Overlapping Time: This is a flexible check, allowing users to bypass it, and it is used for all SALs. • Same Member/Overlapping Time: This is another flexible check, also allowing users to bypass it, and it is applied to all SALs.
Region 10	PCE Systems use dates, times, staff, and CPT codes to check for overlapping claims. This ensures a claim does not overlap with another claim from the same provider or a different one.

The PIHPs followed specific procedures in submitting claims and encounters to MDHHS. These general procedures include, but are not limited to, the following: submission criteria (i.e., only fully adjudicated paid claims; denied or partially denied claims are generally not submitted), error corrections (i.e., claims with errors are returned to providers for correction and providers to resubmit the claims), encounter rejections (i.e., entire encounters may be rejected if any line within them is rejected; rejected encounters are not sent to MDHHS), and validation (i.e., the PIHPs' systems validate each claim line for errors, and these errors may be overridden if deemed appropriate for processing). According to responses received, nearly all PIHPs indicated that they do not send denied or partially denied claims and encounters to MDHHS. **NorthCare Network** further noted that only fully adjudicated paid claims generate encounters, while **Northern Michigan Regional Entity** and **Mid-State Health Network** both noted that denied claims are returned for correction.

Each PIHP outlined its approach to identifying and locating encounters requiring adjustments, as well as its process for submitting those adjustments to MDHHS. In general, based on responses received, adjustments can originate from providers, event verification, or retroactive reviews. Providers handle the adjustments by applying manual voids if needed. The CMHSP system flags errors in real time and voided/corrected claims are resent. Adjustments may arise from internal audits, claims verification, data mining, referrals, or investigations. Adjustments to encounter data across all PIHPs are handled through various standardized processes:

- **Voiding and Resubmission:** Most PIHPs (i.e., **NorthCare Network**, **Lakeshore Regional Entity**, **Mid-State Health Network**, **Detroit Wayne Integrated Health Network**, **Macomb County Community Mental Health**, and **Region 10 PIHP**) utilize a voiding process to nullify erroneous encounters, followed by resubmission of corrected data.

- **Regular Data Submissions:** Adjustments are often incorporated into regular data submission processes, ensuring that corrected encounter information is sent to MDHHS in line with routine schedules.
- **Automated Checks:** For **Southwest Michigan Behavioral Health**, automated systems play a crucial role in identifying errors and mismatches in encounter data. Daily or biweekly automated processes ensure timely correction and resubmission.
- **Provider-Led Corrections:** Some PIHPs (i.e., **NorthCare Network**, **Mid-State Health Network**, and **Community Mental Health Partnership of Southeast Michigan**) indicated that providers play an active role in identifying and correcting encounter issues. This can involve manual adjustments, voids, or resubmissions based on their internal reviews or corrections prompted by external factors.
- **Reconsideration Procedures:** Some PIHPs (i.e., **NorthCare Network**, **Oakland Community Health Network**, and **Region 10 PIHP**) have established procedures for claim reconsiderations, involving voiding original encounters and submitting corrected data.

Collection, Use, and Submission of Provider Data

The majority of PIHPs, excluding **NorthCare Network**, **Lakeshore Regional Entity**, **Mid-State Health Network**, and **Region 10 PIHP**, indicated that the PIHPs were accountable for collecting and maintaining provider information. In contrast, the remaining four PIHPs, including their subcontractors, shared responsibility for this task. Based on responses received, the PIHPs described their provider data collection and maintenance. Responses were also provided to describe the process for linking provider data to claims/encounters, including any procedures for reconciling differences between the claim/encounter data and the PIHPs' provider data:

- **NorthCare Network** collects provider data during the hiring process, including credential verification. Regular reports ensure providers are in good standing. Subcontractors undergo a similar credentialing process. **NorthCare Network** generates two encounter types, SALs encounters and claim encounters, directly from SAL and consumer demographics. Contract provider data are part of the providers' claims, subject to various built-in front-end edits for error prevention.
- **Northern Michigan Regional Entity** records member data submitted via 837 files or electronic entry. It links provider data based on unique identifiers such as NPI, SSN, or a unique provider ID.
- **Lakeshore Regional Entity** collects data from the CMHSPs during contracting and credentialing. It is in the process of designing a new provider data workflow, integrating additional information capture into its system.
- **Southwest Michigan Behavioral Health** incorporates provider information in Health Insurance Portability and Accountability Act (HIPAA) X12 837 encounters, following MDHHS guidelines. It enforces federal, state, and local requirements for provider fields, with encounters failing edits resulting in errors.
- **Mid-State Health Network** collects provider data through subcontractors during the contracting process. It maintains provider data in the same system as claims entry, with validations in place to reject claims with different information.

- **Community Mental Health Partnership of Southeast Michigan** updates provider data through approved PIHP staff. It manages providers and authorizations within one system, ensuring accuracy.
- **Detroit Wayne Integrated Health Network**'s Managed Care Operations department maintains provider records in MH-Win. It submits every claim under a contract number in MH-Win, joining provider and fee screen information.
- **Oakland Community Health Network** receives claims/encounter data from behavioral health providers for MDHHS submission. It requires encounters and claims to be linked via a unique provider ID within its system.
- **Macomb County Community Mental Health** gathers provider information through the contracting process, updating it regularly. It enters service information directly through the EMR, with various data quality edits applied at the time of document/SAL signature.
- **Region 10 PIHP** collects providers' demographic data annually and updates it as needed. It links CMHSP and SUD claims based on authorization, provider organization, billing and rendering NPI number, and submitter ID.

Collection, Use, and Submission of Enrollment Data

Four PIHPs (i.e., **Southwest Michigan Behavioral Health**, **Community Mental Health Partnership of Southeast Michigan**, **Detroit Wayne Integrated Health Network**, and **Oakland Community Health Network**) confirmed their management of enrollment data. Five PIHPs (i.e., **NorthCare Network**, **Lakeshore Regional Entity**, **Mid-State Health Network**, **Macomb County Community Mental Health**, and **Region 10 PIHP**) stated that both the PIHP and its subcontractors handle the enrollment data. Meanwhile one PIHP (i.e., **Northern Michigan Regional Entity**) mentioned that its subcontractor manages the enrollment data. Each PIHP described its key enrollment data management processes. Most PIHPs indicated receiving a monthly 834 enrollment data files from MDHHS or indirectly mentioned using files from MDHHS in processing their enrollment data. **NorthCare Network** noted that unique member IDs were created, and Medicaid eligibility were verified through CHAMPS, while some PIHPs such as **Macomb County Community Mental Health**, performed real-time eligibility checks using SSNs and Medicaid IDs; and others (for example, **Community Mental Health Partnership of Southeast Michigan**) provide member profiles and IDs for manual entry. Two CMHSPs without PCE Systems in **Lakeshore Regional Entity** downloaded the eligibility/enrollment data via the "LIDS" system.

Payment Structures of Encounter Data

This section focuses on how the PIHPs collected payment-related data and processed claims for payment. Table 3-3 shows the PIHPs' primary pricing methodology for inpatient and outpatient encounters.

Table 3-3—Primary Pricing Methodology, by PIHP and Claim Type

Primary Pricing Methodology	Inpatient	Outpatient
Line-by-Line	CMHPSM, Region 10	CMHPSM, MSHN, Region 10
Per Diem	NCN, OCHN, Region 10	MSHN, OCHN
Capitation	LRE, MSHN, NMRE, Region 10	LRE, MSHN, NCN, NMRE, OCHN, SWMBH, Region 10
Fee for Service	DWIHN, NMRE, SWMBH	DWIHN, NMRE, SWMBH
Negotiated (Flat) Rate	MCCMH	MCCMH, Region 10
Other		DWIHN ² , OCHN ¹ , SWMBH ¹

¹ Case rate.

² PMPM.

Gray shaded cells indicate no PIHP utilized the pricing methodology.

Since the encounter data submission does not include a payment methodology field, some variation in pricing methodology exists among the PIHPs.

- For inpatient encounters, most PIHPs (i.e., **Community Mental Health Partnership of Southeast Michigan**, **Detroit Wayne Integrated Health Network**, **Lakeshore Regional Entity**, **Macomb County Community Mental Health**, **Mid-State Health Network**, **NorthCare Network**, **Oakland Community Health Network**, and **Southwest Michigan Behavioral Health**) rely on a single payment methodology. In contrast, **Northern Michigan Regional Entity** (utilizing capitation and fee-for-service methods) and **Region 10 PIHP** (utilizing line-by-line and per diem) employ multiple payment approaches as part of their claim payment strategies for inpatient encounters.
- For outpatient encounters, the majority of PIHPs employ diverse payment methods, including line-by-line, per diem, capitation, fee for service, negotiated flat rate, and other pricing methodologies. However, **Community Mental Health Partnership of Southeast Michigan** (solely line-by-line), **Lakeshore Regional Entity** (solely capitation), and **NorthCare Network** (solely capitation) are exceptions in their use of a single payment method.

Bundle Payment Structures

The PIHPs were asked if there are any services submitted to the PIHP under bundle payment structures. Among the PIHPs, all but five PIHPs indicated that there are services submitted under bundle payment structures.

- **Detroit Wayne Integrated Health Network:** Employs a monthly fixed PMPM payment for certain bundled services, including T1017, H0031, H0032, and T1001. These bundled services are submitted to MDHHS.
- **Macomb County Community Mental Health:** Refers to the MDHHS code chart for bundled-payment applicable service codes as needed.
- **Mid-State Health Network:** Offers bundled services for Medicaid Assertive Community Treatment (ACT), SUD residential services, and Certified Community Behavioral Health Clinic (CCBHC) services. Encounters for bundled services are submitted as a single code, representing various service components.
- **Oakland Community Health Network:** Utilizes bundle payments for outcomes-based contracting, including services such as methadone and suboxone. All encounters and service codes are submitted to MDHHS.
- **Southwest Michigan Behavioral Health:** Implements bundled services for ACT, home-based services, and the Opioid Health Home (OHH) demonstration. Encounters for these bundled services are captured as \$0 claims for each service provided throughout the month.

In summary, different PIHPs and CMHSPs use various approaches to bundle payments for specific services, with some submitting encounters to MDHHS and others handling payments at the provider level. The specific bundled services and methods of submission may vary.

TPL Data

Each PIHP described its processes to collect and verify TPL information:

- **NorthCare Network:** Other insurance data were collected during the initial visit and reverified at subsequent visits.
- **Northern Michigan Regional Entity:** Enrollment checks were performed monthly via MDHHS systems, and beneficiaries reported other insurance coverage during service engagement.
- **Lakeshore Regional Entity:** CMHSPs submitted coordination of benefits (COB) information in their encounters, as required by MDHHS reporting rules effective FY 2023.
- **Southwest Michigan Behavioral Health:** Collects and verifies TPL information through manual lookup in the CHAMPS system, manual entry into claims processing system, and presentation/scanning of insurance cards at intake.
- **Mid-State Health Network:** All contractors were required to collect any TPL and bill those prior to sending claims or encounters.

- **Community Mental Health Partnership of Southeast Michigan:** All relevant insurance information was collected and documented on the member chart.
- **Detroit Wayne Integrated Health Network:** Providers were responsible for billing and collecting payments from other payers.
- **Oakland Community Health Network:** Providers were required to collect ability to pay and other payer information for COB information on claims.
- **Macomb County Community Mental Health:** COB data was collected on the claims, and the system tracks commercial insurance.
- **Region 10 PIHP:** Primary insurance information was collected at intake through disclosure, CHAMPS, or TriZetto. Subcontractors were required to collect and report primary insurance.

Zero-Paid Claims

In general, the approach in submission of zero-paid claims vary across PIHPs, where some PIHPs (i.e., **Northern Michigan Regional Entity**, **Lakeshore Regional Entity**, **Community Mental Health Partnership of Southeast Michigan**, and **Mid-State Health Network**) submit them to MDHHS after validation, while others (i.e., **NorthCare Network**, **Southwest Michigan Behavioral Health**, **Detroit Wayne Integrated Health Network**, **Oakland Community Health Network**, **Macomb County Community Mental Health**, and **Region 10 PIHP**) do not send them. Some PIHPs (i.e., **NorthCare Network**, **Southwest Michigan Behavioral Health**, and **Community Mental Health Partnership of Southeast Michigan**) mentioned capitated arrangements where services were paid at a contracted rate, resulting in no zero-payment amounts. **Southwest Michigan Behavioral Health** mentioned that it has special programs such as OHH or CCBHC, where services were reported as \$0. Generally, denied claims are not submitted as encounters. Furthermore, the payment from the primary insurance provider can influence whether a claim pays \$0.

Services From Providers With PIHPs Under Capitation Arrangement

According to MDHHS, providers are required to submit the usual and customary charge or billed amount. It is acceptable to report a value of zero in certain cases:

- If the health plan has a sub-capitated contract arrangement with the provider, as indicated in Loop–2300 Claim Information, Segment CN1, CN101 (Contract Type Code) or Loop–2400 Service Line Number, Segment CN1, CN101 (Contract Type Code), and the contract allows for zero as a charged amount.
- If the service(s) being reported are recognized by MDHHS as having no associated charge(s).

In the case of a zero-amount submitted for a sub-capitated encounter with a claims adjustment reason code 24, the value of the service should be reported in the monetary amount field.

Per the PIHPs' responses, providers operating under capitated arrangements have distinct processes for encounter submission. In capitated models:

- **Submission Method:** Capitated providers typically do not submit claims; they rely on encounter submissions to reflect service details and associated costs. Encounters involve allocating costs to specific services, often reflecting capitated payment amounts.
- **Cost Reflection:** Encounters may be reported with a fee screen amount, resembling a fee-for-service scenario. However, reporting on the Encounter Quality Initiative (EQI) or similar platforms reflects the actual bundled payment amount rather than fee-for-service rates.
- **Challenges:** There can be challenges in accurately reflecting actual costs due to the annual adjustment nature of capitated rates.
- **Logic and Systems:** Systems often include logic to flag services under capitated programs, ensuring proper handling during encounter submission. Encounter submissions encompass all relevant service details, even if only the initial service for the month is paid.
- **Provider Models:** Capitated models are commonly associated with specific provider entities (e.g., CMHSPs), which operate under cost-settled services and report encounters with adjusted net positive amounts.

It is important to note that these processes may vary across PIHPs based on the specifics of capitation models and local arrangements.

Encounter Data Quality Monitoring

This section evaluates how the PIHPs monitor their encounter data quality from the following questions:

- How do the PIHPs monitor encounter data quality for data collected by their subcontractors?
- How do the PIHPs monitor encounter data quality for data they collect?
- How do the PIHPs address feedback from MDHHS?
- What are the challenges or requests from the PIHPs?

Encounter Data Quality Monitoring by the PIHPs' Subcontractors

Table 3-4 presents information about subcontractor involvement in encounter submission, PIHPs' storage, review, and modification of encounters before submission to MDHHS, and subsequent review by PIHPs after submission. The **green** dots in the table indicate a "Yes" response, and the **red** dots indicate a "No" response.

Table 3-4—PIHP Processes for Encounter From Subcontractors

PIHP	Type of Subcontractor	Submits to MDHHS by Subcontractor	Stored by PIHP	Reviewed by PIHP Before Submission	Modified by PIHP Before Submission	Reviewed by PIHP After Submission
NCN	BH	●	●	●	●	●
	SUD	●	●	●	●	●
NMRE	BH	●	●	●	●	●
LRE	BH	●	●	●	●	●
SWMBH ¹	Not Applicable					
MSHN	BH	●	●	●	●	●
CMHPSM	BH	●	●	●	●	●
DWIHN	Provider Network	●	●	●	●	●
OCHN	BH	●	●	●	●	●
MCCMH	BH	●	●	●	●	●
Region 10	BH	●	●	●	●	●

¹ Southwest Michigan Behavioral Health indicated that it does not have any subcontractors.

Key Findings: Table 3-4

- While subcontractors played a role in the collection and processing of encounters for the PIHPs, the PIHPs themselves consistently managed the submission of encounters to MDHHS. An exception is **Southwest Michigan Behavioral Health**, which specified that it does not engage any subcontractors in this process. Consequently, the subsequent responses do not apply for **Southwest Michigan Behavioral Health**.
- All PIHPs stored their subcontractors' data submitted to MDHHS.
- The PIHPs reviewed the encounter data from subcontractors before and after submission to MDHHS.
- Among the PIHPs, five PIHPs did not indicate modifying encounters before MDHHS submission. However, four PIHPs (i.e., **Lakeshore Regional Entity**, **Mid-State Health Network**, **Detroit Wayne Integrated Health Network**, and **Oakland Community Health Network**) edited some subcontractor data or made modifications to each of its subcontractor's data.

HSAG gathered responses from the PIHPs regarding the quality checks conducted by both their subcontractors and the PIHPs themselves. In order to organize the PIHPs' responses, HSAG provided standard data quality checks for them to choose from in their questionnaire responses. Table 3-5 provides a brief description for these checks.

Table 3-5—Description for Data Quality Checks

Data Quality Checks	Description
Claim Volume by Submission Month	Evaluates the number of unique claims based on the month when the claims were submitted to an entity.
Claim Volume PMPM	Evaluates the number of unique claims PMPM based on the month when the services occurred.

Data Quality Checks	Description
Field-Level Completeness	Evaluates whether there are any missing and/or extra values for a specific data element.
Field-Level Validity	Evaluates whether the values for a specific data element are valid.
Timeliness	Evaluates whether the source entity submits claims in a timely manner.
Reconciliation With Financial Reports	Evaluates whether the payment fields in the claims align with the financial reports from an entity.
EDI Compliance Edits	Evaluates whether 837P and 837I files pass the EDI compliance edits.
MRR	Evaluates whether some of the data elements in the claims are complete and accurate when comparing to the medical records.

Table 3-6 presents the data quality checks conducted by either the PIHPs or their subcontractors on the encounter data collected by the subcontractors. The “Field-Level Completeness and Validity” column included quality checks such as EDI compliance edits, NCPDP edits, field-level completeness, or field-level accuracy. The **green** dots in the table indicate that there are quality checks, and the **red** dots indicate that there are no quality checks.

Table 3-6—Data Quality Checks by PIHPs and/or Their Subcontractors

PIHP	Type of Subcontractor	Claim Volume by Submission Month	Field-Level Completeness and Validity	Timeliness	Reconciliation With Financial Reports	Other ²
NCN	BH	●	●	●	●	
	SUD	●	●	●	●	
NMRE	BH	●	●	●	●	
LRE	BH	●	●	●	●	●
SWMBH ¹	Not Applicable					
MSHN	BH	●	●	●	●	
CMHPSM	BH	●	●	●	●	
DWIHN	BH	●	●	●	●	●
OCHN	BH	●	●	●	●	●
MCCMH ¹	BH					
Region 10	BH	●	●	●	●	●

¹ Southwest Michigan Behavioral Health and Macomb County Community Mental Health do not conduct any reviews of the encounters before submission to MDHHS.

² MRR.

Key Findings: Table 3-6

- The claim volume by submission month encounter data quality check was consistently performed for four of the PIHPs’ (i.e., **Northern Michigan Regional Entity**, **Lakeshore Regional Entity**, **Mid-**

State Health Network, and **Region 10 PIHP**) subcontractor data, while other PIHPs and/or their subcontractors did not conduct this check on their subcontractors' encounter data.

- The field-level completeness and accuracy quality check were performed for nearly all encounters by either the subcontractors or the PIHPs themselves, except for **Detroit Wayne Integrated Health Network**, **Southwest Michigan Behavioral Health**, and **Macomb County Community Mental Health**.
- MDHHS used the timeliness report to track minimum monthly requirements for the PIHPs, but not all PIHPs and their subcontractors conducted this check on subcontractor encounters. Five PIHPs (i.e., **Northern Michigan Regional Entity**, **Lakeshore Regional Entity**, **Mid-State Health Network**, **Community Mental Health Partnership of Southeast Michigan**, and **Region 10 PIHP**) performed timeliness quality checks on all subcontractor encounters.
- Three PIHPs (i.e., **Lakeshore Regional Entity**, **Oakland Community Health Network**, and **Region 10 PIHP**) noted in their responses that they assessed the alignment of payment fields in claims with financial reports for all subcontractor data.
- Overall, two PIHPs (i.e., **Lakeshore Regional Entity** and **Region 10 PIHP**) reported conducting five data quality checks.
- While MRR is a labor- and resource-intensive yet effective method, four of the PIHPs (i.e., **Lakeshore Regional Entity**, **Detroit Wayne Integrated Health Network**, **Oakland Community Health Network**, and **Region 10 PIHP**) also indicated that they use MRR as a data quality check method.

Encounter Data Collected by the PIHPs

For encounters collected by the PIHPs (i.e., not collected by the PIHPs' subcontractors), Table 3-7 shows the quality checks reported by the PIHPs.

Table 3-7—Data Quality Checks for Encounters Collected by the PIHPs

Data Quality Checks	Claim Volume by Submission Month	EDI Compliance Edits	Field-level Completeness and Accuracy	Reconciliation with Financial Reports	Timeliness	Other ¹
NCN				✓		
NMRE	✓			✓	✓	
LRE						
SWMBH	✓	✓	✓	✓		✓
MSHN						
CMHPSM						
DWIHN						
OCHN						
MCCMH		✓	✓	✓	✓	✓
Region 10	✓	✓	✓	✓	✓	✓

¹MRR.

Note: For the gray shaded cells (i.e., **Lakeshore Regional Entity**, **Mid-State Health Network**, **Community Mental Health Partnership of Southeast Michigan**, **Detroit Wayne Integrated Health Network**, and **Oakland Community Health Network**), the PIHPs indicated that their CMHSP subcontractors handle the submission of all encounters and conduct data quality checks. Consequently, these PIHPs did not offer responses regarding data quality checks performed internally for encounters in their data warehouses.

Key Findings: Table 3-7

- Among the PIHPs that provided responses to data quality checks performed by the PIHPs for encounters in their data warehouses, the number and types of data quality checks vary among the PIHPs, with “Reconciliation With Financial Report” being the most commonly conducted data quality checks by the PIHPs.
- Three of the PIHPs (i.e., **Southwest Michigan Behavioral Health**, **Macomb County Community Mental Health**, and **Region 10 PIHP**) reported conducting at least five data quality checks. Additionally, it is worth noting that while MRR is a labor- and resource-intensive yet effective method, these three PIHPs indicated that they use MRR as a data quality check method.

Feedback From MDHHS

As noted previously in the “Claims/Encounter Data Flow” section, upon receiving encounters from the PIHPs, MDHHS generated a series of response files (e.g., X12 999 response files and ETRR response files) based on EDI compliance edits and additional edits applied within MDHHS’ data warehouse. MDHHS send these files to the PIHPs to make corrections. In general, the number of records rejected by MDHHS’ edits was higher than the number of records rejected by the EDI translator. After receiving and reviewing MDHHS’ response files, the PIHPs were capable of making corrections for the rejected encounters and then resubmitting them to MDHHS. Based on the PIHPs’ responses to the questionnaire, Table 3-8 displays the percentage of encounters that were initially rejected and not yet accepted by MDHHS.

Table 3-8—Percentage of Encounters Initially Rejected and Not Yet Accepted by MDHHS

PIHP	837I	837P	Other
NCN	—	—	0.0%
NMRE	0.5%	0.3%	—
LRE	0.0%	0.0%	—
SWMBH	2.0%	2.1%	—
MSHN	0.0%	0.0%	—
CMHPSM	0.2%	0.0%	—
DWIHN	0.0%	0.5%	—
OCHN	0.0%	3.0%	—
MCCMH	0.0%	0.0%	—
Region 10	0.0%	0.0%	—

Note: The “Other” encounters for **NorthCare Network** include its SUD claims, CMSHP SALs, inpatient claims, and contract claim encounters.

Key Findings: Table 3-8

- The rejection rates for encounters that have not yet been accepted by MDHHS were relatively low across all PIHPs at the time the responses were submitted, with PIHP rates ranging from 0.0 percent to 2.0 percent for institutional encounters, and 0.0 percent to 3.0 percent for professional encounters.
- Oakland Community Health Network** reported the highest rejection rate for professional encounters at 3.0 percent, while **Southwest Michigan Behavioral Health** had the highest rejection rate for institutional encounters at 2.0 percent.

Challenges and Changes Noted by the PIHPs

Table 3-9—Internal and External Challenges and Upcoming Changes

PIHP	Challenges and/or Upcoming Changes	Description
NCN	Upcoming Changes	Changes in the COB requirement for FY 2024 might pose some challenges in the PIHP's testing system.
NMRE	External Challenge	Occasionally, there were issues with CHAMPS not accepting files or partially accepting files, but no such incidents have occurred within the last year.
LRE	Upcoming Change	No significant upcoming changes are anticipated. The only changes expected at this time are those related to the conclusion of the coronavirus disease 2019 (COVID-19) public health emergency (PHE).
SWMBH	Internal Challenge	Receiving encounter data in real-time from its participant CMHSPs would enhance the SWMBH submission process. Currently, CMHSPs submit encounter data on a monthly basis, aligning with their contractual obligations.
	External Challenge	CHAMPS processing time is not a major issue. SWMBH typically gets 4950 acknowledgments within one to three days of submission. There are occasional challenges with situational errors, such as duplicate records or claim balancing issues, leading to entire file rejections. Sometimes, expected acknowledgments such as TA1 or 999 are missed, but SWMBH receive a 4950 response for the batch. In rare cases, SWMBH might get more than one 4950 acknowledgment for a unique batch identifier, requiring manual intervention and discussions with MDHHS.
	Upcoming Change	For FY 2023, SWMBH must report third-party billing details. In FY 2024, this might extend to internal services by sub-capitated CMHSPs. Changes are made in CMHSP systems, pending final technical requirements from MDHHS on October 1, 2023. SWMBH is adapting to monitor and validate coordination of benefits data in encounter reporting.
MSHN	External Challenge	A major challenge is MDHHS changing rules without notice. Rejections signal changes, and MSHN must quickly update its system to adapt.
CMHPSM	Internal Challenge	Capturing new data components can be challenging, especially when added to clinical workflows. Despite this, CMHPSM region has successfully adjusted to meet all submission requirements on time.
	Upcoming Change	COB SAL data entry requirements anticipated on October 1, 2023.
DWIHN	None	Not applicable.
OCHN	None	Not applicable.

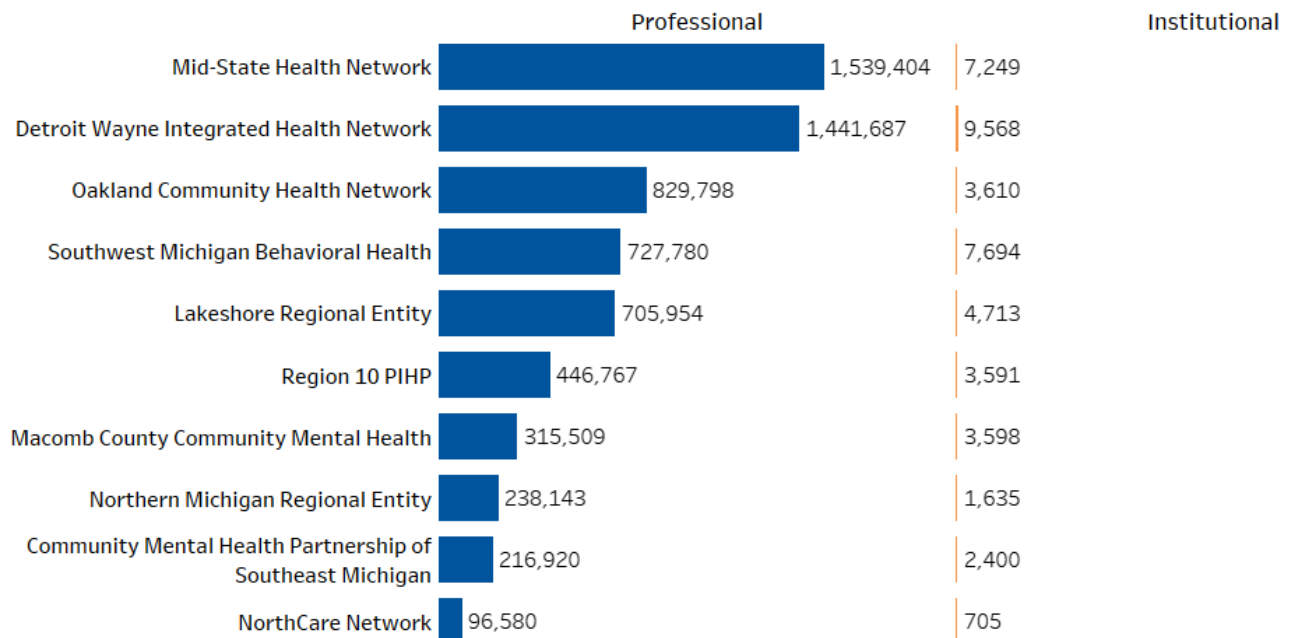
PIHP	Challenges and/or Upcoming Changes	Description
MCCMH	Internal Challenge	Submitting MI Health Link encounter data to MDHHS through ICOs poses challenges, particularly with T1040s for CCBHC encounters involving MI Health Link consumers, as ICOs currently do not accept or process them.
	External Challenge	MDHHS mistakenly suspended file transfers to MCCMH 's file transfer system (FTS) mailbox from December 1, 2022 to December 15, 2022, causing out-of-order processing, errors, and rejected encounter batches. Technical issues, such as changes in MDHHS validation and missing validations in the upload process, were resolved by backing out and resubmitting affected batches. Apart from these technical challenges, no major external issues were reported.
	Upcoming Change	MCCMH is in discussions to enable ICOs to accept T1040s, ensuring complete reporting of CCBHC encounters for MI Health Link eligible members, potentially removing a reporting barrier to the State.
Region 10	None	Not applicable.

4. Administrative Profile Results and Findings

Encounter Data Summary

Figure 4-1 displays the total number of paid encounters by PIHP and category of service. **Mid-State Health Network** had the largest number of paid professional encounters at approximately 1.5 million, and **Detroit Wayne Integrated Health Network** had the largest number of paid institutional encounters, with approximately 9,600. **NorthCare Network** had the lowest number of paid encounters across both professional and institutional categories of service at just over 96,500, and 700, respectively.

Figure 4-1—Number of Paid Encounters by Claim Status and Category of Service by PIHP



Member Composition

Figure 4-2 and Figure 4-3 display MDHHS Medicaid member demographics by PIHP. As shown in Figure 4-2, **Detroit Wayne Integrated Health Network** had the highest number of enrolled members at approximately 850,000, while **NorthCare Network** had the lowest number of enrolled members at approximately 87,000. These findings align with the encounter volume described in Figure 4-1, where **Detroit Wayne Integrated Health Network** had the second largest number of professional encounters and the largest number of paid institutional encounters, while **NorthCare Network** had the lowest number of paid encounters for both categories of service.

Figure 4-2—Enrollment in SFY 2023 by PIHP

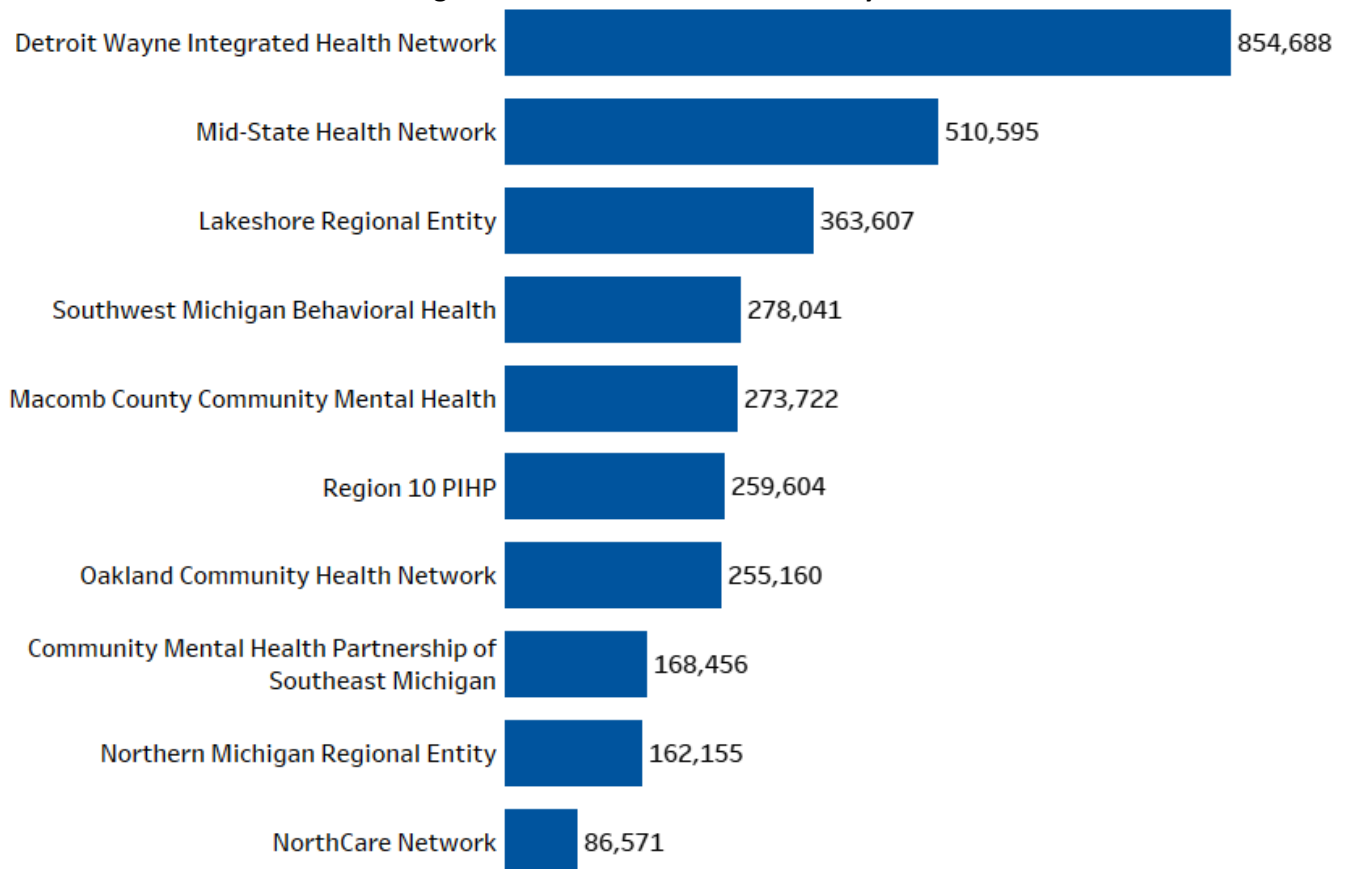
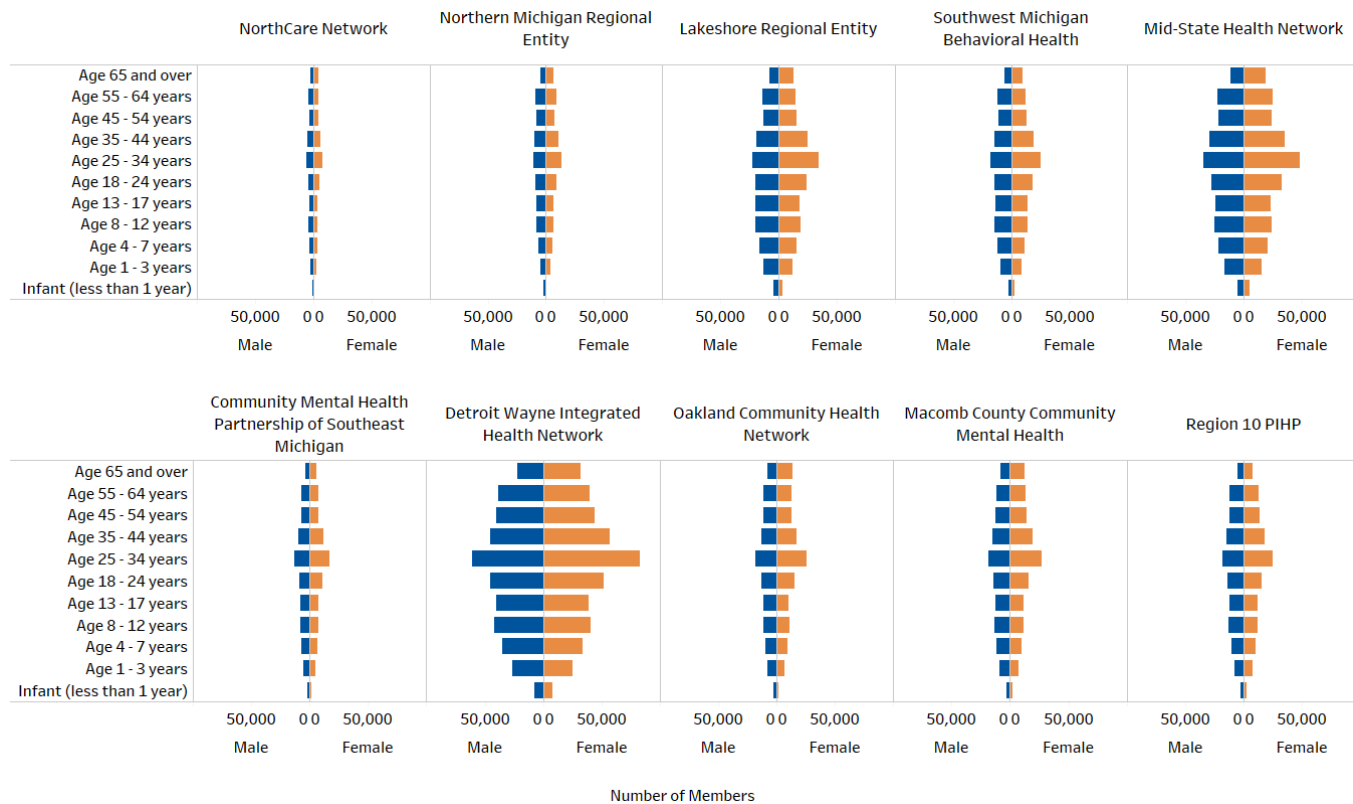


Figure 4-3 displays the age and gender distribution for each PIHP. Across all PIHPs, the 25-to-34-years-old age category had the highest number of members. As the age category got older, the number of members decreased compared to the 25-to-34-years-old age category. Likewise, as the age category got younger, the number of members decreased compared to the 25-to-34-years-old age category. The number of females compared to males was about equal across all age categories, with the 25-to-34-years-old age category having the largest difference, where the number of females slightly outweighed the number of males, on average, 1.4 to 1.

Figure 4-3—Age and Gender Distribution by PIHP



Encounter Data Completeness

To validate encounter data completeness, HSAG examined encounter data volume through multiple angles across four primary metrics. HSAG stratified each of the following metrics by PIHP and category of service (professional and institutional):

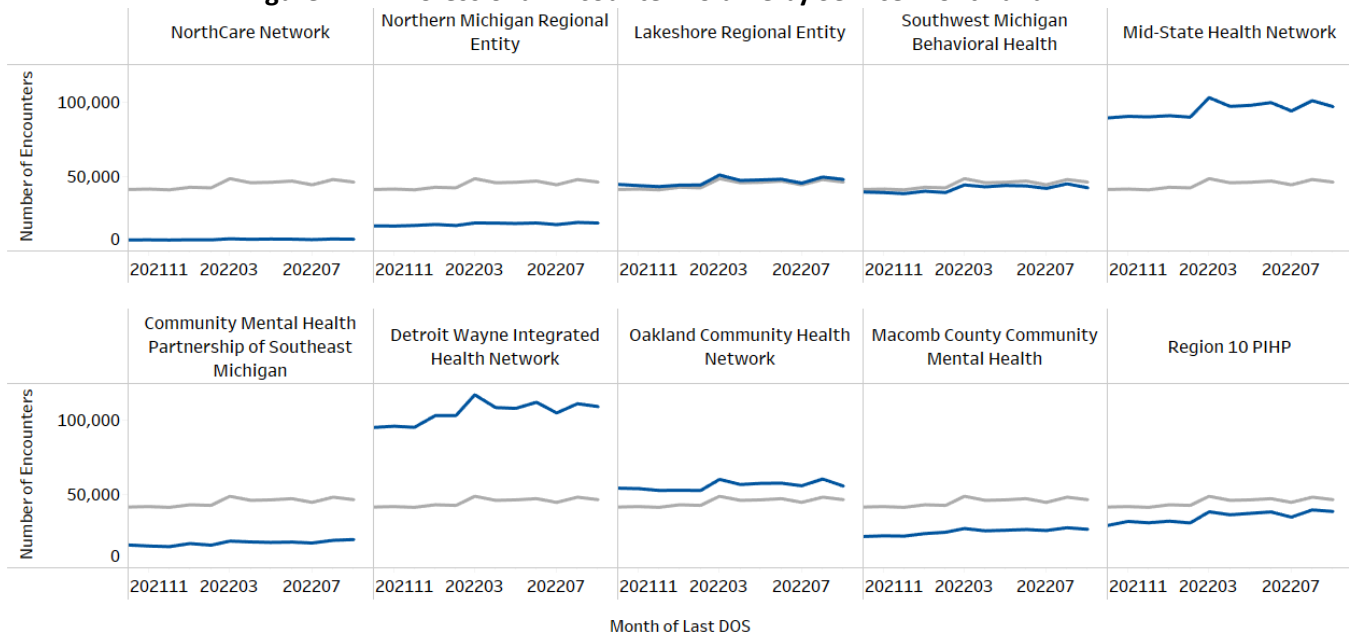
- Monthly encounter volume (i.e., visits) by service month (i.e., the month when services occurred)
- Monthly encounter volume (i.e., visits) per 1,000 MM by service month
- Paid amount PMPM by service month
- Percentage of duplicate encounters

Monthly Encounter Volume by Service Month

Figure 4-4 and Figure 4-5 display the monthly encounter volume by service month and PIHP for all encounters that occurred during the measurement year (i.e., October 1, 2021, through September 30, 2022). These charts evaluate the number of encounters that occurred by the month when the service occurred. A higher number of encounters may not indicate that members are having more encounters, but may indicate a higher number of enrolled members, which would therefore increase the number of encounters. Likewise, a lower number of encounters may not indicate that members are not seeking care, but that there are fewer enrolled members.

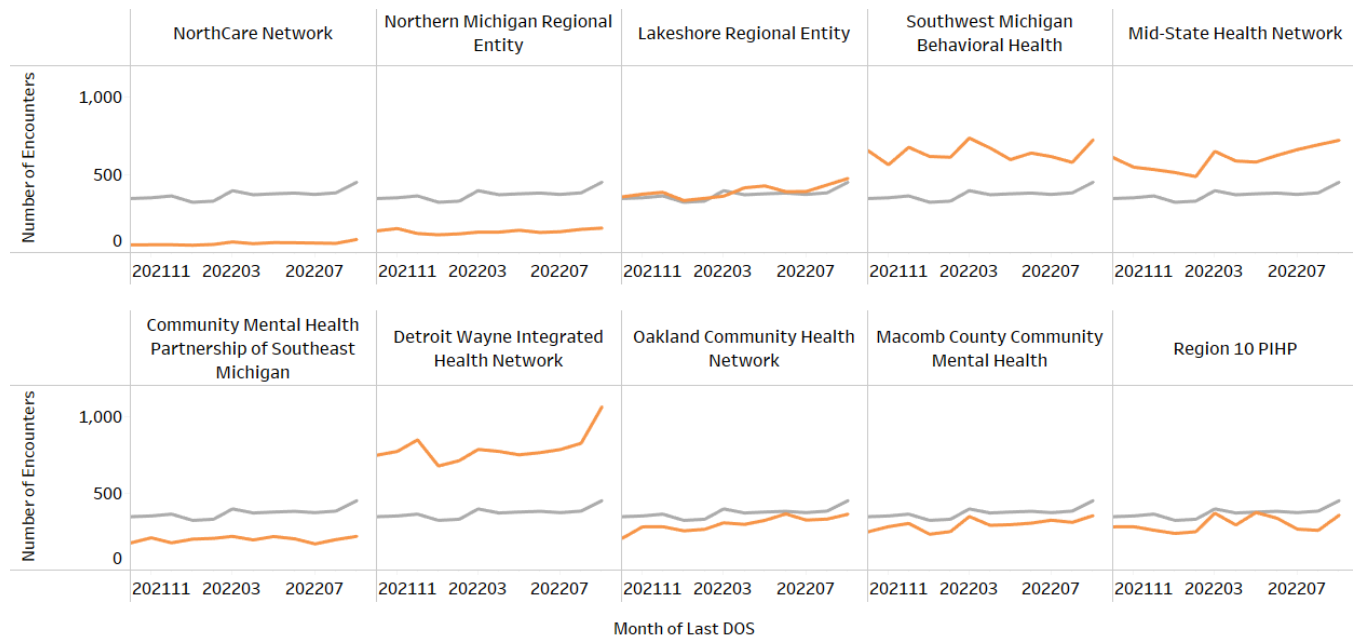
As displayed in Figure 4-4, nearly all PIHPs demonstrated the same trend throughout the measurement year, with a slight upward trend in the number of encounters. **Detroit Wayne Integrated Health Network** had the highest number of professional encounters throughout the measurement year, around 105,000 encounters per month, while **NorthCare Network** had the lowest, slightly less than 8,000 encounters per month. The results could be due to the number of enrolled members. As illustrated in Figure 4-2, **Detroit Wayne Integrated Health Network** had the highest number of enrolled members, and **NorthCare Network** had the lowest, which could explain the variation in encounter volume. **Lakeshore Regional Entity** and **Southwest Michigan Behavioral Health** remained about equal to the all PIHP rate, around 45,000 encounters per month. **NorthCare Network**, **Northern Michigan Regional Entity**, **Community Mental Health Partnership of Southeast Michigan**, **Macomb County Community Health**, and **Region 10 PIHP** were all below the all PIHP rate, whereas, **Mid-State Health Network**, **Detroit Wayne Integrated Health Network**, and **Oakland Community Health Network** were all above the all PIHP rate.

Figure 4-4—Professional Encounter Volume by Service Month and PIHP



As displayed in Figure 4-5, all PIHPs exhibited fluctuations in the institutional encounter volume throughout the measurement year; however, all PIHPs demonstrated a slight increase in encounter volume toward the end of the measurement year. Of note, **Lakeshore Regional Entity**, **Southwest Michigan Behavioral Health**, **Mid-State Health Network**, **Detroit Wayne Integrated Health Network**, and **Macomb County Community Mental Health** all exhibited decreases in encounter volume in January 2022, while all PIHPs had slight increases in March 2022. Additionally, all PIHPs demonstrated an increase in institutional encounter volume in August 2022. Like the trend observed in the professional encounter volume by service month, **Detroit Wayne Integrated Health Network** had the highest number of institutional encounters throughout the measurement year, while **NorthCare Network** had the lowest. The finding could be explained by the number of enrolled members within the PIHPs. As illustrated in Figure 4-2, **Detroit Wayne Integrated Health Network** had the highest number of enrolled members, and **NorthCare Network** had the lowest. Furthermore, **Lakeshore Regional Entity** was about equal to the all PIHP rate, slightly under 400 encounters per month, whereas **Southwest Michigan Behavioral Health**, **Mid-State Health Network**, and **Detroit Wayne Integrated Health Network** were all above the all PIHP rate. All other PIHPs were below the all PIHP rate.

Figure 4-5—Institutional Encounter Volume by Service Month and PIHP

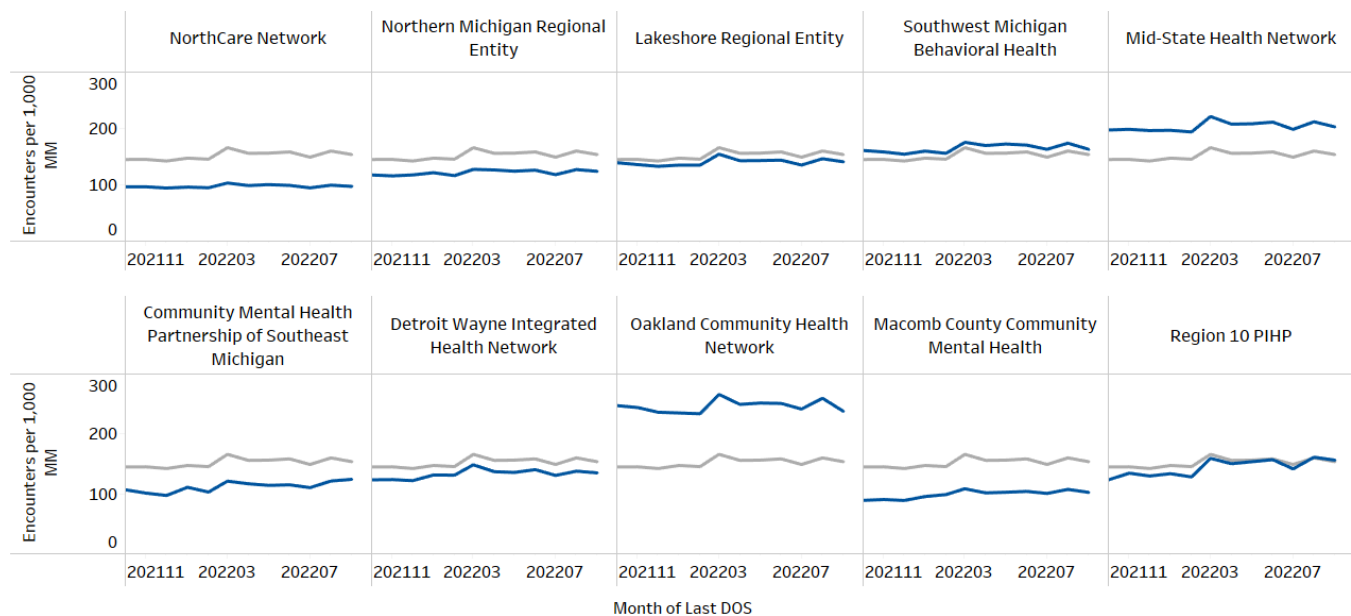


Monthly Encounter Volume per 1,000 Member Months by Service Month

Figure 4-6 and Figure 4-7 display the monthly encounter volume per 1,000 MM by service month and PIHP. Examining the encounter volume per 1,000 MM allows for standardization across all PIHPs based on the number of enrolled members during each month.

Figure 4-6 displays the encounter volume per 1,000 MM by PIHP for professional encounters. All PIHPs ranged from approximately 89 to 266 visits per 1,000 MM. In addition, all PIHPs exhibited an increase in the monthly encounter volume per 1,000 member months in March 2022, which aligned with the encounter volume trend displayed in Figure 4-4. Interestingly, despite **Detroit Wayne Integrated Health Network** having the largest encounter volume, it was slightly below the all PIHP rate. Additionally, both **Mid-State Health Network** and **Oakland Community Health Network** remained above the all PIHP rate after adjusting for the number of enrolled members per month. Like encounter volume trends, both **Lakeshore Regional Entity** and **Southwest Michigan Behavioral Health** were about equal to the all PIHP rate per 1,000 MM, around 160 encounters per 1,000 MM; and **Region 10 PIHP**, which was slightly below the all PIHP rate for encounter volume, was also about equal to the all PIHP rate after adjusting for the number of enrolled members. All other PIHPs remained below the all PIHP rate after adjusting for the number of enrolled members.

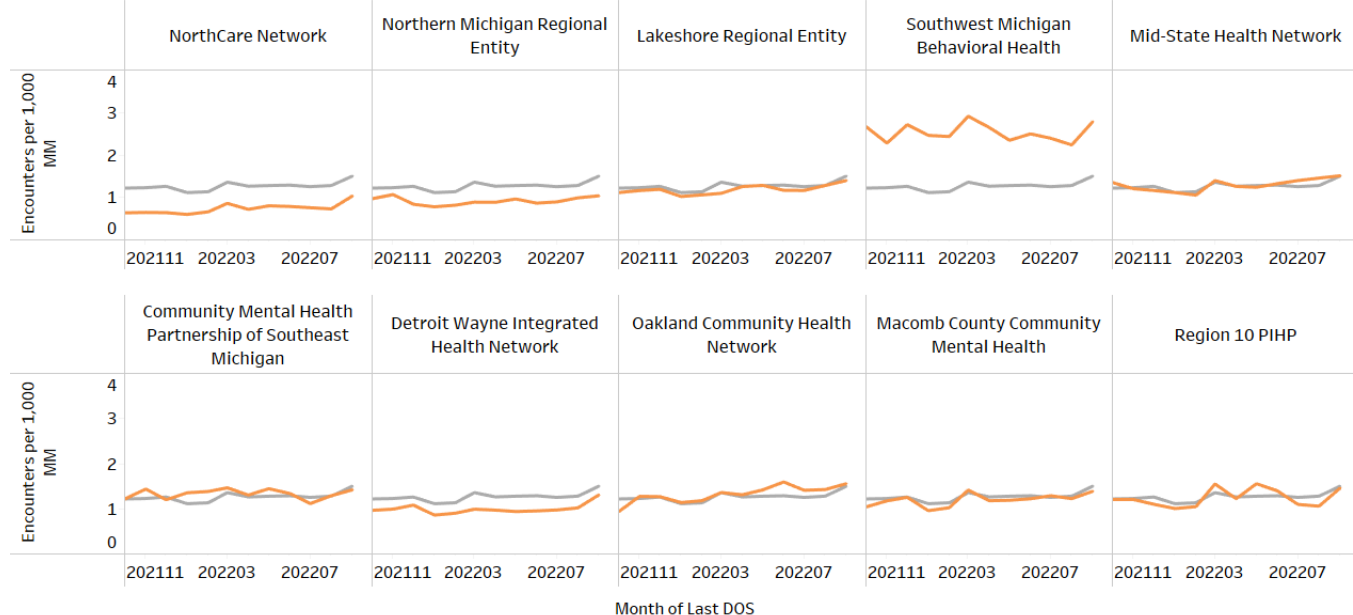
Figure 4-6—Monthly Professional Encounter Volume per 1,000 MM by PIHP



Note: The grey line indicates the all PIHP rate.

Figure 4-7 displays the encounter volume per 1,000 MM by PIHP for institutional encounters. All PIHPs ranged from approximately 0.6 to 3 visits per 1,000 MM. Despite large amounts of variation throughout the measurement year, most PIHPs exhibited similar rates and trends compared to the all PIHP rate. After adjusting for the number of enrolled members, **NorthCare Network** and **Northern Michigan Regional Entity** remained below the all PIHP rate, and **Southwest Michigan Behavioral Health** remained above the rate. Despite **Mid-State Health Network** having a higher encounter volume than the all PIHP rate, as displayed in Figure 4-5, it was equal to the all PIHP rate after adjusting for the number of enrolled members. This suggests that **Mid-State Health Network** members have encounters at a rate that is comparable to all enrolled PIHP members. Conversely, although **Detroit Wayne Integrated Health Network** had a higher encounter volume in Figure 4-5, it was below the all PIHP rate after adjusting for the number of enrolled members, indicating that its members may have institutional encounters at a lower rate compared to other PIHP enrolled members.

Figure 4-7—Monthly Institutional Encounter Volume per 1,000 MM by PIHP



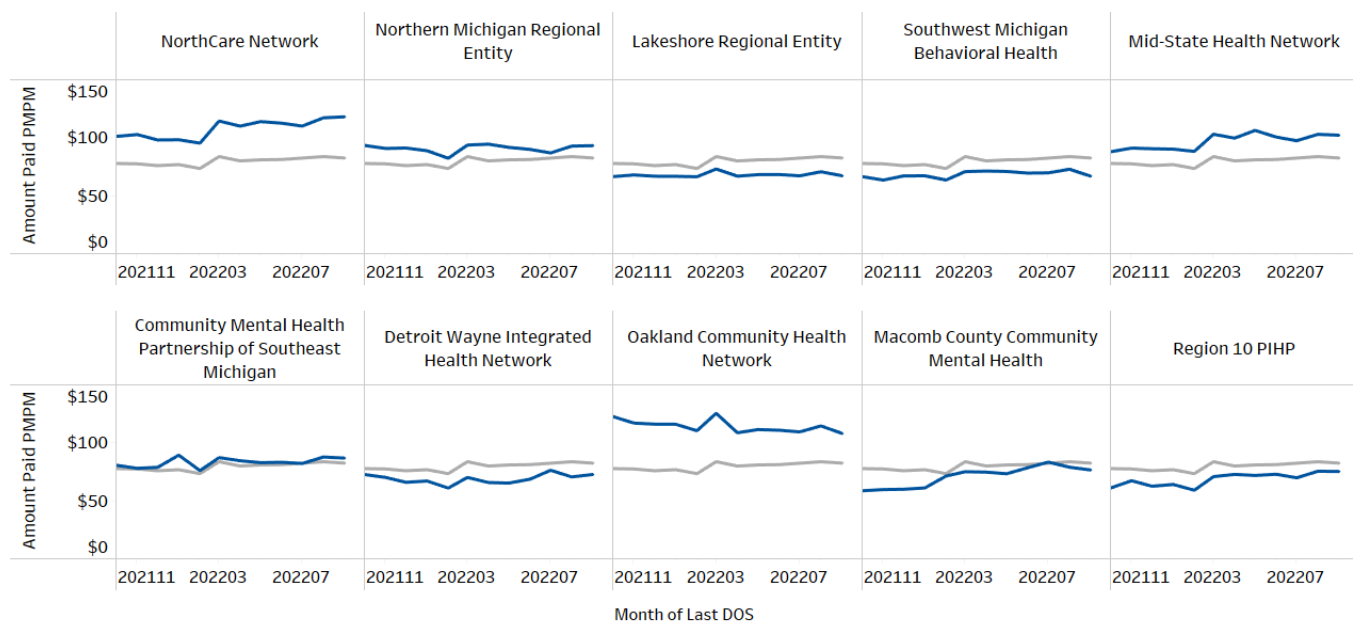
Note: The grey line indicates the all PIHP rate.

Payment Amounts Per Member Per Month

Figure 4-8 and Figure 4-9 display the monthly payment amounts PMPM by service month and PIHP. Examining the paid amount PMPM allows for standardization across all PIHPs based on the number of enrolled members during each month.

Figure 4-8 displays the paid amount PMPM for professional encounters across all PIHPs. Payment amounts were generally consistent among all PIHPs at a PMPM analysis. However, **NorthCare Network**, **Mid-State Health Network**, and **Oakland Community Health Network** were all higher than the all PIHP rate, with payments around \$108 PMPM, \$97 PMPM, and \$114 PMPM respectively. Interestingly, despite **NorthCare Network** having a lower encounter volume per 1,000 MM than the all PIHP rate, as displayed in Figure 4-6, it had a higher cost PMPM. Like the encounter volume trend per 1,000 MM, all PIHPs also had an increase in the payment amount PMPM in March 2022. All other PIHPs were about equal to the all PIHP rate, around \$80 PMPM.

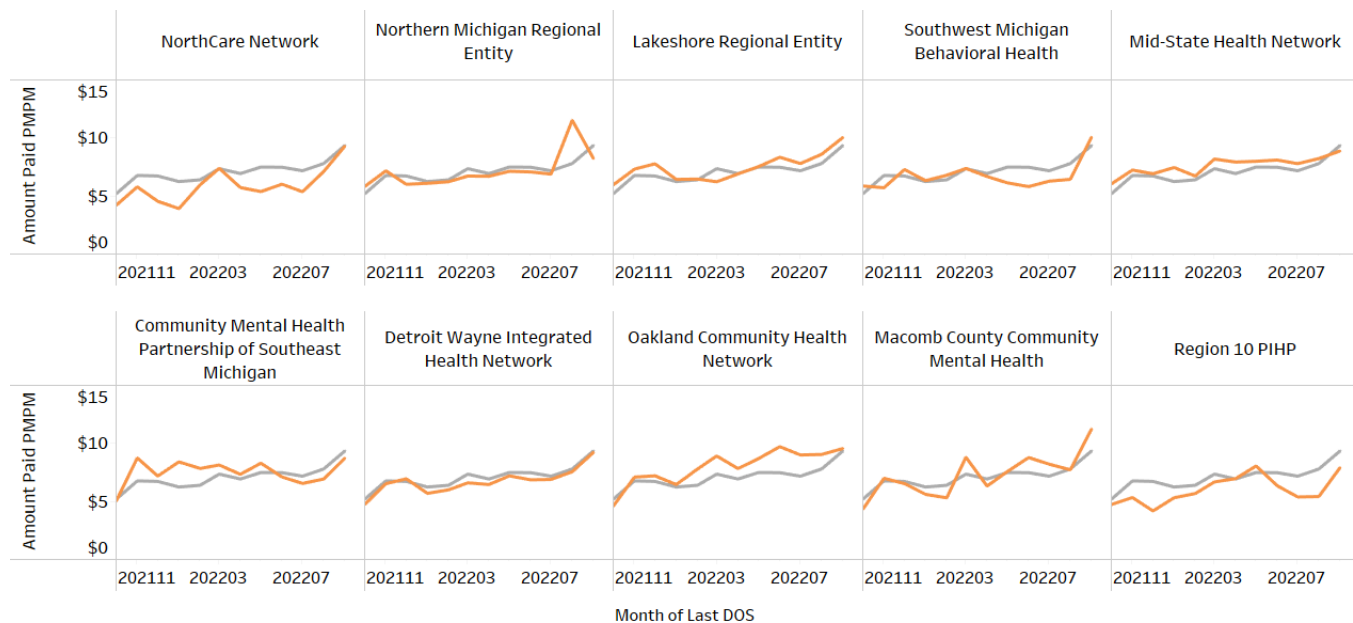
Figure 4-8—Professional Encounters Paid Amount PMPM by PIHP



Note: The grey line indicates the all PIHP rate.

Figure 4-9 displays the paid amount PMPM for institutional encounters across all PIHPs. All PIHPs exhibited fluctuations in the paid amount PMPM but demonstrated a slight increase of the paid amount PMPM over the measurement year. All PIHP trends were approximately equal to the all PIHP rate, ranging from \$5 to \$10 for all PIHPs. Additionally, all PIHPs tended to increase in payment amounts PMPM throughout the measurement year, with all PIHPs, except **Northern Michigan Regional Entity**, trending upward from August 2022. Despite **Southwest Michigan Behavioral Health** having more encounters per 1,000 MM compared to the all PIHP rate, as displayed in Figure 4-7, it was about equal to the all PIHP rate, around \$7.10 PMPM.

Figure 4-9—Institutional Encounters Paid Amount PMPM by PIHP



Note: The grey line indicates the all PIHP rate.

Percentage of Duplicate Encounters

Duplicate encounters may enter the system for a variety of reasons, such as encounters submitted multiple times to rectify an issue for payment. While most performance metrics used by the State, its PIHPs, and its external quality review organization are robust to the presence of duplicate encounters,⁴⁻¹ identification and appropriate handling of duplicate encounters is crucial for accurate financial and actuarial calculations. HSAG assessed the percentage of records that were identified as duplicates across the fields presented in Table 4-1.

Table 4-1—Fields Used to Identify Duplicate Encounters

Key Data Element	Professional Encounters (837P)	Institutional Encounters (837I)
Member ID	✓	✓
Header Service From Date	✓	✓
Header Service To Date	✓	✓
Line Number	✓	✓
Claim Type		✓
Primary Diagnosis Code	✓	✓
CPT/HCPCS/CDT Code	✓	✓
CPT/HCPCS Modifier Codes	✓	✓
Revenue Code		✓
Billing Provider NPI	✓	✓
Rendering Provider NPI	✓	

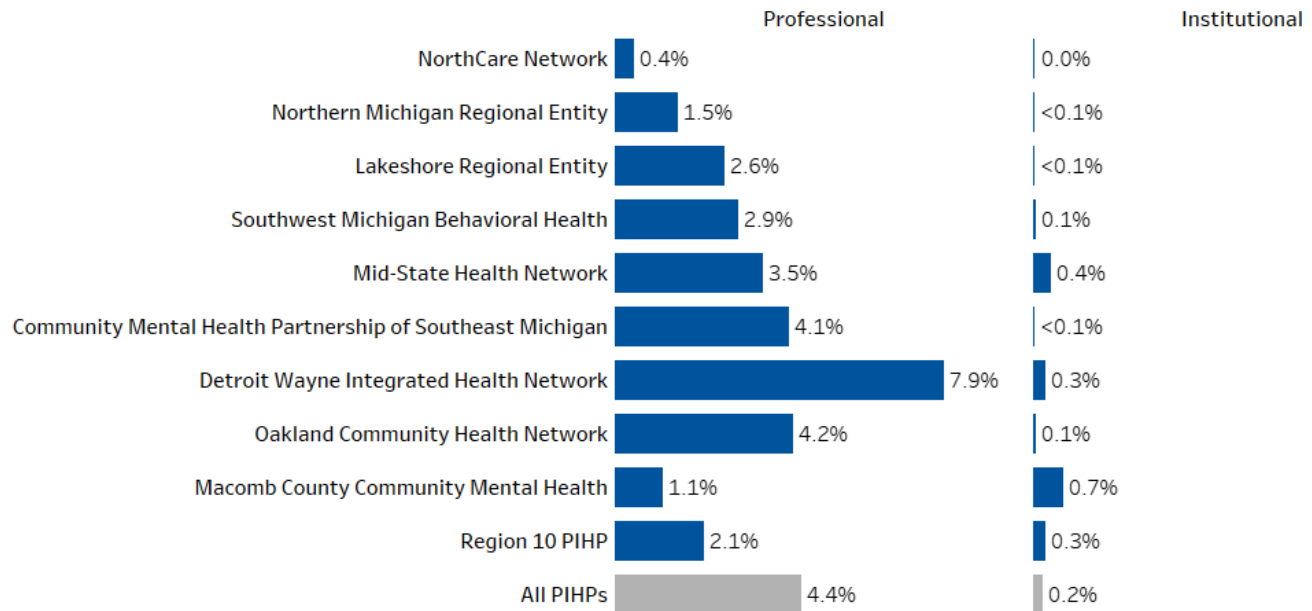
For this analysis, the original claim in a series of duplicates was not counted as a duplicate. For example, if three encounters were identified as duplicates (i.e., the values of all fields in Table 4-1 matched), then the number of duplicates counted was two, as one was counted for the original claim leaving two duplicates remaining.

Figure 4-10 displays the percentage of duplicate encounters for each PIHP and the aggregate result for all PIHPs for all categories of service. Across all PIHPs, 4.4 percent of all professional encounters were identified as a duplicate. **NorthCare Network** had the lowest percentage of duplicate encounters (0.4 percent), whereas **Detroit Wayne Integrated Health Network** had the highest (7.9 percent). Institutional encounters had less duplicates identified than professional encounters and across all PIHPs, 0.2 percent of all institutional encounters were identified as duplicative. Like professional encounters, **NorthCare Network** had the lowest percentage of duplicates identified (0.0 percent), whereas **Macomb**

⁴⁻¹ For example, many HEDIS performance measures count whether or not members had a particular service rather than the number of services. Utilization measures that *do* count the number of services typically count multiple claims for the same service on the same day as a single service, thereby effectively removing duplicate claims.

County Community Mental Health had the highest percentage of institutional encounters identified as duplicative (0.7 percent).

Figure 4-10—Percentage of Duplicate Encounters by Category of Service and PIHP



Encounter Data Timeliness

To validate encounter data timeliness, HSAG examined encounter data volume through multiple angles across two primary metrics. HSAG stratified each of the following metrics by PIHP and category of service (professional and institutional):

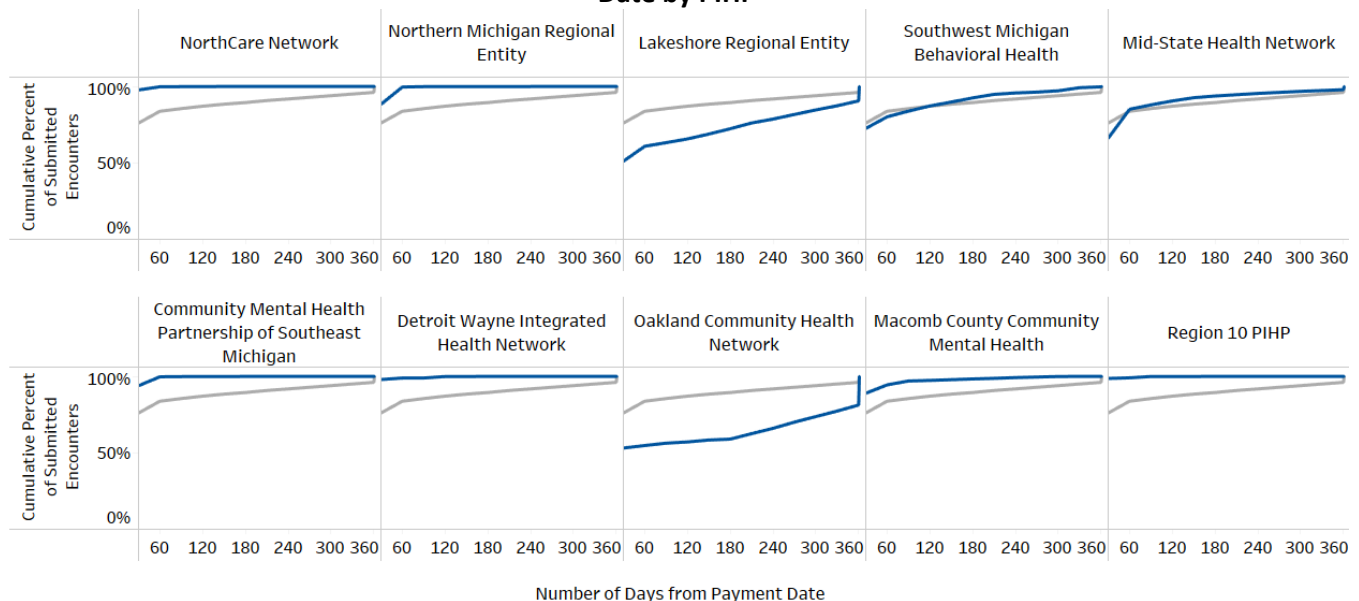
- Percentage of encounters received by MDHHS within 360 days from the PIHP payment date, in 30-day increments.
- Claims lag triangle to illustrate the percentage of encounters received by MDHHS two months, three months, etc., from the service month. For conciseness, lag triangles are presented for each PIHP in appendices D through M.

Lag Between PIHP Payment Date and Submission to MDHHS

Figure 4-11 and Figure 4-12 show the cumulative percentage of encounters submitted to MDHHS from the payment date for each PIHP by category of service.

Figure 4-11 shows the percentage of professional encounters submitted within 360 days from the PIHP payment date, in 30-day increments, by PIHP. **NorthCare Network**, **Northern Michigan Regional Entity**, **Community Mental Health Partnership of Southeast Michigan**, **Detroit Wayne Integrated Health Network**, and **Region 10 PIHP** all had over 99 percent of encounters submitted within 120 days from the PIHP payment date. Of those PIHPs, all but one, **Detroit Wayne Integrated Health Network**, had over 99 percent of encounters submitted within 60 days. Although **Macomb County Community Mental Health** did not reach over 99 percent of submitted encounters until 240 days after submission, it still had 94.5 percent of encounters submitted within 60 days. **Southwest Michigan Behavioral Health** had 95.7 percent of professional encounter submitted within 240 days and reached over 99 percent within 330 days of payment date. Although **Mid-State Health Network** submitted encounters quicker than **Lakeshore Regional Entity** and **Oakland Community Health Network**, reaching 95.4 percent of submitted encounters within 240 days, all three PIHPs had a much longer lag compared to the other PIHPs, with 66.1 percent, 51.1 percent, and 53.1 percent of encounters submitted within 30 days of the payment date.

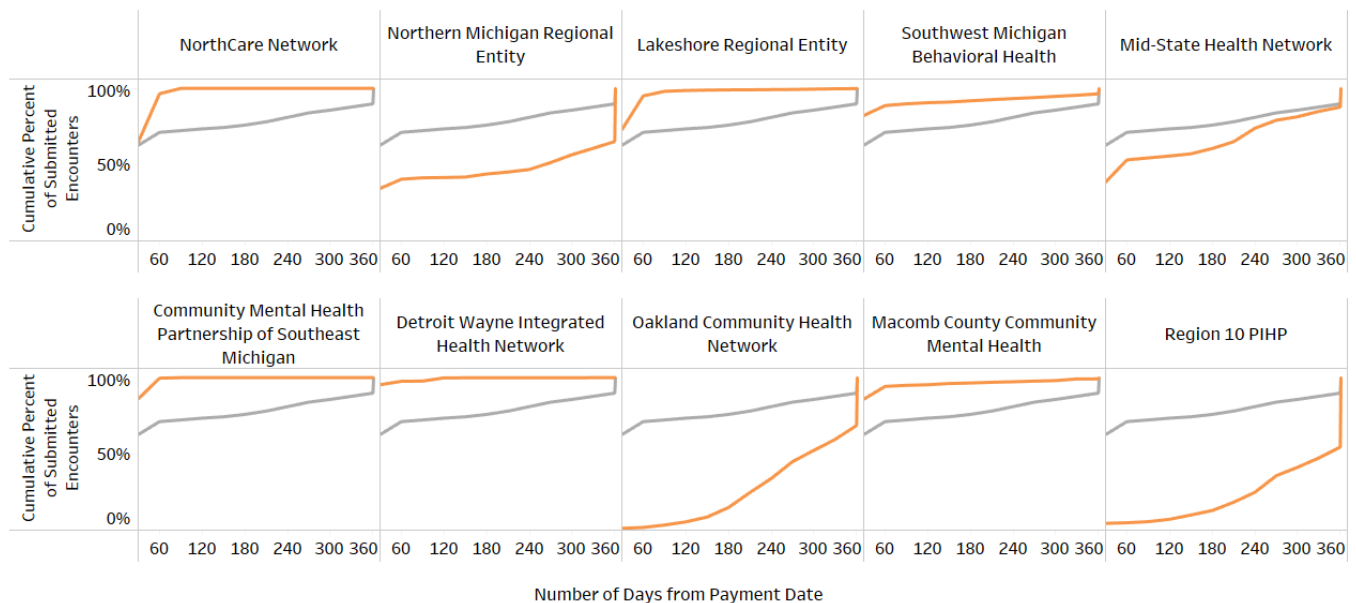
Figure 4-11—Cumulative Percentage of Professional Encounters Submitted to MDHHS From PIHP Payment Date by PIHP



Note: The grey line indicates the all PIHP rate.

Figure 4-12 shows the percentage of institutional encounters submitted within 360 days from the PIHP payment date, in 30-day increments, by PIHP. Compared to professional encounters, there was a greater lag in the encounter submission, with five PIHPs (**NorthCare Network**, **Lakeshore Regional Entity**, **Community Mental Health Partnership of Southeast Michigan**, **Detroit Wayne Integrated Health Network**, and **Macomb County Community Mental Health**) submitting over 94 percent of encounters within 60 days. **Southwest Michigan Behavioral Health** had a slightly longer lag, with 82.1 percent of encounters submitted within 30 days, and reaching over 95 percent within 330 days. **Oakland Community Health Network** and **Region 10 PIHP** each had the longest lag between payment date and submission date, with 1.2 percent and 4.5 percent of encounters submitted within 30 days, respectively. Within 360 days, **Oakland Community Health Network** submitted 68.6 percent of encounters, whereas **Region 10 PIHP** had 54.5 percent of encounters submitted. **Northern Michigan Regional Entity** and **Mid-State Health Network** also had a longer lag, with 34.4 percent and 38.5 percent of encounters submitted within 30 days, respectively. However, within 360 days, **Northern Michigan Regional Entity** submitted 65.1 percent of institutional encounters, whereas **Mid-State Health Network** submitted 87.7 percent of encounters.

Figure 4-12—Cumulative Percentage of Institutional Encounters Submitted to MDHHS From PIHP Payment Date by PIHP



Note: The grey line indicates the all PIHP rate.

Encounter Data Lag Triangles

To fully assess encounter data completeness and identify any patterns or idiosyncrasies in data submission, HSAG examined lag triangles, which relate the month of service to the month of submission to MDHHS. Separate lag triangles were created for each PIHP and category of service. Full results for each PIHP and category of service are presented in appendices D through M. These results can be used to provide additional details pertaining to data completeness, encounter volume, and encounters PMPM.

Field-Level Completeness and Accuracy

HSAG evaluated whether the data elements in the final paid encounters are complete and accurate through the two study indicators described in Table 2-2 for the key data elements listed in Table 2-3. In addition, Table 2-3 shows the criteria HSAG used to evaluate the validity for each data element. These criteria are based on standard reference code sets.

Figure 4-13 and Figure 4-14 provide the percentage of encounters that are present and contain valid values for key data elements across all PIHPs. PIHP-specific results are shown in each PIHP-specific appendix. Percent present was calculated only for fields that were applicable to appropriate claim types (e.g., calculations exclude DRG codes from professional encounters). Similarly, percent valid was only calculated for fields in which values were populated. For instance, Figure 4-13 shows 60.8 percent of all PIHP professional encounters contained a billing provider NPI, but 100 percent of those contained valid values. However, CPT/HCPCS codes with Procedure-to-Procedure (PTP) edits only apply to a subset of encounters. In this measure, the percent present are the number of present and valid values before applying the PTP edits. For example, since PTP edits can only be applied to valid CPT/HCPCS codes for the applicable subset of the data, the percent present displays the CPT/HCPCS codes which are valid (i.e., the CPT/HCPCS code is in a reference database) for the applicable subset of the data. The percent valid for this measure indicates the percentage of CPT codes that are present and valid via the reference database that also pass the PTP edit criteria.

Figure 4-13 shows the aggregate result of all PIHPs for the percent present and percent valid values of key data elements for professional encounters. Nearly three-quarters (14 of 20) of the key data elements were greater than 99.9 percent present, and of these, 13 were 100 percent present. Key data elements that were partially or not populated, such as Rendering Provider Taxonomy Codes, Secondary Diagnosis Codes, Referring Provider NPIs, and NDCs were not expected to be 100 percent populated. Although not expected to be populated 100 percent of the time, Billing Provider NPI was populated 60.8 percent, ranging from 43.8 percent (**Southwest Michigan Behavioral Health**) to 86.8 percent (**NorthCare Network**). Rendering Provider NPI was populated 30.2 percent of the time, ranging from 17.4 percent (**Southwest Michigan Behavioral Health**) to 58.5 percent (**NorthCare Network**). Almost all key professional encounter data elements that were present had a validity rate of 99.0 percent or greater, except Member ID, which had a validity rate of 96.2 percent.

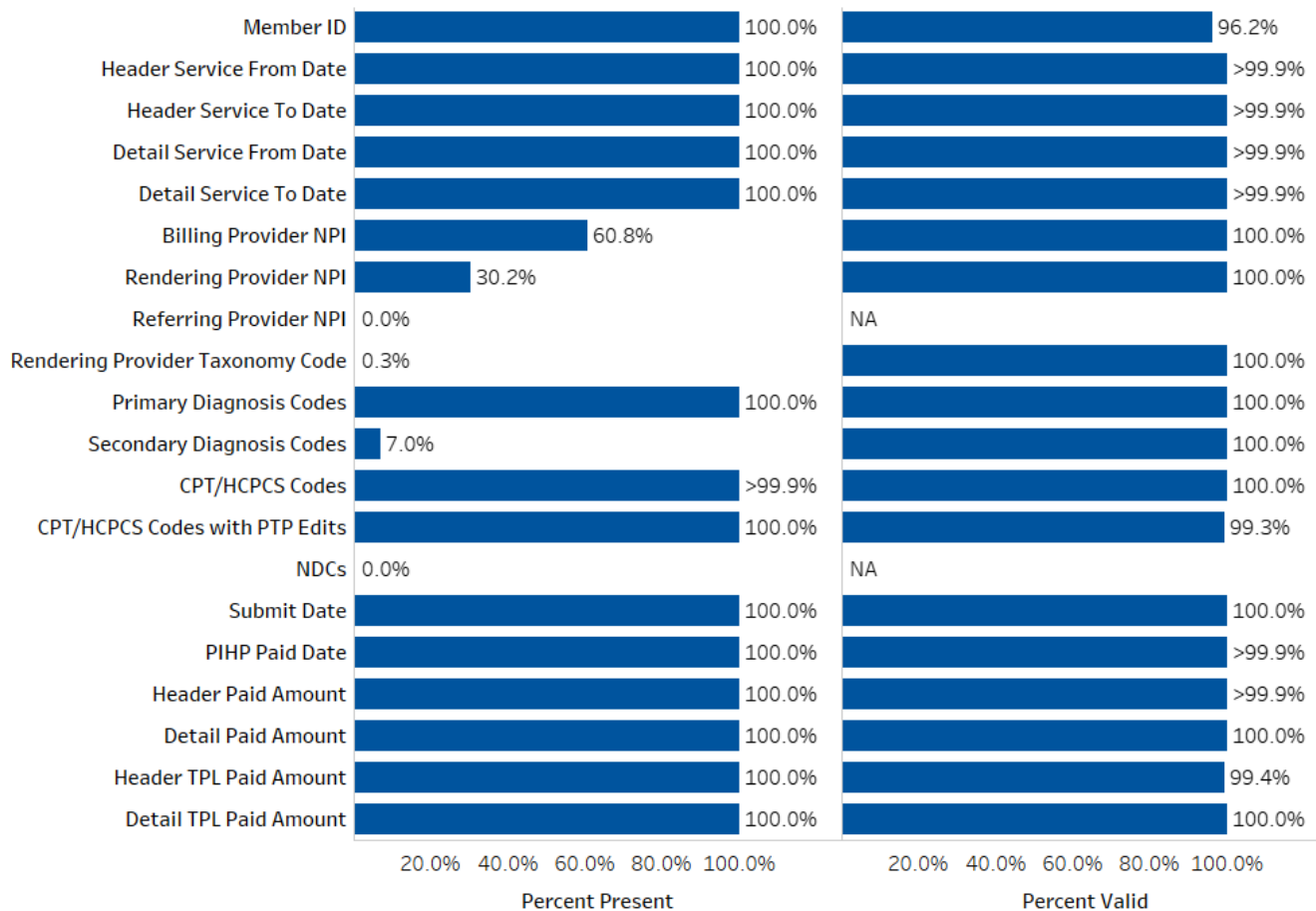
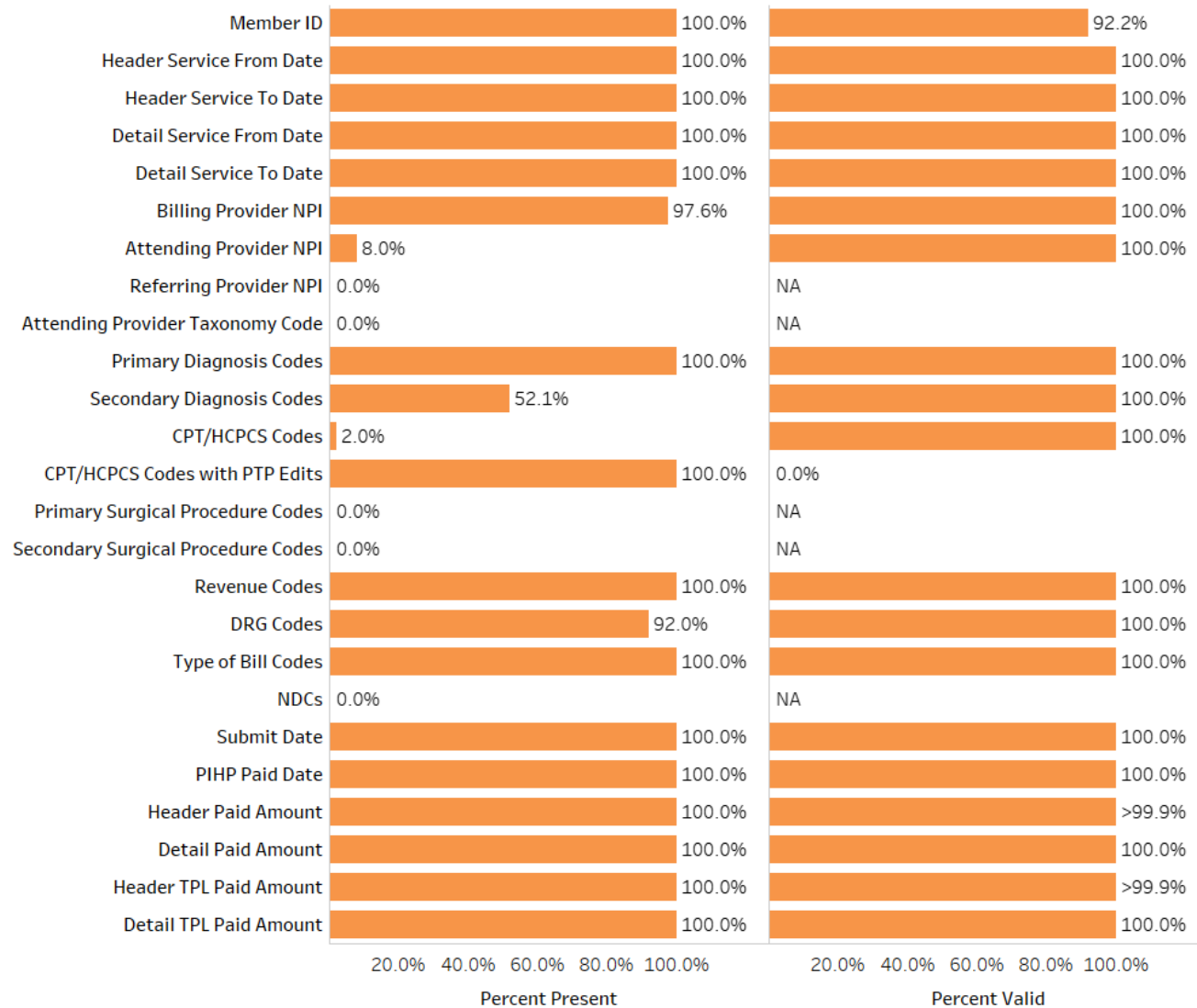
Figure 4-13—Key Professional Encounter Data Elements—All PIHPs


Figure 4-14 shows the aggregate result of all PIHPs for the percent present and percent valid values of key data elements for institutional encounters. Nearly two-thirds (15 of 25) of the key data elements were 100 percent present. Billing Provider NPI and DRG Codes were populated 97.6 percent and 92.0 percent of the time across all PIHPs. Other key data elements that were partially or not populated, such as Attending Provider NPI, Referring Provider NPIs, Attending Provider Taxonomy Code, Secondary Diagnosis Codes, CPT/HCPCS Codes, Primary Surgical Procedure Codes, Secondary Surgical Procedure Codes, and NDCs were not expected to be 100 percent populated. Additionally, data elements such as Primary Surgical Procedure Codes and Secondary Surgical Procedure Codes were expected to be 0.0 percent present. Although the Attending Provider NPI was populated 8.0 percent of the time, **Macomb County Community Mental Health** populated the field with a percent present rate of 99.5 percent, whereas all other PIHPs populated the field 0 percent of the time. Almost all key institutional encounter data elements that were present had a validity greater than 99.9 percent, except Member ID, which had a validity rate of 92.2 percent. Additionally, although CPT/HCPCS codes were valid 100 percent of the time, when applying PTP edits, the validity rate dropped to 0 percent. This could be due to having a low percentage of populated CPT codes.

Figure 4-14—Key Institutional Encounter Data Elements—All PIHPs


Encounter Referential Integrity

Referential integrity is critical for conducting many analyses involving claims/encounter data, as key identifiers are often joined across multiple tables. For instance, member enrollment data must be joined with encounter data when calculating HEDIS performance measures to ensure members meet continuous enrollment criteria. Likewise, provider data must be joined with encounter data to identify visits with specific provider types (e.g., psychologist or psychiatrist).

HSAG examined a bidirectional referential integrity across the files and key identifiers outlined in Table 4-2.

Table 4-2—Referential Integrity Checks

Field	File 1	File 2
Member ID	Medical Encounters	Enrollment
Member ID	Enrollment	Medical Encounters
Provider NPI	Medical Encounters	Provider
Provider NPI	Provider	Medical Encounters

Figure 4-15 through Figure 4-16 display the referential integrity results by PIHP. In each figure, the direction 1 results compare the encounter data to the source file, either the enrollment file or the provider file. Since all member IDs and provider NPIs are expected to be in these files, respectively, the direction 1 results are expected to be 100 percent. The direction 2 results look at the reverse of direction 1, comparing the percentage of members in the enrollment data or providers in the provider file who were in the encounter data. Since it is not expected that all members will have an encounter or all contracted providers actively provide services to Medicaid members, these results are expected to be lower. Across all figures, a medical encounter is defined as either a professional or institutional encounter.

Figure 4-15 displays the referential integrity for member ID between the enrollment and the medical encounter files for each PIHP and the aggregate rate for all PIHPs. In direction 1, 96.2 percent of members with a medical encounter were also in the enrollment file. **NorthCare Network**, **Detroit Wayne Integrated Health Network**, and **Region 10 PIHP** had the highest percentage (97.5 percent) while **Oakland Community Health Network** had the lowest percentage (90.8 percent). When examining the direction 2 results, 7.4 percent of members in the enrollment file had a medical encounter. **Mid-State Health Network** had the highest percentage (8.5 percent) and **Macomb County Community Mental Health** had the lowest percentage (4.7 percent). The low percentage of members in the enrollment file with a medical encounter could be due to the limited subset of behavioral health services that PIHPs cover.

Figure 4-15—Referential Integrity Comparison Between Enrollment and Medical Encounter Files

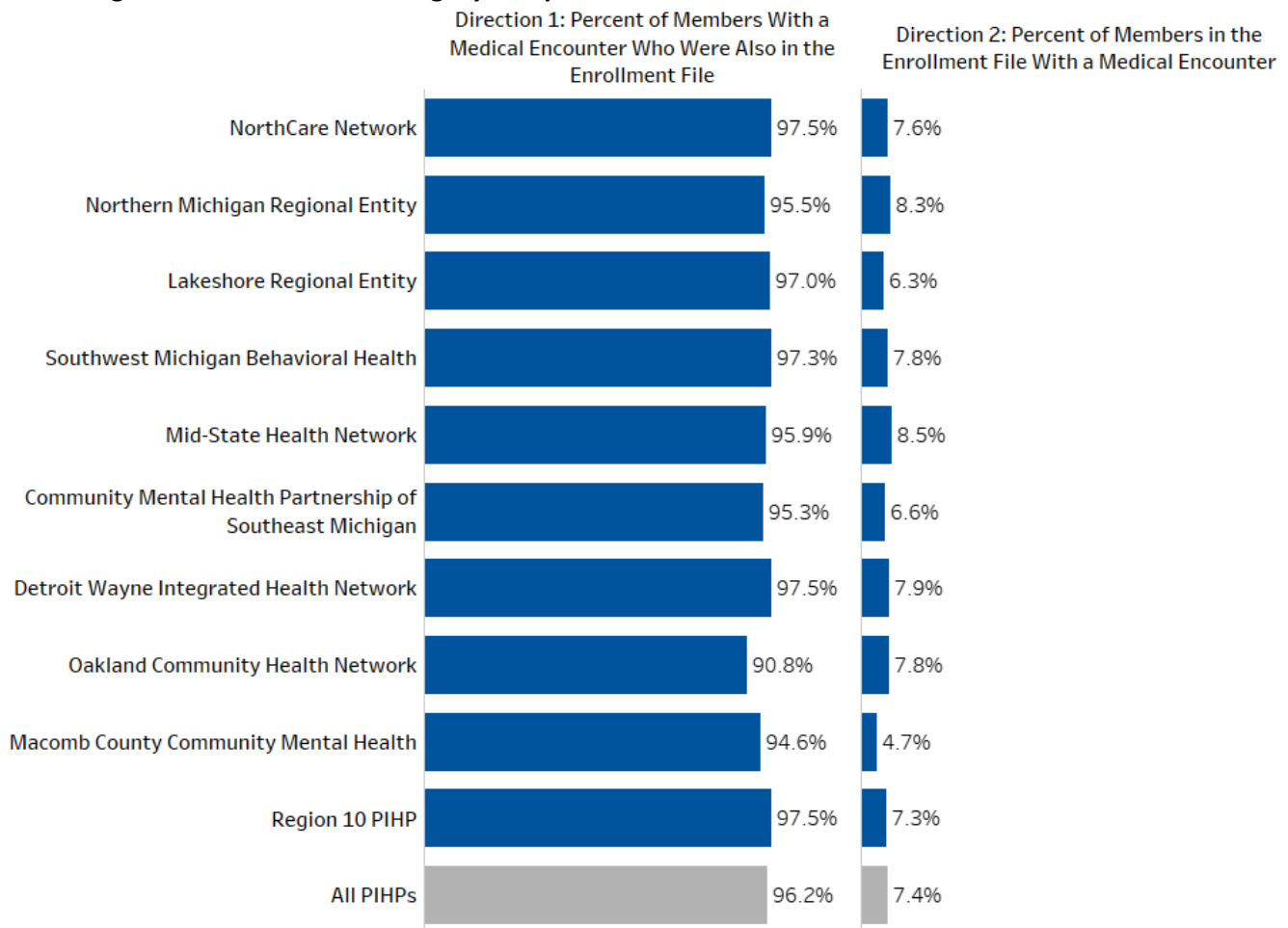
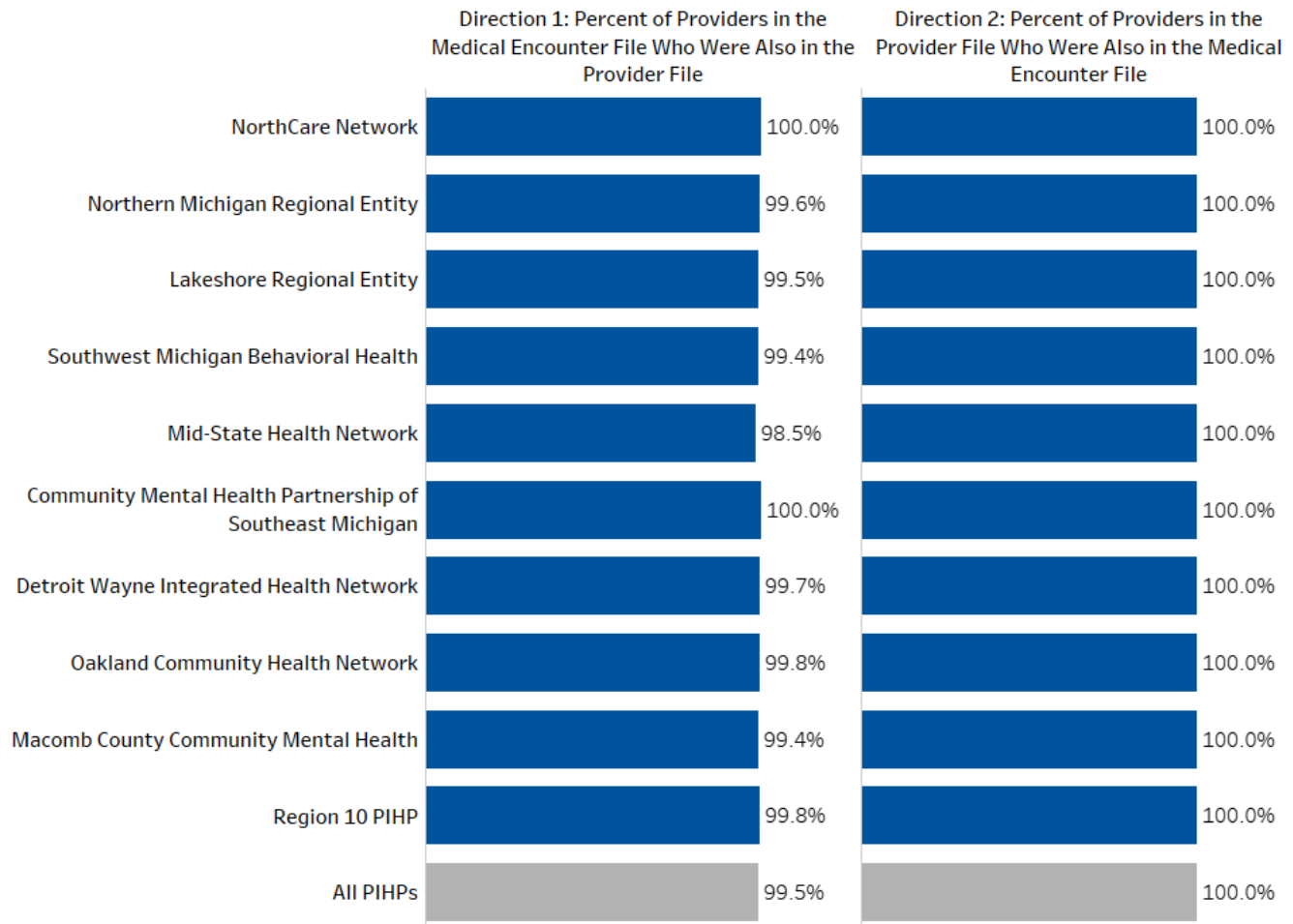


Figure 4-16 displays the referential integrity comparing the providers in the medical encounter file to the provider file. Across all PIHPs, 99.5 percent of providers in the medical encounter file were also in the provider file. **NorthCare Network** and **Community Mental Health Partnership of Southeast Michigan** had the highest percentage (100 percent) and **Mid-State Health Network** had the lowest percentage (98.5 percent). In direction 2, 100 percent providers in the provider file were also in the encounter file for each PIHP, indicating that all contracted providers provided services for enrolled PIHP members throughout the measurement year.

Figure 4-16—Referential Integrity Comparison Between Medical Encounter and Provider Files



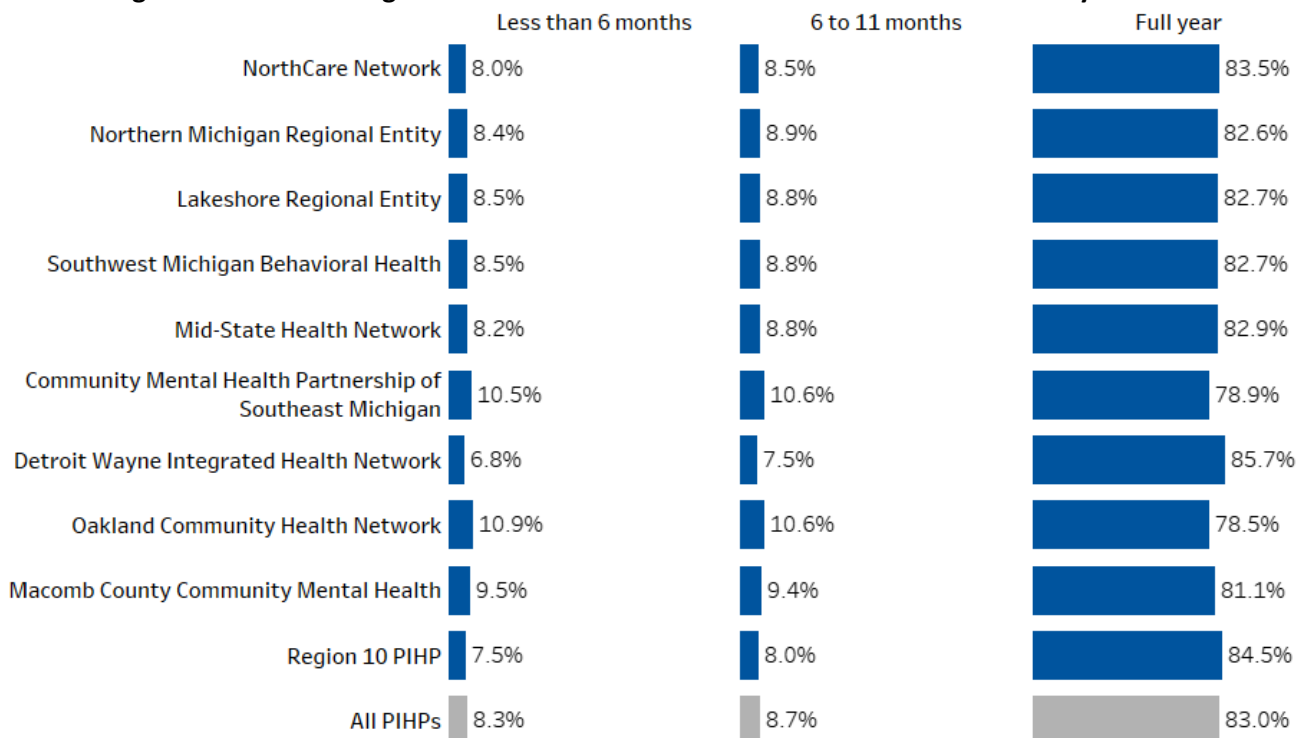
Encounter Data Logic

Additional logic checks were conducted to assess member characteristics pertaining to encounter prevalence and enrollment. This assessment provides insights into how well encounter data may be used to support future analyses such as HEDIS performance measure calculations. For instance, many measures require members be enrolled for the full measurement year, allowing only one gap of up to 45 days.

Member Enrollment

As part of its assessment of the MDHHS Medicaid population, HSAG examined enrollment continuity among the PIHPs to assess the stability of Medicaid membership over time. Figure 4-17 illustrates the percentage of members continuously enrolled in SFY 2023, those enrolled for a total of six to 11 months, and those enrolled for a total of fewer than six months. Across the PIHPs, 83 percent of members were enrolled for 12 consecutive months throughout the measurement year. **Detroit Wayne Integrated Health Network** had the highest percentage (85.7 percent) and **Oakland Community Health Network** had the lowest percentage (78.5 percent). Both **Community Mental Health Partnership of Southeast Michigan** and **Oakland Community Health Network** had the highest number enrolled for six to 11 months (10.6 percent), while **Oakland Community Health Network** also had the highest number enrolled for less than six months (10.9 percent). Across all PIHPs, around 7 percent to 11 percent of all members were enrolled less than six months, or enrolled for six to 11 months, while around 78 percent to 86 percent of members were enrolled for the full year.

Figure 4-17—Percentage of MDHHS Medicaid Members Who Were Continuously Enrolled



Conclusions

Overall, MDHHS' encounter data should continue to support analyses using encounter data such as HEDIS performance measure calculation and rate setting. Data were largely complete, valid, and reliable. While HSAG identified some gaps and data concerns, this should not preclude the State from conducting further analyses given adequate assessment of encounters prior to analysis.

Information Systems Review Conclusions

The IS review provided self-reported qualitative information from all 10 PIHPs regarding the encounter data process. The questionnaire responses showed that the PIHPs and/or their subcontractors have the capability to collect, process, and transmit claims and encounter data to MDHHS that align with established quality specifications. While each PIHP had its unique methods to ensure accurate and timely data submission, they all emphasized the significance of their encounter data systems and data warehouses. These systems allowed the PIHPs the ability to develop adaptable data review processes to address quality concerns raised by MDHHS promptly. Each PIHP discussed its use of software systems and subcontractors for tasks such as claims adjudication, verifying provider and member information, and managing TPL information.

The PIHPs are contractually responsible for all their respective encounter data, which includes subcontractors' encounter data. Based on the information provided by the PIHPs regarding encounter submission process, PIHPs were primarily responsible for managing submissions to MDHHS, with **Southwest Michigan Behavioral Health** being the exception as it does not involve subcontractors in this process. Regardless, all PIHPs stored data from subcontractors intended for MDHHS. The PIHPs maintained a review of encounter data both before and after submitting the data to MDHHS. While five PIHPs abstained from modifying encounters before submission, four others (i.e., **Lakeshore Regional Entity**, **Mid-State Health Network**, **Detroit Wayne Integrated Health Network**, and **Oakland Community Health Network**) acknowledged making certain edits or modifications to their subcontractors' data.

In managing encounter data quality, practices varied among PIHPs. Four PIHPs consistently conducted claim volume checks for subcontractor data, with a focus on submission month encounters. Field-level completeness and accuracy checks were widespread across PIHPs, although three (i.e., **Detroit Wayne Integrated Health Network**, **Southwest Michigan Behavioral Health**, and **Macomb County Community Mental Health**) had exceptions. Five PIHPs maintained timeliness checks on all subcontractor encounters, utilizing MDHHS' minimum monthly requirements. Additionally, three PIHPs (i.e., **Lakeshore Regional Entity**, **Oakland Community Health Network**, and **Region 10 PIHP**) ensured alignment of payment fields in claims with financial reports. Four PIHPs (i.e., **Lakeshore Regional Entity**, **Detroit Wayne Integrated Health Network**, **Oakland Community**

Health Network, and **Region 10 PIHP**), recognizing the efficacy of the labor-intensive MRR method, employed it as an additional data quality check.

In examining data quality within their data warehouses, PIHPs displayed variability in the number and types of checks. Notably, **Southwest Michigan Behavioral Health**, **Macomb County Community Mental Health**, and **Region 10 PIHP** reported conducting at least five distinct data quality checks, including conducting an MRR.

While the PIHPs largely fulfilled the requirement of submitting complete, timely, and accurate data, there existed areas for enhancement (see Recommendations section). According to the questionnaire responses, the main aspect needing improvement pertained to the diverse methods of encounter data monitoring used by the PIHPs, which varied in scope and depth.

Administrative Profile Conclusions

The administrative profile analyzes MDHHS' encounter data for completeness, timeliness, and accuracy by evaluating the data across multiple metrics and using supplemental data (e.g., member enrollment and demographic data, and provider data). Results of these analyses can help indicate the reliability of MDHHS' data to be used in subsequent analyses, such as rate setting and performance measure calculations.

Overall, the data were largely complete, timely, and accurate for each PIHP. Across all PIHPs, professional encounter volume was consistent, with a few minor monthly variations. All PIHPs exhibited an increase in monthly volume per 1,000 MM in March 2022. **Oakland Community Health Network** had the highest number of professional encounters per 1,000 MM, around 246 encounters per 1,000 MM, whereas **NorthCare Network** and **Macomb County Community Mental Health** had the lowest encounter volume per 1,000 MM, slightly under 100 encounters. For all PIHPs, the professional encounter volume per 1,000 MM was higher than the institutional encounter volume, at around 160 encounters per 1,000 MM compared to 1.3 encounters per 1,000 MM. This extreme variation is likely due to the limited subset of behavioral health services that PIHPs cover. Additionally, institutional encounter volume per 1,000 MM fluctuated greatly each month, with ranges from 0.6 to 3 encounters per 1,000 MM. However, this could be due to the low volume of institutional encounters, where any variation is likely to be accentuated. Interestingly, for both professional and institutional encounter volume, **Detroit Wane Integrated Health Network** had a higher encounter volume compared to other PIHPs, but after adjusting for the number of enrolled members, it was below the all PIHP rate. This suggests that members enrolled with **Detroit Wayne Integrated Health Network** may have services at a lower rate compared to members enrolled in other PIHPs. Additionally, **Mid-State Health Network** had a higher professional encounter volume than other PIHPs, whereas **Southwest Michigan Behavioral Health** had a higher institutional encounter volume than other PIHPs. After adjusting for the number of enrolled members, both PIHPs remained above the all PIHP rate, indicating that members enrolled in these PIHPs may have services at a higher rate than other PIHP members for those categories of service.

The timeliness evaluation of the MDHHS data varied across PIHPs and category of service. For professional encounter submissions, six out of 10 PIHPs (**NorthCare Network, Northern Michigan Regional Entity, Community Mental Health Partnership of Southeast Michigan, Detroit Wayne Integrated Health Network, Macomb County Community Mental Health, and Region 10 PIHP**) submitted over 95 percent of professional encounters within 90 days of payment. However, **Lakeshore Regional Entity, Mid-State Health Network Regional Entity, and Oakland Community Health Network** took substantially longer to submit professional encounter volume, not reaching over 99 percent of submitted encounters until after 360 days of payment date. Compared to professional encounters submission, PIHPs submitted institutional encounters in a much slower manner. Within 90 days of payment, only five out of 10 PIHPs (**NorthCare Network, Lakeshore Regional Entity, Community Mental Health Partnership of Southeast Michigan, Detroit Wayne Integrated Health Network, and Macomb County Community Mental Health**) had submitted over 95 percent of institutional encounters. Additionally, **Northern Michigan Regional Entity, Mid-State Health Network Regional Entity, Oakland Community Health Network, and Region 10 PIHP** each had a low percentage of submitted encounters within 90 days of payment, with 41.3 percent, 54.4 percent, 3.4 percent, and 5.6 percent of encounters submitted, respectively.

MDHHS' data were also largely complete and accurate, with all expected data elements populated at high rates for both professional and institutional encounters. For professional encounters, all data elements expected to be populated were populated at high rates, with all data elements greater than 99.9 percent present or higher. However, across all PIHPs' professional encounters, the billing provider NPI and rendering provider NPI had lower population rates, with an all PIHP rate of 60.8 percent and 30.2 percent, respectively. However, all data elements that were populated were greater than 99 percent valid, except for the member ID field, which was valid 96.2 percent of the time. Like professional encounters, institutional encounters were also highly populated, and all data elements expected to be populated were 100 percent of the time. Additionally, all populated data elements were valid greater than 99.9 percent of the time, except for the member ID field, which was valid 92.2 percent of the time. Finally, the referential integrity results suggested that encounter and enrollment data could largely be linked, with 96.2 percent of all member IDs in the encounter data identified in the enrollment data. Although this is high, 4.8 percent of member IDs could not be found in the enrollment data, indicating that there may be some room for improvement. However, 99.5 percent of provider NPIs identified in the encounter data could be identified in the provider data, and 100 percent of providers in the provider data were identified in the encounter data. This suggests strong integrity between these two files and indicates that all contracted PIHP providers provided services to PIHP members.

Overall, MDHHS' encounter data were largely complete, timely, and accurate. Although there are some areas that MDHHS can work with the PIHPs on improving (see Recommendations section), the high levels of completeness, timeliness, and accuracy suggest that the encounter data can be used in subsequent analyses with a high degree of reliability.

Recommendations

Information Systems Review

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

- **Lakeshore Regional Entity, Mid-State Health Network, Detroit Wayne Integrated Health Network, and Oakland Community Health Network** acknowledged making certain edits or modifications to their subcontractors' data. These PIHPs should collaborate with MDHHS to verify that the modifications done by the PIHPs do not necessitate returning the data to the subcontractors.
- Although some PIHPs conducted claim volume checks for subcontractor data, with a focus on submission month encounters, these PIHPs did not provide information regarding this data quality check. As such, these PIHPs should consider building or enhancing their monitoring reports for encounters collected by each of their subcontractors to comprehensively assess encounter volume submission:
 - **NorthCare Network**
 - **Community Mental Health Partnership of Southeast Michigan**
 - **Detroit Wayne Integrated Health Network**
 - **Oakland Community Health Network**
- While the PIHPs may use MDHHS' timeliness report to track their minimum monthly requirements, these PIHPs should consider building or enhancing their monitoring reports for encounters collected by each of their subcontractors to comprehensively assess encounter data timeliness:
 - **NorthCare Network**
 - **Detroit Wayne Integrated Health Network**
 - **Oakland Community Health Network**
- **Detroit Wayne Integrated Health Network** should consider building or enhancing its monitoring reports for encounters collected by its subcontractors to evaluate encounter data completeness and accuracy.
- While MRR can be a labor- and resource-intensive process for conducting data quality checks, six PIHPs (**Lakeshore Regional Entity, Detroit Wayne Integrated Health Network, Oakland Community Health Network, Southwest Michigan Behavioral Health, Macomb County Community Mental Health, and Region 10 PIHP**) have indicated its usage as a method for assessing their subcontractors' data and/or data in their data warehouses. Given the effectiveness of MRR in ensuring completeness and accuracy, HSAG recommends that all other PIHPs consider implementing MRR as part of their data quality checks.
- HSAG recommends that MDHHS continue its collaboration with the PIHPs to address challenges highlighted in the PIHPs' responses noted in Table 3-9, such as situational errors (i.e., duplicate records), which can lead to entire file rejections; unpredictability of MDHHS' rule changes,

requiring swift system updates; and the PIHPs receiving more than one acknowledgment for a unique batch identifier, necessitating manual intervention and discussions with MDHHS.

Administrative Profile

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

- The MDHHS enrollment data contained instances of multiple, overlapping enrollment spans per member, which could be due to the Certified Community Behavioral Health Clinics Demonstration or to members moving to another PIHP region mid-month. HSAG recommends that MDHHS collaborate with the PIHPs to ensure the appropriate member data are captured, allowing for the most complete and accurate data.
- All PIHPs demonstrated lower than expected rates when examining the referential integrity of the member IDs in the encounter data compared to the member IDs in the enrollment data. This also aligns with the lower than expected validity rates for the member ID key data element. Since subsequent analyses may require the ability to link these datasets together, MDHHS should collaborate with PIHPs to determine if the MDHHS enrollment data accurately reflects each PIHP's enrollment data.
- Timely data are crucial to subsequent analyses and if data are not submitted in a timely manner, then subsequent analyses may not include complete information and results may not reflect accurate encounter volume. Therefore, **Lakeshore Regional Entity** and **Oakland Community Health Network** should evaluate the delay when submitting professional encounters to MDHHS after payment; and **Northern Michigan Regional Entity**, **Mid-State Health Network Regional Entity**, **Oakland Community Health Network**, and **Region 10 PIHP** should evaluate the delay when submitting institutional encounters to MDHHS after payment.

Study Limitations

Information Systems Review

When evaluating the findings outlined in the IS review section, it is important to understand the limitations to the execution of the EDV study:

- The information from MDHHS' and the PIHPs' questionnaire responses was self-reported, and HSAG did not validate the responses for accuracy.
- The findings from this assessment were based on questionnaire responses submitted to HSAG in mid-May 2023. As such, findings may not reflect system or process changes implemented after May 2023.

Administrative Profile

The list below displays study limitations for the reader to consider:

- The impact of the coronavirus disease 2019 (COVID-19) public health emergency (PHE) on the data is unclear. Members may have changed how frequently they accessed care from providers, which could have had an impact on the encounter volume trends. Additionally, it is unclear how the COVID-19 PHE directly affected the trends explored encounters.
- The findings from the administrative profile were associated with encounters with dates of service between October 1, 2021, and September 30, 2022. As such, results may not reflect the current quality of MDHHS' encounter data or changes implemented since the data extraction.
- Reference tables that HSAG utilized to determine valid values for certain data elements may differ from the reference tables MDHHS utilizes for its data warehouse edits. As a result, the percentage of valid values may not exactly reflect what would be captured through MDHHS' data warehouse edits.

Appendix A. PIHPs Included in This Report

Table A-1 presents the names, abbreviations, and IDs for the PIHPs associated with the Behavioral Health Managed Care Program included in this report for the EDV study.

Table A-1—PIHPs Included in the Study

Name	Abbreviation	ID
NorthCare Network	NCN	2813561
Northern Michigan Regional Entity	NMRE	2813567
Lakeshore Regional Entity	LRE	2813565
Southwest Michigan Behavioral Health	SWMBH	2813562
Mid-State Health Network	MSHN	2813564
Community Mental Health Partnership of Southeast Michigan	CMHPSM	2813566
Detroit Wayne Integrated Health Network	DWIHN	2813568
Oakland Community Health Network	OCHN	1705289
Macomb County Community Mental Health	MCCMH	3396315
Region 10 PIHP	Region 10	2813563

Appendix B. Blank Questionnaire for MDHHS



SFY 2023 Encounter Data Validation Questionnaire for MDHHS

Overview

Pursuant to Title 42 of the Code of Federal Regulations (42 CFR) §438.242, the Michigan Department of Health and Human Services (MDHHS) must ensure that each of its contracted Medicaid managed care entities (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 disenrollment 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 it is a 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 state fiscal year (SFY) 2023, MDHHS contracted with Health Services Advisory Group, Inc. (HSAG), to conduct an encounter data validation (EDV) study. 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 will conduct the following activities for the EDV study:

1. Information systems (IS) review—assessment of MDHHS' and the MCEs' information systems and processes. The goal of this activity is to examine the extent to which MDHHS' and the MCEs' IS infrastructures are likely to collect and process complete and accurate encounter data. This activity corresponds to Activity 1: Review State Requirements and Activity 2: Review the MCP's Capability in the CMS EQR Protocol 5.
2. Administrative profile—analysis of MDHHS' electronic encounter data completeness, accuracy, and timeliness. The goal of this activity is to evaluate the extent to which the encounter data in MDHHS' encounter data warehouse are complete, accurate, and submitted by the MCEs in a timely manner for encounters with dates of service from October 1, 2021, through September 30, 2022. This activity corresponds to Activity 3: Analyze Electronic Encounter Data in the CMS EQR Protocol 5.

¹ Department of Health and Human Services, Centers for Medicare & Medicaid Services. *EQR Protocol 5 Validation of Encounter Data Reported by the Medicaid and CHIP Managed Care Plan*. Protocol 5, February 2023. Available at: <https://www.medicare.gov/medicaid/quality-of-care/medicaid-managed-care/quality-of-care-external-quality-review/index.html>



EDV QUESTIONNAIRE FOR MDHHS

This document pertains to the IS review activity. In general, the IS review will include an evaluation of the MCEs' processes for collecting, maintaining, and submitting encounter data to MDHHS and on the strengths and limitations of the MCEs' information systems in promoting and maintaining quality encounter data. Similarly, HSAG will also evaluate MDHHS' processes for collecting and managing the MCE-submitted encounter data. In alignment with Activity 1: Review State Requirements in the CMS EQR Protocol 5, HSAG has developed the following EDV focused questionnaire to gather information regarding MDHHS' information systems and data processing procedures. This IS review will enable HSAG to understand how various systems interact to determine whether such interactions have an impact on MDHHS' ability to receive and maintain complete and accurate data.

HSAG will conduct the EDV study for 47 MCEs. Table 1 displays the programs, MCE types, and number of MCEs² included in the study.

Table 1—Michigan Medicaid Managed Programs

Program	MCE Type	Number of MCEs
Comprehensive Health Care Program (CHCP)	Medicaid Health Plans (MHPs)	9
Healthy Kids Dental Program	Prepaid Ambulatory Health Plans (PAHPs)	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

General Instructions

HSAG developed the following questionnaire to gather both general information and specific procedures for data processing, personnel, and data acquisition capabilities. The questionnaire is divided into the following four domains:

Section A: *Encounter Data Sources and Systems*

Section B: *Data Exchange Policies and Procedures*

Section C: *Management of Encounter Data: Collection, Storage, and Processing*

Section D: *Encounter Data Quality Monitoring and Reporting*

² Refer to Appendix A for a list of MCEs included in this study.



EDV QUESTIONNAIRE FOR MDHHS

Please provide comprehensive answers to the questions in each section of the questionnaire and attach supporting documentation (e.g., policies and procedures, data layouts, data flow diagrams, sample reports, sample data, etc.), where applicable. If different staff members within MDHHS are responsible for different aspects of the processes, please distribute multiple copies of the questionnaire and ensure that each group provides answers to the applicable questions in each section. **Responses do not need to be merged into a single final version; uploading multiple sections and documents is acceptable.**

Upon receiving answers to the questionnaire and additional documentation, HSAG's EDV team may conduct additional follow-up with MDHHS via email or conference calls.

Submission of Questionnaire and Documentation

1. MDHHS should upload the completed questionnaire and supporting documentation electronically to HSAG's Secure Access File Exchange (SAFE) site, <https://safe.hsag.com/> in MDHHS' root folder *MI EQRO/MI MDHHS/*
2. Please contact Brittani Alley via e-mail at BAiley@hsag.com for assistance with access to HSAG's SAFE site.
3. HSAG requests that MDHHS upload the completed questionnaire, and any attachments, to HSAG's SAFE site no later than **May 9, 2023**. Upon completion of upload, please notify Krithiga Gopi via e-mail at KGopi@hsag.com.
4. Please provide the descriptions for the acronyms used in your responses in the table below or spell them out when using the acronyms for the first time.

[illegible]

Acronym	Description



SFY 2023 Encounter Data Validation—MDHHS Focused Questionnaire

Section A: Encounter Data Sources and Systems

Contact person for this section (Name and Title)	
Contact Information (Phone Number and E-mail)	

Please note that if your staff members use an electronic version of this questionnaire, the response boxes are expandable. Do not worry about pagination. If supplemental files or supporting documents are provided, please note the filename(s) in your response. In the case of file(s)/document(s) that have already been submitted to HSAG, please provide the filename(s) that are applicable to the question. It is not required to resubmit the file(s).

- Describe the process flows and system architecture used to import, process, and store encounter data submitted by the MCEs. Please submit any supporting documentation available including, but not limited to, information system schemas, processing diagrams, and file/table layouts. If the process differs by encounter type (e.g., medical, vision, pharmacy), provide separate updates for each encounter type and scenario. *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.*

Claim Type	Process Flow	Supporting Document
837 Professional	After MCEs upload 837 professional files to the sFTP site, MDHHS downloads them daily and then passes them through the EDI translator for compliance checks and generates X12 999 response files to the MCEs. Encounters passing the EDI compliance checks are saved in CHAMPS and then go through additional MDHHS edits. Any records failing the edits are flagged with a pending status in the data warehouse and also saved in the response files for the MCEs to submit corrections.	Encounter_Process.docx
837 Professional		
837 Institutional		
837 Dental		
Pharmacy		
<insert claim type>		

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2. Using the table below, list and describe the function and role of any organizational units responsible for processing and monitoring encounters. *Note: The table can be expanded if additional rows are required.*

	Department	Function/ Role	# of Staff
1			
2			
3			
4			
5			

3. Describe all system/processing edits conducted on incoming encounters prior to accepting/loading the data into MDHHS' final database for MDHHS' end-users. For example, please provide details on the encounter data interchange (EDI) compliance edits and the state-specific edits, or how MDHHS assesses whether the encounter is for the appropriate program (e.g., MHP versus ICO).

4. How does MDHHS process data exceptions? For example, when an encounter is not in a valid format, contains invalid values, or includes erroneous field logic, describe the processes (manual or automatic) used to process the submission.

5. Does MDHHS provide any type of response file or feedback to the MCEs submitting the encounters?
- ☐ Yes (If yes, please describe the process used to provide feedback to the MCEs including any process flows and report layouts.)
- ☐ No

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EDV QUESTIONNAIRE FOR MDHHS


6. Please describe in the table below the process used by the MCEs to resubmit updated, modified, or corrected encounters. Provide any documentation or policies and procedures related to the resubmission of encounter files or records.

Question	Response
6a. How are updated records flagged in MDHHS' system?	
6b. Are the original encounters stored in the encounter data system or deleted?	
6c. Provide details on how replacement transactions are processed when target transaction is in active failed validation status.	

7. The following questions address the collection, use, and maintenance of provider data and member enrollment data.

Provider Data	
7a. Outline the path MDHHS' Medicaid provider data follow from collection to maintenance.	
7b. Describe MDHHS' procedures for overseeing and ensuring the completeness of provider data.	
7c. Describe MDHHS' procedures for overseeing and ensuring the accuracy of provider data.	
7d. Describe the process for cross-checking encounters with provider data (e.g., list any procedures for reconciling differences between provider information submitted on the encounter and MDHHS' provider data).	
7e. Describe how MDHHS uses provider data submitted by the MCEs to conduct evaluations on the encounter data, if applicable.	

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EDV QUESTIONNAIRE FOR MDHHS

Member Enrollment data	
7f. Outline the path MDHHS' Medicaid enrollment data follow from collection to maintenance.	
7g. Describe MDHHS' procedures for overseeing and ensuring the completeness of enrollment data.	
7h. Describe MDHHS' procedures for overseeing and ensuring the accuracy of enrollment data.	
7i. How often is Medicaid enrollment information updated for MDHHS and the MCEs?	
7j. Describe the process for crosschecking encounters with enrollment data (e.g., list any procedures for reconciling differences between member information submitted on the encounter and MDHHS' member enrollment data).	

Encounter Data Validation Study
State of Michigan

—Final Copy—

Page 8
MI SFY2023_EDV_Questionnaire for MDHHS_F1_0323

Section B: Data Exchange Policies and Procedures

Contact person for this section (Name and Title)	
Contact Information (Phone Number and E-mail)	

Please note that if your staff members use an electronic version of this questionnaire, the response boxes are expandable. Do not worry about pagination. If supplemental files or supporting documents are provided, please note the filename in your response. In the case of file(s)/document(s) that have already been submitted to HSAG, please provide the filename(s) that are applicable to the question. It is not required to resubmit the file(s).

1. Please describe the data exchange process between the MCEs and MDHHS. Include details outlining the organizational and operational policies and procedures related to the MCEs' encounter data submissions. Provide copies of all policies and procedures, manuals, file specifications, etc., that outline the procedures that govern the transmission of data between the MCEs and MDHHS.

2. Are Medicaid encounters audited regularly?

☐ Yes (If yes, please provide MDHHS' policy regarding Medicaid encounter audits and the audit frequency.)
 ☐ No



EDV QUESTIONNAIRE FOR MDHHS

3. Describe the process MDHHS has in place to ensure that updates to MDHHS' requirements for data submission are implemented and communicated to each MCE. Please provide any documentation, if available.

4. Describe the testing policies and processes MDHHS has in place when MCEs have any major changes affecting the encounter data (e.g., a new subcontractor or a new software). Please provide any documentation, if available, to describe the testing process from the time when the MCE notifies MDHHS of the change to the time when MDHHS approves the MCE to submit the encounter data to the production environment.

5. Describe in the table below how information systems failure affects encounters and the measures taken to prevent failure.

Question	Response
5a. Describe how the loss of Medicaid encounters and other related data is prevented when systems fail.	
5b. How frequently are system back-ups performed?	
5c. How are the back-ups tested to make sure the back-ups are functional?	
5d. How often are back-ups tested for functionality?	
5e. How is Medicaid data corruption prevented when there is a system failure or program error?	
5f. Describe the controls used to ensure all data entered in the system are fully accounted for (e.g., batch control sheets)?	

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Encounter Data Validation Study
State of Michigan

Page 10
MI SFY2023_EDV_Questionnaire for MDHHS_F1_0323

Section C: Management of Encounter Data: Collection, Storage, and Processing

Contact person for this section
(Name and Title)

Contact Information
(Phone Number and E-mail)

Please note that if your staff members use an electronic version of this questionnaire, the response boxes are expandable. Do not worry about pagination. If supplemental files or supporting documents are provided, please note the filename in your response. In the case of file(s)/document(s) that have already been submitted to HSAG, please provide the filename(s) that are applicable to the question. It is not required to resubmit the file(s).

1. Please attach a flowchart outlining the structure of your complete management information systems. Provide any documentation regarding data integration policies and procedures.

2. For each database described in Question 1, please highlight all internal and external data inputs and processes. Identify any processes in place that modify the data as it moves from one database to another.

Input Data	Output Data	Processes that Modify Data

3. Describe in the table below the procedure for consolidating Medicaid claims/encounter, member, and provider data for reporting (whether it is a relational database or file extracts).

Question	Response
3a. How many different data sources are merged to create reports?	

Question	Response
3b. What control processes are in place to ensure data merges are accurate and complete?	
3c. What control processes are in place to ensure that no extraneous data are captured (e.g., lack of specificity in patient identifiers may lead to inclusion of non-eligible members or double counting)?	

4. Describe the algorithms used to check the reasonableness of data integrated for purposes of reporting or creating data marts.

5. Do your current system documentation and file layouts clearly delineate derived and non-derived data fields?
- ☐ Yes (If yes, please describe the fields that are derived and the point in the encounter data process at which they are created. *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.*)
- ☐ No

Derived Field	Point in Process When Field is Calculated	Algorithm for Calculating the Field
<i>Final_Ind indicating final adjudicated encounters</i>	<i>Created when applying MDHHS-specific edits</i>	<i>The most recently submitted records based on the unique claim identifier from MCEs</i>

6. Describe the policies and procedures used to identify duplicate or missing records in the MCEs' regular encounter submissions.

Question	Response
6a. List policies and procedures used to identify duplicates.	
6b. When duplicates are identified, how are the affected records processed and what information is returned to the MCEs?	
6c. List policies and procedures used to identify missing records.	
6d. When missing records are identified, what information is returned to the MCEs?	


7. During the processing of the MCEs' encounter data submissions, describe the modifications or reformatting using specific data field names and specific examples (e.g., zeros are added to the beginning of values in any specific field to pad the results to a length of a specific number of characters). *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.*

Field Name	Modifications/ Reformatting (include examples)	Encounter Types Affected (e.g., All, Pharmacy, Medical)
Rendering Provider NPI	When the rendering provider NPI is missing, fill in with billing provider NPI.	837P

8. Explain the code and/or field mapping processes performed during data processing and provide reference table(s) and/or source of the reference table(s), as appropriate. How often are each of the reference table(s) updated? Monthly, quarterly, annually, never, etc.? *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.*

Field	Description of Mapping	Source of Reference Table	Frequency of Updating Reference Table
Rendering Provider NPI	Map to reference table	Provider enrollment file	Quarterly

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EDV QUESTIONNAIRE FOR MDHHS

Field	Description of Mapping	Source of Reference Table	Frequency of Updating Reference Table

9. Describe the documentation used to train staff within MDHHS regarding MDHHS' information systems and encounter data processing protocols.

Encounter Data Validation Study
State of Michigan

—Final Copy—

Page 14
MI SFY2023_EDV_Questionnaire for MDHHS_F3_0323



Section D: Encounter Data Quality Monitoring and Reporting

Contact person for this section (Name and Title)	
Contact Information (Phone Number and E-mail)	

Please note that if your staff members use an electronic version of this questionnaire, the response boxes are expandable. Do not worry about pagination. If supplemental files or supporting documents are provided, please note the filename in your response. In the case of file(s)/document(s) that have already been submitted to HSAG, please provide the filename(s) that are applicable to the question. It is not required to resubmit the file(s).

- Describe how MDHHS monitors encounter data submitted by the MCEs for accuracy, completeness, and timeliness. Please include metrics in place including defined error thresholds and standards. If regular reports are used, submit a recent report example.

Measure	Description	Metrics
Accuracy		
Completeness		
Timeliness		

- Does MDHHS have performance standards, beyond what is described in the MCE contract requirements, in place regarding the submission, accuracy, and timeliness of encounter data?

☐ Yes (If yes, provide documentation of the performance standards and describe how the performance standards are communicated to the MCEs.)
 ☐ No

3. Are the MCEs required to submit reports on encounter data submission activities (e.g., submission statistics) to MDHHS?
- ☐ Yes (If yes, please describe the reporting process and submit a recent example of these reports for each MCE and other applicable documents.)
- ☐ No

4. Does MDHHS use a specific format to provide feedback to the MCEs on their submissions?
- ☐ Yes (If yes, please describe the files used to provide feedback to the MCEs.)
- ☐ No

5. What is the average percentage of encounters (by MCE) submitted to MDHHS that get rejected by MDHHS? *Note: The first row of the table is provided as an example. The table can be expanded if additional columns are required.*

MCE Type	MCE	Professional	Institutional	Dental	Pharmacy
MHP	Aetna Better Health of Michigan	5%	10%	7%	3%

6. Describe how data in MDHHS' encounter data system/data warehouse are used (e.g., rate-setting, HEDIS reporting, etc.)



EDV QUESTIONNAIRE FOR MDHHS

7. Please answer the questions in the table below regarding MDHHS' collection of capitated encounters (e.g., encounters submitted by the MCEs' capitated providers/provider groups) from its MCEs.

Question	Response
7a. What are MDHHS' requirements for submitting pricing information on capitated encounters?	
7b. Does MDHHS monitor capitated encounters for unallowable services? If YES, describe the type of reporting that is available.	
7c. If NO, does MDHHS maintain a list of allowable/unallowable services? If MDHHS maintains a list of allowable/unallowable services, please provide supporting document(s).	

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EDV QUESTIONNAIRE FOR MDHHS

Attestation Statement

I hereby certify that I have reviewed the information entered on this questionnaire and that, to the best of my knowledge, the information is complete and accurate as of the date below.

Signature of responsible individual

Date

Print name and title

—Final Copy—

Encounter Data Validation Study
State of Michigan

Page 18
MI SFY2023_EDV_Questionnaire for MDHHS_F3_0323



Appendix A: Managed Care Entities Included in the Study

Table A-1 presents the programs, MCE types, MCE names and abbreviations for the MCEs included in the EDV study.

Table A-1—Medicaid Managed Care Programs and MCEs Included in the Study

Program	MCE Type	MCE Name	MCE Abbreviation
CHCP	MHPs	Aetna Better Health of Michigan	AET
		Blue Cross Complete of Michigan	BCC
		HAP Empowered Health Plan, Inc.	HAP
		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
Healthy Kids Dental Program	PAHPs	Blue Cross Complete of Michigan	BCBSM
		Delta Dental of Michigan	DDMI
MI Health Link Program	ICOs/PIHPs	Aetna Better Health Premier Plan	Aetna
		AmeriHealth Caritas VIP Care Plus	AmeriHealth
		HAP Empowered	HAP
		MeridianComplete	Meridian
		Molina Dual Options MI Health Link	Molina
		Upper Peninsula Health Plan MI Health Link	UPHP
Behavioral Health Managed Care Program	PIHPs	NorthCare Network	NCN
		Northern Michigan Regional Entity (NMRE)	NMRE
		Lakeshore Regional Entity	LRE
		Southwest Michigan Behavioral Health	SWMBH
		Mid-State Health Network	MSHN
		Community Mental Health Partnership of Southeast Michigan	CMHPSM
		Detroit Wayne Integrated Health Network	DWIHN
		Oakland Community Health Network	OCHN
		Macomb County Community Mental Health	MCCMH
		Region 10 PIHP	Region 10 PIHP

— Final Copy —

Encounter Data Validation Study
State of Michigan

Page A-1

MI SFY2023_EDV_Questionnaire for MDHHS_F1_0323

Program	MCE Type	MCE Name	MCE Abbreviation
MI Choice Waiver Program	Waiver Agencies	A&D Home Health Care	AD
		Area Agency on Aging 1B	AAA1B
		Area Agency on Aging of Northwest Michigan	AAANWMI
		Area Agency on Aging of Western Michigan	AAAWMI
		Detroit Area Agency on Aging	Detroit AAA
		easterseals MORC	MORC
		Region 9 Area Agency on Aging/ Northeast MI Community Service Agency	NEMCSA
		Northern Health Care Management	NHCM
		Region 2 Area Agency on Aging	R2AAA
		Region 3B Area Agency on Aging/Carewell Services	R3BAAA
		Region IV Area Agency on Aging	RIVAAA
		Region VII Area Agency on Aging	Region VII
		Reliance Community Care Partners	Reliance
		Senior Resources	Senior Resources
		Milestone Senior Services	Senior Services
		Tri-County Office on Aging	Tri-County
		The Information Center	The Information Ctr
		The Senior Alliance	Senior Alliance
		Upper Peninsula Commission for Area Progress (UPCAP)	UPCAP
		Valley Area Agency on Aging	Valley AAA

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Appendix C. Blank Questionnaire for PIHPs



SFY 2023 Encounter Data Validation Questionnaire for PIHPs

Overview

Pursuant to Title 42 of the Code of Federal Regulations (42 CFR) §438.242, the Michigan Department of Health and Human Services (MDHHS) must ensure that each of its contracted Medicaid managed care entities (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 disenrollment 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 it is a 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 state fiscal year (SFY) 2023, MDHHS contracted with Health Services Advisory Group, Inc. (HSAG), to conduct an encounter data validation (EDV) study. 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 will conduct the following activities for the EDV study:

- Information systems (IS) review—assessment of MDHHS' and the MCEs' information systems and processes. The goal of this activity is to examine the extent to which MDHHS' and the MCEs' IS infrastructures are likely to collect and process complete and accurate encounter data. This activity corresponds to Activity 1: Review State Requirements and Activity 2: Review the MCP's Capability in the CMS EQR Protocol 5.
- Administrative profile—analysis of MDHHS' electronic encounter data completeness, accuracy, and timeliness. The goal of this activity is to evaluate the extent to which the encounter data in MDHHS' encounter data warehouse are complete, accurate, and submitted by the MCEs in a timely manner for encounters with dates of service from October 1, 2021, through September 30, 2022. This activity corresponds to Activity 3: Analyze Electronic Encounter Data in the CMS EQR Protocol 5.

¹ Department of Health and Human Services, Centers for Medicare & Medicaid Services. *EQR Protocol 5 Validation of Encounter Data Reported by the Medicaid and CHIP Managed Care Plan*. Protocol 5. February 2023. Available at: <https://www.medicare.gov/medicaid/quality-of-care/medicaid-managed-care/quality-of-care-external-quality-review/index.html>

This document pertains to the IS review activity. In general, the IS review will include an evaluation of the MCEs' processes for collecting, maintaining, and submitting encounter data to MDHHS and on the strengths and limitations of the MCEs' information systems in promoting and maintaining quality encounter data. Similarly, HSAG will also evaluate MDHHS' processes for collecting and managing the MCE-submitted encounter data. In alignment with Activity 2: Review the MCP's Capability in the CMS EQR Protocol 5, HSAG has developed the following EDV focused questionnaire to gather information regarding each MCE's information systems and data processing procedures. The IS review will enable HSAG to understand how various systems interact to determine whether such interactions have an impact on the MCEs' ability to submit complete and accurate data.

HSAG will conduct the EDV study for 47 MCEs. Table 1 displays the programs, MCE types, and number of MCEs² included in the study.

Table 1—Michigan Medicaid Managed Programs

Program	MCE Type	Number of MCEs
Comprehensive Health Care Program (CHCP)	Medicaid Health Plans (MHPs)	9
Healthy Kids Dental Program	Prepaid Ambulatory Health Plans (PAHPs)	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

This questionnaire pertains to the Prepaid Inpatient Health Plans (PIHPs) associated with the Behavioral Health Managed Care Program.

General Instructions

HSAG developed the following questionnaire customized in collaboration with MDHHS to gather both general information and specific procedures for data processing, personnel, and data acquisition capabilities. The questionnaire is divided into the following four domains:

- **Section A:** Encounter Data Sources and Systems
- **Section B:** Payment Structures of Encounter Data
- **Section C:** Encounter Data Quality Monitoring by Subcontractors
- **Section D:** Encounter Data Quality Monitoring by PIHPs

² Refer to Appendix A for a list of MCEs included in this study.



EDV QUESTIONNAIRE FOR PIHPS


Each participating PIHP must complete all sections of the following questionnaire, providing comprehensive answers to the questions and attaching supporting documentation (e.g., policies and procedures, data layouts, data flow diagrams, sample reports, sample data, etc.), where applicable. Please provide responses specific to procedures related to the processing of MDHHS claims and encounters. If different staff members within your PIHP are responsible for different aspects of the processes, please distribute multiple copies of the questionnaire and ensure that each group provides answers to the applicable questions in each section.

Upon evaluating answers to the questionnaire and additional documentation, HSAG's EDV team may conduct additional follow-up with the PIHPs via email or conference calls.

Submission of Questionnaire and Documentation

- HSAG requests that PHPs complete the questionnaires no later than **May 9, 2023**. Upon completion of the questionnaire, please notify Krithiga Gopi via e-mail at KGopi@hsag.com.
- Please provide the descriptions for the acronyms used in your responses in the table below or spell them out when using the acronyms for the first time.

[illegible]



EDV QUESTIONNAIRE FOR PIHPs

Acronym	Description

Encounter Data Validation Study
State of Michigan

—Final Copy—

Page 4
MI SFY2023_EDV_Questionnaire for PIHP_F1_0423

SFY 2023 Encounter Data Validation PIHP Questionnaire

Section A: Encounter Data Sources and Systems

PIHP Name	
Contact person for this section (Name and Title)	
Contact Information (Phone Number and E-mail)	

Please note that if your staff members use an electronic version of this questionnaire, the response boxes are expandable. Do not worry about pagination. If your PIHP uses the same data system for multiple clients or lines of business, please limit your responses to specific procedures related to the processing of MDHHS' claims and encounters. If supplemental files or supporting documents are provided, please note the filename(s) in your response.

This section provides an overview regarding the data sources and systems for your PIHP's claims/encounter data.

- Using the table below and data flow diagrams (i.e., supporting documents listed in the last column), outline the path your PIHP's encounter data follow from the time a member receives a service(s) until the encounter is submitted to MDHHS and your PIHP processes MDHHS' feedback. If the data path differs by or within a claim type, provide a separate list or data flow diagram for each claim type and scenario. Be sure to identify any subcontractors responsible for processing the data and the associated processes with the subcontractors. *Note: The first section of the table is provided as an example. The table can be expanded if additional rows are required.*

Total number of subcontractors: Choose an item.

Data Source ¹	Data Flow	Supporting Document
Paper Claims	All paper claims are received via mail. Paper claims are date stamped upon receipt and scanned with optical character recognition (OCR) software and converted to 837 files for electronic processing. The remaining process is the same as the claims in electronic format.	<insert file name>
Medical		
Behavioral Health (BH)		

Data Source ¹	Data Flow	Supporting Document
Pharmacy		
Non-Emergency Medical Transportation (NEMT)		
<insert other data sources ² >		
¹ These sources represent claims/encounter submissions from the rendering provider to your PIHP or subcontractor.		
² Examples include hearing, chiropractic, laboratory, etc.		

2. For each key data source (i.e., all data your PIHP receives that are included in the encounter data submissions to MDHHS), provide a description of the files received, the frequency of receipt, and the approximate percentage of claims submitted by capitated versus fee-for-service (FFS) providers. *Note: The first section of the table is provided as an example. The table can be expanded if additional rows are required.*

Data Source ¹	Description of Data Received (Including Format)	Frequency	Approximate Percentage of Claims from Capitated Providers
Pharmacy	We receive point of service claims submitted by retail pharmacies from our subcontractor, Express Scripts. Files are submitted using the NCPDP D.0 format.	Weekly	30%
Medical in 837 Professional Format		Choose an item.	
Medical in 837 Institutional Format		Choose an item.	
BH in 837 Professional Format		Choose an item.	
BH in 837 Institutional Format		Choose an item.	
Pharmacy		Choose an item.	
NEMT		Choose an item.	
<insert other data sources ² >		Choose an item.	
¹ These sources represent claims/encounter submissions from the rendering provider to your PIHP or subcontractor.			
² Examples include hearing, chiropractic, laboratory, etc.			

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3. For each key data source, provide a description of the software used to receive data, validate data, prepare outbound encounters for submission to MDHHS, and frequency for submission. *Note: The first section of the table is provided as an example. The table can be expanded if additional rows are required.*

Data Source ¹	Software Used to Receive Data	Software Used to Validate Data	Software Used to Generate Encounters for MDHHS	Frequency for Submission to MDHHS
Paper claims	Convert to 837 format through an optical character recognition (OCR) software by <insert name>	Facets	Encounter Data Manager	Weekly
Medical in 837 Professional Format				Choose an item.
Medical in 837 Institutional Format				Choose an item.
BH in 837 Professional Format				Choose an item.
BH in 837 Institutional Format				Choose an item.
Pharmacy				Choose an item.
NEMT				Choose an item.
<insert other data sources ² >				Choose an item.

¹ These sources represent claims/encounter submissions from the rendering provider to your PIHP or subcontractor.

² Examples include hearing, chiropractic, laboratory, etc.

4. For encounters submitted to MDHHS through 837 professional and institutional formats, please describe the software used for the Electronic Data Interchange (EDI) compliance checks and the Workgroup for Electronic Data Interchange Strategic National Implementation Process (WEDI SNIP) levels that are used in the EDI compliance checks.

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Data Source ¹	Software for EDI Compliance Check	WEDI SNIP Level
<i>NEMT claims</i>		<i>Levels 1 and 2</i>
Medical in 837 Professional Format		
Medical in 837 Institutional Format		
BH in 837 Professional Format		
BH in 837 Institutional Format		
NEMT		
<insert other data sources> ²		
¹ These sources represent claims/encounter submissions from the rendering provider to your PIHP or subcontractor.		
² Examples include hearing, chiropractic, laboratory, etc.		

5. Please specify the modifications, reformatting or changes made to the claims/encounter data to accommodate MDHHS' encounter data submission standards. Describe the modifications or reformatting using specific data field names and examples. If a subcontractor prepares the encounter data submission for your PIHP, please specify the modifications made by the subcontractor and additional modifications made by the PIHP separately. *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.*

Data Type	Field	Modification Details	Modification Made By
<i>NEMT Claims</i>	<i>Provider ID</i>	<i>Zeros are added to the beginning of values in the Provider ID field to pad the results to a standard length of characters (e.g., 00003126).</i>	<i>PIHP</i>

6. Please specify how your PIHP prepares/enriches data elements that are not on the claims from providers but required by MDHHS. Describe the source of the data and process to create these data elements. If a subcontractor prepares the encounter data submission for your PIHP, please specify the modifications made by the subcontractor and additional modifications made by the PIHP

separately. Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.

Data Type	Field	Source Data and Creation Process	Modification Made By
Professional Claims	VBP Indicator	Check whether the encounter is for value-based payments (VBP) by linking with reference table via data fields variable 1, variable 2, and variable 3.	PIHP

7. Describe the process to identify duplicate claims. Provide details on the fields used to identify duplicates, where in the process the duplicates are identified and how they are handled.

8. Describe the types of claims/encounters that are not submitted to MDHHS (e.g., paid, denied, voided, adjusted claims, or a specific service provided to members).

9. Describe the process to submit denied or partially denied claims/encounters to MDHHS. List measures taken to ensure that denied claims/encounters do not include paid service lines.

10. Using the following table, describe the process to submit adjustments/replacement/void/corrections (collectively referred to as adjustments) to encounters that have previously been submitted to MDHHS.

Question	Response
10a. What is the process to identify encounters for which adjustments are required?	
10b. Describe the process to submit adjustments.	
10c. How long does it take from identification to re-submission for encounters needing adjustments?	
10d. If adjustments are not submitted, describe why these encounters were not submitted.	

11. The following questions address the collection, use, and submission of provider data and member enrollment data.

Provider Data	
11a. Provider data collected and maintained by?	<input type="checkbox"/> By the PIHP <input type="checkbox"/> By a subcontractor <input type="checkbox"/> Both
11b. List name of subcontractor and type of provider data maintained (e.g., Subcontractor X maintains provider data for behavioral health services)	
11c. List subcontractor's responsibilities in collecting and maintaining the data	
11d. Describe flow of provider data from collection to maintenance including processes associated with the subcontractor	
11e. Describe the process for linking provider data to claims/encounters including any procedures for reconciling differences	

between data submitted on the claim/encounter and your provider data	
Member Enrollment data	
11f. Data maintained by?	<input type="checkbox"/> By the PIHP <input type="checkbox"/> By a subcontractor <input type="checkbox"/> Both
11g. List subcontractor's responsibilities in maintaining the member enrollment data	
11h. Describe flow of member enrollment data from collection to maintenance including processes associated with the subcontractor	
11i. Describe the process for linking member enrollment data to claims/encounters including any procedures for reconciling differences between data submitted on the claim/encounter and your member enrollment data	

Section B: Payment Structures of Encounter Data

PIHP Name	
Contact person for this section (Name and Title)	
Contact Information (Phone Number and E-mail)	

Please note that if your staff members use an electronic version of this questionnaire, the response boxes are expandable. Do not worry about pagination. If supplemental files or supporting documents are provided, please note the filename in your response.

- How are claims paid (e.g., percent of billed, line-by-line, case rate, etc.)? If different methods exist, please add to the table below and then list them by percentage of claim dollars for each payment type.

Payment Type	Inpatient	Outpatient	Pharmacy
Percent of Billed			
Line-by-line			
Per-diem			
Variable Per Diem			
Capitation			
DRG			
Negotiated (Flat) Rate			
Ingredient Cost (for Pharmacy)			
Other (Please describe)			
Other (Please describe)			
Total	100%	100%	100%

2. Are any services submitted to the PIHP under a bundled-payment structures? If so, what services are submitted for a bundled-payment? For example, if delivery services are considered a bundled payment, please specify whether encounters on both delivery and all prenatal/postpartum services are collected and submitted to MDHHS by your PIHP.

3. Describe in the table below the process for collecting coordination of benefits (COB)/third party liability (TPL) data and submitting encounters with TPL and TPL payments. Provide separate responses for different types of claims including pharmacy encounters.

Question	Response
3a. How is other insurance data collected? Are your PIHP's subcontractors required to collect other insurance data?	
3b. How are claims processed with TPL, including the scenario when other insurance is submitted after the initial claim processing?	
3c. What source data is used to verify the accuracy of the TPL information? Where does your PIHP store payment information and the source data? How is TPL information populated onto encounters submitted to MDHHS?	
3d. What are the measures taken to ensure accuracy of the TPL payment amount?	

4. Describe in the table below the process to capture, monitor accuracy, and submit zero-pay claims to MDHHS.

Question	Response
4a. Describe scenarios creating zero-pay amounts for your PIHP (e.g., full payment by TPL, denied	

Question	Response
claims/claim lines, services under capitated arrangement).	
4b. How are zero-pay claims reflected in the encounter data to MDHHS?	
4c. Are zero-pay claims for capitated providers processed and submitted to MDHHS? If so, describe how the completeness and accuracy of the claims are assessed.	

5. Describe the process for submitting payment information on capitated encounters (e.g., encounters for services paid to providers per member per month by your PIHP or subcontractor).

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Section C: Encounter Data Quality Monitoring by Subcontractors

PIHP Name	
Contact person for this section (Name and Title)	
Contact Information (Phone Number and E-mail)	

Please note that if your staff members use an electronic version of this questionnaire, the response boxes are expandable. Do not worry about pagination. If supplemental files or supporting documents are provided, please note the filename in your response.

This section focuses on the quality checks **performed by your PIHP's subcontractors** (not by your PIHP). Please answer the following questions for each subcontractor that submits claims/encounter data to your PIHP. **Currently, pharmacy, NEMT, and BH are the potential subcontractors listed in this section. If your PIHP has a subcontractor that is not listed, please add a new question after Question 3 based on the questions for the subcontractor listed.** To help organize the responses, this section includes some standard data quality checks in the drop-down list. The table below shows a brief description for these checks. If the checks from the drop-down list are not appropriate for your entity, please choose "Other" and then include the details in the "Description" column.

Data Quality Checks in Drop-Down List	Description
Claim Volume by Submission Month	Evaluates the number of unique claims based on the month when the claims were submitted to your entity. Please describe the specifications for the counts and any stratifications you may use.
Claim Volume per Member per Month (PMPM)	Evaluates the number of unique claims per member per month based on the month when the services occurred. Please describe the specifications for the counts and any stratifications you may use.
Field-Level Completeness	Evaluates whether there are any missing and/or extra values for a specific data element. Please provide a list of variables and specifications for the evaluation.
Field-Level Validity	Evaluates whether the values for a specific data element are valid. Please provide a list of variables and specifications for the evaluation.
Timeliness	Evaluates whether the source entity submits claims to your entity in a timely manner.
Reconciliation with Financial Reports	Evaluates whether the payment fields in the claims align with the financial reports from your entity.

Data Quality Checks in Drop-Down List	Description
EDI Compliance Edits	Evaluates whether 837 professional and 837 institutional files pass the EDI compliance edits. Please describe the Workgroup for Electronic Data Interchange Strategic National Implementation Process (WEDI SNIP) levels that are used in the EDI compliance checks.
Medical Record Review	Evaluates whether some of the data elements in the claims are complete and accurate when comparing to the medical records.

1. Does your **pharmacy** subcontractor perform data quality checks and validation on the claims/encounter data before it submits to your PIHP?
- ☐ Yes
- ☐ No (If No, please provide an explanation why the quality checks were not performed in the box below.)
- ☐ Don't know (If you don't know, please provide an explanation in the box below.)
- ☐ Not applicable. Our PIHP does not have a pharmacy subcontractor

Click or tap here to enter text.

If Yes, list the specific checks and validation the subcontractor performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded row in the table is provided as an example. The table can be expanded if additional rows are required.*

Data Quality Checks	Description	Frequency	Supporting Documents
<i>Claim Volume PMPM</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2022Q1.pdf</i>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

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2. Does your **NEMT** subcontractor perform data quality checks and validation on the claims/encounter data before it submits to your PIHP?
- ☐ Yes
- ☐ No (If No, please provide an explanation why the quality checks are not performed in the box below.)
- ☐ Don't know (If you don't know, please provide an explanation in the box below.)
- ☐ Not applicable. Our PIHP does not have a NEMT subcontractor

Click or tap here to enter text.

If Yes, list the specific checks and validation the subcontractor performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded row in the table is provided as an example. The table can be expanded if additional rows are required.*

Data Quality Checks	Description	Frequency	Supporting Documents
<i>Claim Volume PMPM</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2022Q1.pdf</i>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

3. Does your **BH** subcontractor perform data quality checks and validation on the claims/encounter data before it submits to your PIHP?
- ☐ Yes
- ☐ No (If No, please provide an explanation why the quality checks are not performed in the box below.)
- ☐ Don't know (If you don't know, please provide an explanation in the box below.)
- ☐ Not applicable. Our PIHP does not have a BH subcontractor

Click or tap here to enter text.

If Yes, list the specific checks and validation the subcontractor performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded row in the table is provided as an example. The table can be expanded if additional rows are required.*

Data Quality Checks	Description	Frequency	Supporting Documents
<i>Claim Volume PMPM</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2022Q1.pdf</i>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

SECTION D: ENCOUNTER DATA QUALITY MONITORING BY PIHPs

PIHP Name	
Contact person for this section (Name and Title)	
Contact Information (Phone Number and E-mail)	

Please note that if your staff uses an electronic version of this questionnaire, the response boxes are expandable. Do not worry about pagination. If your PIHP uses the same data system for multiple clients or lines of business, please limit your responses to specific procedures related to the processing of MDHHS' claims and encounters. If supplemental files or supporting documents are provided, please note the filename(s) in your response.

This section focuses on the quality checks **performed by your PIHP** regarding the claims/encounter data in your PIHP's data warehouse, as well as claims/encounter data submitted to MDHHS. Currently, pharmacy, NEMT, and BH are the potential subcontractors listed in this section. **If your PIHP has a subcontractor that is not listed, please add a new question after Question 4 based on the questions for the subcontractor listed.** Lastly, to help organize the responses, this section includes some standard data quality checks in the drop-down list. The table below shows a brief description for these checks. If the checks from the drop-down list are not appropriate for your PIHP, please choose "Other" and then include the details in the "Description" column.

Data Quality Checks in Drop-Down List	Description
Claim Volume by Submission Month	Evaluates the number of unique claims based on the month when the claims were submitted to your entity. Please describe the specifications for the counts and any stratifications you may use.
Claim Volume PMPM	Evaluates the number of unique claims per member per month based on the month when the services occurred. Please describe the specifications for the counts and any stratifications you may use.
Field-Level Completeness	Evaluates whether there are any missing and/or extra values for a specific data element. Please provide a list of variables and specifications for the evaluation.
Field-Level Validity	Evaluates whether the values for a specific data element are valid. Please provide a list of variables and specifications for the evaluation.
Timeliness	Evaluates whether the source entity submits claims to your PIHP in a timely manner.

Data Quality Checks in Drop-Down List	Description
Reconciliation with Financial Reports	Evaluates whether the payment fields in the claims align with the financial reports from your PIHP.
EDI Compliance Edits	Evaluates whether 837 professional and 837 institutional files pass the EDI compliance edits. Please describe the WEDI SNIP levels that are used in the EDI compliance checks.
Medical Record Review	Evaluates whether some of the data elements in the claims are complete and accurate when comparing to the medical records.

- Upon receiving claims/encounter files from your subcontractors, please use the table below to indicate the following for each subcontractor:
 - Column 2: Does subcontractor submit encounter files to MDHHS?
 - Column 3: Does your PIHP store the claims/encounter files from subcontractors in your data warehouse?
 - Column 4: Does your PIHP perform any quality checks on the claims/encounter files from subcontractors **before** submitting them to MDHHS? If not, please provide an explanation why the quality checks are not performed in the second box below.
 - Column 5: Does your PIHP modify the claims/encounter files from subcontractors **before** submitting them to MDHHS?
 - Column 6: Does your PIHP perform any quality checks on the claims/encounter data from subcontractors **after** submitting them to MDHHS?

Subcontractor	Submits to MDHHS by Subcontractor	Stored by PIHP	Reviewed by PIHP Before Submission	Modified by PIHP Before Submission	Reviewed by PIHP After Submission
<i>Pharmacy</i>	<i>Yes</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	<i>Yes</i>
BH	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
NEMT	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
Pharmacy	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
<i>Other (list and describe)</i>	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

Subcontractor	Explanation Why Claims/Encounter Data are Not Reviewed by PIHP Before Submission to MDHHS
<i>Pharmacy</i>	<i>PIHP is satisfied with the quality checks that the subcontractor has in place.</i>

Subcontractor	Explanation Why Claims/Encounter Data are Not Reviewed by PIHP Before Submission to MDHHS
BH	
NEMT	
Pharmacy	
Other (list and describe)	

2. If your PIHP performs quality checks on the claims/encounter data from a **pharmacy** subcontractor, please list the specific checks and validation your PIHP performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded row in the table is provided as an example. The table can be expanded if additional rows are required.*

Data Quality Checks	Description	Frequency	Supporting Documents
<i>Claim Volume PMPM</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2022Q1.pdf</i>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

3. If your PIHP does not have a **NEMT** subcontractor, please mark the check box below. If your PIHP performs quality checks on the claims/encounter data from a **NEMT** subcontractor, please list the specific checks and validation your PIHP performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded row in the table is provided as an example. The table can be expanded if additional rows are required.*

☐ Our PIHP does not have a NEMT subcontractor

Data Quality Checks	Description	Frequency	Supporting Documents
<i>Claim Volume PMPM</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2022Q1.pdf</i>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

Data Quality Checks	Description	Frequency	Supporting Documents
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

4. If your PIHP does not have a **BH** subcontractor, please mark the check box below. If your PIHP performs quality checks on the claims/encounter data from a **BH** subcontractor, please list the specific checks and validation your PIHP performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded rows in the table are provided as an example. The table can be expanded if additional rows are required.*

☐ Not applicable. Our PIHP does not have a BH subcontractor

Data Quality Checks	Description	Frequency	Supporting Documents
<i>Claim Volume PMPM</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2022Q1.pdf</i>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

5. Does your PIHP perform any quality checks on the claims/encounter data that are stored in your data warehouse but **NOT** submitted by the subcontractors?

☐ Yes

☐ No (If No, please provide an explanation why the quality checks are not performed in the box below.)

☐ Don't know (If you don't know, please provide an explanation in the box below.)

Click or tap here to enter text.

If Yes, please list the specific checks and validation your PIHP performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded row in the table is provided as an example. The table can be expanded if additional rows are required.*

Data Quality Checks	Description	Frequency	Supporting Documents
<i>Claim Volume PMPM</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2022Q1.pdf</i>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

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Data Quality Checks	Description	Frequency	Supporting Documents
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

6. Please describe how your PIHP ensures that the National Correct Coding Initiative (NCCI) edits have been applied to the encounter data submitted to MDHHS.

7. Using the table below, please identify which transaction response files are used to support your encounter data submission activities and how the responses are tracked in your data system. If the transaction response files are used to support encounter data submission activities ("YES"), describe how the data are used in the last column and whether the transaction responses are stored in your PIHP's data system. If the transaction responses are not used to support encounter data submission activities ("NO"), explain the reason why in the last column and whether the transaction responses are stored in your PIHP's data system. *Note: The table can be expanded if additional rows are required.*

Transaction Response	Used to Support Encounter Data Submission?	Explanation of Transaction Response Use and Storage in your PIHP's Data System
277	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	

8. List the number of encounters submitted, initially denied, initially denied but later accepted on resubmission, and initially denied but not accepted yet as of the date when the responses are prepared. Please stratify the counts by claim/encounter type.

Claim/Encounter Type	Submitted	Initially Denied Due to MDHHS' EDI Translator	Initially Denied Due to Additional MDHHS Specific Edits	Initially Denied, Accepted on Resubmission	Initially Denied, Not Yet Accepted
837 Institutional					
837 Professional					
Pharmacy					
<Insert Subcontractor>					

9. What are the top five reasons for the initial denials by MDHHS for each claim/encounter type?

Claim/Encounter	Reason 1	Reason 2	Reason 3	Reason 4	Reason 5
837 Institutional					
837 Professional					
Pharmacy					
<Insert Subcontractor>					

10. Describe your PIHP's process for reconciling files rejected by MDHHS' EDI translator, including key policies and procedures for the identification, correction, and subsequent resubmission of encounters to MDHHS.



EDV QUESTIONNAIRE FOR PIHPs

11. Describe your PIHP's process for reconciling transactions that fail additional state-specific edits, including key policies and procedures for the identification, correction, and subsequent resubmission of these encounters to MDHHS.

12. Describe how data in your PIHP's encounter data system/data warehouse are used (e.g., rate-setting, HEDIS reporting, etc.)

13. What internal challenges do you face in submitting encounter data to MDHHS?

14. What external challenges do you face in submitting encounter data to MDHHS? For example, are there challenges with MDHHS' EDI translator or the Community Health Automated Medicaid Processing System (CHAMPS).

15. What changes in processes or additional resources and support from MDHHS would you find most helpful in overcoming your challenges with successfully submitting encounter data to MDHHS?

16. Do you have any upcoming changes to your encounter submission process that may impact your answers to the questions above? If yes, what changes are expected and when are they likely to become effective?



EDV QUESTIONNAIRE FOR PIHPs

Attestation Statement

I hereby certify that I have reviewed the information entered on this questionnaire and that, to the best of my knowledge, the information is complete and accurate as of the date below.

Signature of CEO or responsible individual

Date

Print name and title

Appendix A: Managed Care Entities Included in the Study

Table A-1 presents the programs, MCE types, MCE names and abbreviations for the MCEs included in the EDV study.

Table A-1—Medicaid Managed Care Programs and MCEs Included in the Study

Program	MCE Type	MCE Name	MCE Abbreviation
CHCP	MHPs	Aetna Better Health of Michigan	AET
		Blue Cross Complete of Michigan	BCC
		HAP Empowered Health Plan, Inc.	HAP
		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
Healthy Kids Dental Program	PAHPs	Blue Cross Blue Shield of Michigan Healthy Kids Dental	BCBSM
		Delta Dental of Michigan	DDMI
MI Health Link Program	ICOs/PIHPs	Aetna Better Health Premier Plan	Aetna
		AmeriHealth Caritas VIP Care Plus	AmeriHealth
		HAP Empowered	HAP
		MeridianComplete	Meridian
		Molina Dual Options MI Health Link	Molina
		Upper Peninsula Health Plan MI Health Link	UPHP
Behavioral Health Managed Care Program	PIHPs	NorthCare Network	NCN
		Northern Michigan Regional Entity (NMRE)	NMRE
		Lakeshore Regional Entity	LRE
		Southwest Michigan Behavioral Health	SWMBH
		Mid-State Health Network	MSHN
		Community Mental Health Partnership of Southeast Michigan	CMHPSM
		Detroit Wayne Integrated Health Network	DWIHN
		Oakland Community Health Network	OCHN
		Macomb County Community Mental Health	MCCMH

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Program	MCE Type	MCE Name	MCE Abbreviation
		Region 10 PIHP	Region 10 PIHP
MI Choice Waiver Program	Waiver Agencies	A&D Home Health Care	AD
		Area Agency on Aging 1B	AAA1B
		Area Agency on Aging of Northwest Michigan	AAANWMI
		Area Agency on Aging of Western Michigan	AAAWMI
		Detroit Area Agency on Aging	Detroit AAA
		easterseals MORC	MORC
		Region 9 Area Agency on Aging/Northeast MI Community Service Agency	NEMCSA
		Northern Health Care Management	NHCM
		Region 2 Area Agency on Aging	R2AAA
		Region 3B Area Agency on Aging/Carewell Services	R3BAAA
		Region IV Area Agency on Aging	RIVAAA
		Region VII Area Agency on Aging	Region VII
		Reliance Community Care Partners	Reliance
		Senior Resources	Senior Resources
		Milestone Senior Services	Senior Services
		Tri-County Office on Aging	Tri-County
		The Information Center	The Information Ctr
		The Senior Alliance	Senior Alliance
		Upper Peninsular Commission for Area Progress (UPCAP)	UPCAP
		Valley Area Agency on Aging	Valley AAA

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Appendix D. Results for Region 1—NorthCare Network

Appendix D contains the IS review and administrative profile results, strengths, weaknesses, and recommendations, as applicable, that HSAG identified from the EDV study for **NorthCare Network**.

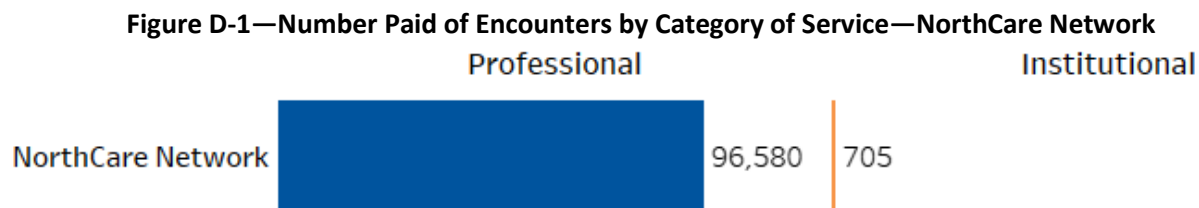
IS Review Findings

Please refer to Section 3: Information Systems Review Findings for **NorthCare Network**'s specific findings, if any.

Administrative Profile Results

Encounter Data Summary

Figure D-1 displays the number of encounters by category of service.

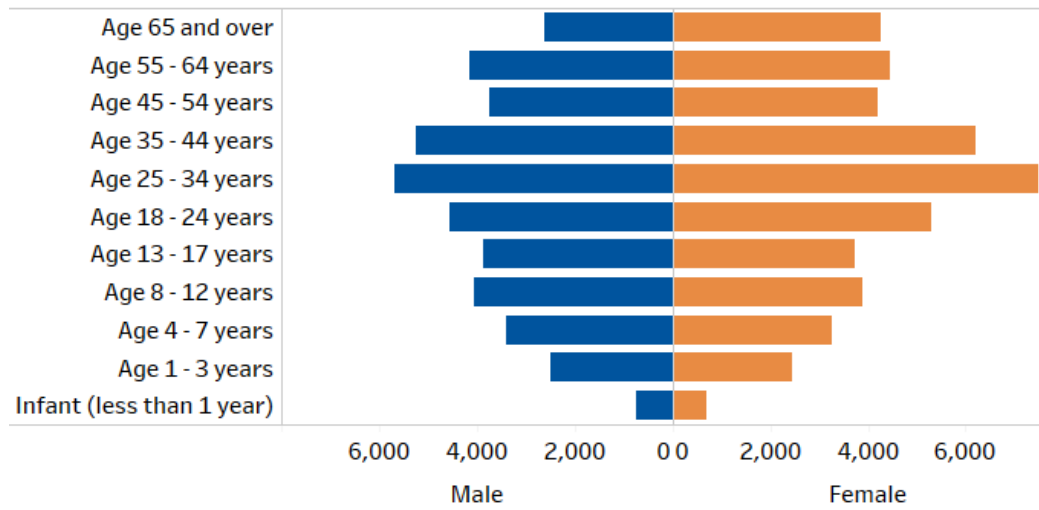


Member Composition

Figure D-2 and Figure D-3 display member demographics.



Figure D-3—Age and Gender Distribution—NorthCare Network

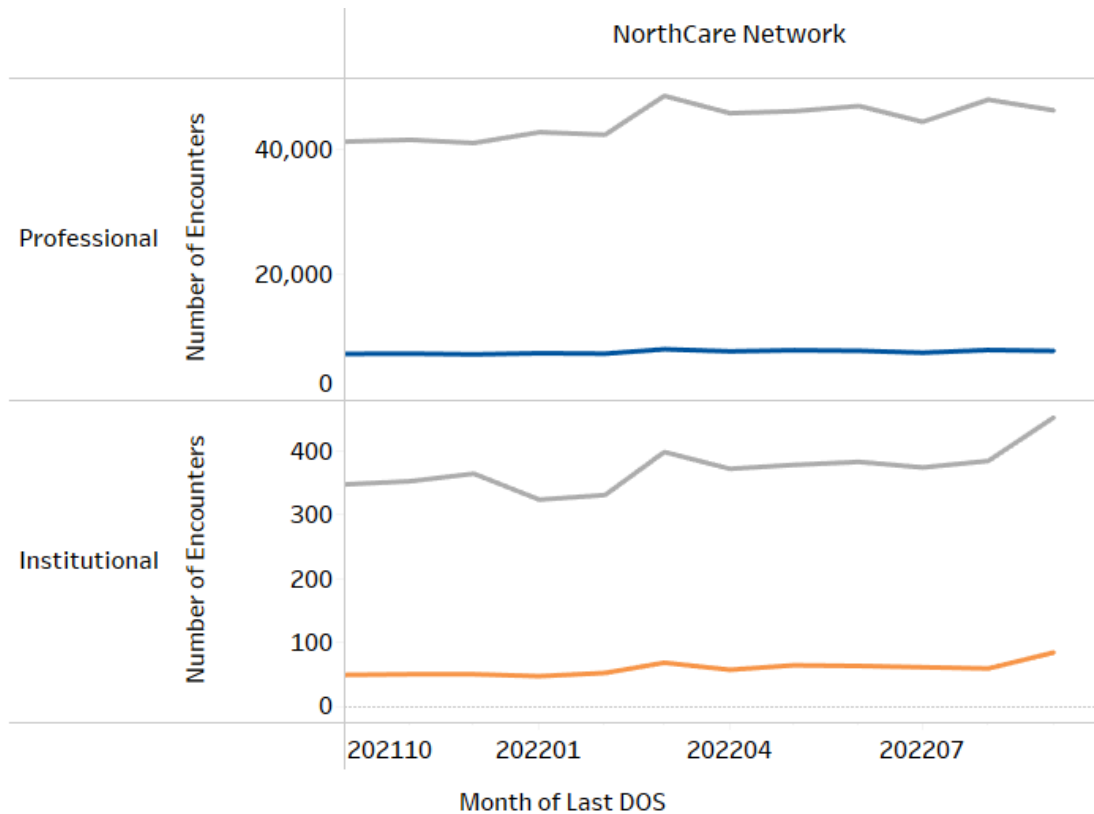


Encounter Data Completeness

Encounter Volume by Service Month

Figure D-4 displays the monthly encounter volume by service month and category of service.

Figure D-4—Encounter Volume by Service Month—NorthCare Network

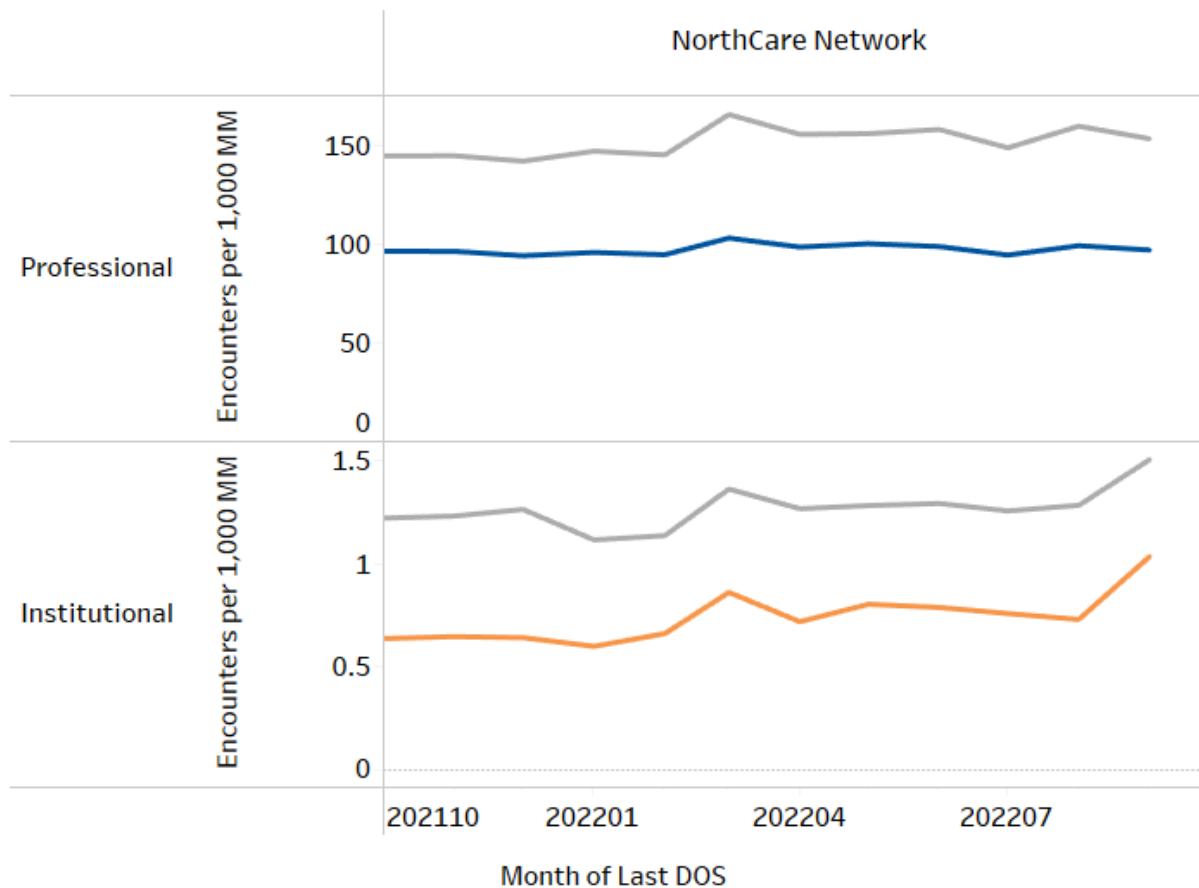


Note: The grey line indicates the all PIHP rate.

Encounter Volume Per 1,000 Member Months

Figure D-5 displays the monthly encounter volume per 1,000 MM by service month and category of service.

Figure D-5—Encounter Volume per 1,000 MM—NorthCare Network

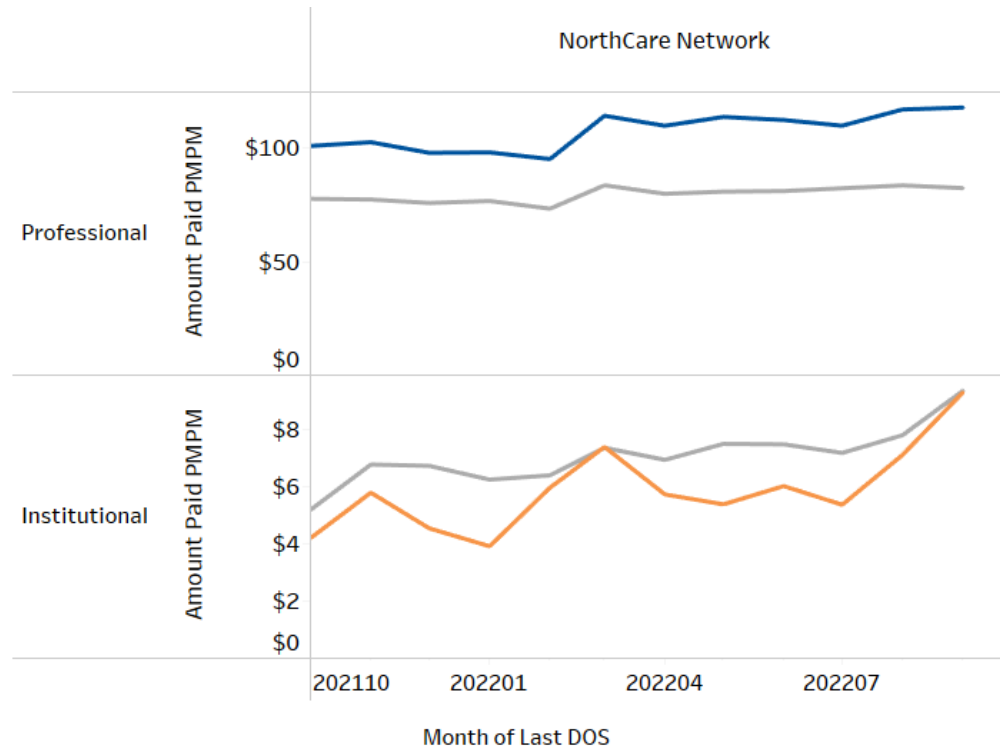


Note: The grey line indicates the all PIHP rate.

Payment Amounts Per Member Per Month

Figure D-6 displays the monthly payment amounts PMPM by service month and category of service.

Figure D-6—Paid Amount PMPM—NorthCare Network

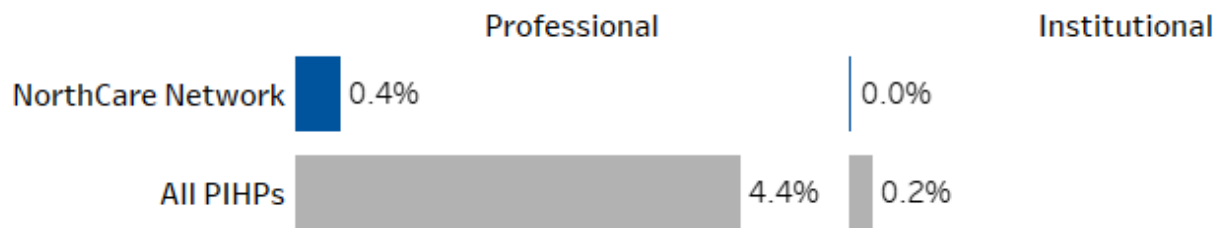


Note: The grey line indicates the all PIHP rate.

Percentage of Duplicate Encounters

Figure D-7 displays the percentage of duplicate encounters.

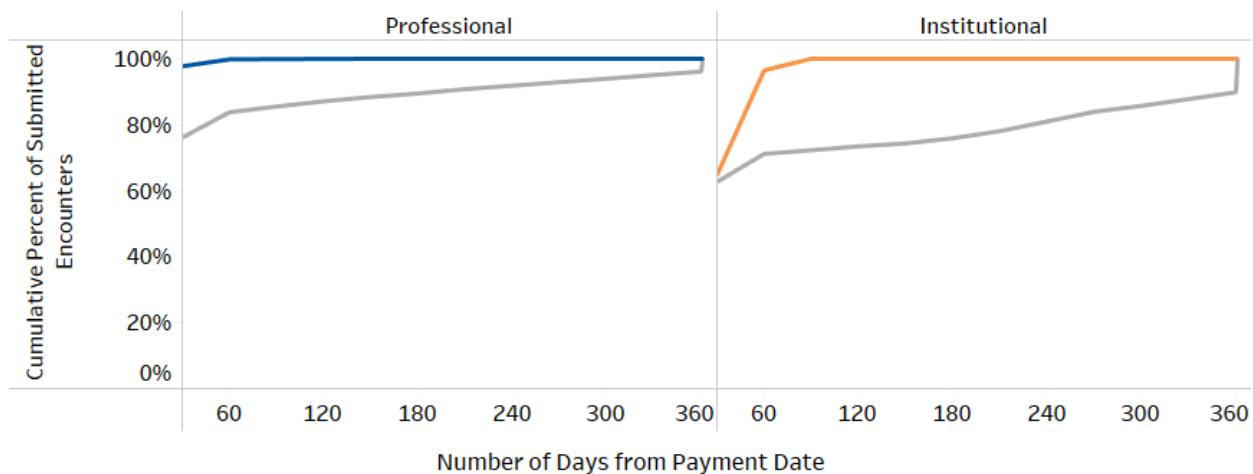
Figure D-7—Percentage of Duplicate Encounters—NorthCare Network



Encounter Data Timeliness

Figure D-8 and Table D-1 show the cumulative percentage of encounters submitted to MDHHS from the payment date by category of service.

Figure D-8—Cumulative Percentage of Encounters Submitted to MDHHS From PIHP Payment Date by Category of Service—NorthCare Network



Note: The grey line indicates the all PIHP rate.

Table D-1—Completeness of Encounters by Category of Service—NorthCare Network

Number of Days From Payment Date	Cumulative Percentage of Submitted Professional Encounters	Cumulative Percentage of Submitted Institutional Encounters
Submitted Within 30 Days	97.7%	64.7%
Submitted Within 60 Days	99.8%	96.5%
Submitted Within 90 Days	99.9%	100.0%
Submitted Within 120 Days	99.9%	100.0%
Submitted Within 150 Days	>99.9%	100.0%
Submitted Within 180 Days	>99.9%	100.0%
Submitted Within 210 Days	>99.9%	100.0%
Submitted Within 240 Days	>99.9%	100.0%
Submitted Within 270 Days	100.0%	100.0%
Submitted Within 300 Days	100.0%	100.0%
Submitted Within 330 Days	100.0%	100.0%
Submitted Within 360 Days	100.0%	100.0%
Submitted After 360 Days	100.0%	100.0%

Field-Level Completeness and Accuracy

Figure D-9 and Figure D-10 provide the percentage of encounters that are present and contain valid values for key data elements.

Figure D-9—Key Professional Encounter Data Elements—NorthCare Network

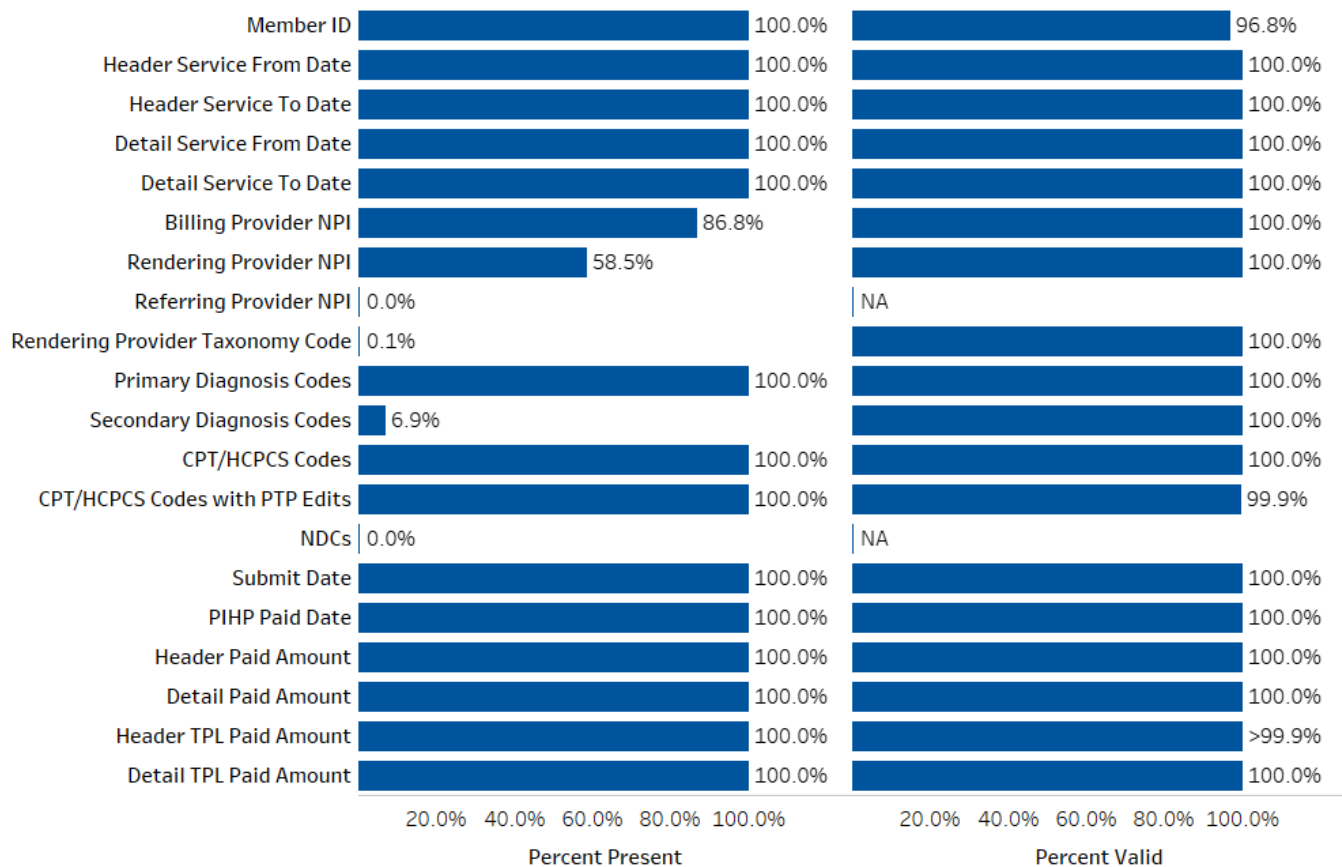
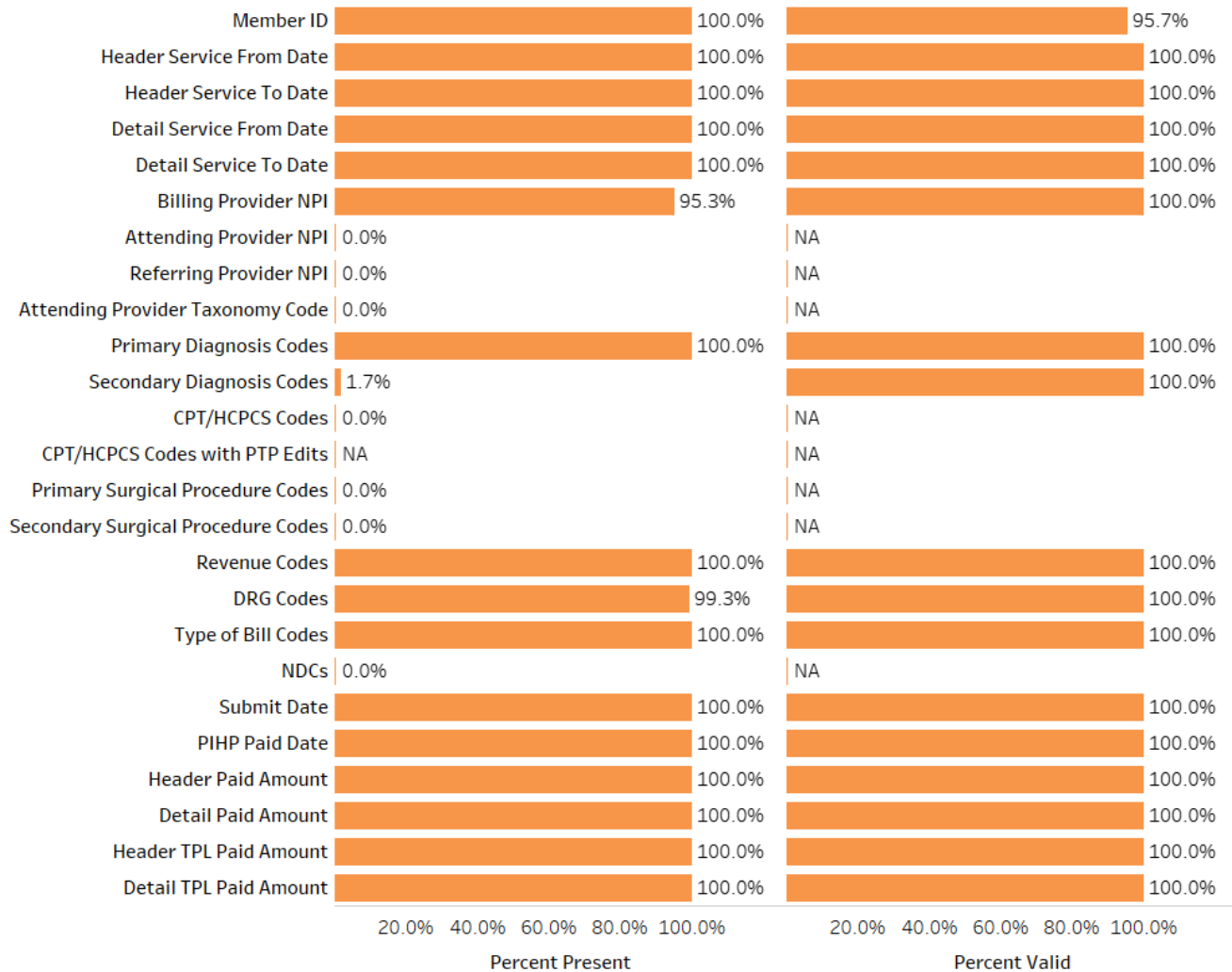


Figure D-10—Key Institutional Encounter Data Elements—NorthCare Network



Encounter Data Referential Integrity

Figure D-11 and Figure D-12 display the referential integrity results.

Figure D-11—Referential Integrity Comparison Between Enrollment and Medical Encounter Files—NorthCare Network

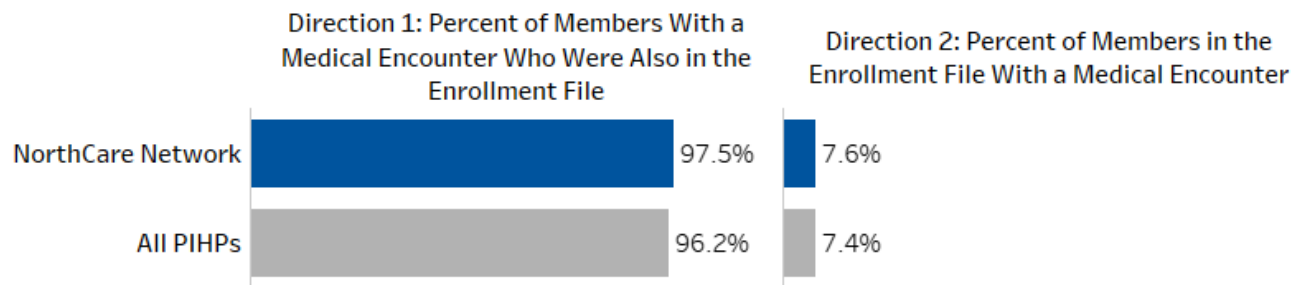
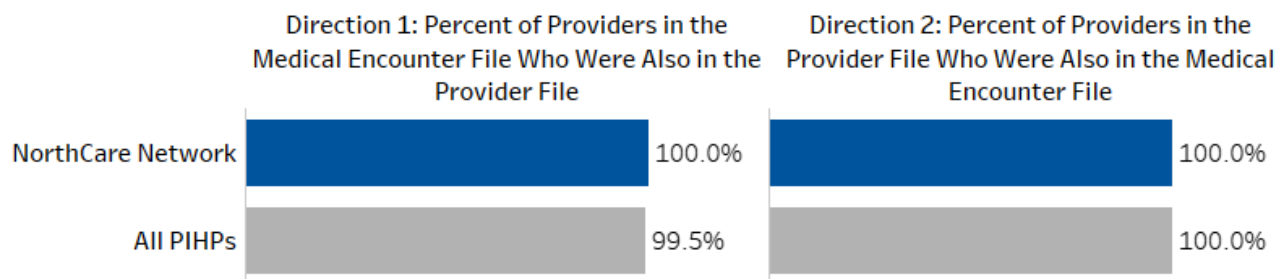


Figure D-12—Referential Integrity Comparison Between Medical Encounter and Provider Files—NorthCare Network

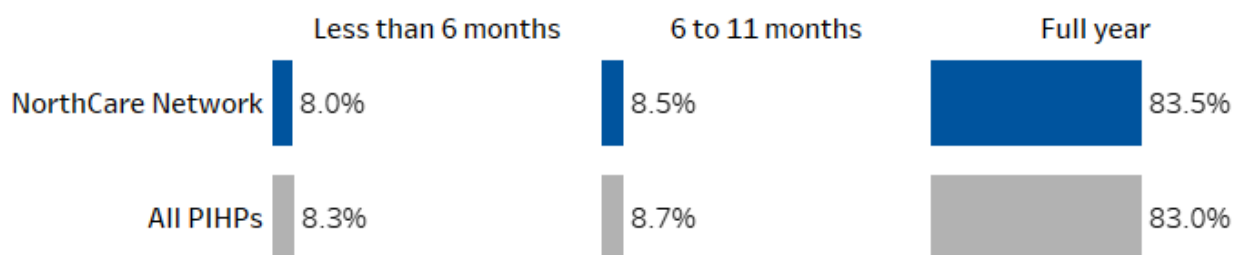


Encounter Data Logic

Member Enrollment

Figure D-13 displays the percentage of members who were continuously enrolled.

Figure D-13—Percentage of Members Who Were Continuously Enrolled—NorthCare Network



Conclusions

Based on the examination of the IS review and administrative profile outcomes in Section 3 and Section 4, respectively, for **NorthCare Network**, HSAG identified the following areas of strength, opportunities for improvement, and recommendations.

IS Review Conclusions

Strengths

Strength #1: NorthCare Network demonstrated its capability to collect, process, and transmit encounter data to MDHHS. The PIHP has also established data review and correction processes that efficiently address quality concerns identified by MDHHS.

Opportunities for Improvement

Weakness #1: NorthCare Network did not indicate claim volume or timeliness quality checks performed for claims/encounters from its subcontractors' data.

Why the weakness exists: Claim volume checks are crucial to validating that the submitted data align with the expected volume, helping identify any discrepancies or missing information. Timeliness quality checks ensure that the claims/encounters are submitted within the specified time frames, meeting MDHHS' minimum monthly requirements. The lack of these checks increases the risk of errors, omissions, or delays in data submission, which can impact the reliability and effectiveness of the overall encounter data system.

Recommendation: **NorthCare Network** should establish or refine either its subcontractors' or its data monitoring reports aimed at assessing the completeness and timeliness of encounter data. By implementing such measures, **NorthCare Network** can enhance the overall quality and reliability of the encounter data that it submits, aligning with industry standards and improving data usability for all stakeholders. Regularly reviewing and updating these quality checks will help maintain data integrity over time.

Weakness #2: While several PIHPs recognized the labor- and resource-intensive nature of MRR as a method for conducting data quality checks and reported its usage, **NorthCare Network** did not indicate the incorporation of MRR as part of its data quality assessment for its subcontractors' data.

Why the weakness exists: The absence of MRR in **NorthCare Network**'s data quality checks may stem from resource constraints, a lack of awareness about the benefits of MRR, or possibly a reliance on alternative methods for data quality assurance.

Recommendation: Acknowledging the efficacy of MRR in ensuring accuracy and completeness in encounter data, HSAG recommends that **NorthCare Network** evaluates the feasibility and potential benefits of integrating MRR into its data quality checks. This could enhance the reliability and thoroughness of its data assessment process.

Administrative Profile Conclusions

Strengths

Strength #1: NorthCare Network displayed timely submission of both professional and institutional encounters after payment date, with greater than 99.9 percent of encounters submitted within 90 days.

Strength #2: Across all encounters, most key data elements for **NorthCare Network** were populated at high rates, and the majority of data elements were over 99.9 percent valid.

Opportunities for Improvement

Weakness #1: The member ID field had lower than expected validity rates in both professional and institutional data, with a validity rate of 96.8 percent and 95.7 percent, respectively. Additionally, 97.5 percent of members with a medical encounter were identified in the enrollment file. Combined, these findings suggest that **NorthCare Network**'s enrollment data may not be complete.

Why the weakness exists: Linking datasets to each other to pull in additional information (i.e., enrollment start date or enrollment end date) may be important in subsequent analyses. Additionally, members identified in the encounter file should be enrolled on the date the service occurred.

Recommendation: **NorthCare Network** should collaborate with MDHHS to ensure both entities have an accurate and complete database of enrolled members.

Administrative Profile Results—Tabular Data

Encounter Data Summary

Member Composition

Table D-2 presents the member composition.

Table D-2—Age and Gender Distribution—NorthCare Network

Age Category	Number of Females	Number of Males
Infant (less than 1 year)	704	749
Age 1–3 years	2,441	2,496
Age 4–7 years	3,262	3,401
Age 8–12 years	3,879	4,074
Age 13–17 years	3,728	3,862
Age 18–24 years	5,310	4,563
Age 25–34 years	7,501	5,689
Age 35–44 years	6,210	5,236
Age 45–54 years	4,218	3,755
Age 55–64 years	4,452	4,162
Age 65 and over	4,261	2,610
Total	45,966	40,597

Encounter Data Completeness

Encounter Volume by Service Month

Table D-3 and Table D-4 display the encounter volume by service month.

Table D-3—Encounter Volume: Professional Encounters—NorthCare Network

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	7,424	76,915	96.5
November 2021	7,462	77,348	96.5
December 2021	7,349	77,962	94.3
January 2022	7,521	78,394	95.9
February 2022	7,457	78,671	94.8
March 2022	8,160	79,054	103.2
April 2022	7,829	79,344	98.7

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
May 2022	8,002	79,731	100.4
June 2022	7,916	80,020	98.9
July 2022	7,613	80,477	94.6
August 2022	8,038	80,897	99.4
September 2022	7,895	81,259	97.2

Table D-4—Encounter Volume: Institutional Encounters—NorthCare Network

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	49	76,915	0.6
November 2021	50	77,348	0.6
December 2021	50	77,962	0.6
January 2022	47	78,394	0.6
February 2022	52	78,671	0.7
March 2022	68	79,054	0.9
April 2022	57	79,344	0.7
May 2022	64	79,731	0.8
June 2022	63	80,020	0.8
July 2022	61	80,477	0.8
August 2022	59	80,897	0.7
September 2022	84	81,259	1.0

Payment Amounts Per Member Per Month

Table D-5 and Table D-6 display the monthly payment amounts PMPM by service month.

Table D-5—Paid Amount PMPM: Professional Encounters—NorthCare Network

Month of Service	Number of MM	Paid Amount PMPM
October 2021	76,915	\$101.08
November 2021	77,348	\$102.73
December 2021	77,962	\$98.05
January 2022	78,394	\$98.23
February 2022	78,671	\$95.30
March 2022	79,054	\$114.39

Month of Service	Number of MM	Paid Amount PMPM
April 2022	79,344	\$109.99
May 2022	79,731	\$113.88
June 2022	80,020	\$112.52
July 2022	80,477	\$110.01
August 2022	80,897	\$117.17
September 2022	81,259	\$118.01

Table D-6—Paid Amount PMPM: Institutional Encounters—NorthCare Network

Month of Service	Number of MM	Paid Amount PMPM
October 2021	76,915	\$4.20
November 2021	77,348	\$5.79
December 2021	77,962	\$4.54
January 2022	78,394	\$3.91
February 2022	78,671	\$5.96
March 2022	79,054	\$7.38
April 2022	79,344	\$5.73
May 2022	79,731	\$5.38
June 2022	80,020	\$6.02
July 2022	80,477	\$5.37
August 2022	80,897	\$7.11
September 2022	81,259	\$9.29

Percentage of Duplicate Encounters

Table D-7 displays the percentage of duplicate encounters by category of service.

Table D-7—Percentage of Duplicate Encounters by Category of Service—NorthCare Network

Category of Service	Number of Duplicate Records	Percentage of Duplicate Records
Professional	1,540	0.4%
Institutional	0	0.0%

Encounter Data Timeliness

Encounter Data Lag Triangles

Table D-8 and Table D-9 display the lag triangles between service month and submission month to MDHHS. For conciseness, lag triangles only include encounters submitted through April 2023 (a minimum of a seven-month lag); therefore, counts displayed in the total line may not equal counts displayed in encounter volume figures.

Table D-8—Encounter Data Lag Triangle: Professional Encounters—NorthCare Network

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	7,078	1											7,079
202112	0	0	0										0
202201	497	7,657	7,257	1									15,412
202202	30	62	233	7,334	2								7,661
202203	18	26	40	343	7,493	5							7,925
202204	24	4	22	48	116	8,075	2						8,291
202205	5	6	11	11	58	217	7,812	2					8,122
202206	9	8	6	21	29	39	191	7,815	4				8,122
202207	13	25	16	21	24	31	32	323	7,709	2			8,196
202208	2	1	8	5	27	50	54	114	385	7,447	1		8,094
202209	0	0	0	0	0	0	0	0	0	0	0	0	0
202210	1	3	2	6	11	7	34	22	48	296	7,754	3	8,187
202211	21	22	24	35	29	60	32	48	102	102	523	7,820	8,818
202212	4	11	13	4	4	8	15	20	26	52	88	360	605
202301	0	0	0	0	0	0	0	0	0	0	0	0	0
202302	0	0	0	0	0	0	0	0	0	0	0	0	0
202303	1	0	0	0	0	0	1	1	0	0	2	60	65
202304	0	0	0	0	0	0	0	0	0	0	2	1	3
Total	7,703	7,826	7,632	7,829	7,793	8,492	8,173	8,345	8,274	7,899	8,370	8,244	96,580
MM	76,915	77,348	77,962	78,394	78,671	79,054	79,344	79,731	80,020	80,477	80,897	81,259	950,072
PMPM	0.10	0.10	0.10	0.10	0.10	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10

Table D-9—Encounter Data Lag Triangle: Institutional Encounters—NorthCare Network

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	36	8											44
202112	0	0	0										0
202201	9	36	29	1									75
202202	2	4	12	26	4								48
202203	0	1	0	4	34	2							41
202204	2	1	2	6	8	47	5						71
202205	0	0	0	1	2	13	40	10					66
202206	0	0	0	0	1	3	9	45	7				65
202207	0	0	1	6	2	2	1	7	37	6			62
202208	0	0	1	0	0	1	1	1	12	39	11		66
202209	0	0	0	0	0	0	0	0	0	0	0	0	0
202210	0	0	4	2	0	1	0	0	2	7	42	15	73
202211	0	0	0	0	1	0	0	0	0	0	1	26	28
202212	0	0	1	1	0	0	1	1	5	9	5	43	66
202301	0	0	0	0	0	0	0	0	0	0	0	0	0
202302	0	0	0	0	0	0	0	0	0	0	0	0	0
202303	0	0	0	0	0	0	0	0	0	0	0	0	0
202304	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	49	50	50	47	52	69	57	64	63	61	59	84	705
MM	76,915	77,348	77,962	78,394	78,671	79,054	79,344	79,731	80,020	80,477	80,897	81,259	950,072
PMPM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Field-Level Completeness and Accuracy

Table D-10 and Table D-11 provide the percentage of encounters that are present and contain valid values for key data elements for all categories of service.

Table D-10—Key Encounter Data Elements: Professional Encounters—NorthCare Network

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	96,580	96,580	100.0%	96,580	93,517	96.8%
Header Service From Date	96,580	96,580	100.0%	96,580	96,580	100.0%
Header Service To Date	96,580	96,580	100.0%	96,580	96,580	100.0%
Detail Service From Date	345,828	345,828	100.0%	345,828	345,828	100.0%
Detail Service To Date	345,828	345,828	100.0%	345,828	345,828	100.0%
Billing Provider NPI	96,580	83,825	86.8%	83,825	83,825	100.0%
Rendering Provider NPI	96,580	56,470	58.5%	56,470	56,470	100.0%
Referring Provider NPI	96,580	0	0.0%	0	0	NA
Rendering Provider Taxonomy Code	96,580	141	0.1%	152	152	100.0%
Primary Diagnosis Codes	96,580	96,580	100.0%	96,580	96,580	100.0%
Secondary Diagnosis Codes	96,580	6,638	6.9%	14,953	14,953	100.0%
CPT/HCPCS Codes	345,828	345,828	100.0%	345,828	345,828	100.0%
CPT/HCPCS Codes with PTP Edits	345,710	345,710	100.0%	345,710	345,257	99.9%
NDCs	345,828	0	0.0%	0	0	NA
Submit Date	345,828	345,828	100.0%	345,828	345,828	100.0%
PIHP Paid Date	345,828	345,828	100.0%	345,828	345,828	100.0%
Header Paid Amount	96,580	96,580	100.0%	96,580	96,580	100.0%
Detail Paid Amount	345,828	345,828	100.0%	345,828	345,828	100.0%
Header TPL Paid Amount	96,580	96,580	100.0%	96,580	96,579	>99.9%
Detail TPL Paid Amount	345,828	345,828	100.0%	345,828	345,828	100.0%

Table D-11—Key Encounter Data Elements: Institutional Encounters—NorthCare Network

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	705	705	100.0%	705	675	95.7%
Header Service From Date	705	705	100.0%	705	705	100.0%
Header Service To Date	705	705	100.0%	705	705	100.0%
Detail Service From Date	728	728	100.0%	728	728	100.0%
Detail Service To Date	728	728	100.0%	728	728	100.0%
Billing Provider NPI	705	672	95.3%	672	672	100.0%
Attending Provider NPI	705	0	0.0%	0	0	NA
Referring Provider NPI	705	0	0.0%	0	0	NA
Attending Provider Taxonomy Code	705	0	0.0%	0	0	NA
Primary Diagnosis Codes	705	705	100.0%	705	705	100.0%
Secondary Diagnosis Codes	705	12	1.7%	15	15	100.0%
CPT/HCPCS Codes	728	0	0.0%	0	0	NA
CPT/HCPCS Codes with PTP Edits	0	0	NA	0	0	NA
Primary Surgical Procedure Codes	705	0	0.0%	0	0	NA
Secondary Surgical Procedure Codes	705	0	0.0%	0	0	NA
Revenue Codes	728	728	100.0%	728	728	100.0%
DRG Codes	705	700	99.3%	700	700	100.0%
Type of Bill Codes	705	705	100.0%	705	705	100.0%
NDCs	728	0	0.0%	0	0	NA
Submit Date	728	728	100.0%	728	728	100.0%
PIHP Paid Date	728	728	100.0%	728	728	100.0%
Header Paid Amount	705	705	100.0%	705	705	100.0%
Detail Paid Amount	728	728	100.0%	728	728	100.0%
Header TPL Paid Amount	705	705	100.0%	705	705	100.0%
Detail TPL Paid Amount	728	728	100.0%	728	728	100.0%

Appendix E. Results for Region 2–Northern Michigan Regional Entity

Appendix E contains the IS review and administrative profile results, strengths, weaknesses, and recommendations, as applicable, that HSAG identified from the EDV study for **Northern Michigan Regional Entity**.

IS Review Findings

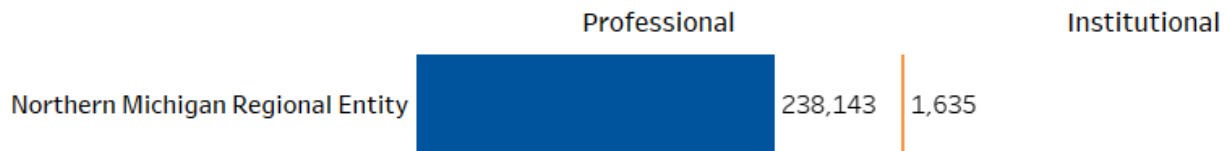
Please refer to Section 3: Information Systems Review Findings for **Northern Michigan Regional Entity**'s specific findings, if any.

Administrative Profile Results

Encounter Data Summary

Figure E-1 displays the number of encounters by category of service.

Figure E-1—Number of Paid Encounters by Category of Service—Northern Michigan Regional Entity



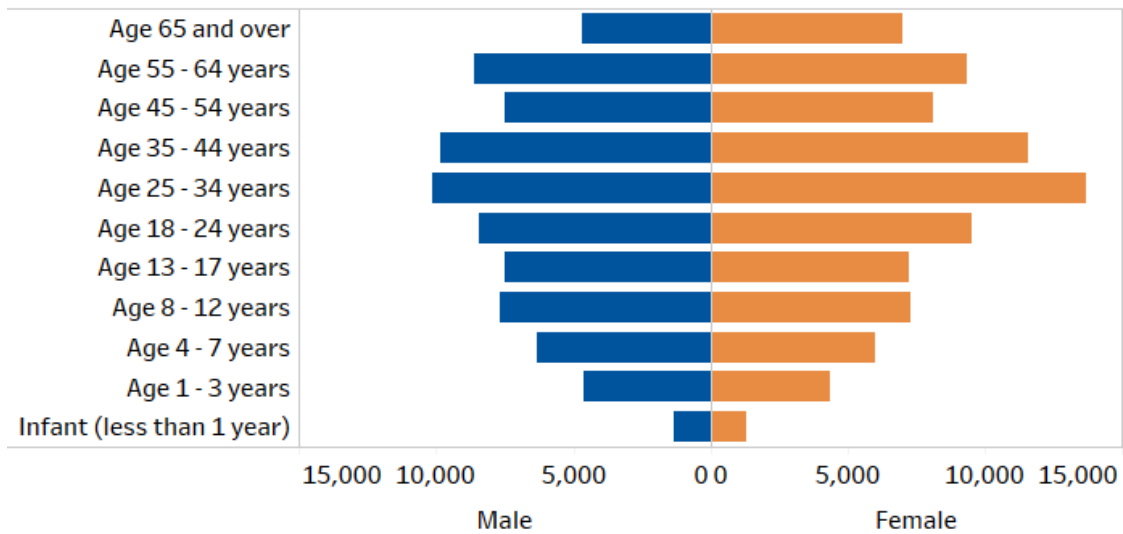
Member Composition

Figure E-2 and Figure E-3 display member demographics.

Figure E-2—Enrollment in SFY 2023—Northern Michigan Regional Entity



Figure E-3—Age and Gender Distribution—Northern Michigan Regional Entity

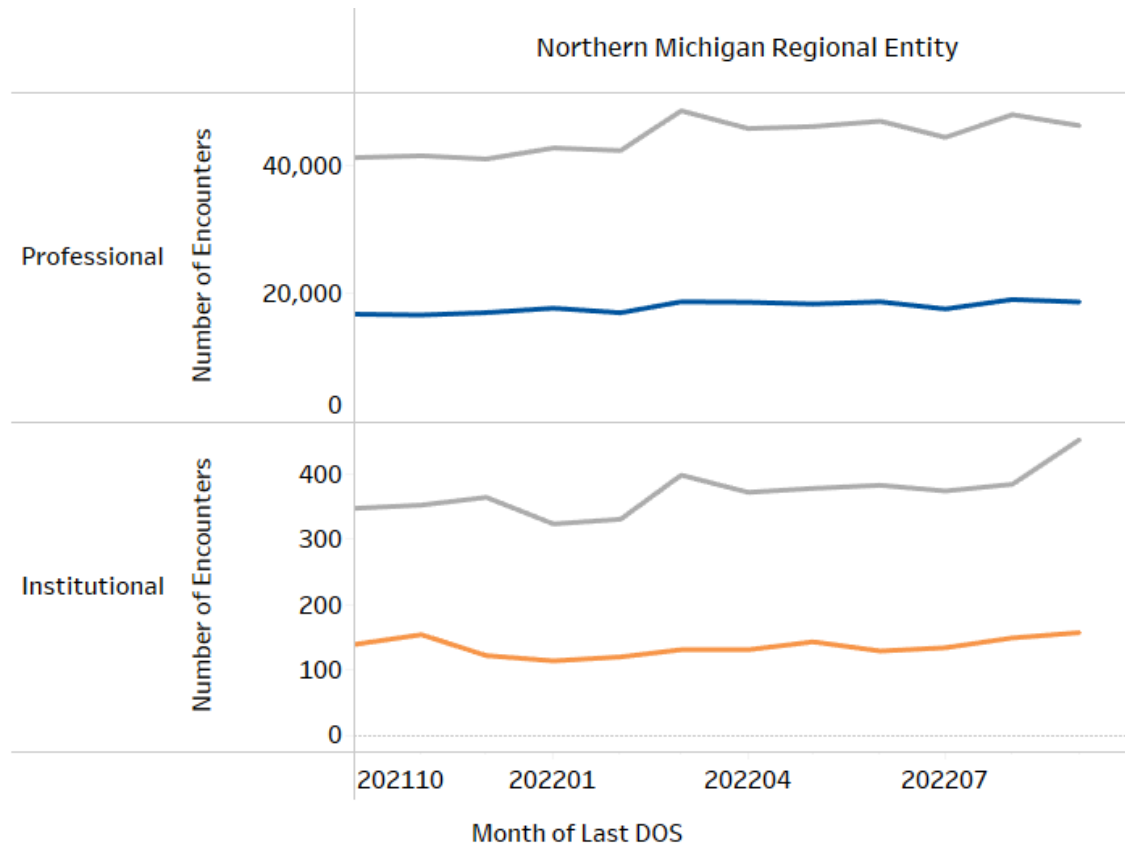


Encounter Data Completeness

Encounter Volume by Service Month

Figure E-4 displays the monthly encounter volume by service month and category of service.

Figure E-4—Encounter Volume by Service Month—Northern Michigan Regional Entity

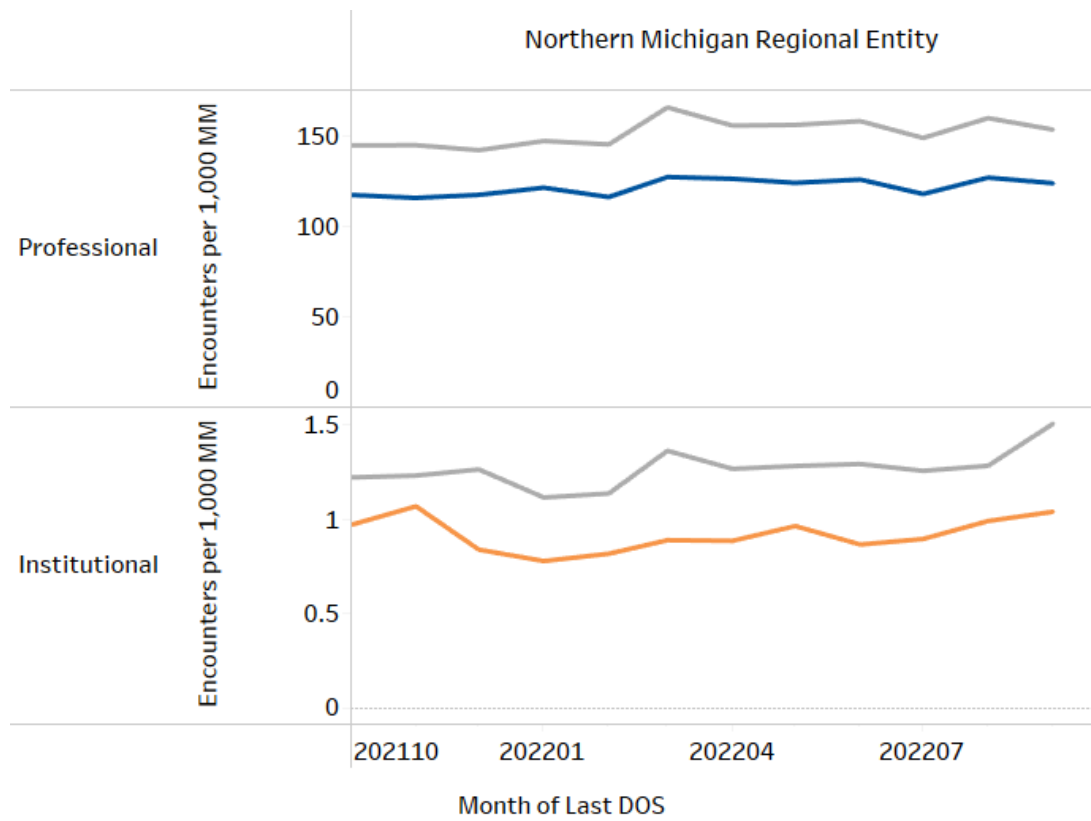


Note: The grey line indicates the all PIHP rate.

Encounter Volume Per 1,000 Member Months

Figure E-5 displays the monthly encounter volume per 1,000 MM by service month and category of service.

Figure E-5—Encounter Volume per 1,000 MM—Northern Michigan Regional Entity

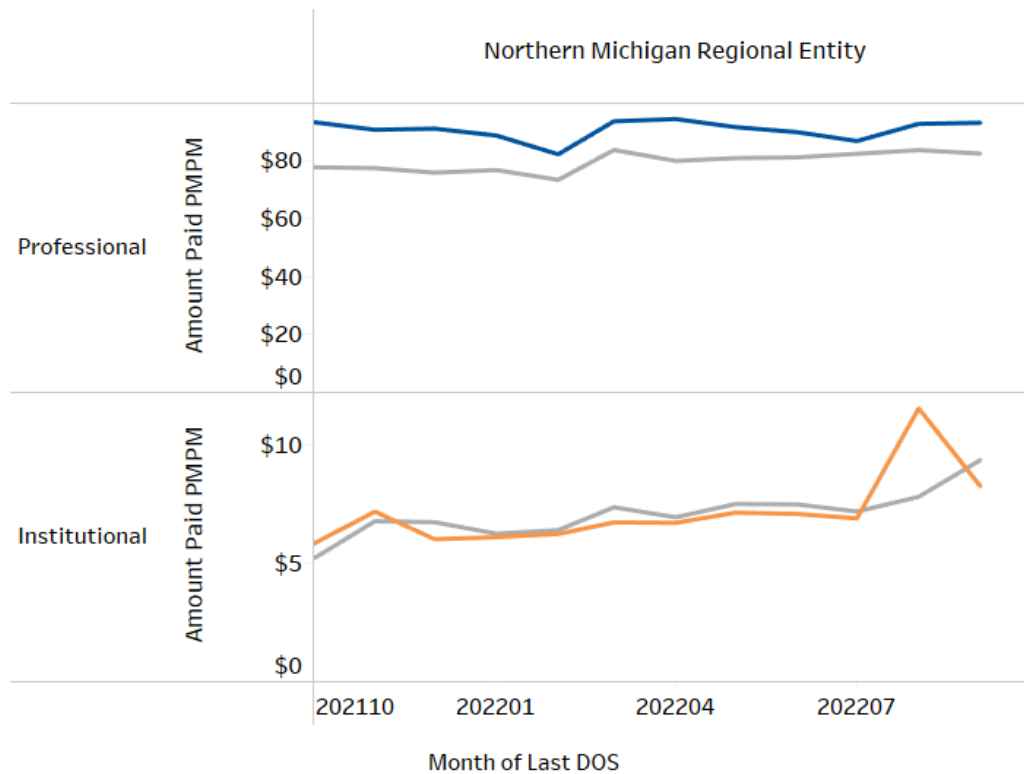


Note: The grey line indicates the all PIHP rate.

Payment Amounts Per Member Per Month

Figure E-6 displays the monthly payment amounts PMPM by service month and category of service.

Figure E-6—Paid Amount PMPM—Northern Michigan Regional Entity

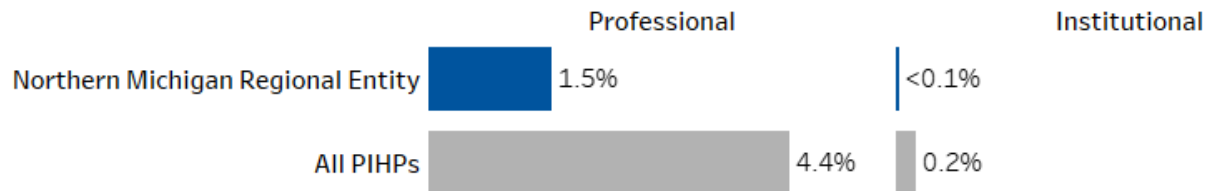


Note: The grey line indicates the all PIHP rate.

Percentage of Duplicate Encounters

Figure E-7 displays the percentage of duplicate encounters.

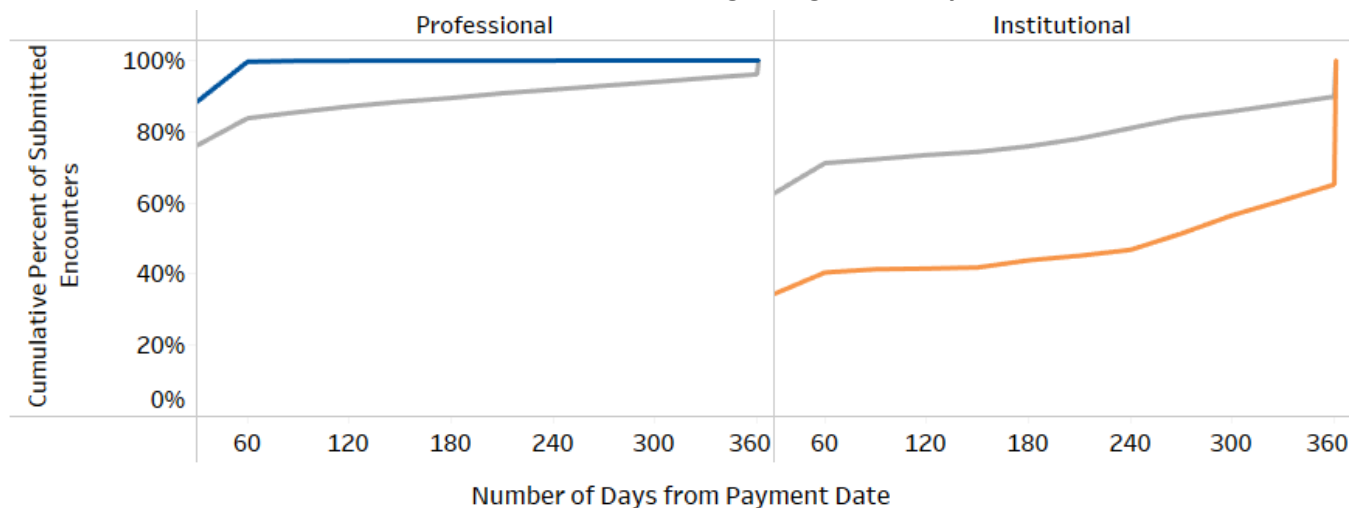
Figure E-7—Percentage of Duplicate Encounters—Northern Michigan Regional Entity



Encounter Data Timeliness

Figure E-8 and Table E-1 show the cumulative percentage of encounters submitted to MDHHS from the payment date by category of service.

Figure E-8—Cumulative Percentage of Encounters Submitted to MDHHS From PIHP Payment Date by Category of Service—Northern Michigan Regional Entity



Note: The grey line indicates the all PIHP rate.

Table E-1—Completeness of Encounters by Category of Service—Northern Michigan Regional Entity

Number of Days From Payment Date	Cumulative Percentage of Submitted Professional Encounters	Cumulative Percentage of Submitted Institutional Encounters
Submitted Within 30 Days	88.3%	34.4%
Submitted Within 60 Days	99.6%	40.4%
Submitted Within 90 Days	99.9%	41.3%
Submitted Within 120 Days	99.9%	41.5%
Submitted Within 150 Days	99.9%	41.8%
Submitted Within 180 Days	99.9%	43.9%
Submitted Within 210 Days	99.9%	45.1%
Submitted Within 240 Days	>99.9%	46.8%
Submitted Within 270 Days	>99.9%	51.4%
Submitted Within 300 Days	>99.9%	56.5%
Submitted Within 330 Days	>99.9%	60.7%
Submitted Within 360 Days	>99.9%	65.1%
Submitted After 360 Days	100.0%	100.0%

Field-Level Completeness and Accuracy

Figure E-9 and Figure E-10 provide the percentage of encounters that are present and contain valid values for key data elements.

Figure E-9—Key Professional Encounter Data Elements—Northern Michigan Regional Entity

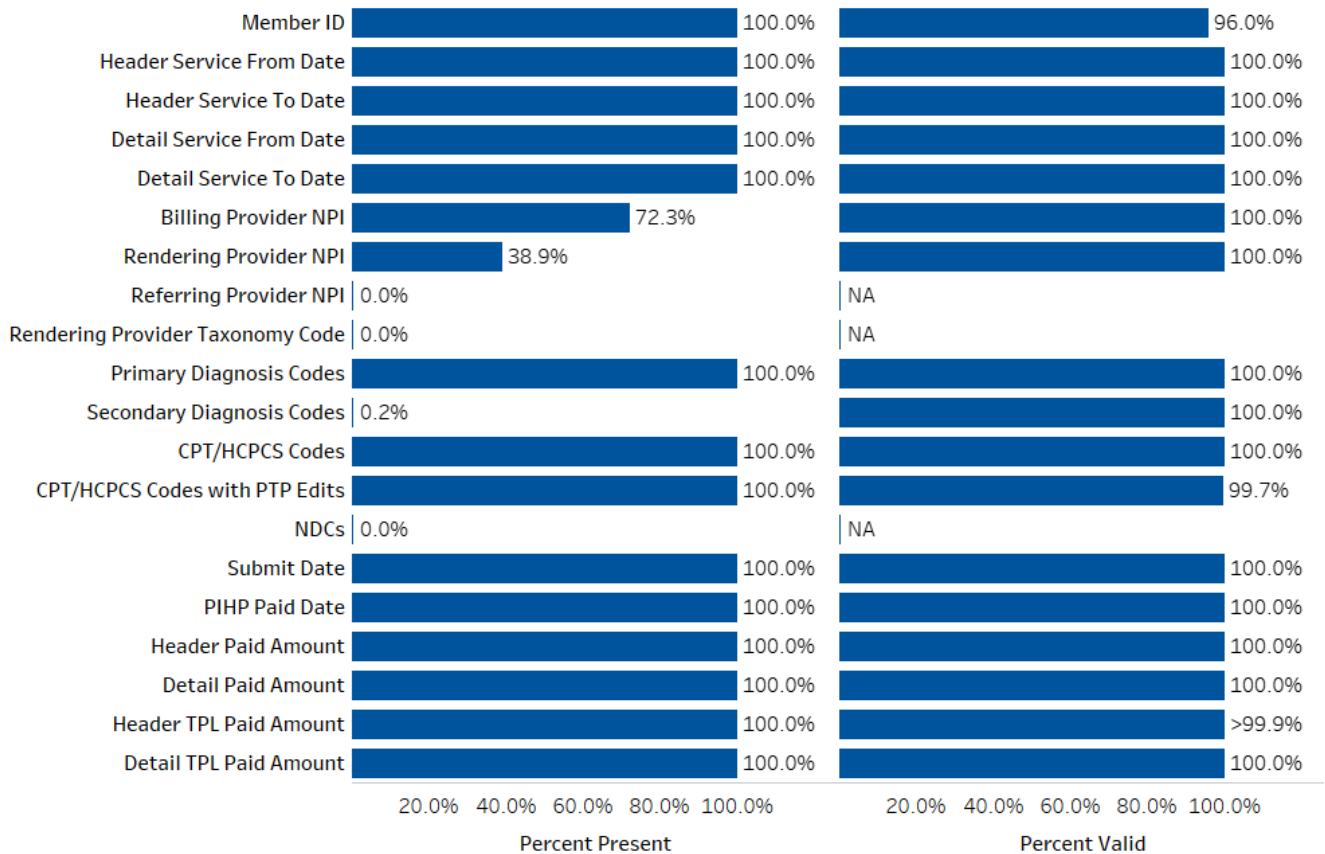
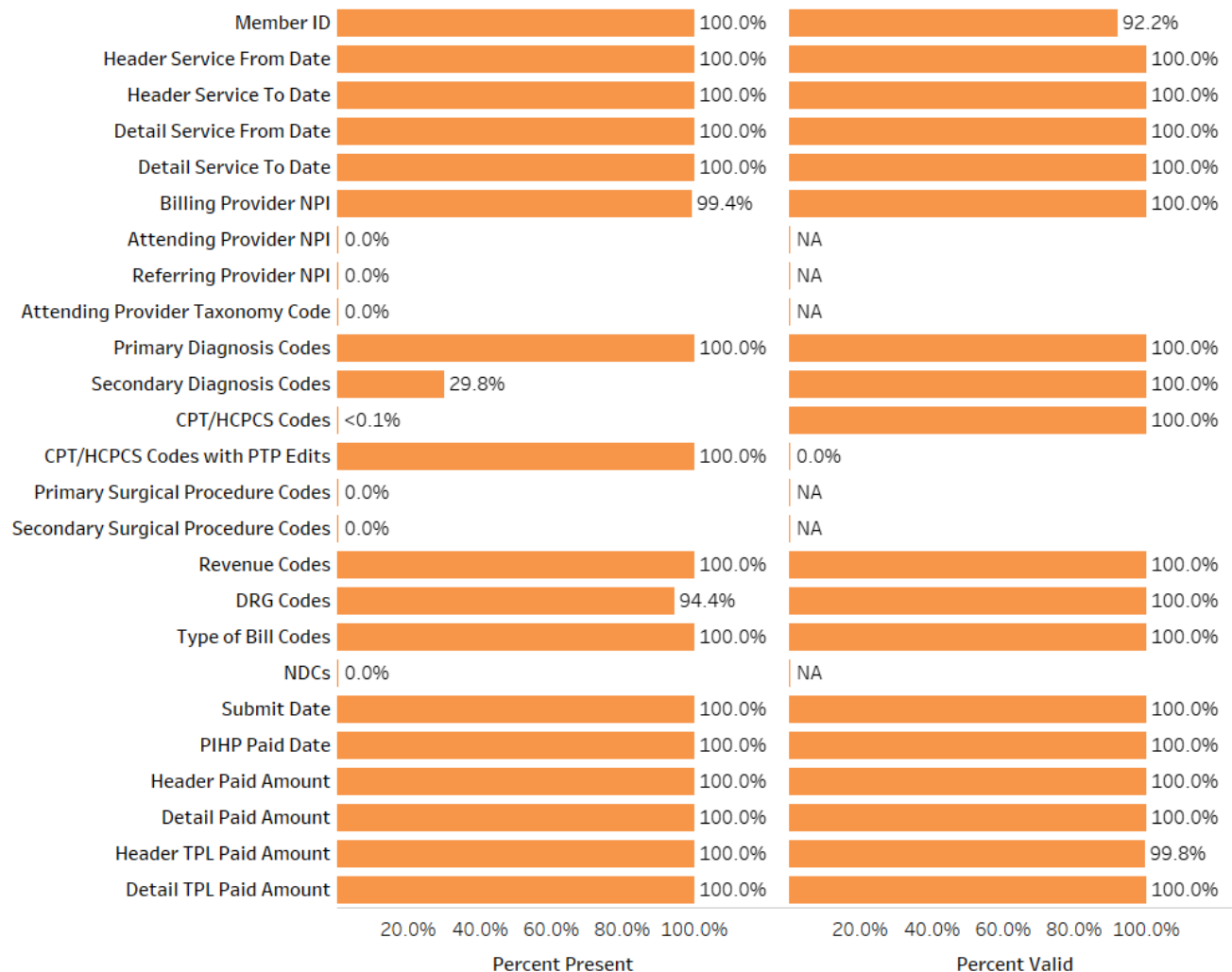


Figure E-10—Key Institutional Encounter Data Elements—Northern Michigan Regional Entity


Encounter Data Referential Integrity

Figure E-11 and Figure E-12 display the referential integrity results.

Figure E-11—Referential Integrity Comparison Between Enrollment and Medical Encounter Files—Northern Michigan Regional Entity

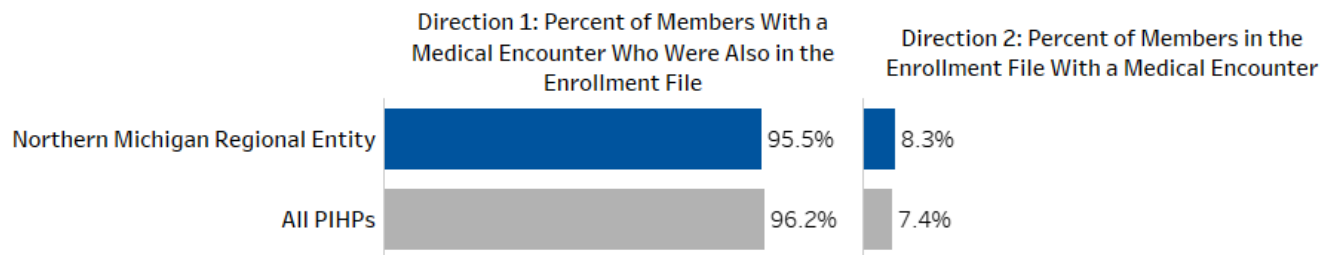
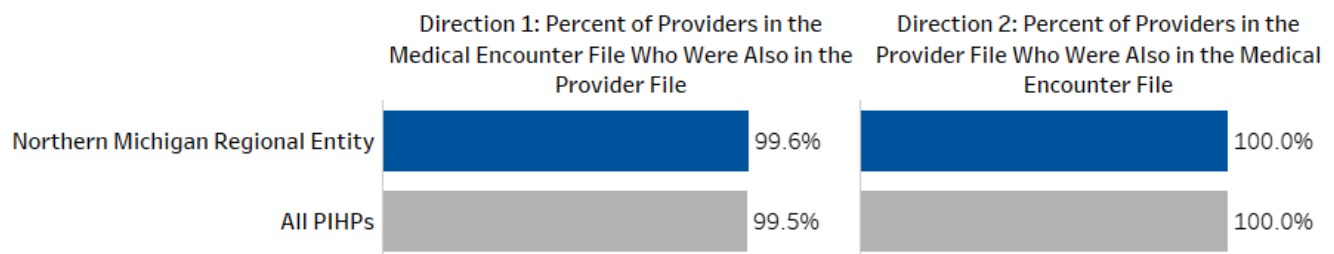


Figure E-12—Referential Integrity Comparison Between Medical Encounter and Provider Files—Northern Michigan Regional Entity

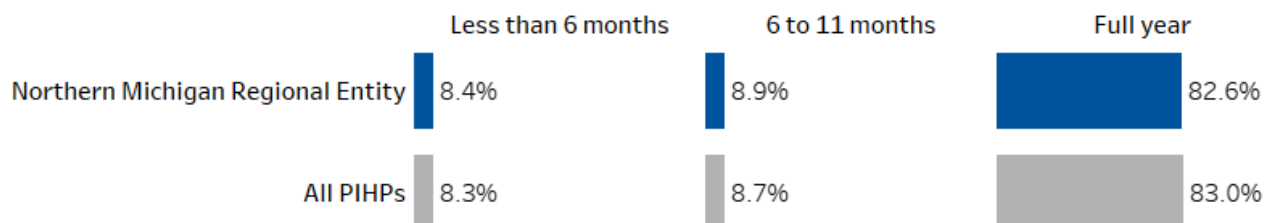


Encounter Data Logic

Member Enrollment

Figure E-13 displays the percentage of members who were continuously enrolled.

Figure E-13—Percentage of Members Who Were Continuously Enrolled—Northern Michigan Regional Entity



Conclusions

Based on the examination of the IS review and administrative profile outcomes in Section 3 and Section 4, respectively, for **Northern Michigan Regional Entity**, HSAG identified the following areas of strength, opportunities for improvement, and recommendations.

IS Review Conclusions

Strengths

Strength #1: Northern Michigan Regional Entity demonstrated its capability to collect, process, and transmit encounter data to MDHHS. The PIHP has also established data review and correction processes that efficiently address quality concerns identified by MDHHS.

Opportunities for Improvement

Weakness #1: While several PIHPs recognized the labor- and resource-intensive nature of MRR as a method for conducting data quality checks and reported its usage, **Northern Michigan Regional Entity** did not indicate the incorporation of MRR as part of its data quality assessment for its subcontractors' data.

Why the weakness exists: The absence of MRR in **Northern Michigan Regional Entity**'s data quality checks may stem from resource constraints, a lack of awareness about the benefits of MRR, or possibly a reliance on alternative methods for data quality assurance.

Recommendation: Acknowledging the efficacy of MRR in ensuring accuracy and completeness in encounter data, HSAG recommends that **Northern Michigan Regional Entity** evaluates the feasibility and potential benefits of integrating MRR into its data quality checks. This could enhance the reliability and thoroughness of its data assessment process.

Administrative Profile Conclusions

Strengths

Strength #1: Northern Michigan Regional Entity displayed timely submission of professional encounters after payment date, with 99.6 percent of encounters submitted within 60 days.

Strength #2: Across all encounters, most key data elements for **Northern Michigan Regional Entity** were populated at high rates, and the majority of data elements were over 99 percent valid.

Opportunities for Improvement

Weakness #1: Northern Michigan Regional Entity did not submit institutional encounters timely, where 40.4 percent of institutional encounters were submitted within 60 days of payment and 65.1 percent of encounters were submitted within 360 days.

Why the weakness exists: The timely submission of encounters is crucial to guarantee that conducted analyses include comprehensive data. Failure to submit encounters in a timely manner may lead to incomplete analyses and inaccurate results.

Recommendation: **Northern Michigan Regional Entity** should monitor its encounter data submission to MDHHS to ensure encounters are submitted after payment.

Weakness #2: The member ID field had lower than expected validity rates in both professional and institutional data, with a validity rate of 96.0 percent and 92.2 percent, respectively. Additionally, 95.5 percent of members with a medical encounter were identified in the enrollment file. Combined, these findings suggest that **Northern Michigan Regional Entity**'s enrollment data may not be complete.

Why the weakness exists: Linking datasets to each other to pull in additional information (i.e., enrollment start date or enrollment end date) may be important in subsequent analyses. Additionally, members identified in the encounter file should be enrolled on the date the service occurred.

Recommendation: **Northern Michigan Regional Entity** should collaborate with MDHHS to ensure both entities have an accurate and complete database of enrolled members.

Administrative Profile Results—Tabular Data

Encounter Data Summary

Member Composition

Table E-2 presents the member composition.

Table E-2—Age and Gender Distribution—Northern Michigan Regional Entity

Age Category	Number of Females	Number of Males
Infant (less than 1 year)	1,290	1,323
Age 1–3 years	4,375	4,624
Age 4–7 years	6,007	6,303
Age 8–12 years	7,310	7,663
Age 13–17 years	7,229	7,513
Age 18–24 years	9,538	8,429
Age 25–34 years	13,703	10,146
Age 35–44 years	11,594	9,823
Age 45–54 years	8,091	7,482
Age 55–64 years	9,356	8,628
Age 65 and over	7,023	4,691
Total	85,516	76,625

Encounter Data Completeness

Encounter Volume by Service Month

Table E-3 and Table E-4 display the encounter volume by service month.

Table E-3—Encounter Volume: Professional Encounters—Northern Michigan Regional Entity

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	16,847	143,416	117.5
November 2021	16,717	144,321	115.8
December 2021	17,093	145,436	117.5
January 2022	17,779	146,359	121.5
February 2022	17,075	146,819	116.3
March 2022	18,779	147,418	127.4

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
April 2022	18,709	147,981	126.4
May 2022	18,438	148,500	124.2
June 2022	18,773	149,010	126.0
July 2022	17,662	149,708	118.0
August 2022	19,131	150,560	127.1
September 2022	18,744	151,204	124.0

Table E-4—Encounter Volume: Institutional Encounters—Northern Michigan Regional Entity

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	139	143,416	1.0
November 2021	154	144,321	1.1
December 2021	122	145,436	0.8
January 2022	114	146,359	0.8
February 2022	120	146,819	0.8
March 2022	131	147,418	0.9
April 2022	131	147,981	0.9
May 2022	143	148,500	1.0
June 2022	129	149,010	0.9
July 2022	134	149,708	0.9
August 2022	149	150,560	1.0
September 2022	157	151,204	1.0

Payment Amounts Per Member Per Month

Table E-5 and Table E-5 display the monthly payment amounts PMPM by service month.

Table E-5—Paid Amount PMPM: Professional Encounters—Northern Michigan Regional Entity

Month of Service	Number of MM	Paid Amount PMPM
October 2021	143,416	\$93.36
November 2021	144,321	\$90.73
December 2021	145,436	\$91.12
January 2022	146,359	\$88.73
February 2022	146,819	\$82.26

Month of Service	Number of MM	Paid Amount PMPM
March 2022	147,418	\$93.67
April 2022	147,981	\$94.43
May 2022	148,500	\$91.64
June 2022	149,010	\$89.90
July 2022	149,708	\$86.84
August 2022	150,560	\$92.78
September 2022	151,204	\$93.14

Table E-6—Paid Amount PMPM: Institutional Encounters—Northern Michigan Regional Entity

Month of Service	Number of MM	Paid Amount PMPM
October 2021	143,416	\$5.81
November 2021	144,321	\$7.17
December 2021	145,436	\$6.01
January 2022	146,359	\$6.10
February 2022	146,819	\$6.23
March 2022	147,418	\$6.72
April 2022	147,981	\$6.70
May 2022	148,500	\$7.13
June 2022	149,010	\$7.08
July 2022	149,708	\$6.89
August 2022	150,560	\$11.53
September 2022	151,204	\$8.24

Percentage of Duplicate Encounters

Table E-7 displays the percentage of duplicate encounters by category of service.

Table E-7—Percentage of Duplicate Encounters by Category of Service—Northern Michigan Regional Entity

Category of Service	Number of Duplicate Records	Percentage of Duplicate Records
Professional	12,914	1.5%
Institutional	1	<0.1%

Encounter Data Timeliness

Encounter Data Lag Triangles

Table E-8 and Table E-9 display the lag triangles between service month and submission month to MDHHS. For conciseness, lag triangles only include encounters submitted through April 2023 (a minimum of a seven-month lag); therefore, counts displayed in the total line may not equal counts displayed in encounter volume figures.

Table E-8—Encounter Data Lag Triangle: Professional Encounters—Northern Michigan Regional Entity

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	13,782	11											13,793
202112	1,127	9,241	970										11,338
202201	1,803	7,390	14,892	14									24,099
202202	530	813	1,411	16,110	4								18,868
202203	166	159	435	2,122	16,198	35							19,115
202204	267	168	371	549	1,238	17,864	29						20,486
202205	226	155	34	286	374	1,561	16,974	10					19,620
202206	21	176	265	203	329	469	1,903	14,922	22				18,310
202207	30	41	58	106	364	446	931	4,218	16,992	20			23,206
202208	15	17	31	21	35	90	165	517	2,856	16,292	37		20,076
202209	48	40	33	37	48	65	264	302	497	2,116	18,116	32	21,598
202210	18	32	36	47	72	61	51	99	326	571	2,289	18,177	21,779
202211	44	34	49	79	82	106	128	134	206	293	667	1,905	3,727
202212	11	7	6	3	5	11	9	9	19	23	33	208	344
202301	78	101	87	93	74	109	124	142	162	108	167	439	1,684
202302	0	0	0	0	1	1	3	6	5	6	7	14	43
202303	0	0	0	0	0	0	0	0	0	0	0	0	0
202304	0	0	0	0	0	2	0	3	2	2	5	7	21
Total	18,166	18,385	18,678	19,670	18,824	20,820	20,581	20,362	21,087	19,431	21,321	20,782	238,107
MM	143,416	144,321	145,436	146,359	146,819	147,418	147,981	148,500	149,010	149,708	150,560	151,204	1,770,732
PMPM	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.13	0.14	0.14	0.13

Table E-9—Encounter Data Lag Triangle: Institutional Encounters—Northern Michigan Regional Entity

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	7	0											7
202112	14	23	1										38
202201	16	23	13	0									52
202202	5	11	12	13	1								42
202203	7	5	10	13	34	1							70
202204	0	2	1	8	12	27	4						54
202205	0	1	1	0	2	11	18	1					34
202206	0	1	0	1	2	4	15	28	1				52
202207	1	2	0	0	2	1	6	19	24	2			57
202208	0	0	0	0	2	0	2	5	4	35	6		54
202209	0	1	1	1	0	3	0	2	7	12	14	3	44
202210	0	1	0	1	0	0	1	0	3	5	17	24	52
202211	1	0	0	0	0	1	0	2	0	2	7	31	44
202212	0	0	0	0	0	0	3	5	0	1	1	1	11
202301	0	0	0	0	0	0	0	0	2	1	4	5	12
202302	0	0	0	0	0	0	0	0	0	0	0	0	0
202303	4	2	1	3	3	2	0	1	1	5	2	3	27
202304	13	10	11	12	14	12	14	15	13	13	12	19	158
Total	68	82	51	52	72	62	63	78	55	76	63	86	808
MM	143,416	144,321	145,436	146,359	146,819	147,418	147,981	148,500	149,010	149,708	150,560	151,204	1,770,732
PMPM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Field-Level Completeness and Accuracy

Table E-10 and Table E-11 provide the percentage of encounters that are present and contain valid values for key data elements for all categories of service.

Table E-10—Key Encounter Data Elements: Professional Encounters—Northern Michigan Regional Entity

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	238,143	238,143	100.0%	238,143	228,527	96.0%
Header Service From Date	238,143	238,143	100.0%	238,143	238,143	100.0%
Header Service To Date	238,143	238,143	100.0%	238,143	238,143	100.0%
Detail Service From Date	851,657	851,657	100.0%	851,657	851,657	100.0%
Detail Service To Date	851,657	851,657	100.0%	851,657	851,657	100.0%
Billing Provider NPI	238,143	172,170	72.3%	172,170	172,170	100.0%
Rendering Provider NPI	238,143	92,702	38.9%	92,702	92,702	100.0%
Referring Provider NPI	238,143	0	0.0%	0	0	NA
Rendering Provider Taxonomy Code	238,143	0	0.0%	0	0	NA
Primary Diagnosis Codes	238,143	238,143	100.0%	238,143	238,143	100.0%
Secondary Diagnosis Codes	238,143	450	0.2%	996	996	100.0%
CPT/HCPCS Codes	851,657	851,657	100.0%	851,657	851,657	100.0%
CPT/HCPCS Codes with PTP Edits	850,032	850,032	100.0%	850,032	847,434	99.7%
NDCs	851,657	0	0.0%	0	0	NA
Submit Date	851,657	851,657	100.0%	851,657	851,657	100.0%
PIHP Paid Date	851,657	851,657	100.0%	851,657	851,657	100.0%
Header Paid Amount	238,143	238,143	100.0%	238,143	238,143	100.0%
Detail Paid Amount	851,657	851,657	100.0%	851,657	851,657	100.0%
Header TPL Paid Amount	238,143	238,143	100.0%	238,143	238,100	>99.9%
Detail TPL Paid Amount	851,657	851,657	100.0%	851,657	851,657	100.0%

Table E-11—Key Encounter Data Elements: Institutional Encounters—Northern Michigan Regional Entity

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	1,635	1,635	100.0%	1,635	1,508	92.2%
Header Service From Date	1,635	1,635	100.0%	1,635	1,635	100.0%
Header Service To Date	1,635	1,635	100.0%	1,635	1,635	100.0%
Detail Service From Date	2,525	2,525	100.0%	2,525	2,525	100.0%
Detail Service To Date	2,525	2,525	100.0%	2,525	2,525	100.0%
Billing Provider NPI	1,635	1,625	99.4%	1,625	1,625	100.0%
Attending Provider NPI	1,635	0	0.0%	0	0	NA
Referring Provider NPI	1,635	0	0.0%	0	0	NA
Attending Provider Taxonomy Code	1,635	0	0.0%	0	0	NA
Primary Diagnosis Codes	1,635	1,635	100.0%	1,635	1,635	100.0%
Secondary Diagnosis Codes	1,635	488	29.8%	1,082	1,082	100.0%
CPT/HCPCS Codes	2,525	1	<0.1%	1	1	100.0%
CPT/HCPCS Codes with PTP Edits	1	1	100.0%	1	0	0.0%
Primary Surgical Procedure Codes	1,635	0	0.0%	0	0	NA
Secondary Surgical Procedure Codes	1,635	0	0.0%	0	0	NA
Revenue Codes	2,525	2,525	100.0%	2,525	2,525	100.0%
DRG Codes	1,635	1,544	94.4%	1,544	1,544	100.0%
Type of Bill Codes	1,635	1,635	100.0%	1,635	1,635	100.0%
NDCs	2,525	0	0.0%	0	0	NA
Submit Date	2,525	2,525	100.0%	2,525	2,525	100.0%
PIHP Paid Date	2,525	2,525	100.0%	2,525	2,525	100.0%
Header Paid Amount	1,635	1,635	100.0%	1,635	1,635	100.0%
Detail Paid Amount	2,525	2,525	100.0%	2,525	2,525	100.0%
Header TPL Paid Amount	1,635	1,635	100.0%	1,635	1,631	99.8%
Detail TPL Paid Amount	2,525	2,525	100.0%	2,525	2,525	100.0%

Appendix F. Results for Region 3—Lakeshore Regional Entity

Appendix F contains the IS review and administrative profile results, strengths, weaknesses, and recommendations, as applicable, that HSAG identified from the EDV study for **Lakeshore Regional Entity**.

IS Review Findings

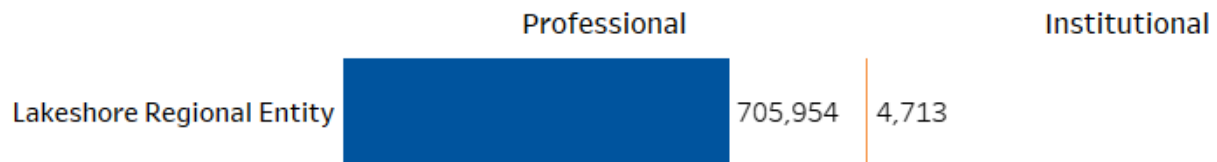
Please refer to Section 3: Information Systems Review Findings for **Lakeshore Regional Entity**'s specific findings, if any.

Administrative Profile Results

Encounter Data Summary

Figure F-1 displays the number of encounters by category of service.

Figure F-1—Number of Paid Encounters by Category of Service—Lakeshore Regional Entity



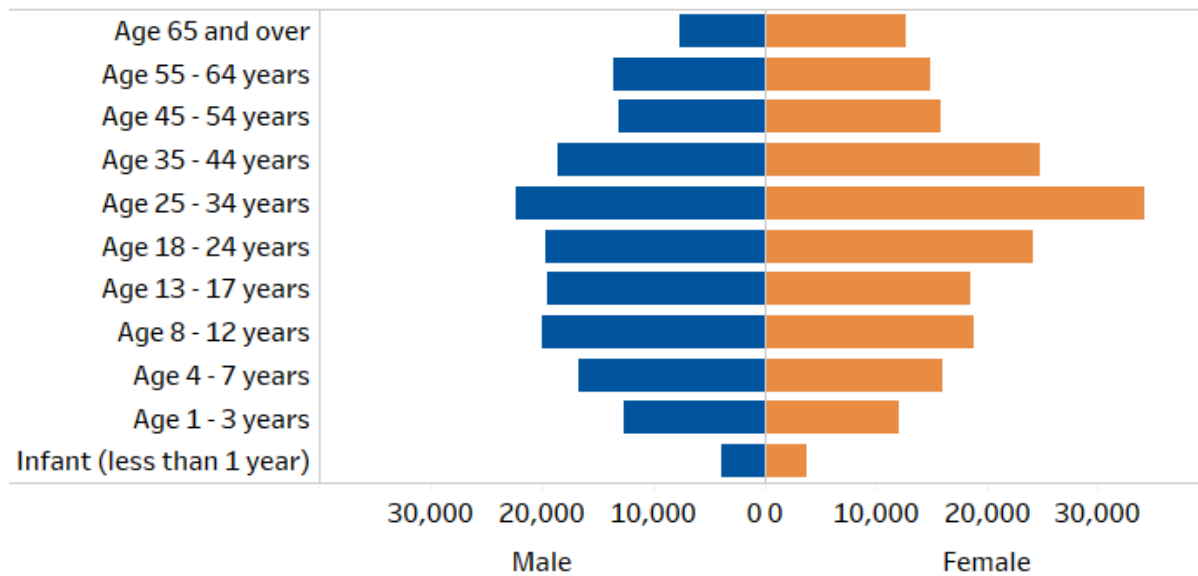
Member Composition

Figure F-2 and Figure F-3 display member demographics.

Figure F-2—Enrollment in SFY 2023—Lakeshore Regional Entity



Figure F-3—Age and Gender Distribution—Lakeshore Regional Entity

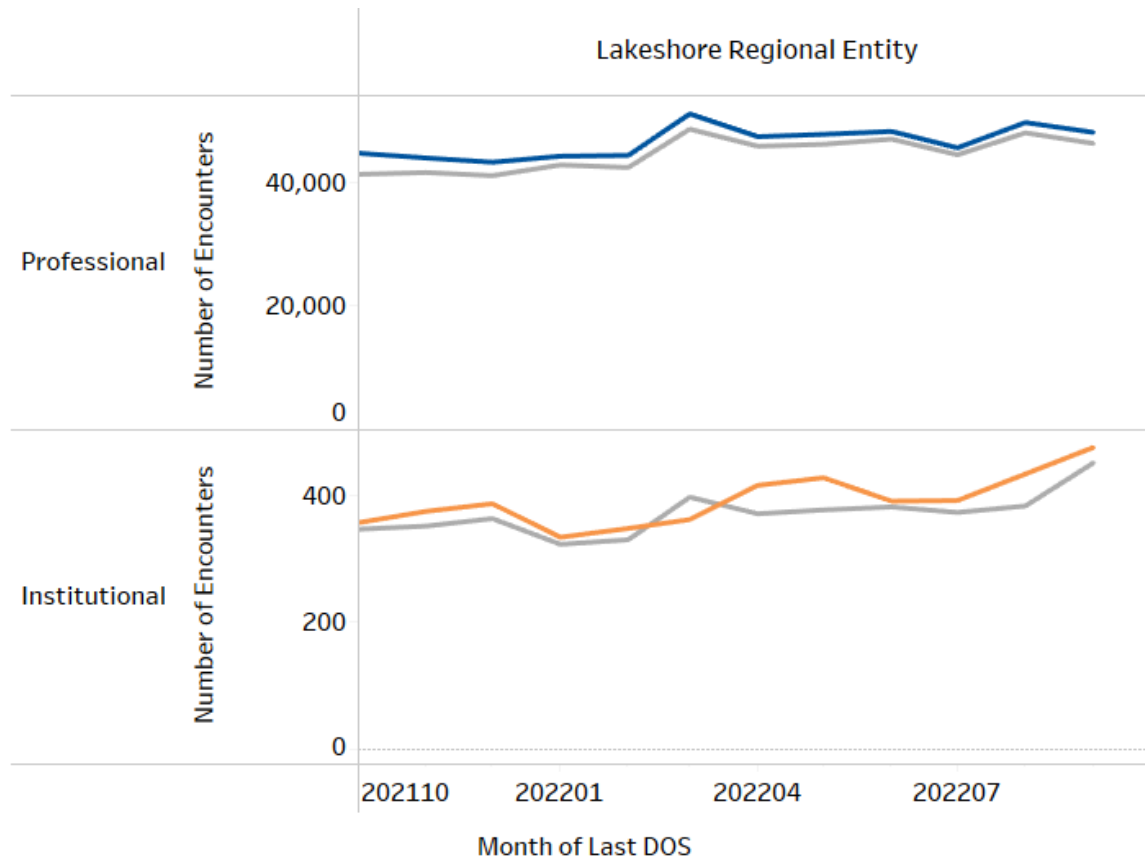


Encounter Data Completeness

Encounter Volume by Service Month

Figure F-4 displays the monthly encounter volume by service month and category of service.

Figure F-4—Encounter Volume by Service Month—Lakeshore Regional Entity

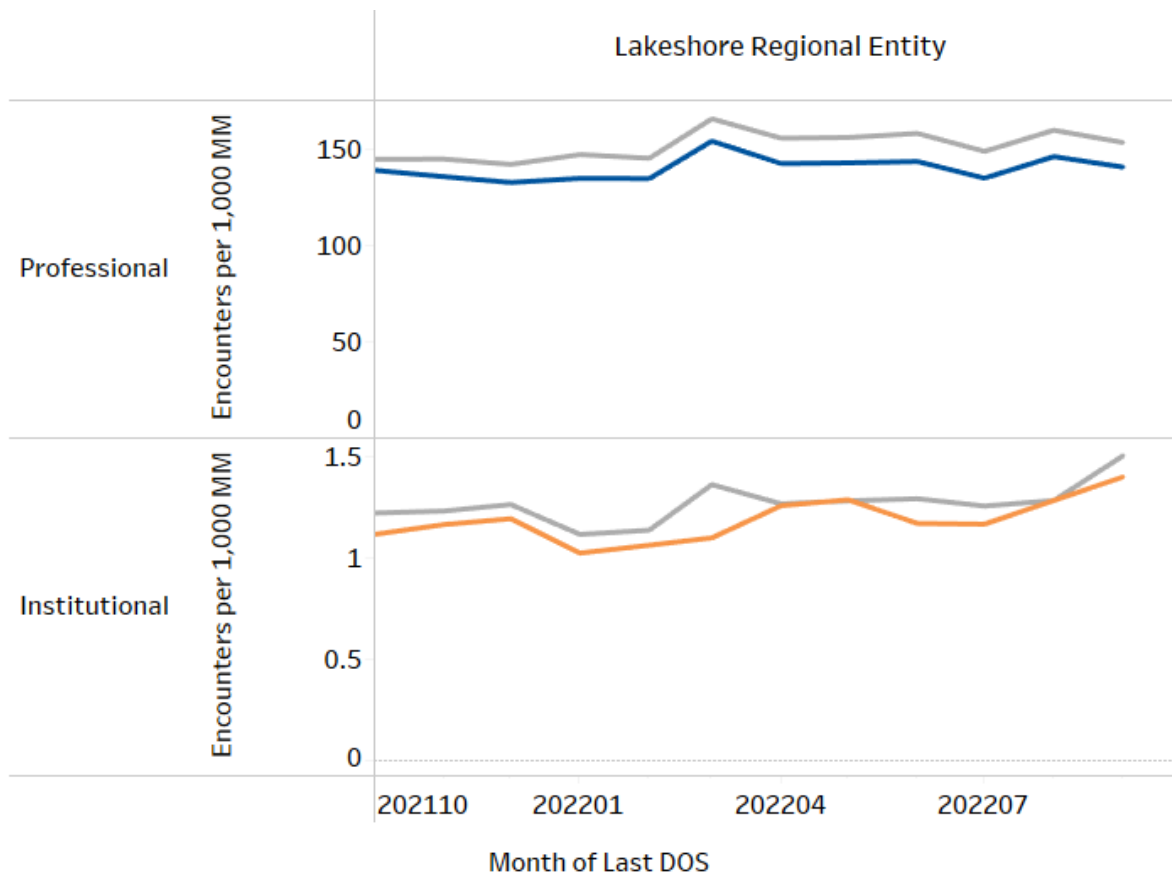


Note: The grey line indicates the all PIHP rate.

Encounter Volume Per 1,000 Member Months

Figure F-5 displays the monthly encounter volume per 1,000 MM by service month and category of service.

Figure F-5—Encounter Volume per 1,000 MM—Lakeshore Regional Entity

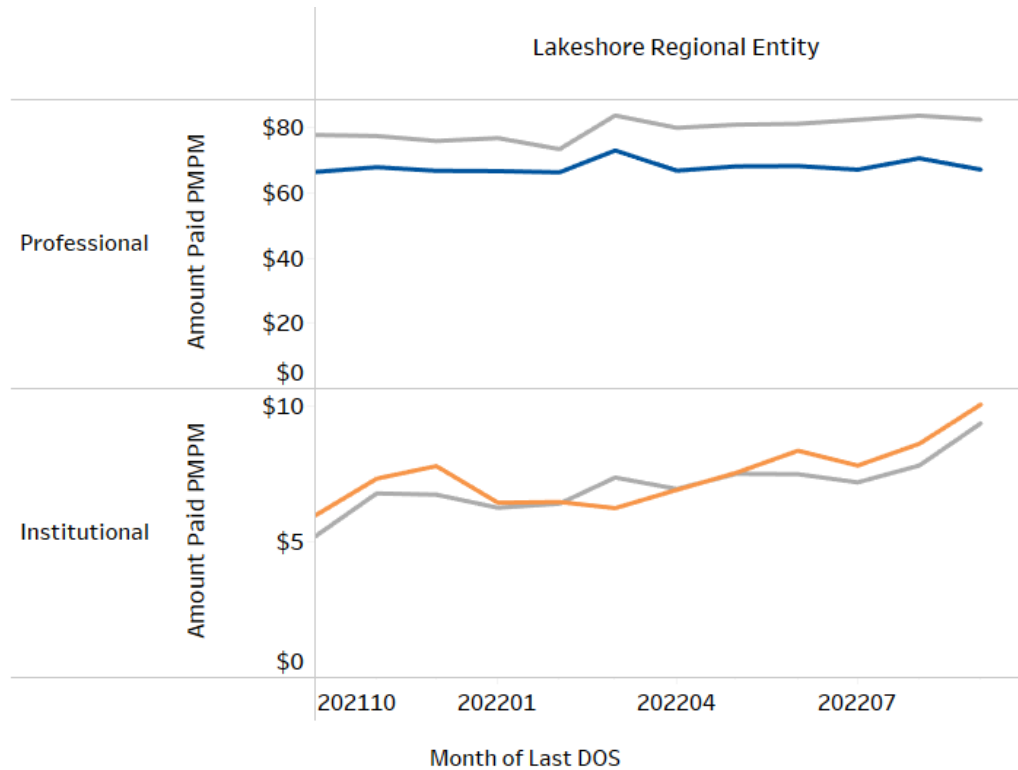


Note: The grey line indicates the all PIHP rate.

Payment Amounts Per Member Per Month

Figure F-6 displays the monthly payment amounts PMPM by service month and category of service.

Figure F-6—Paid Amount PMPM—Lakeshore Regional Entity

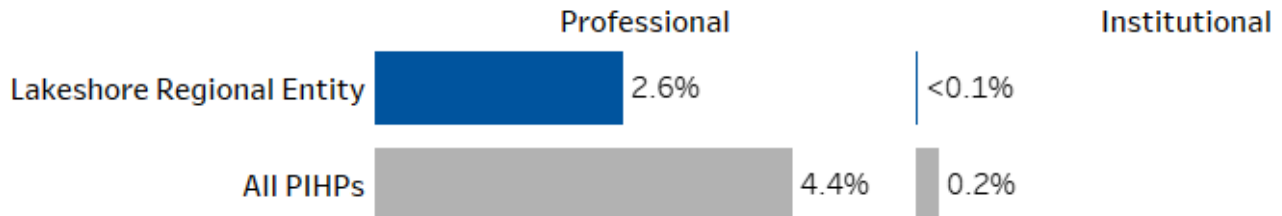


Note: The grey line indicates the all PIHP rate.

Percentage of Duplicate Encounters

Figure F-7 displays the percentage of duplicate encounters.

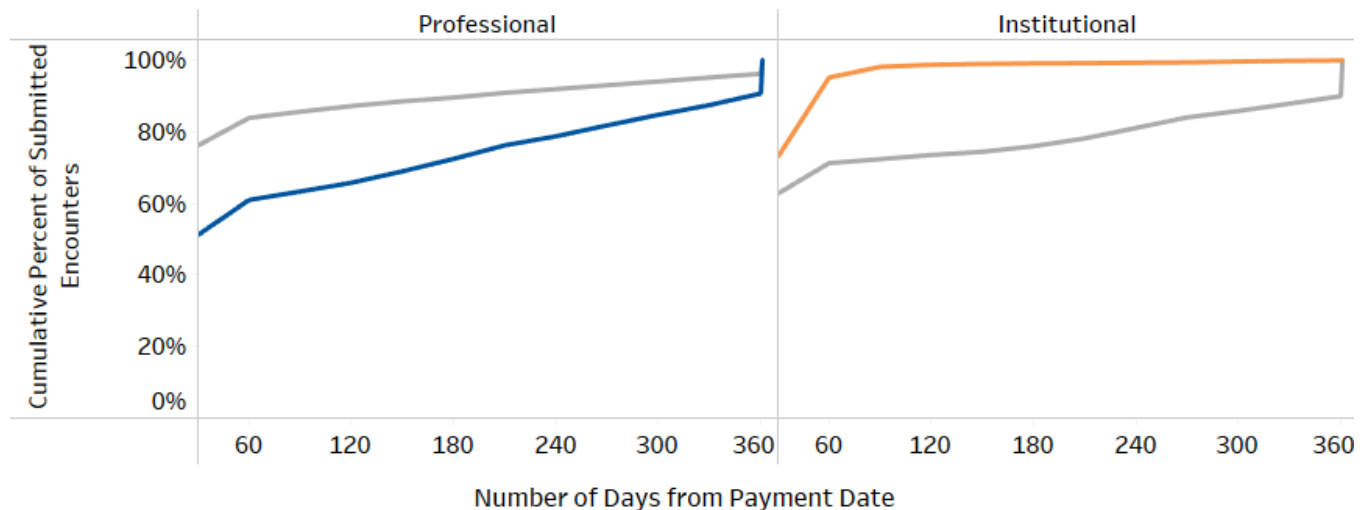
Figure F-7—Percentage of Duplicate Encounters—Lakeshore Regional Entity



Encounter Data Timeliness

Figure F-8 and Table F-1 show the cumulative percentage of encounters submitted to MDHHS from the payment date by category of service.

Figure F-8—Cumulative Percentage of Encounters Submitted to MDHHS From PIHP Payment Date by Category of Service—Lakeshore Regional Entity



Note: The grey line indicates the all PIHP rate.

Table F-1—Completeness of Encounters by Category of Service—Lakeshore Regional Entity

Number of Days From Payment Date	Cumulative Percentage of Submitted Professional Encounters	Cumulative Percentage of Submitted Institutional Encounters
Submitted Within 30 Days	51.1%	72.9%
Submitted Within 60 Days	60.9%	95.0%
Submitted Within 90 Days	63.2%	98.0%
Submitted Within 120 Days	65.7%	98.6%
Submitted Within 150 Days	68.9%	98.8%
Submitted Within 180 Days	72.3%	99.0%
Submitted Within 210 Days	76.1%	99.0%
Submitted Within 240 Days	78.7%	99.2%
Submitted Within 270 Days	81.7%	99.3%
Submitted Within 300 Days	84.6%	99.5%
Submitted Within 330 Days	87.4%	99.7%
Submitted Within 360 Days	90.6%	99.8%
Submitted After 360 Days	100.0%	100.0%

Field-Level Completeness and Accuracy

Figure F-9 and Figure F-10 provide the percentage of encounters that are present and contain valid values for key data elements.

Figure F-9—Key Professional Encounter Data Elements—Lakeshore Regional Entity

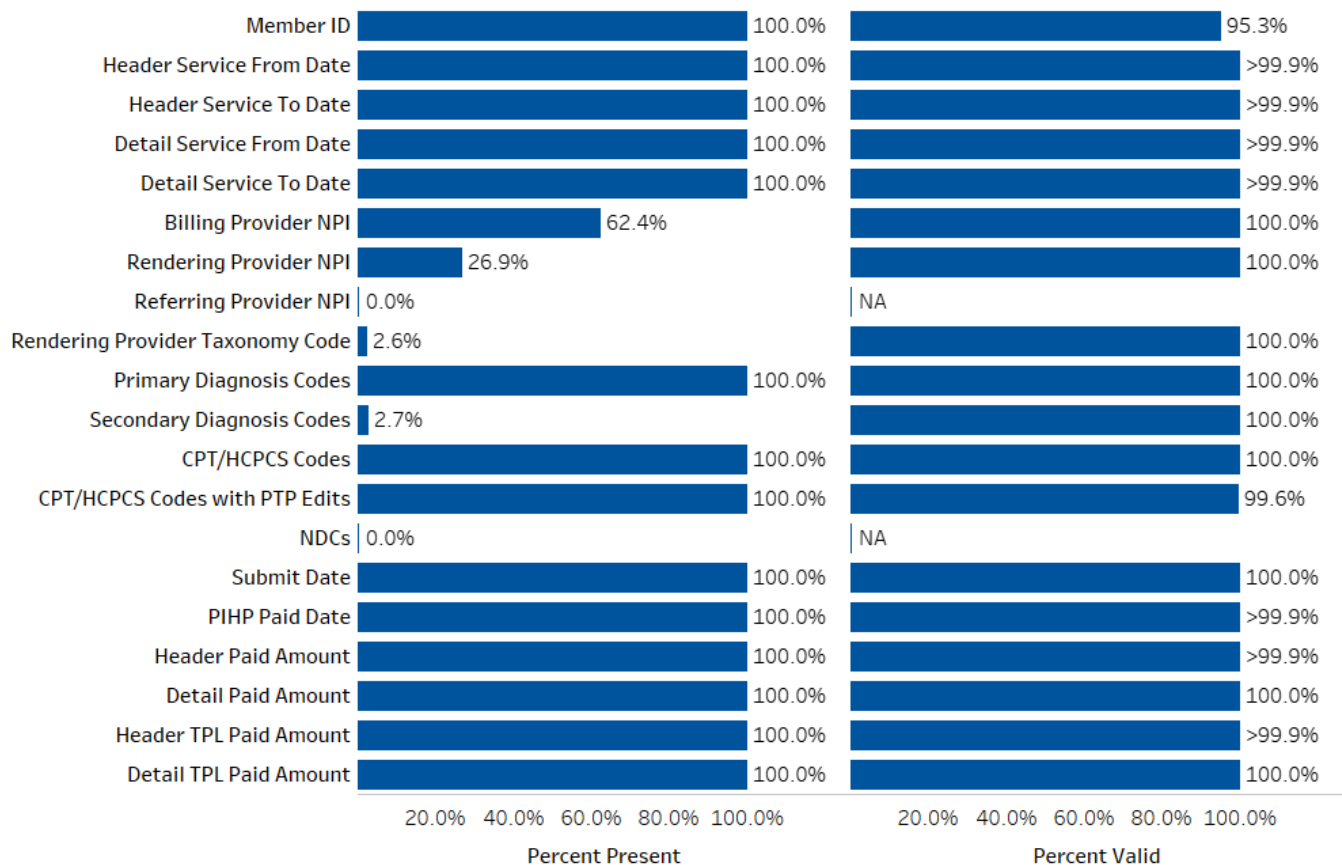
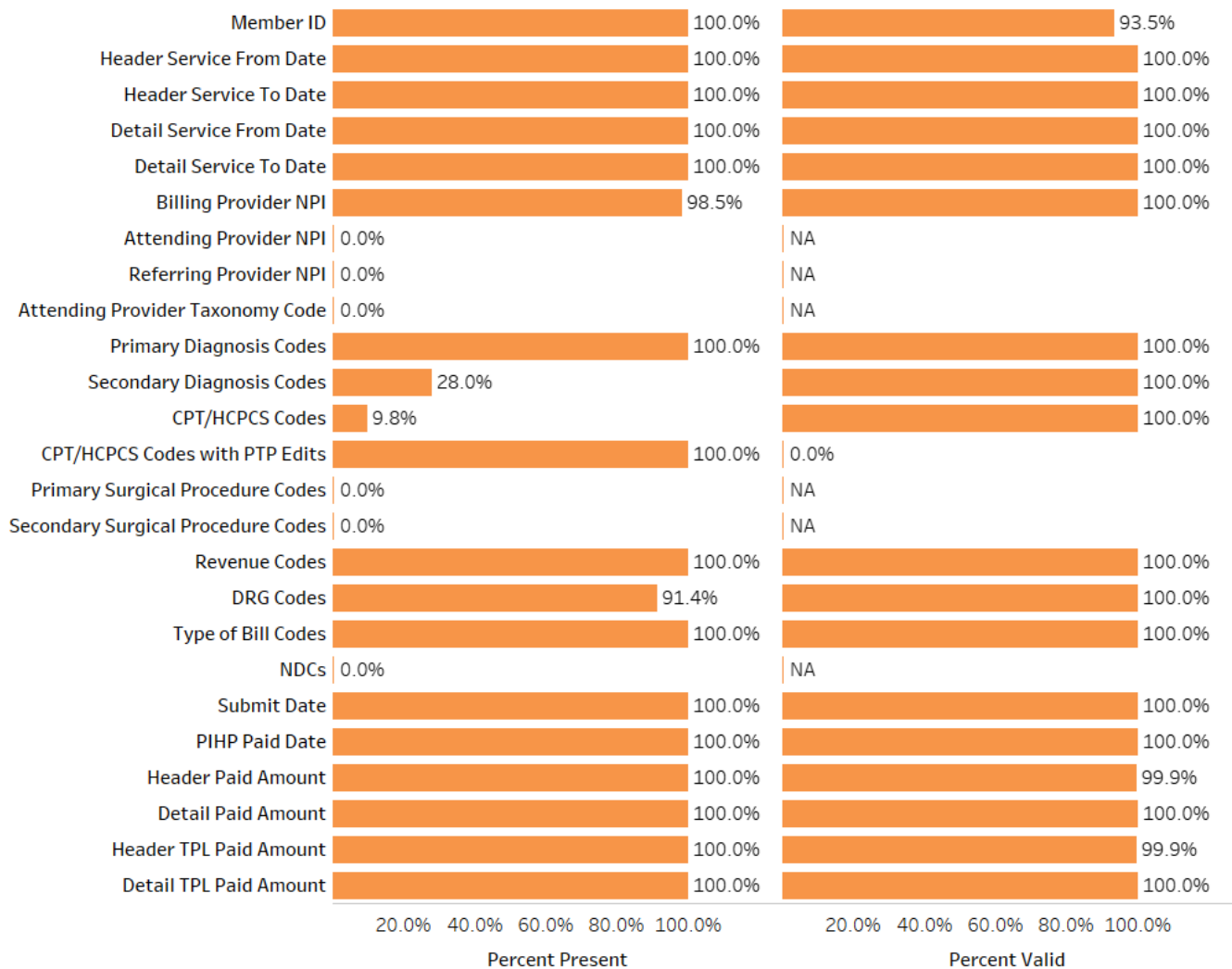


Figure F-10—Key Institutional Encounter Data Elements—Lakeshore Regional Entity



Encounter Data Referential Integrity

Figure F-11 and Figure F-12 display the referential integrity results.

Figure F-11—Referential Integrity Comparison Between Enrollment and Medical Encounter Files—Lakeshore Regional Entity

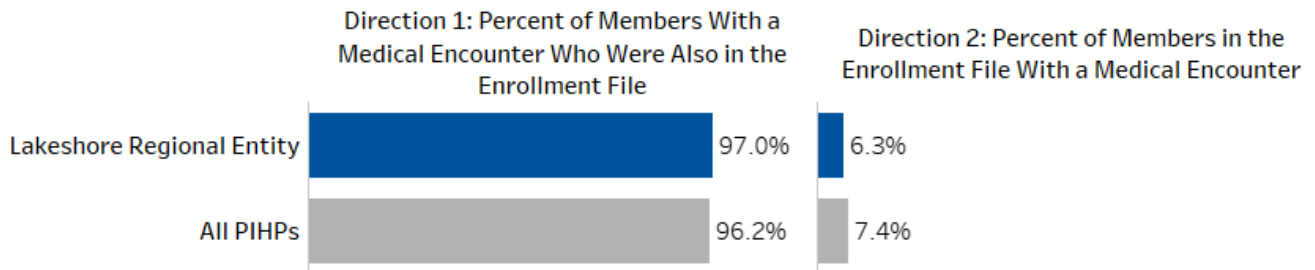
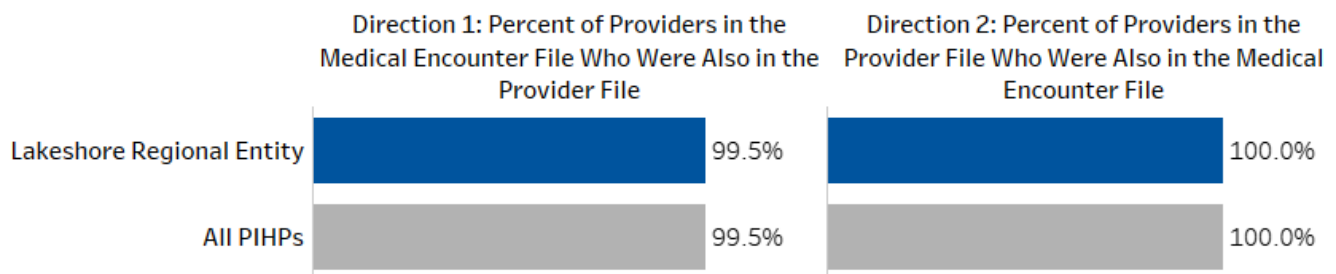


Figure F-12—Referential Integrity Comparison Between Medical Encounter and Provider Files—Lakeshore Regional Entity

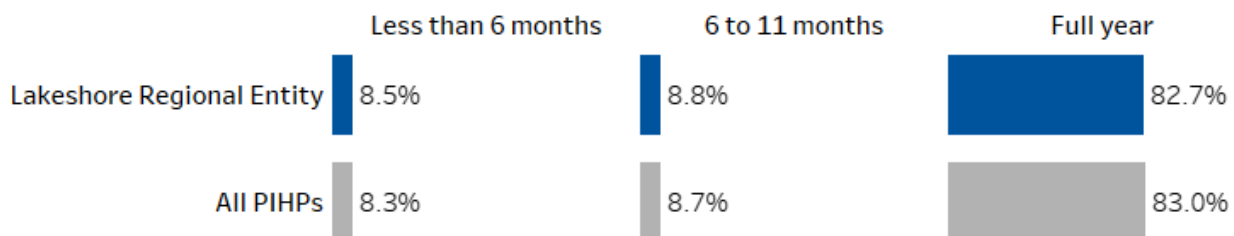


Encounter Data Logic

Member Enrollment

Figure F-13 displays the percentage of members who were continuously enrolled.

Figure F-13—Percentage of Members Who Were Continuously Enrolled—Lakeshore Regional Entity



Conclusions

Based on the examination of the IS review and administrative profile outcomes in Section 3 and Section 4, respectively, for **Lakeshore Regional Entity**, HSAG identified the following areas of strength, opportunities for improvement, and recommendations.

IS Review Conclusions

Strengths

Strength #1: Lakeshore Regional Entity demonstrated its capability to collect, process, and transmit encounter data to MDHHS. The PIHP has also established data review and correction processes that efficiently address quality concerns identified by MDHHS.

Strength #2: Lakeshore Regional Entity has a robust system for monitoring encounter data submissions designed to oversee the accuracy, completeness, and timeliness of encounter data, which includes encounter data submissions from its own data warehouse and directly from its subcontractors.

Strength #3: While MRR can be labor- and resource-intensive process for conducting data quality checks, **Lakeshore Regional Entity** indicated its usage as a method for assessing its subcontractors' data. The use of this method enhances the reliability, accuracy, and contextual understanding of its subcontractors' encounter data. This reflects **Lakeshore Regional Entity**'s commitment to delivering high-quality healthcare data.

Opportunities for Improvement

Weakness #1: Lakeshore Regional Entity modified encounters from its subcontractors before submitting them to MDHHS.

Why the weakness exists: Since modifications were made to the subcontractors' encounters, it is essential to communicate these changes to each entity involved to maintain data integrity.

Recommendation: **Lakeshore Regional Entity** should collaborate with MDHHS to confirm that the identified changes do not require adjustments to be sent back to the subcontractors.

Administrative Profile Conclusions

Strengths

Strength #1: Lakeshore Regional Entity displayed timely submission of institutional encounters after payment date, with 95 percent of encounters submitted within 60 days.

Strength #2: Across all encounters, most key data elements for **Lakeshore Regional Entity** were populated at high rates, and the majority of data elements were over 99 percent valid.

Opportunities for Improvement

Weakness #1: Lakeshore Regional Entity did not submit professional encounters timely, where 60.9 percent of professional encounters were submitted within 60 days of payment, and not reaching greater than 90 percent of professional encounters submitted until within 360 days of payment.

Why the weakness exists: The timely submission of encounters is crucial to guarantee that conducted analyses include comprehensive data. Failure to submit encounters in a timely manner may lead to incomplete analyses and inaccurate results.

Recommendation: Lakeshore Regional Entity should monitor its encounter data submission to MDHHS to ensure encounters are submitted after payment.

Weakness #2: The member ID field had lower than expected validity rates in both professional and institutional data, with a validity rate of 95.3 percent and 93.5 percent, respectively. Additionally, 97 percent of members with a medical encounter were identified in the enrollment file. Combined, these findings suggest that **Lakeshore Regional Entity**'s enrollment data may not be complete.

Why the weakness exists: Linking datasets to each other to pull in additional information (i.e., enrollment start date or enrollment end date) may be important in subsequent analyses. Additionally, members identified in the encounter file should be enrolled on the date the service occurred.

Recommendation: Lakeshore Regional Entity should collaborate with MDHHS to ensure both entities have an accurate and complete database of enrolled members.

Weakness #3: Although not required to be populated, 62.4 percent and 26.9 percent of professional encounters contained a billing provider NPI and a rendering provider NPI, respectively.

Why the weakness exists: Billing and rendering provider information is important for proper provider identification.

Recommendation: Lakeshore Regional Entity should determine the completeness of key provider data elements by implementing quality checks to ensure these fields are populated.

Administrative Profile Results—Tabular Data

Encounter Data Summary

Member Composition

Table F-2 presents the member composition.

Table F-2—Age and Gender Distribution—Lakeshore Regional Entity

Age Category	Number of Females	Number of Males
Infant (less than 1 year)	3,796	3,924
Age 1–3 years	12,131	12,621
Age 4–7 years	15,937	16,715
Age 8–12 years	18,900	20,026
Age 13–17 years	18,478	19,486
Age 18–24 years	24,127	19,733
Age 25–34 years	34,210	22,321
Age 35–44 years	24,742	18,607
Age 45–54 years	15,915	13,095
Age 55–64 years	14,912	13,535
Age 65 and over	12,703	7,655
Total	195,851	167,718

Encounter Data Completeness

Encounter Volume by Service Month

Table F-3 and Table F-4 display the encounter volume by service month.

Table F-3—Encounter Volume: Professional Encounters—Lakeshore Regional Entity

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	44,621	320,592	139.2
November 2021	43,847	322,744	135.9
December 2021	43,166	324,963	132.8
January 2022	44,138	327,021	135.0
February 2022	44,271	328,282	134.9
March 2022	50,958	330,147	154.3

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
April 2022	47,288	331,425	142.7
May 2022	47,664	333,200	143.0
June 2022	48,135	334,907	143.7
July 2022	45,489	336,751	135.1
August 2022	49,568	338,821	146.3
September 2022	47,974	340,660	140.8

Table F-4—Encounter Volume: Institutional Encounters—Lakeshore Regional Entity

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	357	320,592	1.1
November 2021	375	322,744	1.2
December 2021	387	324,963	1.2
January 2022	334	327,021	1.0
February 2022	348	328,282	1.1
March 2022	362	330,147	1.1
April 2022	416	331,425	1.3
May 2022	428	333,200	1.3
June 2022	391	334,907	1.2
July 2022	392	336,751	1.2
August 2022	434	338,821	1.3
September 2022	476	340,660	1.4

Payment Amounts Per Member Per Month

Table F-5 and Table F-6 display the monthly payment amounts PMPM by service month.

Table F-5—Paid Amount PMPM: Professional Encounters—Lakeshore Regional Entity

Month of Service	Number of MM	Paid Amount PMPM
October 2021	320,592	\$66.42
November 2021	322,744	\$67.89
December 2021	324,963	\$66.79
January 2022	327,021	\$66.69
February 2022	328,282	\$66.32

Month of Service	Number of MM	Paid Amount PMPM
March 2022	330,147	\$73.02
April 2022	331,425	\$66.83
May 2022	333,200	\$68.15
June 2022	334,907	\$68.25
July 2022	336,751	\$67.13
August 2022	338,821	\$70.63
September 2022	340,660	\$67.14

Table F-6—Paid Amount PMPM: Institutional Encounters—Lakeshore Regional Entity

Month of Service	Number of MM	Paid Amount PMPM
October 2021	320,592	\$5.95
November 2021	322,744	\$7.31
December 2021	324,963	\$7.78
January 2022	327,021	\$6.43
February 2022	328,282	\$6.46
March 2022	330,147	\$6.23
April 2022	331,425	\$6.90
May 2022	333,200	\$7.53
June 2022	334,907	\$8.34
July 2022	336,751	\$7.79
August 2022	338,821	\$8.60
September 2022	340,660	\$10.04

Percentage of Duplicate Encounters

Table F-7 displays the percentage of duplicate encounters by category of service.

Table F-7—Percentage of Duplicate Encounters by Category of Service—Lakeshore Regional Entity

Category of Service	Number of Duplicate Records	Percentage of Duplicate Records
Professional	37,377	2.6%
Institutional	1	<0.1%

Encounter Data Timeliness

Encounter Data Lag Triangles

Table F-8 and Table F-9 display the lag triangles between service month and submission month to MDHHS. For conciseness, lag triangles only include encounters submitted through April 2023 (a minimum of a seven-month lag); therefore, counts displayed in the total line may not equal counts displayed in encounter volume figures.

Table F-8—Encounter Data Lag Triangle: Professional Encounters—Lakeshore Regional Entity

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	18,267	1,840											20,107
202112	317	3,802	0										4,119
202201	6,240	18,882	10,554	2,149									37,825
202202	6,608	5,501	17,827	18,304	3,909								52,149
202203	488	609	1,546	9,712	23,813	6,049							42,217
202204	2,769	2,902	2,957	3,236	5,668	23,791	5,729						47,052
202205	155	235	238	436	831	8,108	25,990	6,148					42,141
202206	760	758	254	560	603	1,306	5,149	24,761	4,988				39,139
202207	214	170	164	227	265	485	911	4,736	28,317	7,490			42,979
202208	235	290	307	336	406	377	432	887	3,536	24,081	5,838		36,725
202209	605	581	543	482	244	355	250	350	677	2,805	19,420	7,919	34,231
202210	118	122	109	97	103	273	186	276	429	1,392	11,988	12,643	27,736
202211	279	314	323	427	574	620	561	569	635	815	1,962	10,043	17,122
202212	128	107	104	137	105	128	189	209	184	255	1,821	8,405	11,772
202301	3,598	3,554	3,173	3,330	3,346	3,852	3,309	3,317	3,217	3,051	3,304	3,180	40,231
202302	15,312	15,590	16,730	16,780	15,815	18,457	16,993	19,062	19,115	18,166	18,676	18,387	209,083
202303	44	26	13	25	67	54	36	24	41	45	116	77	568
202304	8	18	15	22	14	25	23	29	36	37	68	51	346
Total	56,145	55,301	54,857	56,260	55,763	63,880	59,758	60,368	61,175	58,137	63,193	60,705	705,542
MM	320,592	322,744	324,963	327,021	328,282	330,147	331,425	333,200	334,907	336,751	338,821	340,660	3,969,513
PMPM	0.18	0.17	0.17	0.17	0.17	0.19	0.18	0.18	0.18	0.17	0.19	0.18	0.18

Table F-9—Encounter Data Lag Triangle: Institutional Encounters—Lakeshore Regional Entity

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	59	0											59
202112	2	0	0										2
202201	113	185	129	23									450
202202	109	52	56	47	20								284
202203	51	108	140	112	117	19							547
202204	0	6	3	18	23	56	17						123
202205	9	12	28	91	148	190	224	21					723
202206	0	1	2	6	9	27	64	205	23				337
202207	3	4	3	10	5	19	56	112	247	27			486
202208	2	0	0	9	6	19	16	33	64	237	62		448
202209	1	1	2	3	4	5	7	19	18	62	223	29	374
202210	3	1	6	4	2	4	14	12	22	30	76	271	445
202211	0	4	5	2	7	4	5	9	4	13	33	78	164
202212	1	1	1	0	1	3	0	6	3	6	13	19	54
202301	1	1	2	1	1	4	0	3	3	8	19	63	106
202302	0	0	5	3	3	9	11	4	1	3	3	7	49
202303	0	0	0	1	0	0	0	0	0	0	1	1	3
202304	0	0	0	1	0	0	0	0	0	1	2	5	9
Total	354	376	382	331	346	359	414	424	385	387	432	473	4,663
MM	320,592	322,744	324,963	327,021	328,282	330,147	331,425	333,200	334,907	336,751	338,821	340,660	3,969,513
PMPM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Field-Level Completeness and Accuracy

Table F-10 and Table F-11 provide the percentage of encounters that are present and contain valid values for key data elements for all categories of service.

Table F-10—Key Encounter Data Elements: Professional Encounters—Lakeshore Regional Entity

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	705,954	705,954	100.0%	705,954	672,619	95.3%
Header Service From Date	705,954	705,954	100.0%	705,954	705,953	>99.9%
Header Service To Date	705,954	705,954	100.0%	705,954	705,953	>99.9%
Detail Service From Date	1,420,992	1,420,992	100.0%	1,420,992	1,420,991	>99.9%
Detail Service To Date	1,420,992	1,420,992	100.0%	1,420,992	1,420,991	>99.9%
Billing Provider NPI	705,954	440,630	62.4%	440,630	440,630	100.0%
Rendering Provider NPI	705,954	189,552	26.9%	189,552	189,552	100.0%
Referring Provider NPI	705,954	0	0.0%	0	0	NA
Rendering Provider Taxonomy Code	705,954	18,033	2.6%	20,185	20,185	100.0%
Primary Diagnosis Codes	705,954	705,954	100.0%	705,954	705,954	100.0%
Secondary Diagnosis Codes	705,954	19,145	2.7%	28,928	28,928	100.0%
CPT/HCPCS Codes	1,420,992	1,420,992	100.0%	1,420,992	1,420,992	100.0%
CPT/HCPCS Codes with PTP Edits	1,419,953	1,419,953	100.0%	1,419,953	1,414,955	99.6%
NDCs	1,420,992	0	0.0%	0	0	NA
Submit Date	1,420,992	1,420,992	100.0%	1,420,992	1,420,992	100.0%
PIHP Paid Date	1,420,992	1,420,992	100.0%	1,420,992	1,420,991	>99.9%
Header Paid Amount	705,954	705,954	100.0%	705,954	705,781	>99.9%
Detail Paid Amount	1,420,992	1,420,992	100.0%	1,420,992	1,420,992	100.0%
Header TPL Paid Amount	705,954	705,954	100.0%	705,954	705,875	>99.9%
Detail TPL Paid Amount	1,420,992	1,420,992	100.0%	1,420,992	1,420,992	100.0%

Table F-11—Key Encounter Data Elements: Institutional Encounters—Lakeshore Regional Entity

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	4,713	4,713	100.0%	4,713	4,405	93.5%
Header Service From Date	4,713	4,713	100.0%	4,713	4,713	100.0%
Header Service To Date	4,713	4,713	100.0%	4,713	4,713	100.0%
Detail Service From Date	5,760	5,760	100.0%	5,760	5,760	100.0%
Detail Service To Date	5,760	5,760	100.0%	5,760	5,760	100.0%
Billing Provider NPI	4,713	4,640	98.5%	4,640	4,640	100.0%
Attending Provider NPI	4,713	0	0.0%	0	0	NA
Referring Provider NPI	4,713	0	0.0%	0	0	NA
Attending Provider Taxonomy Code	4,713	0	0.0%	0	0	NA
Primary Diagnosis Codes	4,713	4,713	100.0%	4,713	4,713	100.0%
Secondary Diagnosis Codes	4,713	1,321	28.0%	2,358	2,358	100.0%
CPT/HCPCS Codes	5,760	562	9.8%	562	562	100.0%
CPT/HCPCS Codes with PTP Edits	561	561	100.0%	561	0	0.0%
Primary Surgical Procedure Codes	4,713	0	0.0%	0	0	NA
Secondary Surgical Procedure Codes	4,713	0	0.0%	0	0	NA
Revenue Codes	5,760	5,760	100.0%	5,760	5,760	100.0%
DRG Codes	4,713	4,306	91.4%	4,306	4,306	100.0%
Type of Bill Codes	4,713	4,713	100.0%	4,713	4,713	100.0%
NDCs	5,760	0	0.0%	0	0	NA
Submit Date	5,760	5,760	100.0%	5,760	5,760	100.0%
PIHP Paid Date	5,760	5,760	100.0%	5,760	5,760	100.0%
Header Paid Amount	4,713	4,713	100.0%	4,713	4,710	99.9%
Detail Paid Amount	5,760	5,760	100.0%	5,760	5,760	100.0%
Header TPL Paid Amount	4,713	4,713	100.0%	4,713	4,709	99.9%
Detail TPL Paid Amount	5,760	5,760	100.0%	5,760	5,760	100.0%

Appendix G. Results for Region 4–Southwest Michigan Behavioral Health

Appendix G contains the IS review and administrative profile results, strengths, weaknesses, and recommendations, as applicable, that HSAG identified from the EDV study for **Southwest Michigan Behavioral Health**.

IS Review Findings

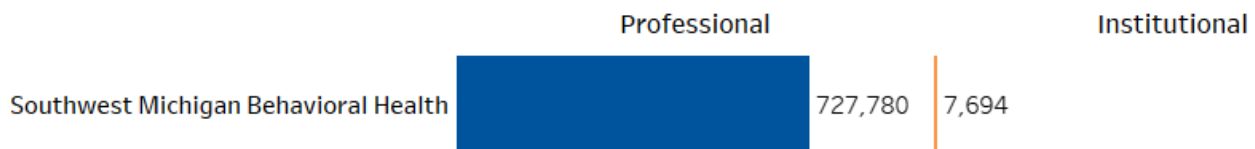
Please refer to Section 3: Information Systems Review Findings for **Southwest Michigan Behavioral Health**'s specific findings, if any.

Administrative Profile Results

Encounter Data Summary

Figure G-1 displays the number of encounters by category of service.

Figure G-1—Number of Paid Encounters by Category of Service—Southwest Michigan Behavioral Health



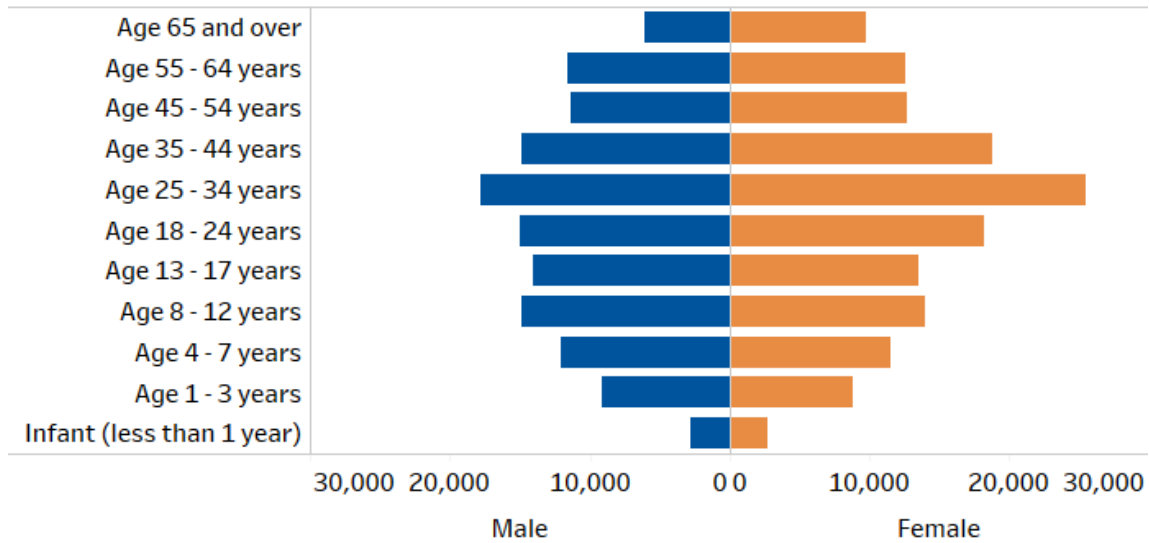
Member Composition

Figure G-2 and Figure G-3 display member demographics.

Figure G-2—Enrollment in SFY 2023—Southwest Michigan Behavioral Health



Figure G-3—Age and Gender Distribution—Southwest Michigan Behavioral Health

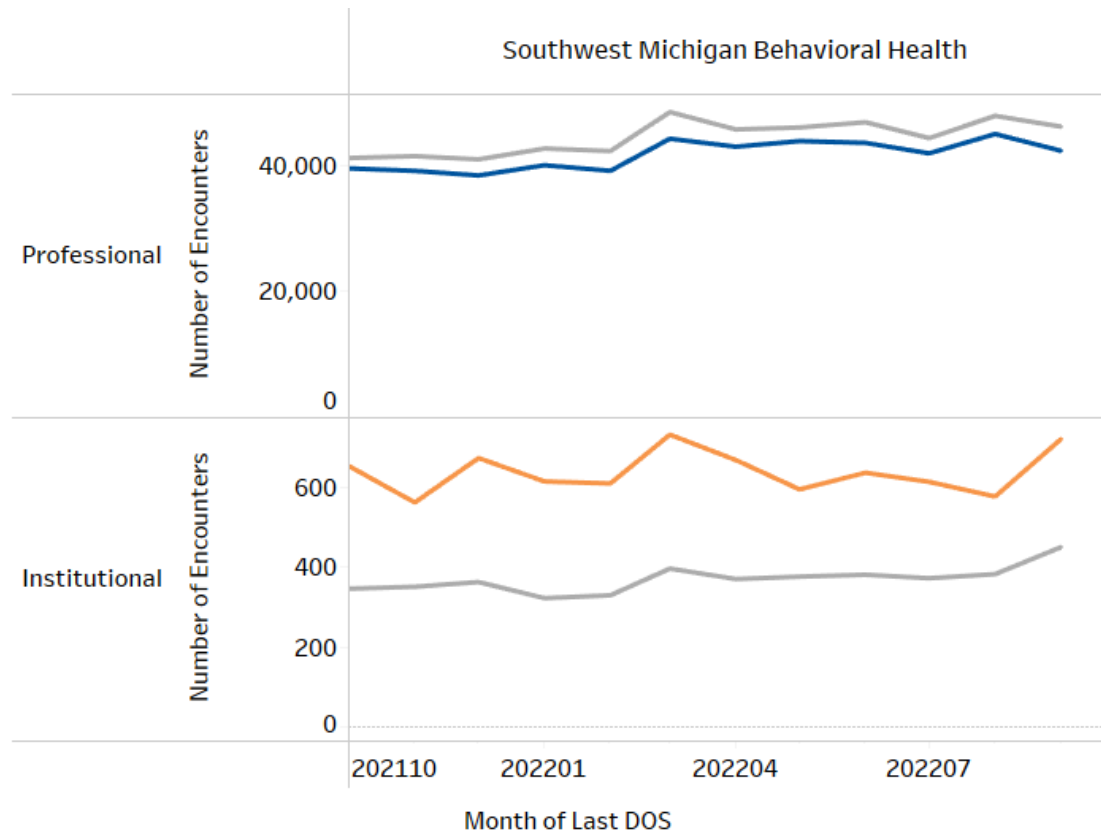


Encounter Data Completeness

Encounter Volume by Service Month

Figure G-4 displays the monthly encounter volume by service month and category of service.

Figure G-4—Encounter Volume by Service Month—Southwest Michigan Behavioral Health

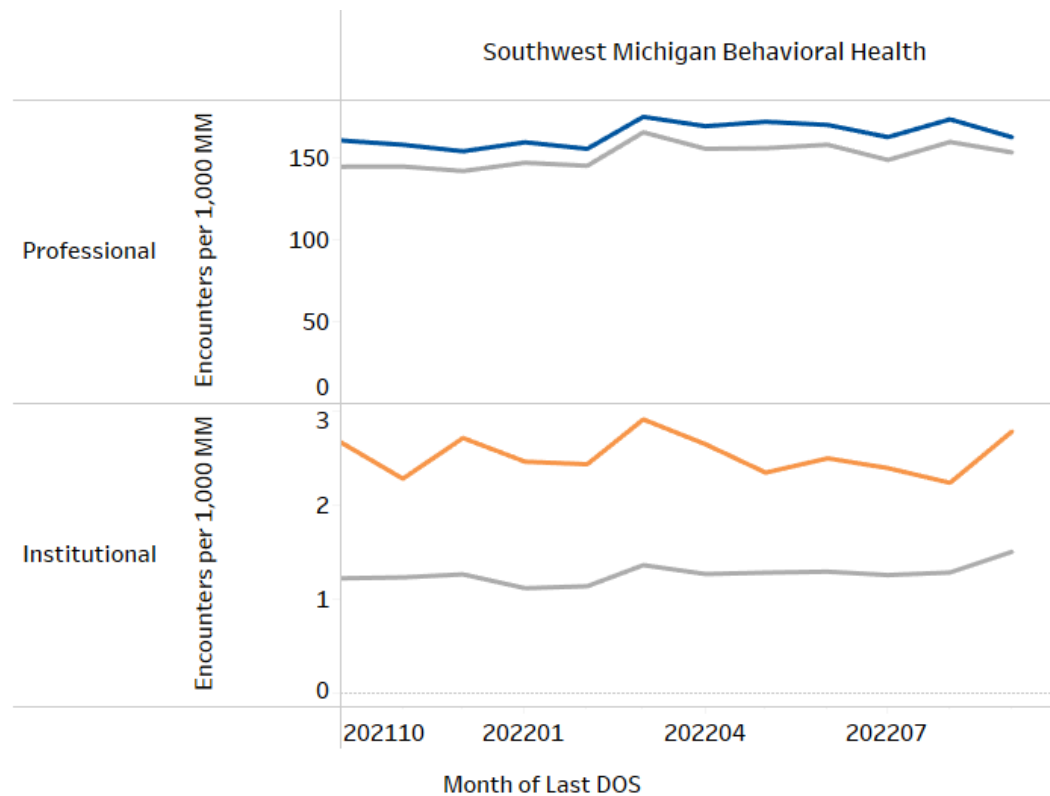


Note: The grey line indicates the all PIHP rate.

Encounter Volume Per 1,000 Member Months

Figure G-5 displays the monthly encounter volume per 1,000 MM by service month and category of service.

Figure G-5—Encounter Volume per 1,000 MM—Southwest Michigan Behavioral Health

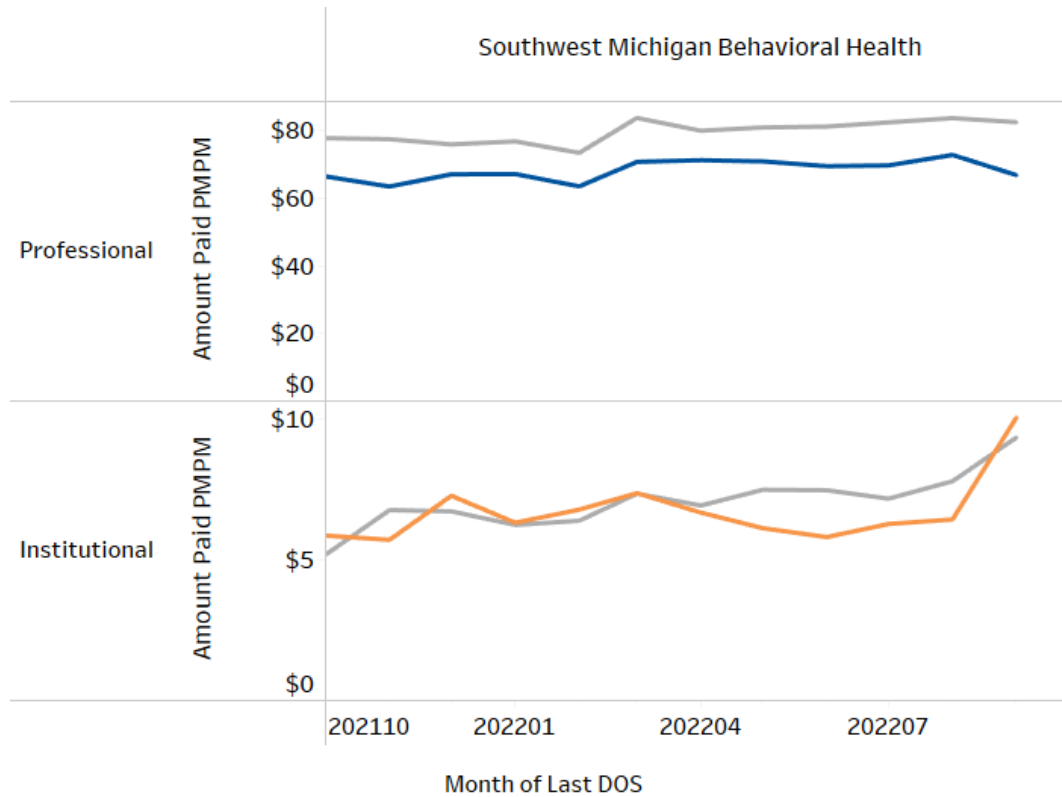


Note: The grey line indicates the all PIHP rate.

Payment Amounts Per Member Per Month

Figure G-6 displays the monthly payment amounts PMPM by service month and category of service.

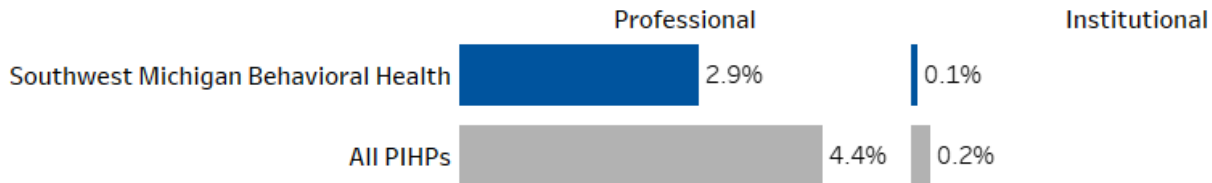
Figure G-6—Paid Amount PMPM—Southwest Michigan Behavioral Health



Percentage of Duplicate Encounters

Figure G-7 displays the percentage of duplicate encounters.

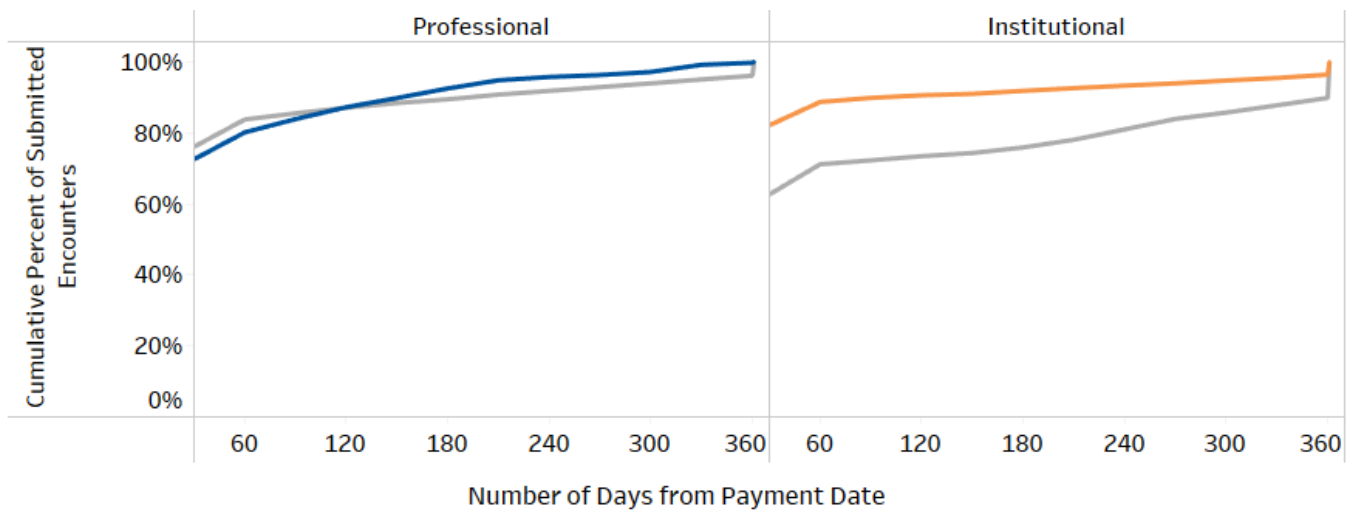
Figure G-7—Percentage of Duplicate Encounters—Southwest Michigan Behavioral Health



Encounter Data Timeliness

Figure G-8 and Table G-1 show the cumulative percentage of encounters submitted to MDHHS from the payment date by category of service.

Figure G-8—Cumulative Percentage of Encounters Submitted to MDHHS From PIHP Payment Date by Category of Service—Southwest Michigan Behavioral Health



Note: The grey line indicates the all PIHP rate.

Table G-1—Completeness of Encounters by Category of Service—Southwest Michigan Behavioral Health

Number of Days From Payment Date	Cumulative Percentage of Submitted Professional Encounters	Cumulative Percentage of Submitted Institutional Encounters
Submitted Within 30 Days	72.5%	82.1%
Submitted Within 60 Days	80.1%	88.7%
Submitted Within 90 Days	83.9%	89.8%
Submitted Within 120 Days	87.2%	90.6%
Submitted Within 150 Days	89.8%	91.0%
Submitted Within 180 Days	92.5%	91.8%
Submitted Within 210 Days	94.8%	92.6%
Submitted Within 240 Days	95.7%	93.3%
Submitted Within 270 Days	96.3%	93.9%
Submitted Within 300 Days	97.1%	94.7%
Submitted Within 330 Days	99.2%	95.5%
Submitted Within 360 Days	99.7%	96.4%
Submitted After 360 Days	100.0%	100.0%

Field-Level Completeness and Accuracy

Figure G-9 and Figure G-10 provide the percentage of encounters that are present and contain valid values for key data elements.

Figure G-9—Key Professional Encounter Data Elements—Southwest Michigan Behavioral Health

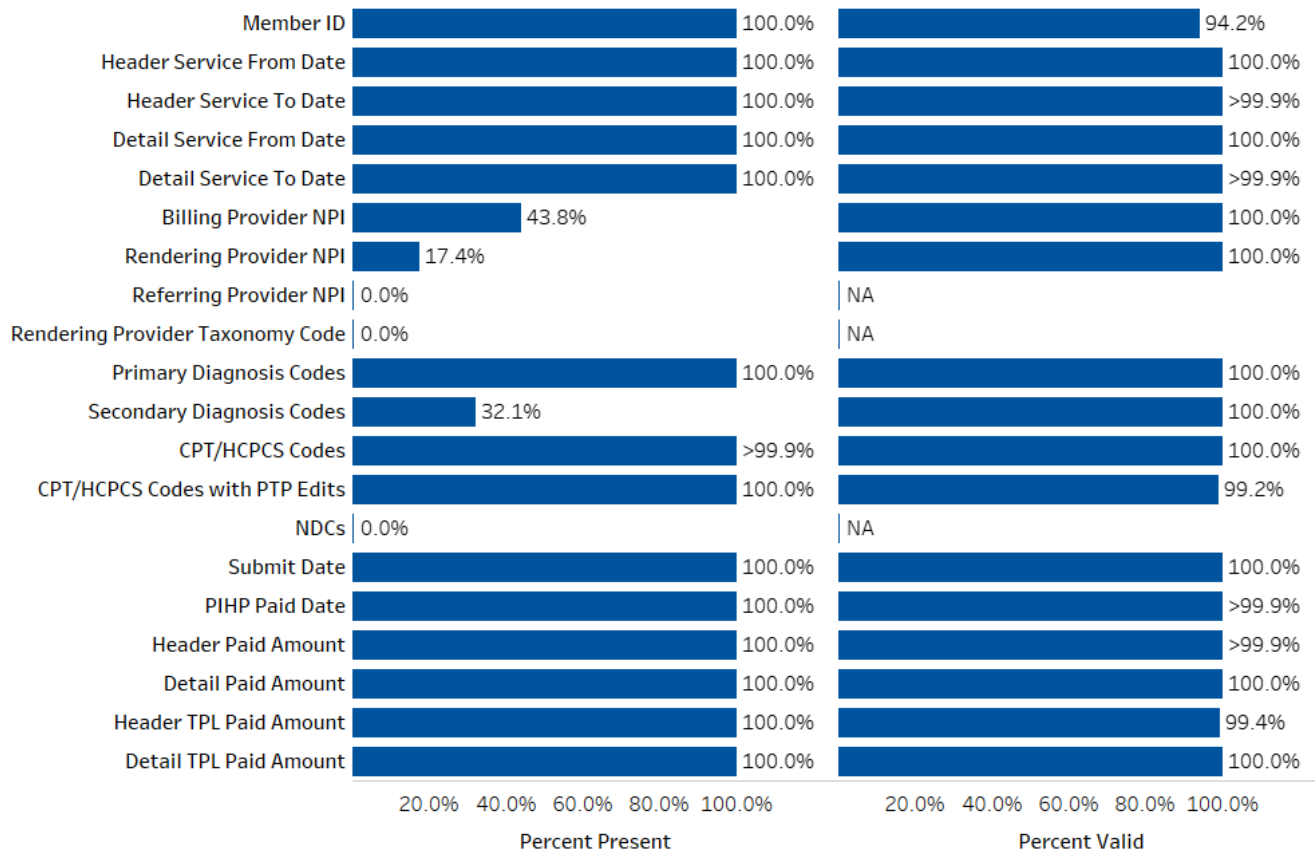
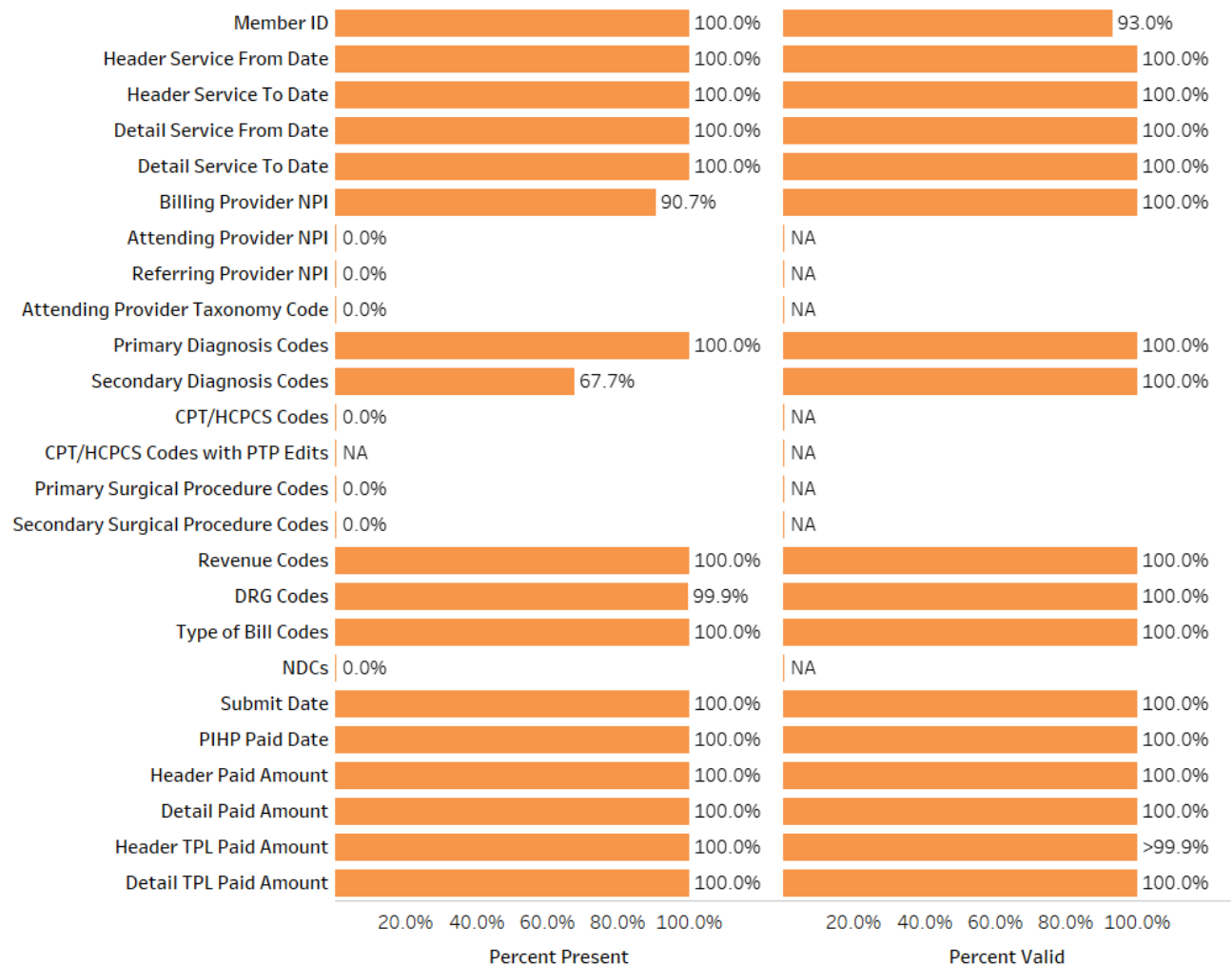


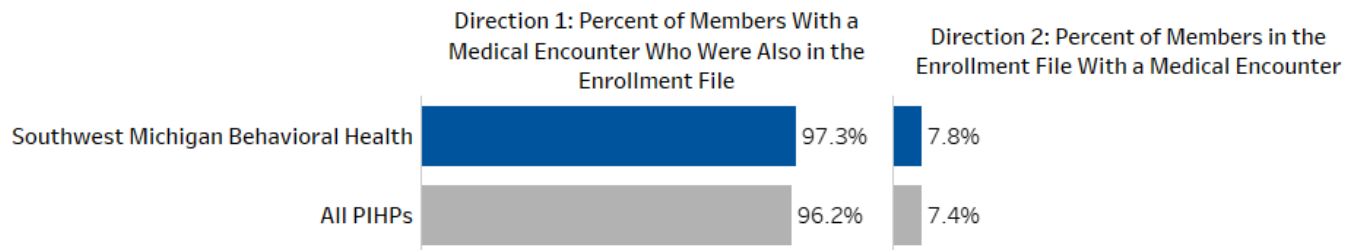
Figure G-10—Key Institutional Encounter Data Elements—Southwest Michigan Behavioral Health



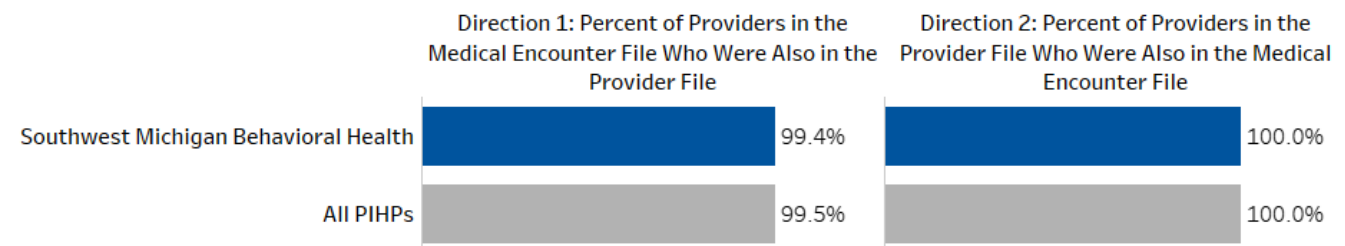
Encounter Data Referential Integrity

Figure G-11 and Figure G-12 display the referential integrity results.

**Figure G-11—Referential Integrity Comparison Between Enrollment and Medical Encounter Files—
Southwest Michigan Behavioral Health**



**Figure G-12—Referential Integrity Comparison Between Medical Encounter and Provider Files—
Southwest Michigan Behavioral Health**

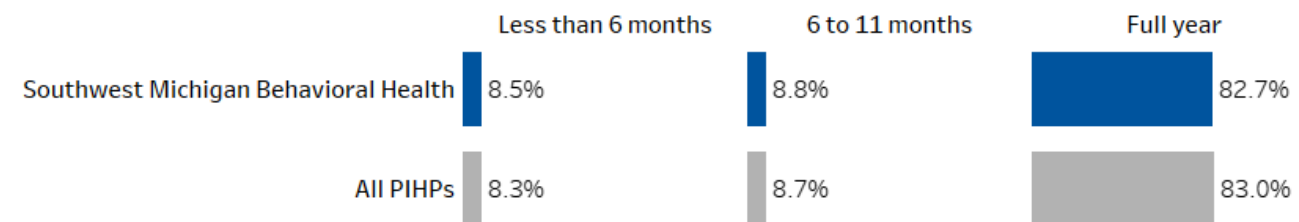


Encounter Data Logic

Member Enrollment

Figure G-13 displays the percentage of members who were continuously enrolled.

**Figure G-13—Percentage of Members Who Were Continuously Enrolled—
Southwest Michigan Behavioral Health**



Conclusions

Based on the examination of the IS review and administrative profile outcomes in Section 3 and Section 4, respectively, for **Southwest Michigan Behavioral Health**, HSAG identified the following areas of strength, opportunities for improvement, and recommendations.

IS Review Conclusions

Strengths

Strength #1: Southwest Michigan Behavioral Health demonstrated its capability to collect, process, and transmit encounter data to MDHHS. The PIHP has also established data review and correction processes that efficiently address quality concerns identified by MDHHS.

Strength #2: Southwest Michigan Behavioral Health has a robust system for monitoring encounter data submissions designed to oversee the accuracy, completeness, and timeliness of encounter data, which includes encounter data submissions from its own data warehouse and directly from its subcontractors.

Strength #3: While MRR can be labor- and resource-intensive process for conducting data quality checks, **Southwest Michigan Behavioral Health** indicated its usage as a method for assessing its subcontractors' data. The use of this method enhances the reliability, accuracy, and contextual understanding of its subcontractors' encounter data. This reflects **Southwest Michigan Behavioral Health's** commitment to delivering high-quality healthcare data.

Opportunities for Improvement

Weakness #1: None were identified.

Why the weakness exists: Not applicable.

Recommendation: None were identified.

Administrative Profile Conclusions

Strengths

Strength #1: Across all encounters, most key data elements for **Southwest Michigan Behavioral Health** were populated at high rates, and the majority of data elements were over 99 percent valid.

Opportunities for Improvement

Weakness #1: Southwest Michigan Behavioral Health did not submit professional or institutional encounters timely, where within 120 days of payment, 87.2 percent of professional encounters were submitted and 90.6 of institutional encounters were submitted. **Southwest Michigan Behavioral Health**

reached over a 99 percent professional encounter submission rate within 330 days and after 360 days for institutional encounters.

Why the weakness exists: The timely submission of encounters is crucial to guarantee that conducted analyses include comprehensive data. Failure to submit encounters in a timely manner may lead to incomplete analyses and inaccurate results.

Recommendation: **Southwest Michigan Behavioral Health** should monitor its encounter data submission to MDHHS to ensure encounters are submitted after payment.

Weakness #2: The member ID field had lower than expected validity rates in both professional and institutional data, with a validity rate of 94.2 percent and 93 percent, respectively. Additionally, 97.3 percent of members with a medical encounter were identified in the enrollment file. Combined, these findings suggest that **Southwest Michigan Behavioral Health**'s enrollment data may not be complete.

Why the weakness exists: Linking datasets to each other to pull in additional information (i.e., enrollment start date or enrollment end date) may be important in subsequent analyses. Additionally, members identified in the encounter file should be enrolled on the date the service occurred.

Recommendation: **Southwest Michigan Behavioral Health** should collaborate with MDHHS to ensure both entities have an accurate and complete database of enrolled members.

Weakness #3: Although not required to be populated, 43.8 percent and 17.4 percent of professional encounters contained a billing provider NPI and a rendering provider NPI, respectively.

Why the weakness exists: Billing and rendering provider information is important for proper provider identification.

Recommendation: **Southwest Michigan Behavioral Health** should determine the completeness of key provider data elements by implementing quality checks to ensure these fields are populated.

Administrative Profile Results—Tabular Data

Encounter Data Summary

Member Composition

Table G-2 presents the member composition.

Table G-2—Age and Gender Distribution—Southwest Michigan Behavioral Health

Age Category	Number of Females	Number of Males
Infant (less than 1 year)	2,692	2,761
Age 1–3 years	8,845	9,173
Age 4–7 years	11,540	12,093
Age 8–12 years	13,999	14,902
Age 13–17 years	13,515	14,100
Age 18–24 years	18,206	14,988
Age 25–34 years	25,479	17,849
Age 35–44 years	18,831	14,937
Age 45–54 years	12,753	11,358
Age 55–64 years	12,553	11,638
Age 65 and over	9,754	6,044
Total	148,167	129,843

Encounter Data Completeness

Encounter Volume by Service Month

Table G-3 and Table G-4 display the encounter volume by service month.

Table G-3—Encounter Volume: Professional Encounters—Southwest Michigan Behavioral Health

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	39,572	245,837	161.0
November 2021	39,170	247,433	158.3
December 2021	38,444	249,126	154.3
January 2022	40,071	250,701	159.8
February 2022	39,184	251,445	155.8
March 2022	44,275	252,411	175.4

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
April 2022	43,009	253,479	169.7
May 2022	43,894	254,625	172.4
June 2022	43,617	255,898	170.4
July 2022	41,954	257,418	163.0
August 2022	45,024	258,942	173.9
September 2022	42,354	260,003	162.9

Table G-4—Encounter Volume: Institutional Encounters—Southwest Michigan Behavioral Health

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	656	245,837	2.7
November 2021	564	247,433	2.3
December 2021	676	249,126	2.7
January 2022	617	250,701	2.5
February 2022	612	251,445	2.4
March 2022	735	252,411	2.9
April 2022	671	253,479	2.6
May 2022	597	254,625	2.3
June 2022	639	255,898	2.5
July 2022	616	257,418	2.4
August 2022	579	258,942	2.2
September 2022	724	260,003	2.8

Payment Amounts Per Member Per Month

Table G-5 and Table G-6 display the monthly payment amounts PMPM by service month.

Table G-5—Paid Amount PMPM: Professional Encounters—Southwest Michigan Behavioral Health

Month of Service	Number of MM	Paid Amount PMPM
October 2021	245,837	\$66.44
November 2021	247,433	\$63.46
December 2021	249,126	\$67.08
January 2022	250,701	\$67.15
February 2022	251,445	\$63.50

Month of Service	Number of MM	Paid Amount PMPM
March 2022	252,411	\$70.76
April 2022	253,479	\$71.25
May 2022	254,625	\$70.89
June 2022	255,898	\$69.48
July 2022	257,418	\$69.70
August 2022	258,942	\$72.81
September 2022	260,003	\$66.83

Table G-6—Paid Amount PMPM: Institutional Encounters—Southwest Michigan Behavioral Health

Month of Service	Number of MM	Paid Amount PMPM
October 2021	245,837	\$5.86
November 2021	247,433	\$5.71
December 2021	249,126	\$7.28
January 2022	250,701	\$6.32
February 2022	251,445	\$6.79
March 2022	252,411	\$7.37
April 2022	253,479	\$6.68
May 2022	254,625	\$6.13
June 2022	255,898	\$5.81
July 2022	257,418	\$6.28
August 2022	258,942	\$6.44
September 2022	260,003	\$10.06

Percentage of Duplicate Encounters

Table G-7 displays the percentage of duplicate encounters by category of service.

Table G-7—Percentage of Duplicate Encounters by Category of Service—Southwest Michigan Behavioral Health

Category of Service	Number of Duplicate Records	Percentage of Duplicate Records
Professional	39,614	2.9%
Institutional	6	0.1%

Encounter Data Timeliness

Encounter Data Lag Triangles

Table G-8 and Table G-9 display the lag triangles between service month and submission month to MDHHS. For conciseness, lag triangles only include encounters submitted through April 2023 (a minimum of a seven-month lag); therefore, counts displayed in the total line may not equal counts displayed in encounter volume figures.

Table G-8—Encounter Data Lag Triangle: Professional Encounters—Southwest Michigan Behavioral Health

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	2,208	567											2,775
202112	6,974	4,192	1,806										12,972
202201	11,134	12,925	14,409	2,623									41,091
202202	2,592	3,446	6,651	16,913	3,656								33,258
202203	4,512	4,735	4,486	7,956	19,076	6,842							47,607
202204	8,215	11,140	10,607	9,252	10,705	25,796	6,379						82,094
202205	12,561	11,797	11,569	13,583	11,996	17,397	37,833	6,769					123,505
202206	3,511	1,487	1,401	1,320	3,803	4,758	7,825	41,745	13,397				79,247
202207	482	365	240	522	480	676	2,093	4,750	33,148	12,295			55,051
202208	1,113	1,220	1,391	1,450	1,552	1,800	1,776	4,335	9,117	36,780	12,513		73,047
202209	842	857	741	792	876	939	895	867	1,998	6,318	37,124	12,099	64,348
202210	344	451	261	235	516	409	350	541	535	1,729	9,689	33,641	48,701
202211	109	139	74	136	148	152	258	263	320	458	1,300	9,993	13,350
202212	16	8	13	43	54	51	90	106	220	311	262	964	2,138
202301	406	203	199	178	169	330	196	182	132	156	285	777	3,213
202302	88	95	110	89	119	128	175	195	196	174	175	232	1,776
202303	3,394	3,478	2,992	3,490	3,662	4,178	3,810	3,776	3,622	3,403	4,031	3,475	43,311
202304	0	3	1	2	4	17	9	6	4	18	32	36	132
Total	58,501	57,108	56,951	58,584	56,816	63,473	61,689	63,535	62,689	61,642	65,411	61,217	727,616
MM	245,837	247,433	249,126	250,701	251,445	252,411	253,479	254,625	255,898	257,418	258,942	260,003	3,037,318
PMPM	0.24	0.23	0.23	0.23	0.23	0.25	0.24	0.25	0.24	0.24	0.25	0.24	0.24

Table G-9—Encounter Data Lag Triangle: Institutional Encounters—Southwest Michigan Behavioral Health

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	17	1											18
202112	262	157	2										421
202201	76	51	213	16									356
202202	23	54	154	161	12								404
202203	70	38	84	208	236	14							650
202204	66	49	23	31	106	144	10						429
202205	5	12	7	31	17	71	125	1					269
202206	50	49	76	77	22	98	148	145	32				697
202207	13	56	1	11	2	10	33	59	132	51			368
202208	4	0	0	3	5	3	5	72	82	112	17		303
202209	13	20	1	20	17	65	57	71	93	94	162	70	683
202210	2	34	28	17	126	250	181	132	87	134	109	204	1,304
202211	0	1	4	7	7	12	33	42	146	116	149	139	656
202212	0	0	2	3	0	6	4	22	9	20	50	177	293
202301	0	0	10	0	0	0	5	1	0	3	9	50	78
202302	22	21	21	6	27	24	27	18	31	49	38	34	318
202303	1	0	0	0	0	0	1	0	1	1	0	1	5
202304	16	12	28	12	24	23	24	19	11	17	29	24	239
Total	640	555	654	603	601	720	653	582	624	597	563	699	7,491
MM	245,837	247,433	249,126	250,701	251,445	252,411	253,479	254,625	255,898	257,418	258,942	260,003	3,037,318
PMPM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Field-Level Completeness and Accuracy

Table G-10 and Table G-11 provide the percentage of encounters that are present and contain valid values for key data elements for all categories of service.

Table G-10—Key Encounter Data Elements: Professional Encounters—Southwest Michigan Behavioral Health

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	727,780	727,780	100.0%	727,780	685,247	94.2%
Header Service From Date	727,780	727,780	100.0%	727,780	727,780	100.0%
Header Service To Date	727,780	727,780	100.0%	727,780	727,779	>99.9%
Detail Service From Date	1,352,285	1,352,285	100.0%	1,352,285	1,352,285	100.0%
Detail Service To Date	1,352,285	1,352,285	100.0%	1,352,285	1,352,283	>99.9%
Billing Provider NPI	727,780	318,671	43.8%	318,671	318,671	100.0%
Rendering Provider NPI	727,780	126,889	17.4%	126,889	126,889	100.0%
Referring Provider NPI	727,780	0	0.0%	0	0	NA
Rendering Provider Taxonomy Code	727,780	0	0.0%	0	0	NA
Primary Diagnosis Codes	727,780	727,780	100.0%	727,780	727,780	100.0%
Secondary Diagnosis Codes	727,780	233,835	32.1%	394,518	394,518	100.0%
CPT/HCPCS Codes	1,352,285	1,352,284	>99.9%	1,352,284	1,352,284	100.0%
CPT/HCPCS Codes with PTP Edits	1,347,489	1,347,489	100.0%	1,347,489	1,336,085	99.2%
NDCs	1,352,285	0	0.0%	0	0	NA
Submit Date	1,352,285	1,352,285	100.0%	1,352,285	1,352,285	100.0%
PIHP Paid Date	1,352,285	1,352,285	100.0%	1,352,285	1,352,283	>99.9%
Header Paid Amount	727,780	727,780	100.0%	727,780	727,764	>99.9%
Detail Paid Amount	1,352,285	1,352,285	100.0%	1,352,285	1,352,285	100.0%
Header TPL Paid Amount	727,780	727,780	100.0%	727,780	723,638	99.4%
Detail TPL Paid Amount	1,352,285	1,352,285	100.0%	1,352,285	1,352,285	100.0%

Table G-11—Key Encounter Data Elements: Institutional Encounters—Southwest Michigan Behavioral Health

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	7,694	7,694	100.0%	7,694	7,156	93.0%
Header Service From Date	7,694	7,694	100.0%	7,694	7,694	100.0%
Header Service To Date	7,694	7,694	100.0%	7,694	7,694	100.0%
Detail Service From Date	7,941	7,941	100.0%	7,941	7,941	100.0%
Detail Service To Date	7,941	7,941	100.0%	7,941	7,941	100.0%
Billing Provider NPI	7,694	6,976	90.7%	6,976	6,976	100.0%
Attending Provider NPI	7,694	0	0.0%	0	0	NA
Referring Provider NPI	7,694	0	0.0%	0	0	NA
Attending Provider Taxonomy Code	7,694	0	0.0%	0	0	NA
Primary Diagnosis Codes	7,694	7,694	100.0%	7,694	7,694	100.0%
Secondary Diagnosis Codes	7,694	5,207	67.7%	14,365	14,365	100.0%
CPT/HCPCS Codes	7,941	0	0.0%	0	0	NA
CPT/HCPCS Codes with PTP Edits	0	0	NA	0	0	NA
Primary Surgical Procedure Codes	7,694	0	0.0%	0	0	NA
Secondary Surgical Procedure Codes	7,694	0	0.0%	0	0	NA
Revenue Codes	7,941	7,941	100.0%	7,941	7,941	100.0%
DRG Codes	7,694	7,689	99.9%	7,689	7,689	100.0%
Type of Bill Codes	7,694	7,694	100.0%	7,694	7,694	100.0%
NDCs	7,941	0	0.0%	0	0	NA
Submit Date	7,941	7,941	100.0%	7,941	7,941	100.0%
PIHP Paid Date	7,941	7,941	100.0%	7,941	7,941	100.0%
Header Paid Amount	7,694	7,694	100.0%	7,694	7,694	100.0%
Detail Paid Amount	7,941	7,941	100.0%	7,941	7,941	100.0%
Header TPL Paid Amount	7,694	7,694	100.0%	7,694	7,692	>99.9%
Detail TPL Paid Amount	7,941	7,941	100.0%	7,941	7,941	100.0%

Appendix H. Results for Region 5—Mid-State Health Network

Appendix H contains the IS review and administrative profile results, strengths, weaknesses, and recommendations, as applicable, that HSAG identified from the EDV study for **Mid-State Health Network**.

IS Review Findings

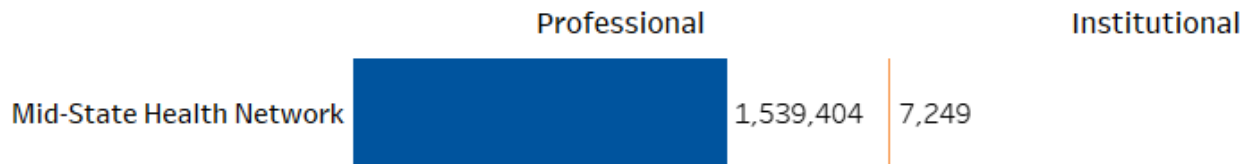
Please refer to Section 3: Information Systems Review Findings for **Mid-State Health Network**'s specific findings, if any.

Administrative Profile Results

Encounter Data Summary

Figure H-1 displays the number of encounters by category of service.

Figure H-1—Number of Paid Encounters by Category of Service—Mid-State Health Network



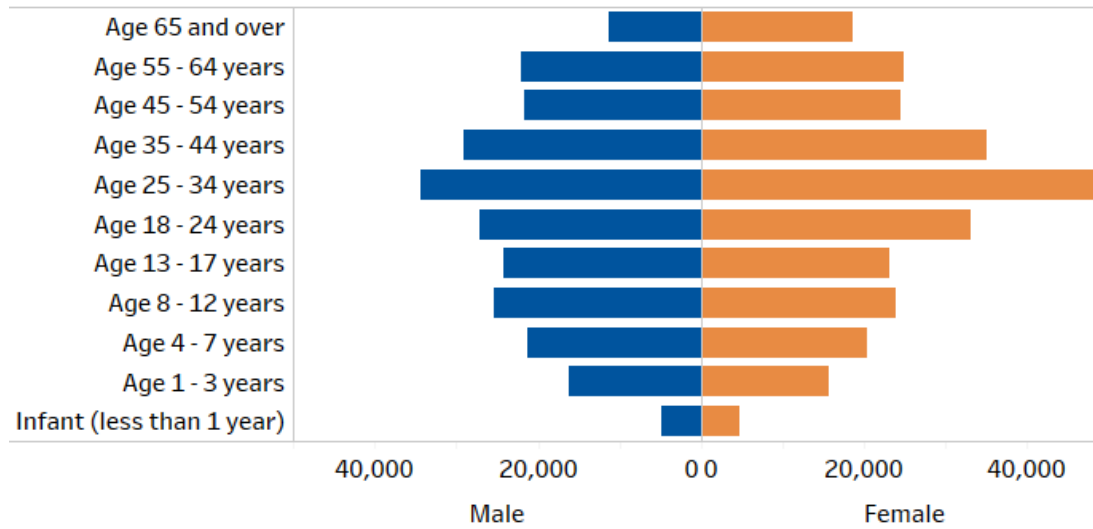
Member Composition

Figure H-2 and Figure H-3 display member demographics.

Figure H-2—Enrollment in SFY 2023—Mid-State Health Network



Figure H-3—Age and Gender Distribution—Mid-State Health Network

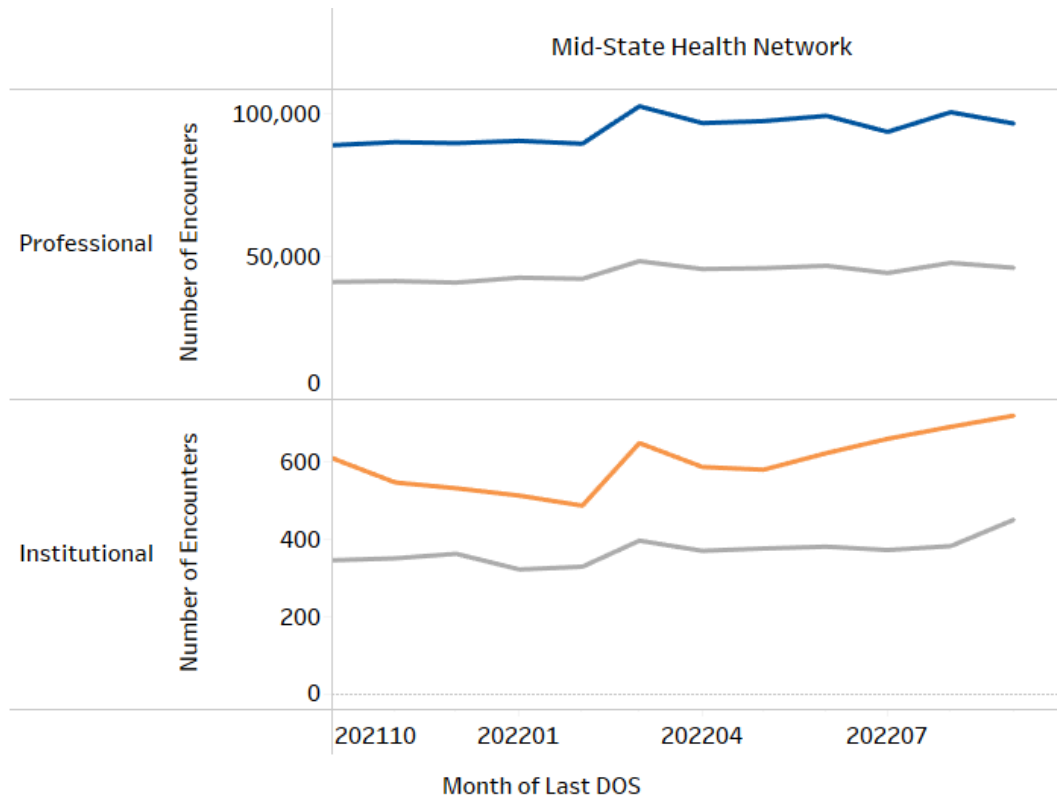


Encounter Data Completeness

Encounter Volume by Service Month

Figure H-4 displays the monthly encounter volume by service month and category of service.

Figure H-4—Encounter Volume by Service Month—Mid-State Health Network

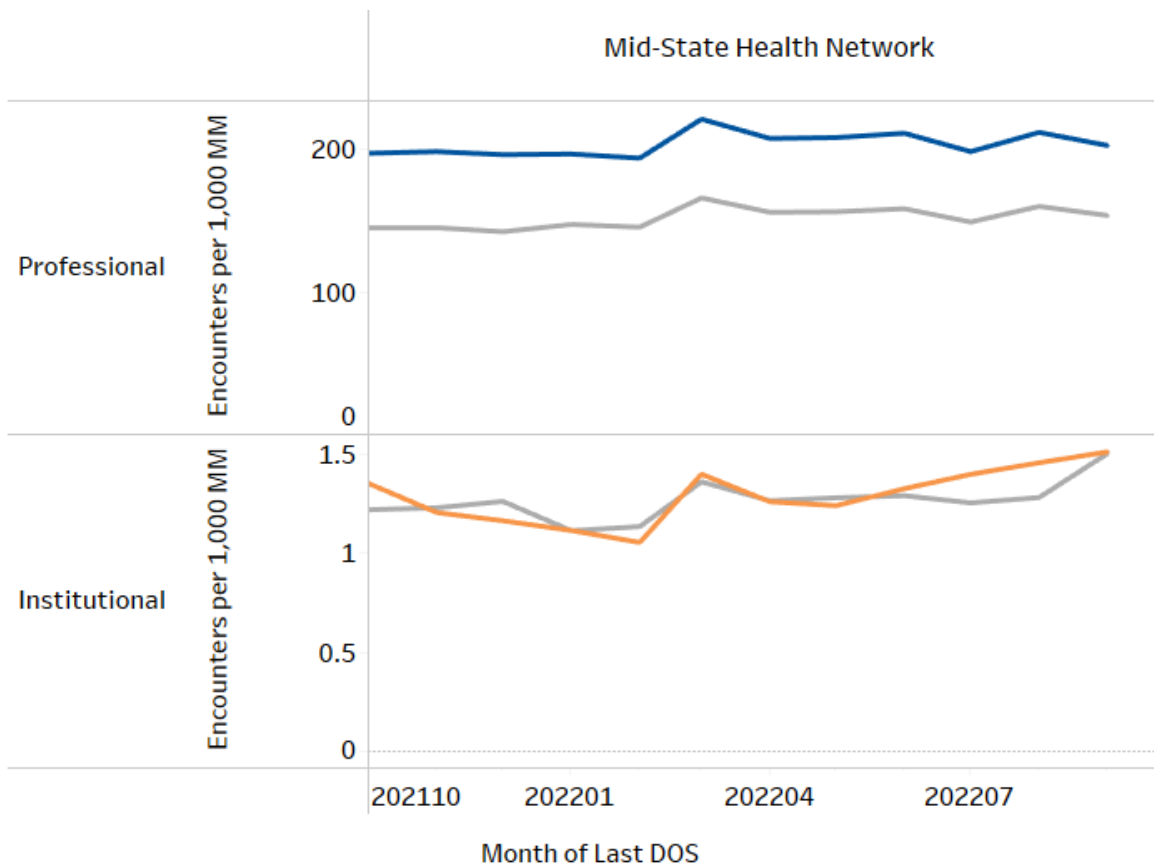


Note: The grey line indicates the all PIHP rate.

Encounter Volume Per 1,000 Member Months

Figure H-5 displays the monthly encounter volume per 1,000 MM by service month and category of service.

Figure H-5—Encounter Volume per 1,000 MM—Mid-State Health Network

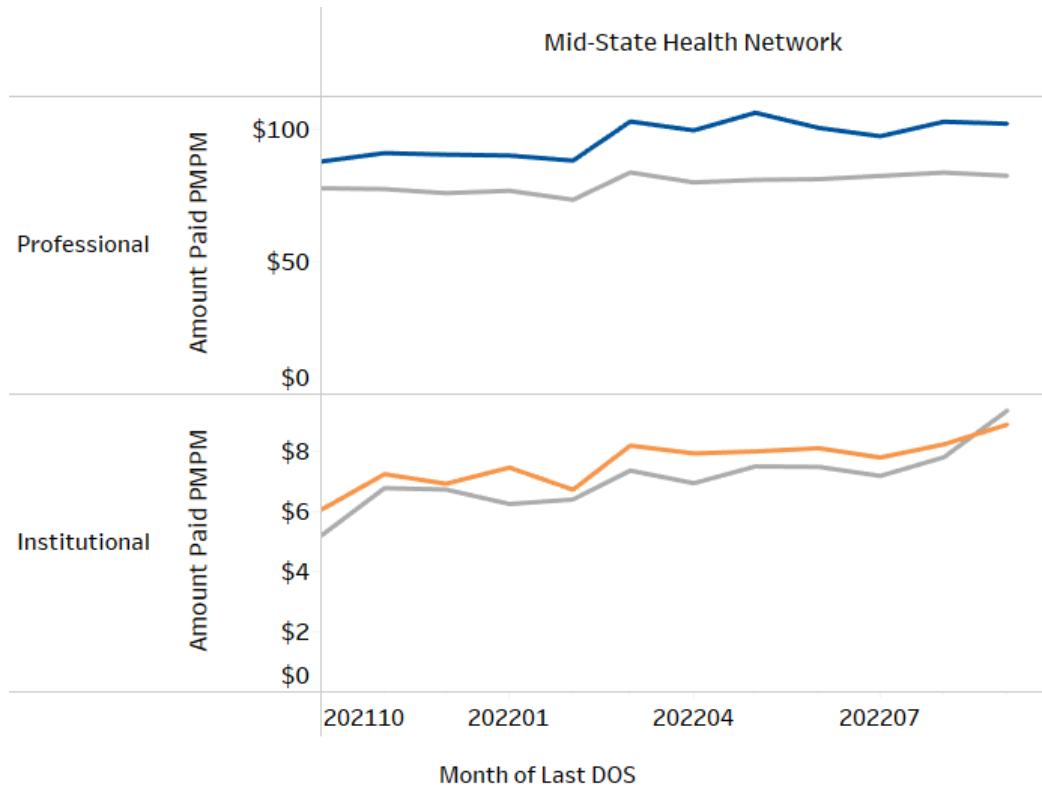


Note: The grey line indicates the all PIHP rate.

Payment Amounts Per Member Per Month

Figure H-6 displays the monthly payment amounts PMPM by service month and category of service.

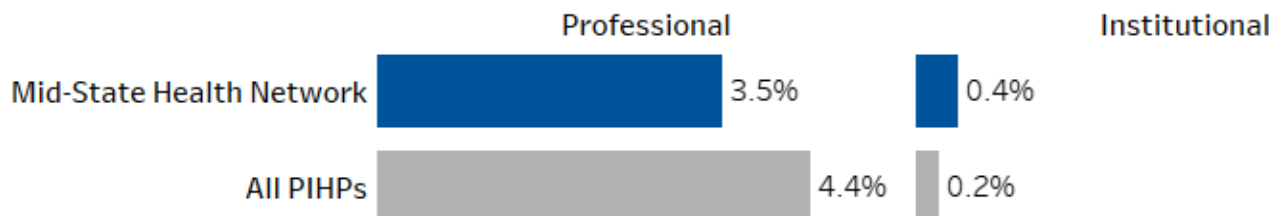
Figure H-6—Paid Amount PMPM—Mid-State Health Network



Percentage of Duplicate Encounters

Figure H-7 displays the percentage of duplicate encounters.

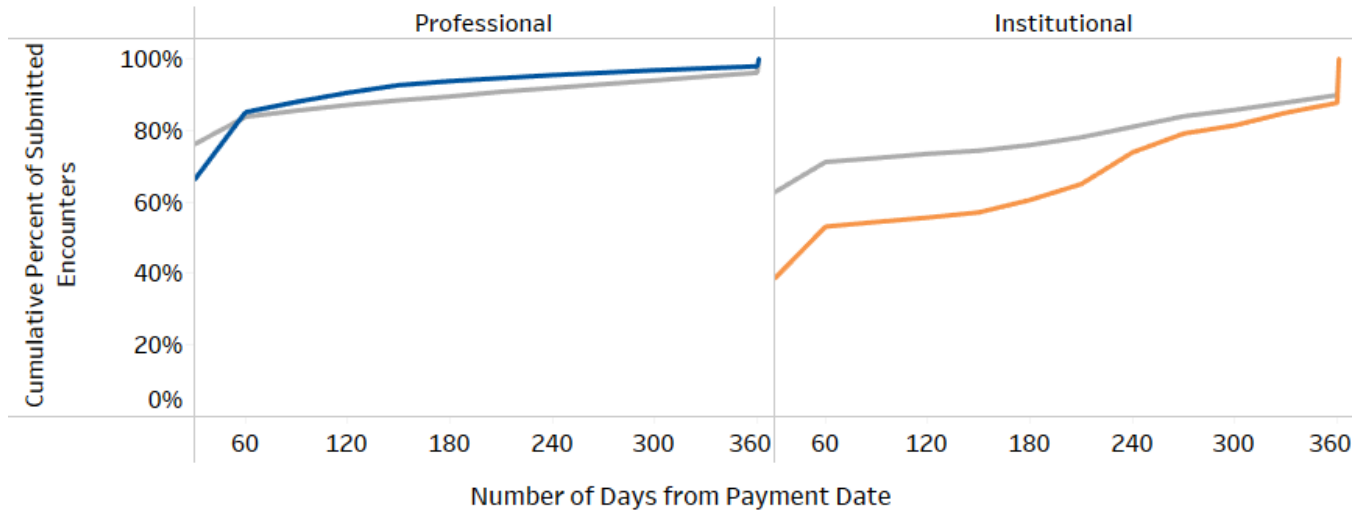
Figure H-7—Percentage of Duplicate Encounters—Mid-State Health Network



Encounter Data Timeliness

Figure H-8 and Table H-1 show the cumulative percentage of encounters submitted to MDHHS from the payment date by category of service.

Figure H-8—Cumulative Percentage of Encounters Submitted to MDHHS From PIHP Payment Date by Category of Service—Mid-State Health Network



Note: The grey line indicates the all PIHP rate.

Table H-1—Completeness of Encounters by Category of Service—Mid-State Health Network

Number of Days From Payment Date	Cumulative Percentage of Submitted Professional Encounters	Cumulative Percentage of Submitted Institutional Encounters
Submitted Within 30 Days	66.1%	38.5%
Submitted Within 60 Days	85.1%	53.1%
Submitted Within 90 Days	87.9%	54.4%
Submitted Within 120 Days	90.5%	55.6%
Submitted Within 150 Days	92.6%	57.1%
Submitted Within 180 Days	93.7%	60.5%
Submitted Within 210 Days	94.6%	65.0%
Submitted Within 240 Days	95.4%	73.8%
Submitted Within 270 Days	96.1%	79.1%
Submitted Within 300 Days	96.8%	81.4%
Submitted Within 330 Days	97.3%	84.9%
Submitted Within 360 Days	97.9%	87.7%
Submitted After 360 Days	100.0%	100.0%

Field-Level Completeness and Accuracy

Figure H-9 and Figure H-10 provide the percentage of encounters that are present and contain valid values for key data elements.

Figure H-9—Key Professional Encounter Data Elements—Mid-State Health Network

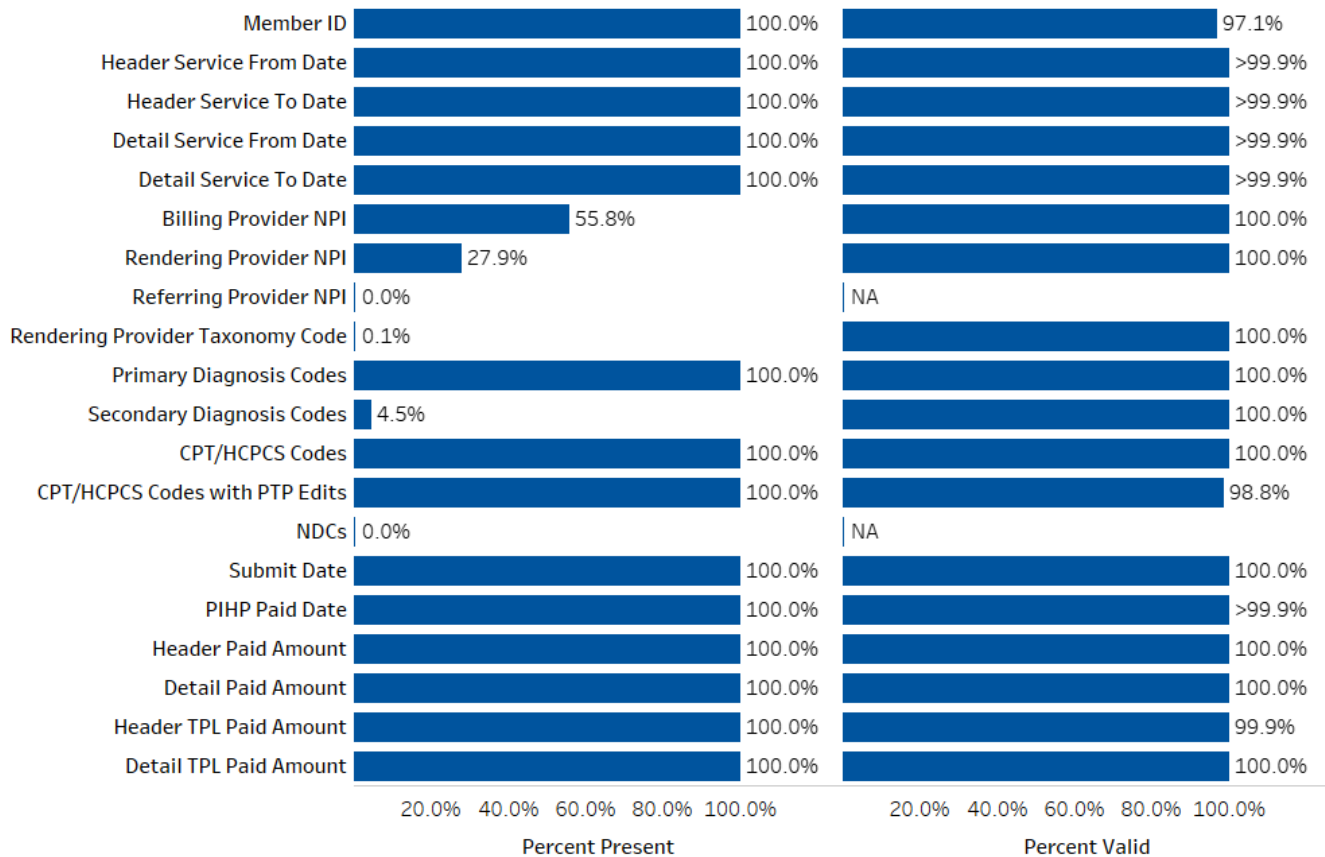
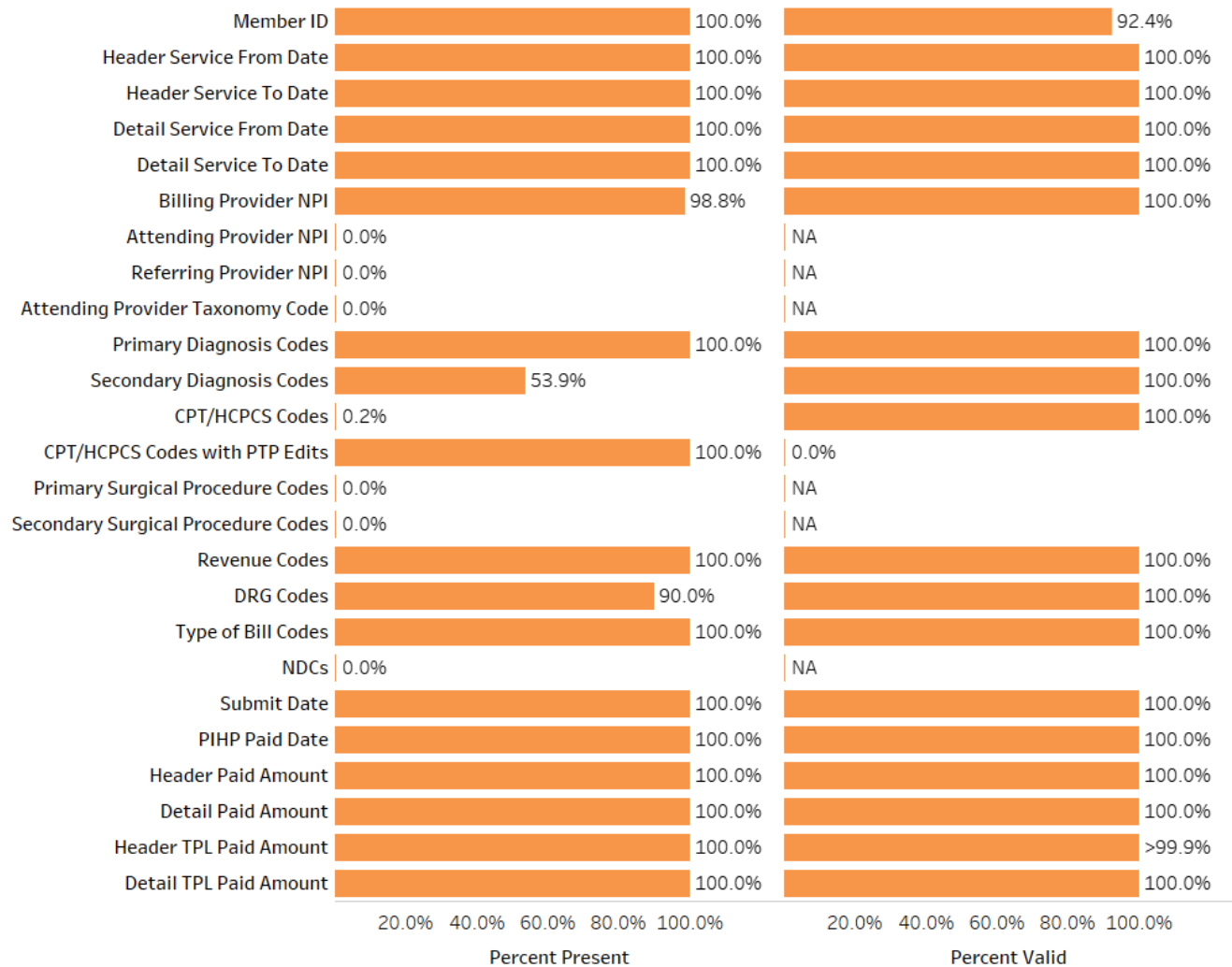


Figure H-10—Key Institutional Encounter Data Elements—Mid-State Health Network



Encounter Data Referential Integrity

Figure H-11 and Figure H-11 display the referential integrity results.

Figure H-11—Referential Integrity Comparison Between Enrollment and Medical Encounter Files—Mid-State Health Network

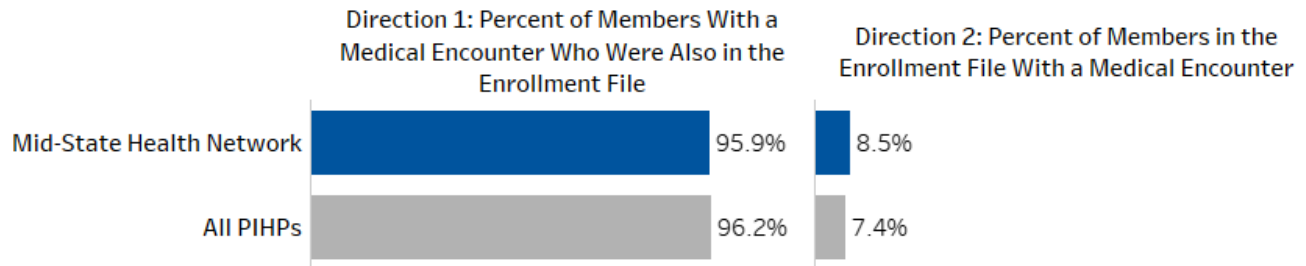
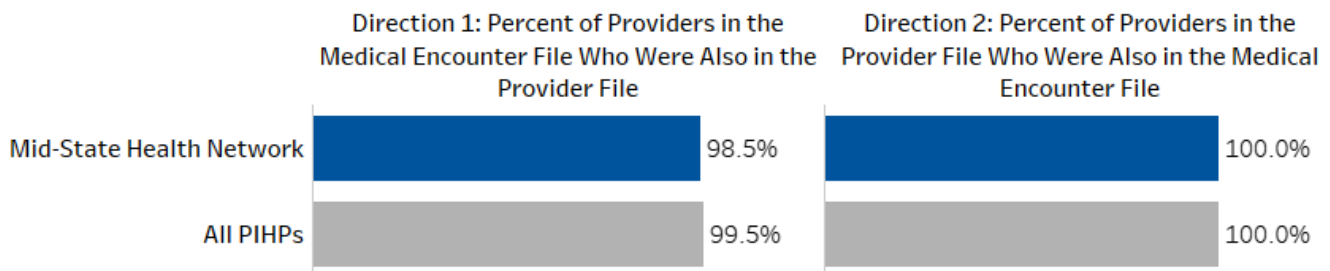


Figure H-12—Referential Integrity Comparison Between Medical Encounter and Provider Files—Mid-State Health Network

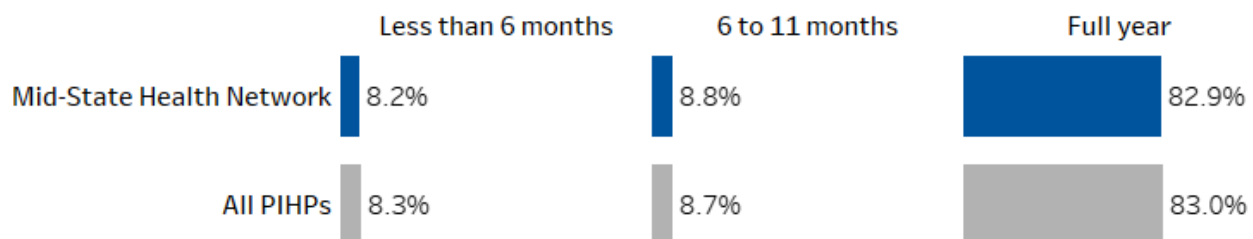


Encounter Data Logic

Member Enrollment

Figure H-13 displays the percentage of members who were continuously enrolled.

Figure H-13—Percentage of Members Who Were Continuously Enrolled—Mid-State Health Network



Conclusions

Based on the examination of the IS review and administrative profile outcomes in Section 3 and Section 4, respectively, for **Mid-State Health Network**, HSAG identified the following areas of strength, opportunities for improvement, and recommendations.

IS Review Conclusions

Strengths

Strength #1: Mid-State Health Network demonstrated its capability to collect, process, and transmit encounter data to MDHHS. The PIHP has also established data review and correction processes that efficiently address quality concerns identified by MDHHS.

Opportunities for Improvement

Weakness #1: Mid-State Health Network modified encounters from its subcontractors before submitting them to MDHHS.

Why the weakness exists: Since modifications were made to the subcontractors' encounters, it is essential to communicate these changes to each entity involved to maintain data integrity.

Recommendation: **Mid-State Health Network** should collaborate with MDHHS to confirm that the identified changes do not require adjustments to be sent back to the subcontractors.

Weakness #2: While several PIHPs recognized the labor- and resource-intensive nature of MRR as a method for conducting data quality checks and reported its usage, **Mid-State Health Network** did not indicate the incorporation of MRR as part of its data quality assessment for its subcontractors' data.

Why the weakness exists: The absence of MRR in **Mid-State Health Network**'s data quality checks may stem from resource constraints, a lack of awareness about the benefits of MRR, or possibly a reliance on alternative methods for data quality assurance.

Recommendation: Acknowledging the efficacy of MRR in ensuring accuracy and completeness in encounter data, HSAG recommends that **Mid-State Health Network** evaluates the feasibility and potential benefits of integrating MRR into its data quality checks. This could enhance the reliability and thoroughness of its data assessment process.

Administrative Profile Conclusions

Strengths

Strength #1: Mid-State Health Network displayed timely submission of professional encounters after payment date, with 90.5 percent of encounters submitted within 120 days.

Strength #2: Across all encounters, most key data elements for **Mid-State Health Network** were populated at high rates, and the majority of data elements were over 98 percent valid.

Opportunities for Improvement

Weakness #1: Mid-State Health Network did not submit institutional encounters timely, where 55.6 percent of institutional encounters were submitted within 120 days of payment, and not reaching greater than 90 percent of professional encounters submitted until after 360 days of payment.

Why the weakness exists: The timely submission of encounters is crucial to guarantee that conducted analyses include comprehensive data. Failure to submit encounters in a timely manner may lead to incomplete analyses and inaccurate results.

Recommendation: **Mid-State Health Network** should monitor its encounter data submission to MDHHS to ensure encounters are submitted after payment.

Weakness #2: The member ID field had lower than expected validity rates in both professional and institutional data, with a validity rate of 97.1 percent and 92.4 percent, respectively. Additionally, 95.9 percent of members with a medical encounter were identified in the enrollment file. Combined, these findings suggest that **Mid-State Health Network**'s enrollment data may not be complete.

Why the weakness exists: Linking datasets to each other to pull in additional information (i.e., enrollment start date or enrollment end date) may be important in subsequent analyses. Additionally, members identified in the encounter file should be enrolled on the date the service occurred.

Recommendation: **Mid-State Health Network** should collaborate with MDHHS to ensure both entities have an accurate and complete database of enrolled members.

Weakness #3: Although not required to be populated, 55.8 percent and 27.9 percent of professional encounters contained a billing provider NPI and a rendering provider NPI, respectively.

Why the weakness exists: Billing and rendering provider information is important for proper provider identification.

Recommendation: **Mid-State Health Network** should determine the completeness of key provider data elements by implementing quality checks to ensure these fields are populated.

Administrative Profile Results—Tabular Data

Encounter Data Summary

Member Composition

Table H-2 presents the member composition.

Table H-2—Age and Gender Distribution—Mid-State Health Network

Age Category	Number of Females	Number of Males
Infant (less than 1 year)	4,765	4,929
Age 1–3 years	15,678	16,167
Age 4–7 years	20,478	21,366
Age 8–12 years	23,997	25,408
Age 13–17 years	23,100	24,252
Age 18–24 years	33,062	27,241
Age 25–34 years	48,312	34,440
Age 35–44 years	35,188	29,086
Age 45–54 years	24,443	21,758
Age 55–64 years	24,844	21,995
Age 65 and over	18,636	11,403
Total	272,503	238,045

Encounter Data Completeness

Encounter Volume by Service Month

Table H-3 and Table H-4 display the encounter volume by service month.

Table H-3—Encounter Volume: Professional Encounters—Mid-State Health Network

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	89,177	452,065	197.3
November 2021	90,258	454,856	198.4
December 2021	89,907	458,082	196.3
January 2022	90,709	461,132	196.7
February 2022	89,716	462,824	193.8
March 2022	102,854	464,979	221.2

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
April 2022	96,948	466,896	207.6
May 2022	97,638	468,775	208.3
June 2022	99,490	470,883	211.3
July 2022	93,869	473,084	198.4
August 2022	100,767	475,496	211.9
September 2022	96,789	477,482	202.7

Table H-4—Encounter Volume: Institutional Encounters—Mid-State Health Network

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	611	452,065	1.4
November 2021	548	454,856	1.2
December 2021	533	458,082	1.2
January 2022	514	461,132	1.1
February 2022	488	462,824	1.1
March 2022	650	464,979	1.4
April 2022	588	466,896	1.3
May 2022	581	468,775	1.2
June 2022	624	470,883	1.3
July 2022	661	473,084	1.4
August 2022	692	475,496	1.5
September 2022	721	477,482	1.5

Payment Amounts Per Member Per Month

Table H-5 and Table H-6 display the monthly payment amounts PMPM by service month.

Table H-5—Paid Amount PMPM: Professional Encounters—Mid-State Health Network

Month of Service	Number of MM	Paid Amount PMPM
October 2021	452,065	\$87.84
November 2021	454,856	\$91.05
December 2021	458,082	\$90.48
January 2022	461,132	\$90.13
February 2022	462,824	\$88.21

Month of Service	Number of MM	Paid Amount PMPM
March 2022	464,979	\$102.98
April 2022	466,896	\$99.63
May 2022	468,775	\$106.28
June 2022	470,883	\$100.55
July 2022	473,084	\$97.41
August 2022	475,496	\$102.90
September 2022	477,482	\$102.15

Table H-6—Paid Amount PMPM: Institutional Encounters—Mid-State Health Network

Month of Service	Number of MM	Paid Amount PMPM
October 2021	452,065	\$6.05
November 2021	454,856	\$7.24
December 2021	458,082	\$6.92
January 2022	461,132	\$7.45
February 2022	462,824	\$6.72
March 2022	464,979	\$8.18
April 2022	466,896	\$7.92
May 2022	468,775	\$7.99
June 2022	470,883	\$8.10
July 2022	473,084	\$7.79
August 2022	475,496	\$8.23
September 2022	477,482	\$8.88

Percentage of Duplicate Encounters

Table H-7 displays the percentage of duplicate encounters by category of service.

Table H-7—Percentage of Duplicate Encounters by Category of Service—Mid-State Health Network

Category of Service	Number of Duplicate Records	Percentage of Duplicate Records
Professional	109,022	3.5%
Institutional	36	0.4%

Encounter Data Timeliness

Encounter Data Lag Triangles

Table H-8 and Table H-9 display the lag triangles between service month and submission month to MDHHS. For conciseness, lag triangles only include encounters submitted through April 2023 (a minimum of a seven-month lag); therefore, counts displayed in the total line may not equal counts displayed in encounter volume figures.

Table H-8—Encounter Data Lag Triangle: Professional Encounters—Mid-State Health Network

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	1,535	0											1,535
202112	55,637	12,600	1,753										69,990
202201	20,809	56,974	49,248	2,128									129,159
202202	13,979	13,120	24,457	55,809	3,810								111,175
202203	3,506	3,950	6,153	17,677	49,063	4,054							84,403
202204	3,891	4,080	3,958	7,744	25,732	70,279	5,085						120,769
202205	6,206	15,045	16,906	16,766	21,283	38,639	76,858	6,028					197,731
202206	1,841	2,514	6,594	4,915	5,591	6,876	29,491	89,667	8,503				155,992
202207	942	1,212	1,122	1,076	1,119	1,827	3,526	20,330	80,448	6,688			118,290
202208	412	296	264	297	344	567	674	2,633	23,492	70,882	4,400		104,261
202209	1,732	2,233	2,240	2,427	2,220	2,599	2,909	3,588	5,899	31,401	89,667	4,626	151,541
202210	2,626	1,155	1,144	5,648	1,263	1,428	1,563	2,634	3,215	4,068	18,389	84,503	127,636
202211	821	606	584	590	572	730	1,015	1,296	1,342	1,608	2,226	11,141	22,531
202212	3,841	3,340	3,196	2,996	2,841	3,294	3,323	3,811	4,153	5,978	8,292	18,493	63,558
202301	345	305	277	1,144	1,107	1,138	1,008	1,045	1,102	1,274	4,959	5,785	19,489
202302	266	243	300	315	373	413	483	432	525	593	668	1,170	5,781
202303	932	965	1,003	1,092	1,002	1,022	969	890	951	939	1,078	1,081	11,924
202304	3,213	3,142	3,082	2,886	3,044	3,494	3,347	3,744	3,455	3,090	3,391	3,239	39,127
Total	122,534	121,780	122,281	123,510	119,364	136,360	130,251	136,098	133,085	126,521	133,070	130,038	1,534,892
MM	452,065	454,856	458,082	461,132	462,824	464,979	466,896	468,775	470,883	473,084	475,496	477,482	5,586,554
PMPM	0.27	0.27	0.27	0.27	0.26	0.29	0.28	0.29	0.28	0.27	0.28	0.27	0.27

Table H-9—Encounter Data Lag Triangle: Institutional Encounters—Mid-State Health Network

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	1	0											1
202112	155	55	1										211
202201	113	198	84	12									407
202202	20	35	160	156	8								379
202203	8	12	29	57	144	16							266
202204	8	8	11	21	48	145	16						257
202205	2	7	7	14	24	107	138	10					309
202206	2	5	8	22	25	29	79	171	33				374
202207	0	7	6	5	3	5	26	52	140	16			260
202208	0	1	3	2	6	4	7	24	106	151	6		310
202209	8	3	1	9	3	6	17	29	39	112	176	7	410
202210	3	1	4	5	3	4	6	13	15	29	100	185	368
202211	0	0	0	0	0	0	1	2	2	10	9	73	97
202212	52	47	37	41	40	59	48	56	65	65	68	107	685
202301	0	2	2	0	2	1	1	0	3	1	11	30	53
202302	0	0	0	0	0	0	0	0	0	1	0	4	5
202303	0	0	0	0	0	0	0	0	0	0	0	4	4
202304	240	169	179	171	182	274	250	227	224	278	322	316	2,832
Total	612	550	532	515	488	650	589	584	627	663	692	726	7,228
MM	452,065	454,856	458,082	461,132	462,824	464,979	466,896	468,775	470,883	473,084	475,496	477,482	5,586,554
PMPM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Field-Level Completeness and Accuracy

Table H-10 and Table H-11 provide the percentage of encounters that are present and contain valid values for key data elements for all categories of service.

Table H-10—Key Encounter Data Elements: Professional Encounters—Mid-State Health Network

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	1,539,404	1,539,404	100.0%	1,539,404	1,495,231	97.1%
Header Service From Date	1,539,404	1,539,404	100.0%	1,539,404	1,539,402	>99.9%
Header Service To Date	1,539,404	1,539,404	100.0%	1,539,404	1,539,395	>99.9%
Detail Service From Date	3,075,295	3,075,295	100.0%	3,075,295	3,075,293	>99.9%
Detail Service To Date	3,075,295	3,075,295	100.0%	3,075,295	3,075,282	>99.9%
Billing Provider NPI	1,539,404	859,054	55.8%	859,054	859,054	100.0%
Rendering Provider NPI	1,539,404	429,717	27.9%	429,717	429,717	100.0%
Referring Provider NPI	1,539,404	0	0.0%	0	0	NA
Rendering Provider Taxonomy Code	1,539,404	1,707	0.1%	1,751	1,751	100.0%
Primary Diagnosis Codes	1,539,404	1,539,404	100.0%	1,539,404	1,539,404	100.0%
Secondary Diagnosis Codes	1,539,404	69,586	4.5%	154,923	154,923	100.0%
CPT/HCPCS Codes	3,075,295	3,075,295	100.0%	3,075,295	3,075,295	100.0%
CPT/HCPCS Codes with PTP Edits	3,069,286	3,069,286	100.0%	3,069,286	3,032,211	98.8%
NDCs	3,075,295	0	0.0%	0	0	NA
Submit Date	3,075,295	3,075,295	100.0%	3,075,295	3,075,295	100.0%
PIHP Paid Date	3,075,295	3,075,295	100.0%	3,075,295	3,075,282	>99.9%
Header Paid Amount	1,539,404	1,539,404	100.0%	1,539,404	1,539,404	100.0%
Detail Paid Amount	3,075,295	3,075,295	100.0%	3,075,295	3,075,295	100.0%
Header TPL Paid Amount	1,539,404	1,539,404	100.0%	1,539,404	1,538,619	99.9%
Detail TPL Paid Amount	3,075,295	3,075,295	100.0%	3,075,295	3,075,295	100.0%

Table H-11—Key Encounter Data Elements: Institutional Encounters—Mid-State Health Network

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	7,249	7,249	100.0%	7,249	6,697	92.4%
Header Service From Date	7,249	7,249	100.0%	7,249	7,249	100.0%
Header Service To Date	7,249	7,249	100.0%	7,249	7,249	100.0%
Detail Service From Date	8,429	8,429	100.0%	8,429	8,429	100.0%
Detail Service To Date	8,429	8,429	100.0%	8,429	8,429	100.0%
Billing Provider NPI	7,249	7,159	98.8%	7,159	7,159	100.0%
Attending Provider NPI	7,249	0	0.0%	0	0	NA
Referring Provider NPI	7,249	0	0.0%	0	0	NA
Attending Provider Taxonomy Code	7,249	0	0.0%	0	0	NA
Primary Diagnosis Codes	7,249	7,249	100.0%	7,249	7,249	100.0%
Secondary Diagnosis Codes	7,249	3,904	53.9%	7,823	7,823	100.0%
CPT/HCPCS Codes	8,429	19	0.2%	19	19	100.0%
CPT/HCPCS Codes with PTP Edits	9	9	100.0%	9	0	0.0%
Primary Surgical Procedure Codes	7,249	0	0.0%	0	0	NA
Secondary Surgical Procedure Codes	7,249	0	0.0%	0	0	NA
Revenue Codes	8,429	8,429	100.0%	8,429	8,429	100.0%
DRG Codes	7,249	6,524	90.0%	6,524	6,524	100.0%
Type of Bill Codes	7,249	7,249	100.0%	7,249	7,249	100.0%
NDCs	8,429	0	0.0%	0	0	NA
Submit Date	8,429	8,429	100.0%	8,429	8,429	100.0%
PIHP Paid Date	8,429	8,429	100.0%	8,429	8,429	100.0%
Header Paid Amount	7,249	7,249	100.0%	7,249	7,249	100.0%
Detail Paid Amount	8,429	8,429	100.0%	8,429	8,429	100.0%
Header TPL Paid Amount	7,249	7,249	100.0%	7,249	7,247	>99.9%
Detail TPL Paid Amount	8,429	8,429	100.0%	8,429	8,429	100.0%

Appendix I. Results for Region 6—Community Mental Health Partnership of Southeast Michigan

Appendix I contains the IS review and administrative profile results, strengths, weaknesses, and recommendations, as applicable, that HSAG identified from the EDV study for **Community Mental Health Partnership of Southeast Michigan**.

IS Review Findings

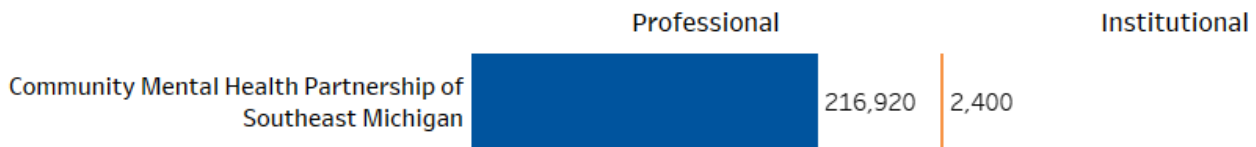
Please refer to Section 3: Information Systems Review Findings for **Community Mental Health Partnership of Southeast Michigan**'s specific findings, if any.

Administrative Profile Results

Encounter Data Summary

Figure I-1 displays the number of encounters by category of service.

Figure I-1—Number of Paid Encounters by Category of Service—Community Mental Health Partnership of Southeast Michigan



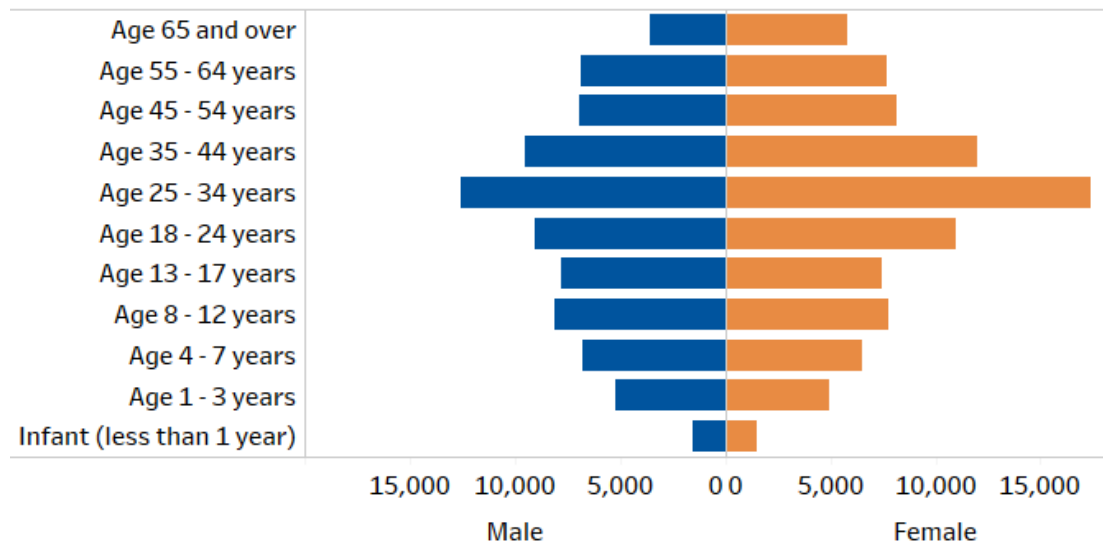
Member Composition

Figure I-2 and Figure I-3 display member demographics.

Figure I-2—Enrollment in SFY 2023—Community Mental Health Partnership of Southeast Michigan



Figure I-3—Age and Gender Distribution—Community Mental Health Partnership of Southeast Michigan

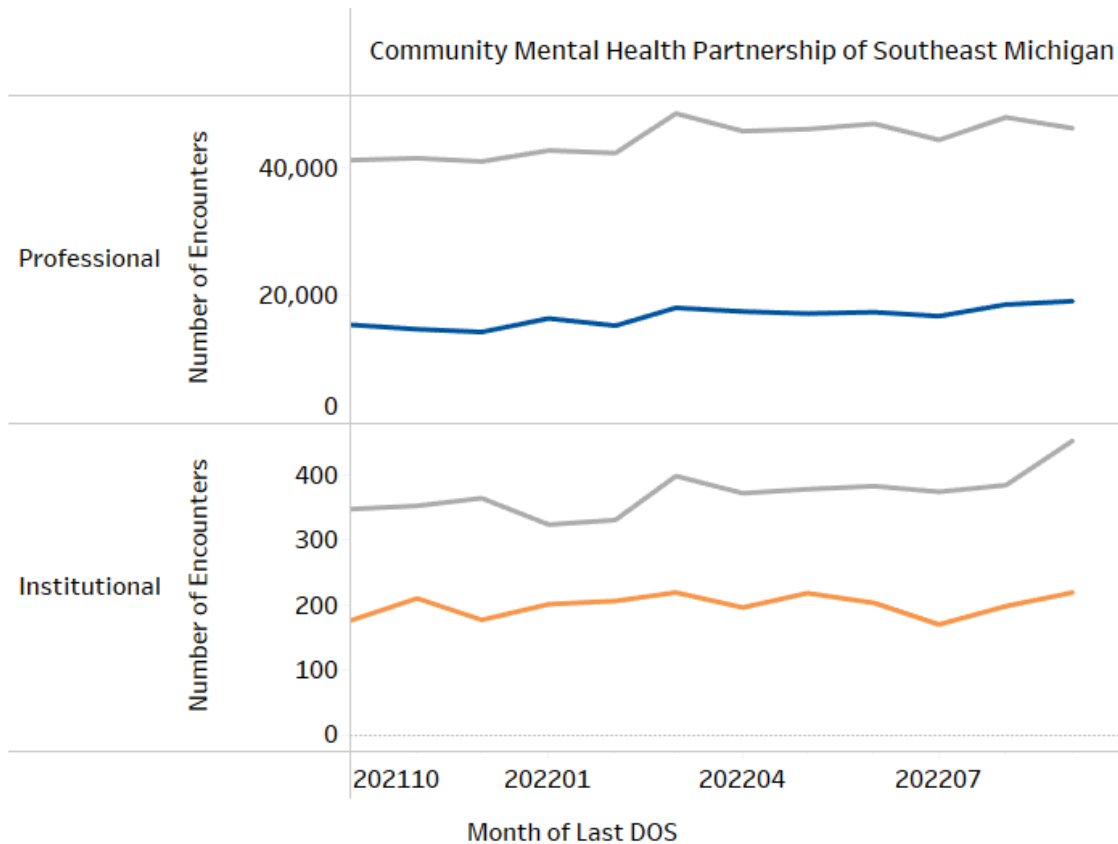


Encounter Data Completeness

Encounter Volume by Service Month

Figure I-4 displays the monthly encounter volume by service month and category of service.

Figure I-4—Encounter Volume by Service Month—Community Mental Health Partnership of Southeast Michigan

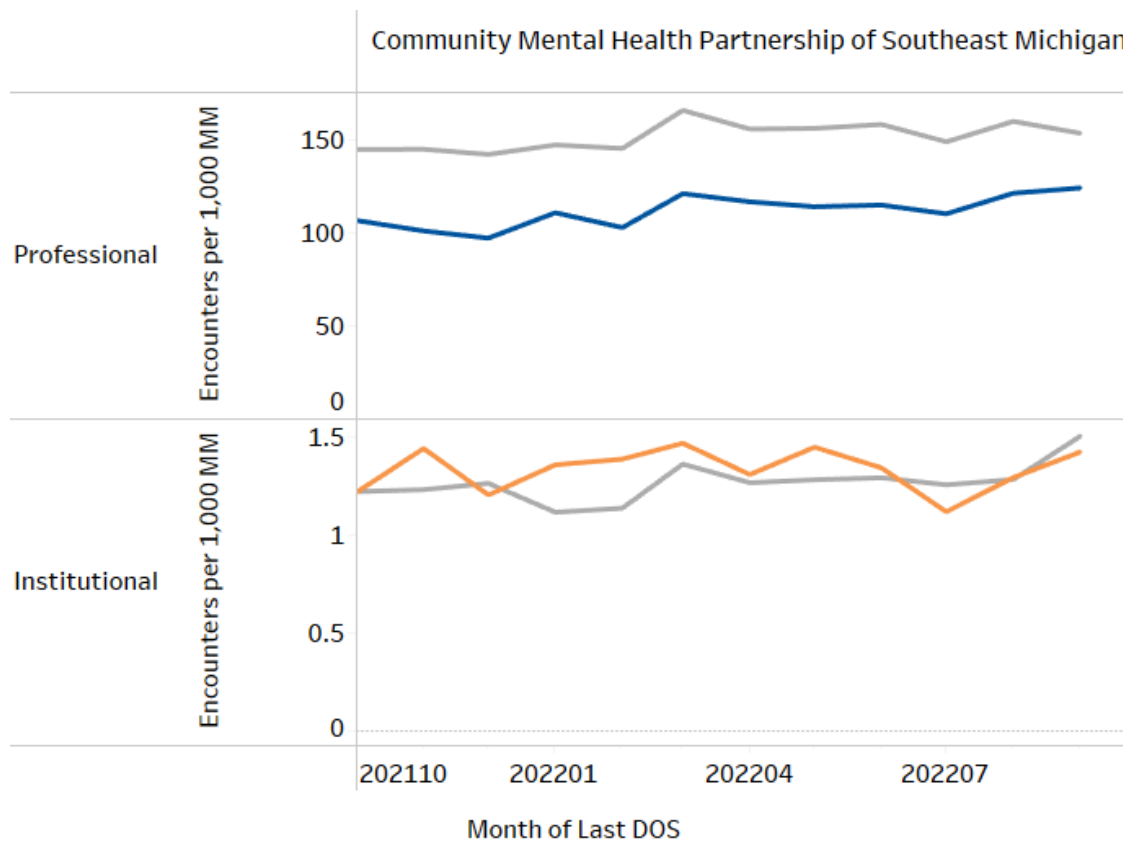


Note: The grey line indicates the all PIHP rate.

Encounter Volume Per 1,000 Member Months

Figure I-5 displays the monthly encounter volume per 1,000 MM by service month and category of service.

Figure I-5—Encounter Volume per 1,000 MM—Community Mental Health Partnership of Southeast Michigan

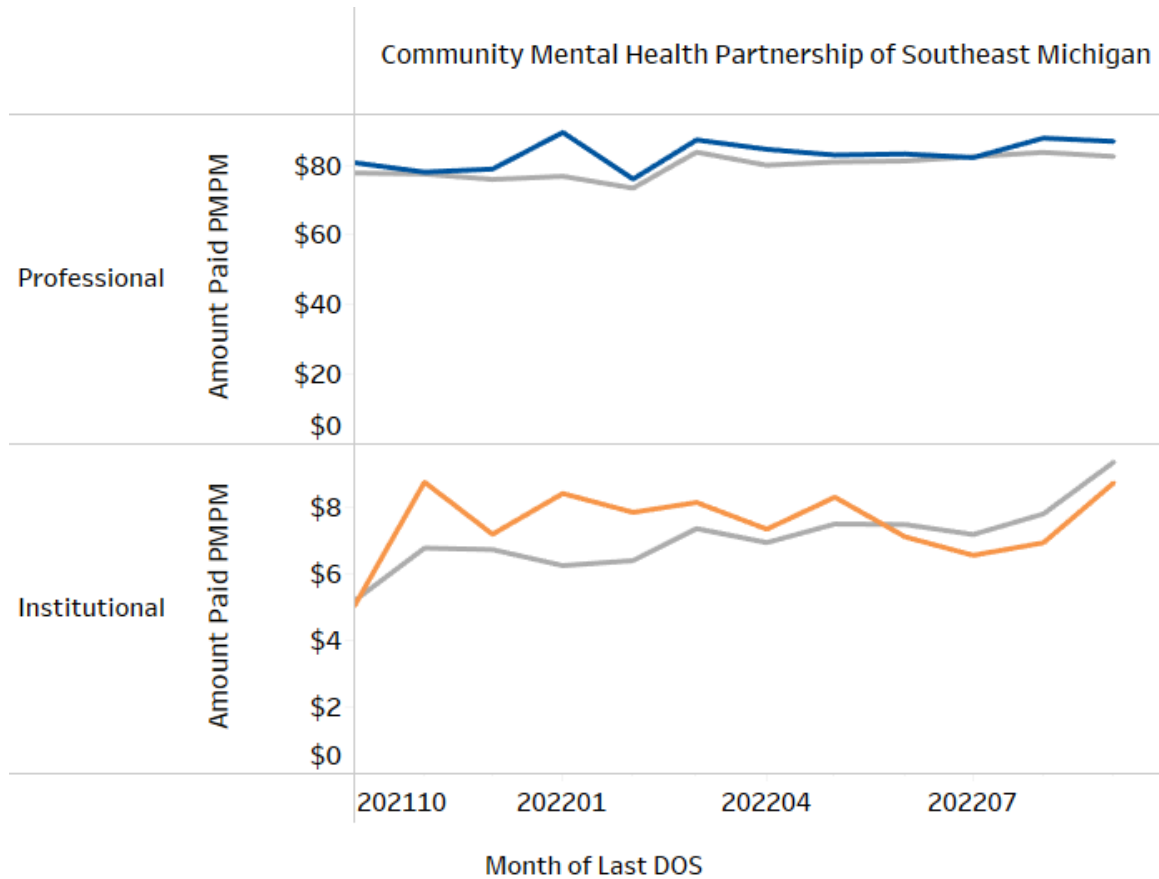


Note: The grey line indicates the all PIHP rate.

Payment Amounts Per Member Per Month

Figure I-6 displays the monthly payment amounts PMPM by service month and category of service.

Figure I-6—Paid Amount PMPM—Community Mental Health Partnership of Southeast Michigan

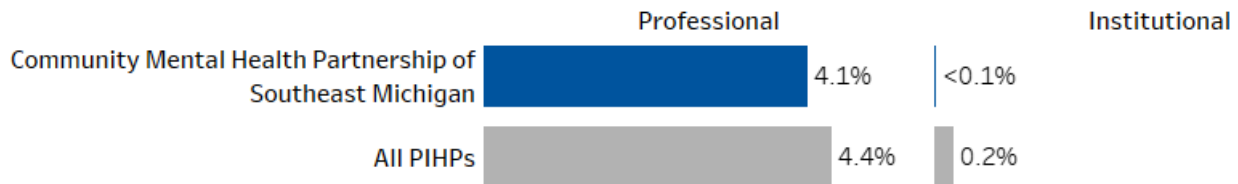


Note: The grey line indicates the all PIHP rate.

Percentage of Duplicate Encounters

Figure I-7 displays the percentage of duplicate encounters.

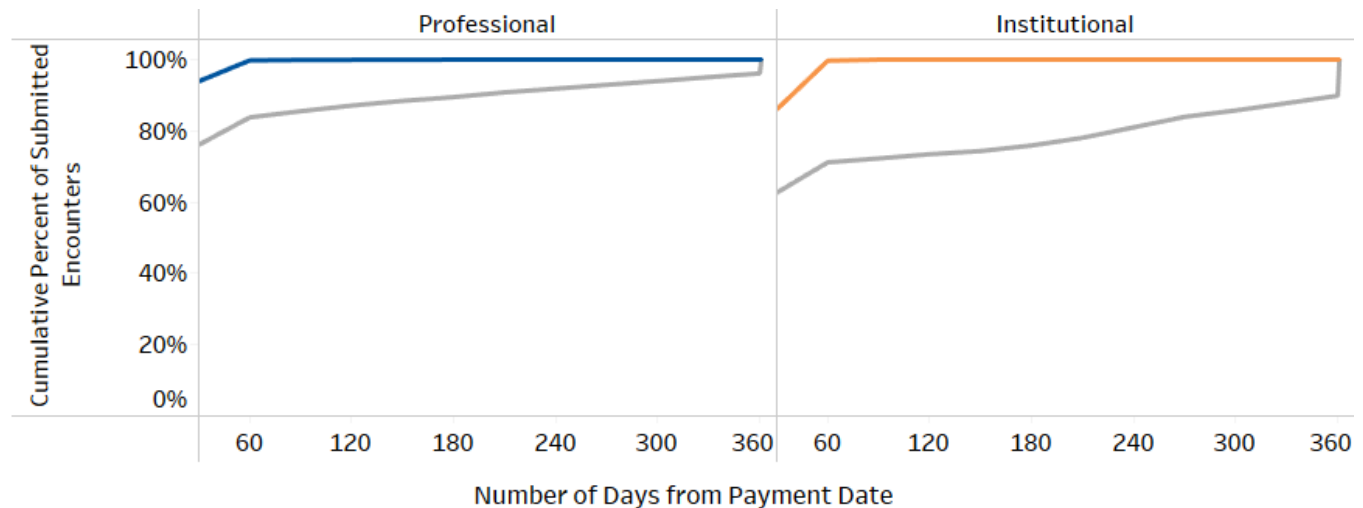
Figure I-7—Percentage of Duplicate Encounters—Community Mental Health Partnership of Southeast Michigan



Encounter Data Timeliness

Figure I-8 and Table I-1 show the cumulative percentage of encounters submitted to MDHHS from the payment date by category of service.

Figure I-8—Cumulative Percentage of Encounters Submitted to MDHHS From PIHP Payment Date by Category of Service—Community Mental Health Partnership of Southeast Michigan



Note: The grey line indicates the all PIHP rate.

**Table I-1—Completeness of Encounters by Category of Service—Community Mental Health Partnership
of Southeast Michigan**

Number of Days From Payment Date	Cumulative Percentage of Submitted Professional Encounters	Cumulative Percentage of Submitted Institutional Encounters
Submitted Within 30 Days	93.9%	86.0%
Submitted Within 60 Days	99.7%	99.7%
Submitted Within 90 Days	99.9%	>99.9%
Submitted Within 120 Days	99.9%	>99.9%
Submitted Within 150 Days	99.9%	>99.9%
Submitted Within 180 Days	>99.9%	>99.9%
Submitted Within 210 Days	>99.9%	>99.9%
Submitted Within 240 Days	>99.9%	>99.9%
Submitted Within 270 Days	>99.9%	100.0%
Submitted Within 300 Days	>99.9%	100.0%
Submitted Within 330 Days	>99.9%	100.0%
Submitted Within 360 Days	>99.9%	100.0%
Submitted After 360 Days	100.0%	100.0%

Field-Level Completeness and Accuracy

Figure I-9 and Figure I-10 provide the percentage of encounters that are present and contain valid values for key data elements.

Figure I-9—Key Professional Encounter Data Elements—Community Mental Health Partnership of Southeast Michigan

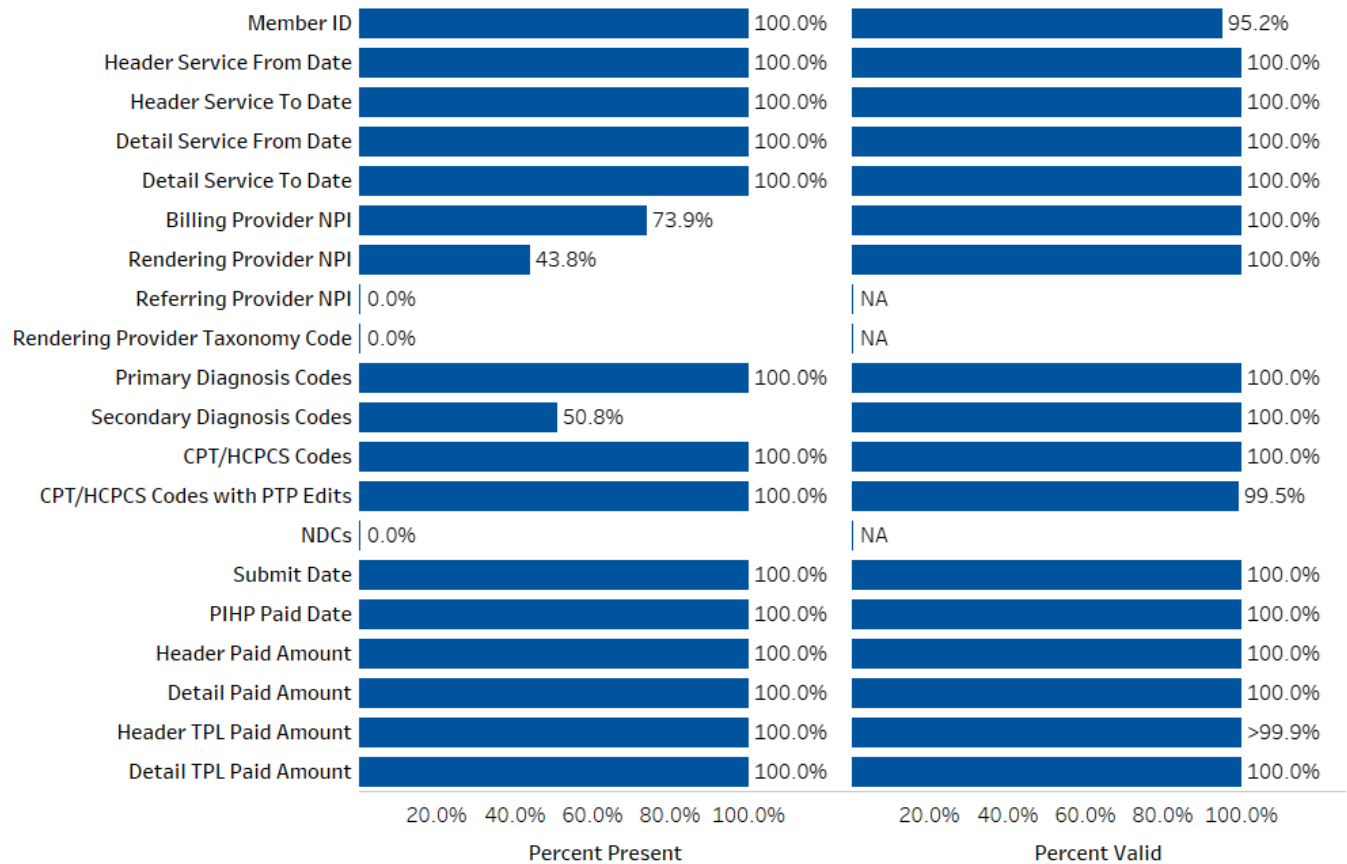
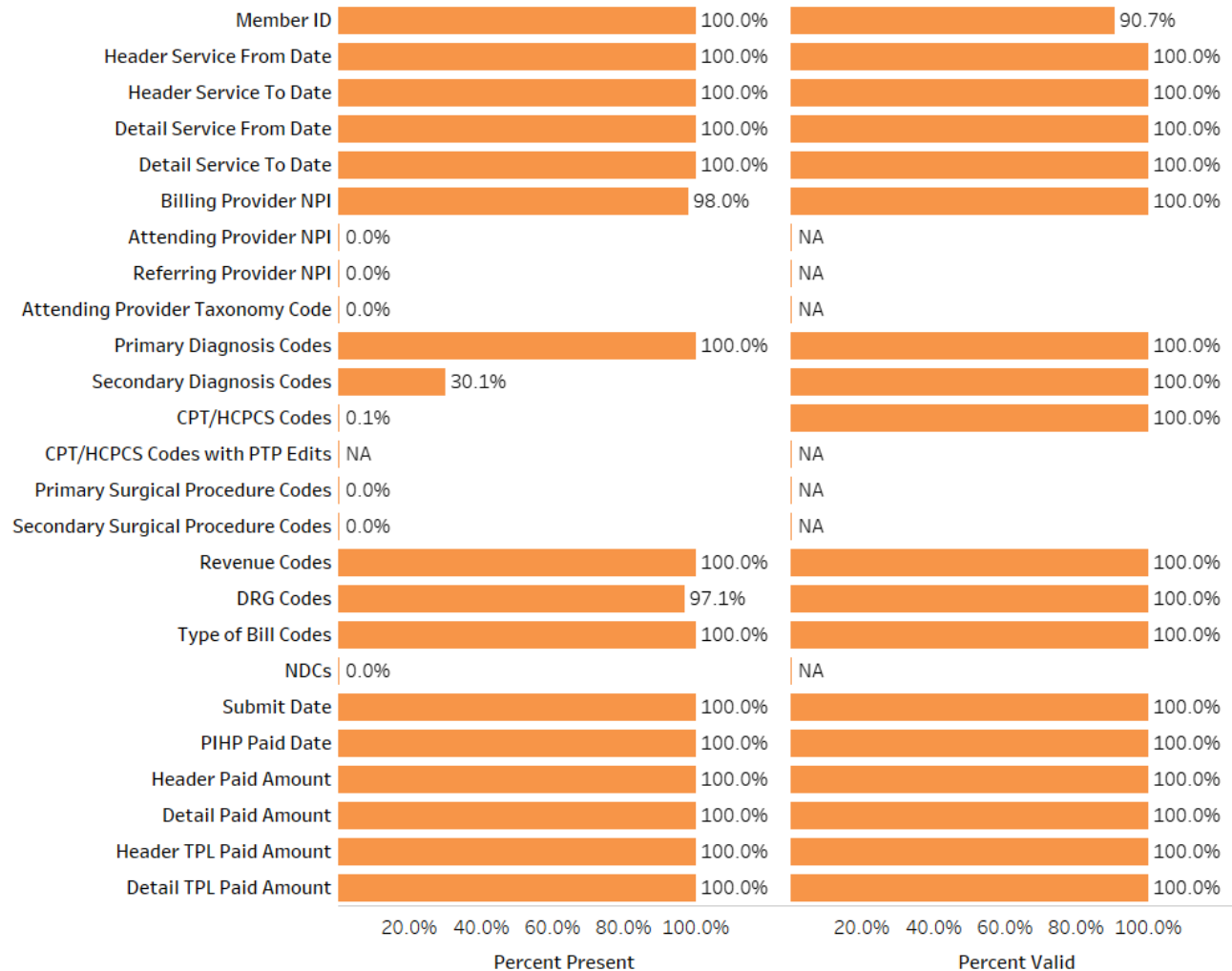


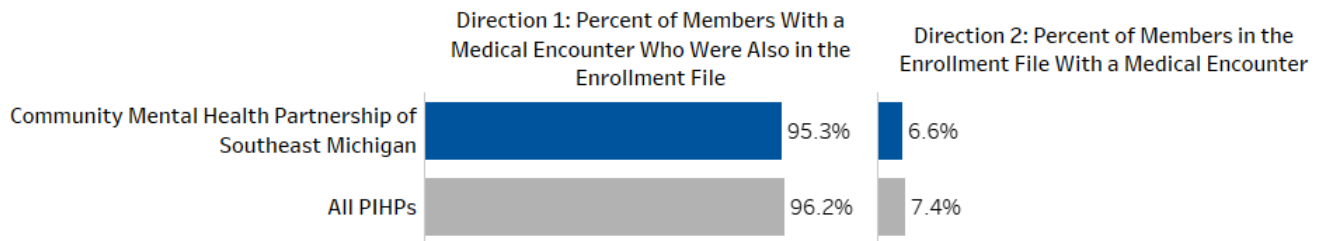
Figure I-10—Key Institutional Encounter Data Elements—Community Mental Health Partnership of Southeast Michigan



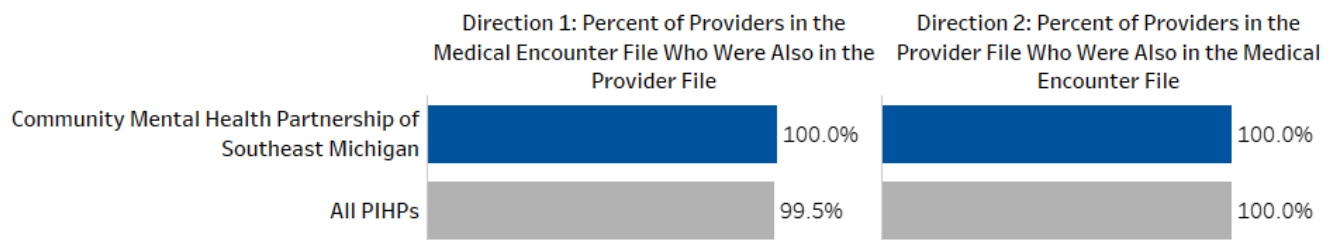
Encounter Data Referential Integrity

Figure I-11 and Figure I-12 display the referential integrity results.

**Figure I-11—Referential Integrity Comparison Between Enrollment and Medical Encounter Files—
Community Mental Health Partnership of Southeast Michigan**



**Figure I-12—Referential Integrity Comparison Between Medical Encounter and Provider Files—
Community Mental Health Partnership of Southeast Michigan**

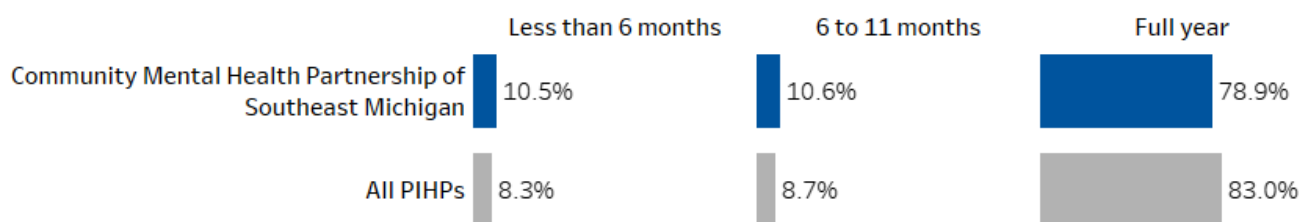


Encounter Data Logic

Member Enrollment

Figure I-13 displays the percentage of members who were continuously enrolled.

Figure I-13—Percentage of Members Who Were Continuously Enrolled—Community Mental Health Partnership of Southeast Michigan



Conclusions

Based on the examination of the IS review and administrative profile outcomes in Section 3 and Section 4, respectively, for **Community Mental Health Partnership of Southeast Michigan**, HSAG identified the following areas of strength, opportunities for improvement, and recommendations.

IS Review Conclusions

Strengths

Strength #1: Community Mental Health Partnership of Southeast Michigan demonstrated its capability to collect, process, and transmit encounter data to MDHHS. The PIHP has also established data review and correction processes that efficiently address quality concerns identified by MDHHS.

Opportunities for Improvement

Weakness #1: Community Mental Health Partnership of Southeast Michigan did not indicate claim volume quality checks performed for claims/encounters from its subcontractors' data.

Why the weakness exists: Claim volume checks are crucial to validating that the submitted data align with the expected volume, helping identify any discrepancies or missing information. The lack of this check increases the risk of errors and omissions in data submission, which can impact the reliability and effectiveness of the overall encounter data system.

Recommendation: **Community Mental Health Partnership of Southeast Michigan** should establish or refine either its subcontractors' or its data monitoring reports aimed at assessing the completeness of encounter data. By implementing such measures, **Community Mental Health Partnership of Southeast Michigan** can enhance the overall quality and reliability of the encounter data it submits, aligning with industry standards and improving data usability for all stakeholders. Regularly reviewing and updating these quality checks will help maintain data integrity over time.

Weakness #2: While several PIHPs recognized the labor- and resource-intensive nature of MRR as a method for conducting data quality checks and reported its usage, **Community Mental Health Partnership of Southeast Michigan** did not indicate the incorporation of MRR as part of its data quality assessment for its subcontractors' data.

Why the weakness exists: The absence of MRR in **Community Mental Health Partnership of Southeast Michigan**'s data quality checks may stem from resource constraints, a lack of awareness about the benefits of MRR, or possibly a reliance on alternative methods for data quality assurance.

Recommendation: Acknowledging the efficacy of MRR in ensuring accuracy and completeness in encounter data, HSAG recommends that **Community Mental Health Partnership of Southeast Michigan** evaluates the feasibility and potential benefits of integrating MRR into its data quality checks. This could enhance the reliability and thoroughness of its data assessment process.

Administrative Profile Conclusions

Strengths

Strength #1: Community Mental Health Partnership of Southeast Michigan displayed timely submission of professional and institutional encounters after payment date, with 99.7 percent of encounters submitted within 60 days for both categories of service.

Strength #2: Across all encounters, most key data elements for **Community Mental Health Partnership of Southeast Michigan** were populated at high rates, and the majority of data elements were over 99 percent valid.

Opportunities for Improvement

Weakness #1: The member ID field had lower than expected validity rates in both professional and institutional data, with a validity rate of 95.2 percent and 90.7 percent, respectively. Additionally, 95.3 percent of members with a medical encounter were identified in the enrollment file. Combined, these findings suggest that **Community Mental Health Partnership of Southeast Michigan**'s enrollment data may not be complete.

Why the weakness exists: Linking datasets to each other to pull in additional information (i.e., enrollment start date or enrollment end date) may be important in subsequent analyses. Additionally, members identified in the encounter file should be enrolled on the date the service occurred.

Recommendation: **Community Mental Health Partnership of Southeast Michigan** should collaborate with MDHHS to ensure both entities have an accurate and complete database of enrolled members.

Weakness #2: Community Mental Health Partnership of Southeast Michigan had relatively high percentage of duplicates for professional encounters (4.1 percent).

Why the weakness exists: Duplicates could be a result of error within the internal process of encounter submission. If duplicates are not properly identified and handled, duplicate encounters can falsely indicate higher utilization of services.

Recommendation: HSAG recommends that **Community Mental Health Partnership of Southeast Michigan** examine its internal process of identifying duplicates.

Administrative Profile Results—Tabular Data

Encounter Data Summary

Member Composition

Table I-2 presents the member composition.

Table I-2—Age and Gender Distribution—Community Mental Health Partnership of Southeast Michigan

Age Category	Number of Females	Number of Males
Infant (less than 1 year)	1,460	1,588
Age 1–3 years	4,966	5,248
Age 4–7 years	6,496	6,828
Age 8–12 years	7,732	8,117
Age 13–17 years	7,489	7,845
Age 18–24 years	10,959	9,046
Age 25–34 years	17,383	12,612
Age 35–44 years	12,005	9,523
Age 45–54 years	8,178	6,953
Age 55–64 years	7,650	6,909
Age 65 and over	5,843	3,615
Total	90,161	78,284

Encounter Data Completeness

Encounter Volume by Service Month

Table I-3 and Table I-4 display the encounter volume by service month.

Table I-3—Encounter Volume: Professional Encounters—Community Mental Health Partnership of Southeast Michigan

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	15,454	144,796	106.7
November 2021	14,756	145,937	101.1
December 2021	14,322	147,276	97.2
January 2022	16,444	148,267	110.9
February 2022	15,312	148,789	102.9
March 2022	18,105	149,432	121.2

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
April 2022	17,527	150,090	116.8
May 2022	17,210	150,793	114.1
June 2022	17,425	151,504	115.0
July 2022	16,802	152,308	110.3
August 2022	18,618	153,394	121.4
September 2022	19,143	154,114	124.2

Table I-4—Encounter Volume: Institutional Encounters—Community Mental Health Partnership of Southeast Michigan

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	176	144,796	1.2
November 2021	210	145,937	1.4
December 2021	177	147,276	1.2
January 2022	201	148,267	1.4
February 2022	206	148,789	1.4
March 2022	219	149,432	1.5
April 2022	196	150,090	1.3
May 2022	218	150,793	1.4
June 2022	203	151,504	1.3
July 2022	170	152,308	1.1
August 2022	198	153,394	1.3
September 2022	219	154,114	1.4

Payment Amounts Per Member Per Month

Table I-5 and Table I-6 display the monthly payment amounts PMPM by service month.

Table I-5—Paid Amount PMPM: Professional Encounters—Community Mental Health Partnership of Southeast Michigan

Month of Service	Number of MM	Paid Amount PMPM
October 2021	144,796	\$80.73
November 2021	145,937	\$78.02
December 2021	147,276	\$78.88
January 2022	148,267	\$89.41

Month of Service	Number of MM	Paid Amount PMPM
February 2022	148,789	\$76.02
March 2022	149,432	\$87.26
April 2022	150,090	\$84.56
May 2022	150,793	\$82.91
June 2022	151,504	\$83.22
July 2022	152,308	\$82.20
August 2022	153,394	\$87.77
September 2022	154,114	\$86.83

Table I-6—Paid Amount PMPM: Institutional Encounters—Community Mental Health Partnership of Southeast Michigan

Month of Service	Number of MM	Paid Amount PMPM
October 2021	144,796	\$5.02
November 2021	145,937	\$8.75
December 2021	147,276	\$7.19
January 2022	148,267	\$8.41
February 2022	148,789	\$7.84
March 2022	149,432	\$8.14
April 2022	150,090	\$7.34
May 2022	150,793	\$8.30
June 2022	151,504	\$7.11
July 2022	152,308	\$6.55
August 2022	153,394	\$6.93
September 2022	154,114	\$8.73

Percentage of Duplicate Encounters

Table I-7 displays the percentage of duplicate encounters by category of service.

Table I-7—Percentage of Duplicate Encounters by Category of Service—Community Mental Health Partnership of Southeast Michigan

Category of Service	Number of Duplicate Records	Percentage of Duplicate Records
Professional	41,714	4.1%
Institutional	1	<0.1%

Encounter Data Timeliness

Encounter Data Lag Triangles

Table I-8 and Table I-9 display the lag triangles between service month and submission month to MDHHS. For conciseness, lag triangles only include encounters submitted through April 2023 (a minimum of a seven-month lag); therefore, counts displayed in the total line may not equal counts displayed in encounter volume figures.

Table I-8—Encounter Data Lag Triangle: Professional Encounters—Community Mental Health Partnership of Southeast Michigan

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	6,467	34											6,501
202112	1,677	4,487	47										6,211
202201	2,687	5,391	8,406	6,591									23,075
202202	293	759	2,971	6,346	3,528								13,897
202203	216	194	417	2,713	8,540	3,681							15,761
202204	4,511	4,258	2,519	837	2,834	11,459	3,837						30,255
202205	118	112	145	172	615	2,639	10,582	3,471					17,854
202206	20	8	42	41	96	311	2,842	11,450	4,034				18,844
202207	10	9	1	17	38	273	346	2,321	10,756	3,285			17,056
202208	159	179	280	325	230	599	186	585	2,383	10,410	3,971		19,307
202209	36	34	47	52	33	84	417	261	847	2,972	12,073	3,698	20,554
202210	323	337	381	507	476	214	131	157	240	544	3,129	14,635	21,074
202211	55	62	60	66	62	71	120	163	277	600	704	1,864	4,104
202212	8	9	6	4	6	9	271	35	149	186	55	196	934
202301	33	25	54	57	51	66	80	70	75	58	77	215	861
202302	42	38	41	54	38	52	40	35	37	46	81	128	632
202303	0	0	0	0	0	0	0	0	0	0	0	0	0
202304	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	16,655	15,936	15,417	17,782	16,547	19,458	18,852	18,548	18,798	18,101	20,090	20,736	216,920
MM	144,796	145,937	147,276	148,267	148,789	149,432	150,090	150,793	151,504	152,308	153,394	154,114	1,796,700
PMPM	0.12	0.11	0.10	0.12	0.11	0.13	0.13	0.12	0.12	0.12	0.13	0.13	0.12

**Table I-9—Encounter Data Lag Triangle: Institutional Encounters—Community Mental Health Partnership
of Southeast Michigan**

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	90	21											111
202112	22	90	5										117
202201	17	41	109	26									193
202202	1	2	16	102	17								138
202203	1	4	6	22	110	18							161
202204	29	33	27	22	49	146	33						339
202205	3	5	4	6	7	21	109	31					186
202206	2	3	1	5	2	8	22	138	36				217
202207	1	3	2	4	4	7	11	20	113	18			183
202208	0	1	1	1	1	4	4	8	26	111	27		184
202209	0	1	1	3	4	3	1	4	9	14	120	27	187
202210	0	0	0	1	1	2	3	1	3	8	12	129	160
202211	1	1	0	0	0	1	1	1	3	2	15	40	65
202212	9	9	5	9	11	10	11	14	11	13	14	15	131
202301	0	0	0	1	0	0	1	1	2	4	11	8	28
202302	0	0	0	0	0	0	0	0	0	0	0	0	0
202303	0	0	0	0	0	0	0	0	0	0	0	0	0
202304	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	176	214	177	202	206	220	196	218	203	170	199	219	2,400
MM	144,796	145,937	147,276	148,267	148,789	149,432	150,090	150,793	151,504	152,308	153,394	154,114	1,796,700
PMPM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Field-Level Completeness and Accuracy

Table I-10 and Table I-11 provide the percentage of encounters that are present and contain valid values for key data elements for all categories of service.

Table I-10—Key Encounter Data Elements: Professional Encounters—Community Mental Health Partnership of Southeast Michigan

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	216,920	216,920	100.0%	216,920	206,518	95.2%
Header Service From Date	216,920	216,920	100.0%	216,920	216,920	100.0%
Header Service To Date	216,920	216,920	100.0%	216,920	216,920	100.0%
Detail Service From Date	1,007,151	1,007,151	100.0%	1,007,151	1,007,151	100.0%
Detail Service To Date	1,007,151	1,007,151	100.0%	1,007,151	1,007,151	100.0%
Billing Provider NPI	216,920	160,406	73.9%	160,406	160,406	100.0%
Rendering Provider NPI	216,920	94,973	43.8%	94,973	94,973	100.0%
Referring Provider NPI	216,920	0	0.0%	0	0	NA
Rendering Provider Taxonomy Code	216,920	0	0.0%	0	0	NA
Primary Diagnosis Codes	216,920	216,920	100.0%	216,920	216,920	100.0%
Secondary Diagnosis Codes	216,920	110,103	50.8%	249,586	249,586	100.0%
CPT/HCPCS Codes	1,007,151	1,007,151	100.0%	1,007,151	1,007,151	100.0%
CPT/HCPCS Codes with PTP Edits	1,006,500	1,006,500	100.0%	1,006,500	1,001,928	99.5%
NDCs	1,007,151	0	0.0%	0	0	NA
Submit Date	1,007,151	1,007,151	100.0%	1,007,151	1,007,151	100.0%
PIHP Paid Date	1,007,151	1,007,151	100.0%	1,007,151	1,007,151	100.0%
Header Paid Amount	216,920	216,920	100.0%	216,920	216,920	100.0%
Detail Paid Amount	1,007,151	1,007,151	100.0%	1,007,151	1,007,151	100.0%
Header TPL Paid Amount	216,920	216,920	100.0%	216,920	216,871	>99.9%
Detail TPL Paid Amount	1,007,151	1,007,151	100.0%	1,007,151	1,007,151	100.0%

Table I-11—Key Encounter Data Elements: Institutional Encounters—Community Mental Health Partnership of Southeast Michigan

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	2,400	2,400	100.0%	2,400	2,177	90.7%
Header Service From Date	2,400	2,400	100.0%	2,400	2,400	100.0%
Header Service To Date	2,400	2,400	100.0%	2,400	2,400	100.0%
Detail Service From Date	4,520	4,520	100.0%	4,520	4,520	100.0%
Detail Service To Date	4,520	4,520	100.0%	4,520	4,520	100.0%
Billing Provider NPI	2,400	2,351	98.0%	2,351	2,351	100.0%
Attending Provider NPI	2,400	0	0.0%	0	0	NA
Referring Provider NPI	2,400	0	0.0%	0	0	NA
Attending Provider Taxonomy Code	2,400	0	0.0%	0	0	NA
Primary Diagnosis Codes	2,400	2,400	100.0%	2,400	2,400	100.0%
Secondary Diagnosis Codes	2,400	722	30.1%	1,357	1,357	100.0%
CPT/HCPCS Codes	4,520	3	0.1%	3	3	100.0%
CPT/HCPCS Codes with PTP Edits	0	0	NA	0	0	NA
Primary Surgical Procedure Codes	2,400	0	0.0%	0	0	NA
Secondary Surgical Procedure Codes	2,400	0	0.0%	0	0	NA
Revenue Codes	4,520	4,520	100.0%	4,520	4,520	100.0%
DRG Codes	2,400	2,331	97.1%	2,331	2,331	100.0%
Type of Bill Codes	2,400	2,400	100.0%	2,400	2,400	100.0%
NDCs	4,520	0	0.0%	0	0	NA
Submit Date	4,520	4,520	100.0%	4,520	4,520	100.0%
PIHP Paid Date	4,520	4,520	100.0%	4,520	4,520	100.0%
Header Paid Amount	2,400	2,400	100.0%	2,400	2,400	100.0%
Detail Paid Amount	4,520	4,520	100.0%	4,520	4,520	100.0%
Header TPL Paid Amount	2,400	2,400	100.0%	2,400	2,400	100.0%
Detail TPL Paid Amount	4,520	4,520	100.0%	4,520	4,520	100.0%

Appendix J. Results for Region 7—Detroit Wayne Integrated Health Network

Appendix J contains the IS review and administrative profile results, strengths, weaknesses, and recommendations, as applicable, that HSAG identified from the EDV study for **Detroit Wayne Integrated Health Network**.

IS Review Findings

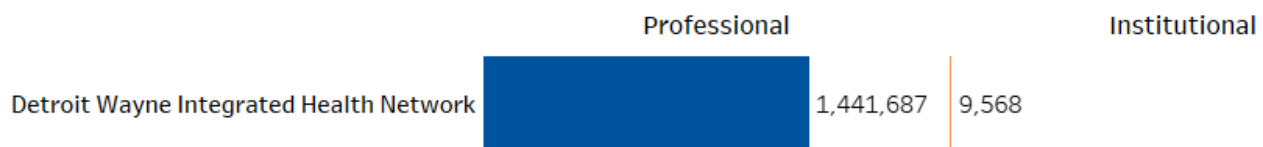
Please refer to Section 3: Information Systems Review Findings for **Detroit Wayne Integrated Health Network**'s specific findings, if any.

Administrative Profile Results

Encounter Data Summary

Figure J-1 displays the number of encounters by category of service.

Figure J-1—Number of Paid Encounters by Category of Service—Detroit Wayne Integrated Health Network



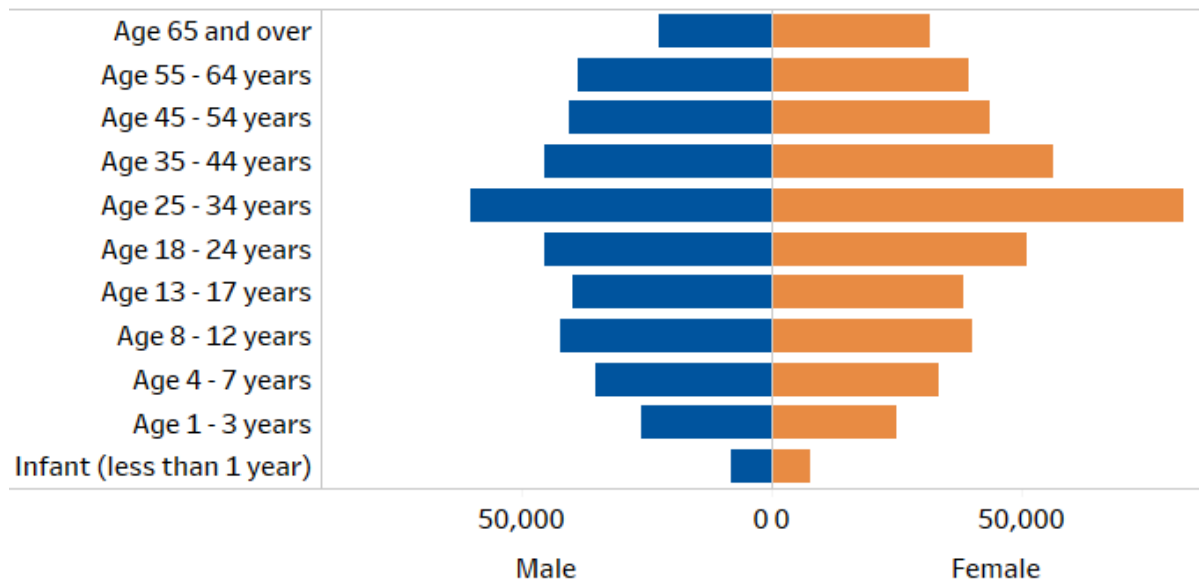
Member Composition

Figure J-2 and Figure J-3 display member demographics.

Figure J-2—Enrollment in SFY 2023—Detroit Wayne Integrated Health Network



Figure J-3—Age and Gender Distribution—Detroit Wayne Integrated Health Network

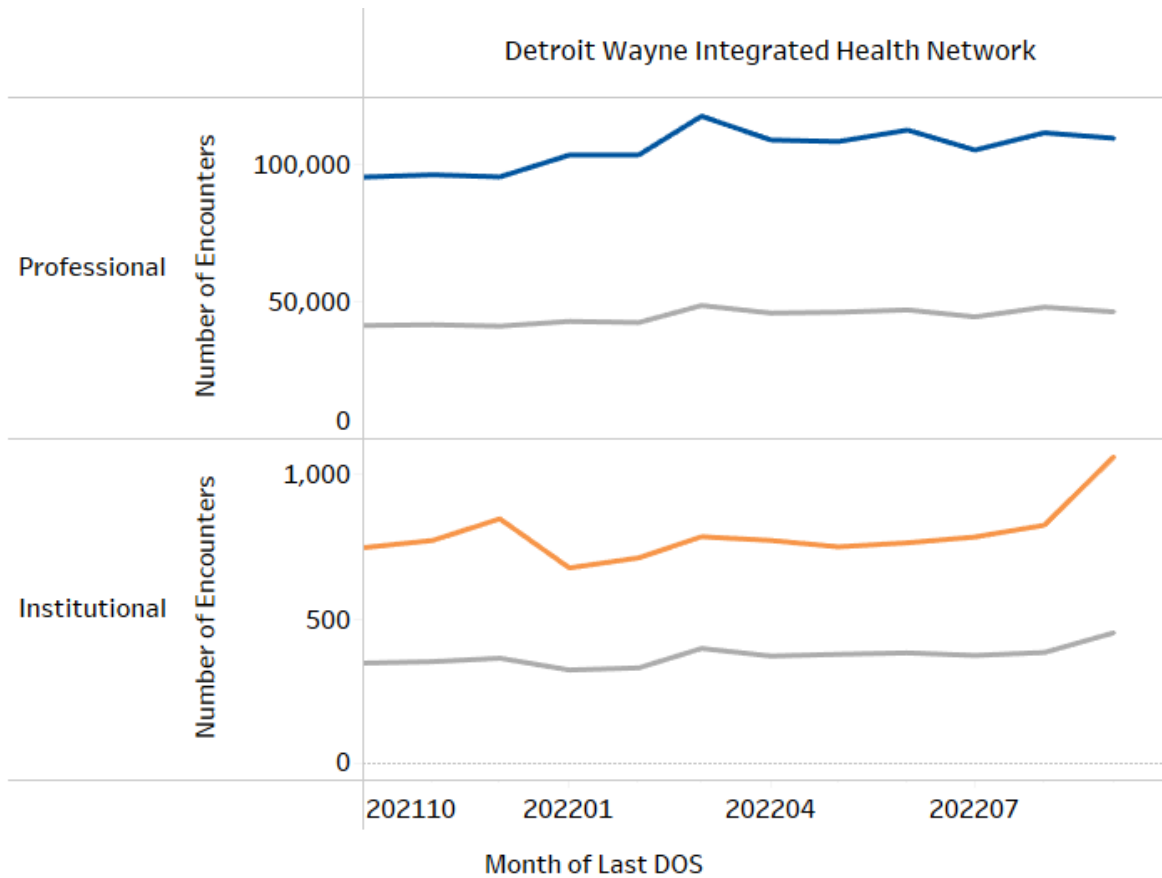


Encounter Data Completeness

Encounter Volume by Service Month

Figure J-4 displays the monthly encounter volume by service month and category of service.

Figure J-4—Encounter Volume by Service Month—Detroit Wayne Integrated Health Network

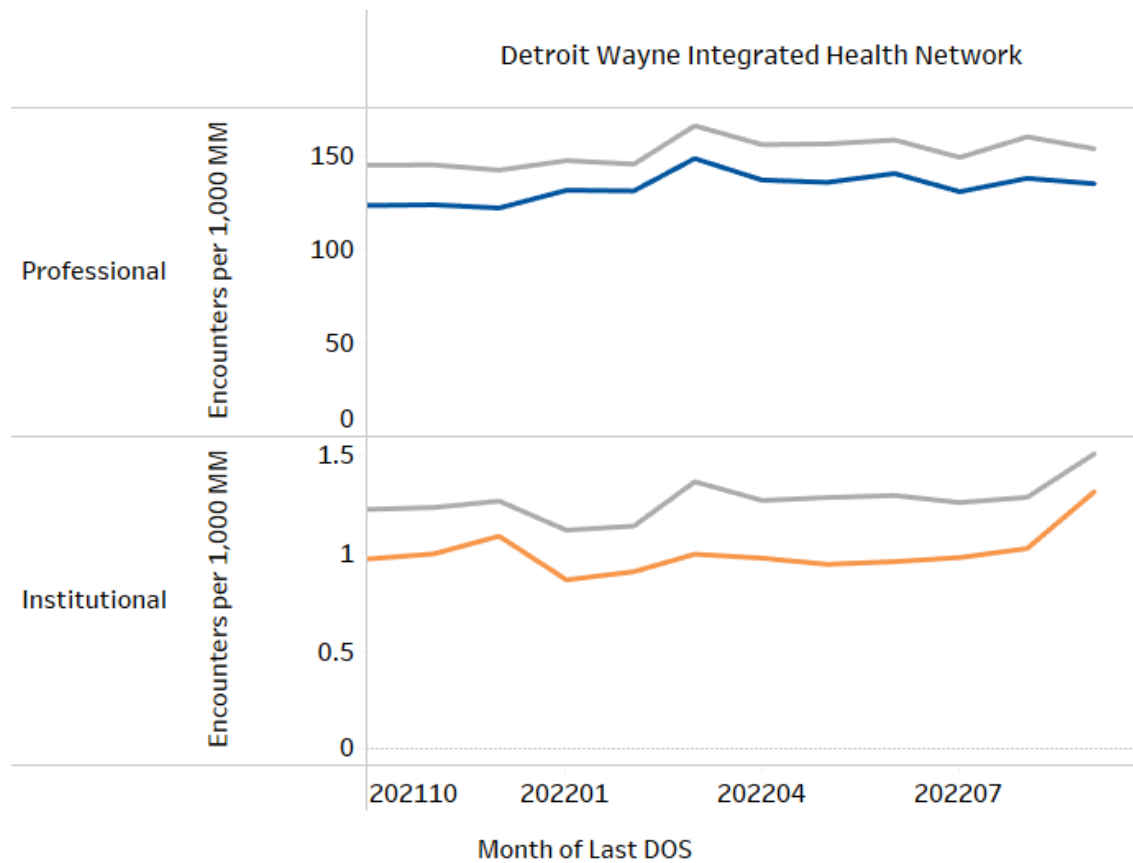


Note: The grey line indicates the all PIHP rate.

Encounter Volume Per 1,000 Member Months

Figure J-5 displays the monthly encounter volume per 1,000 MM by service month and category of service.

Figure J-5—Encounter Volume per 1,000 MM—Detroit Wayne Integrated Health Network

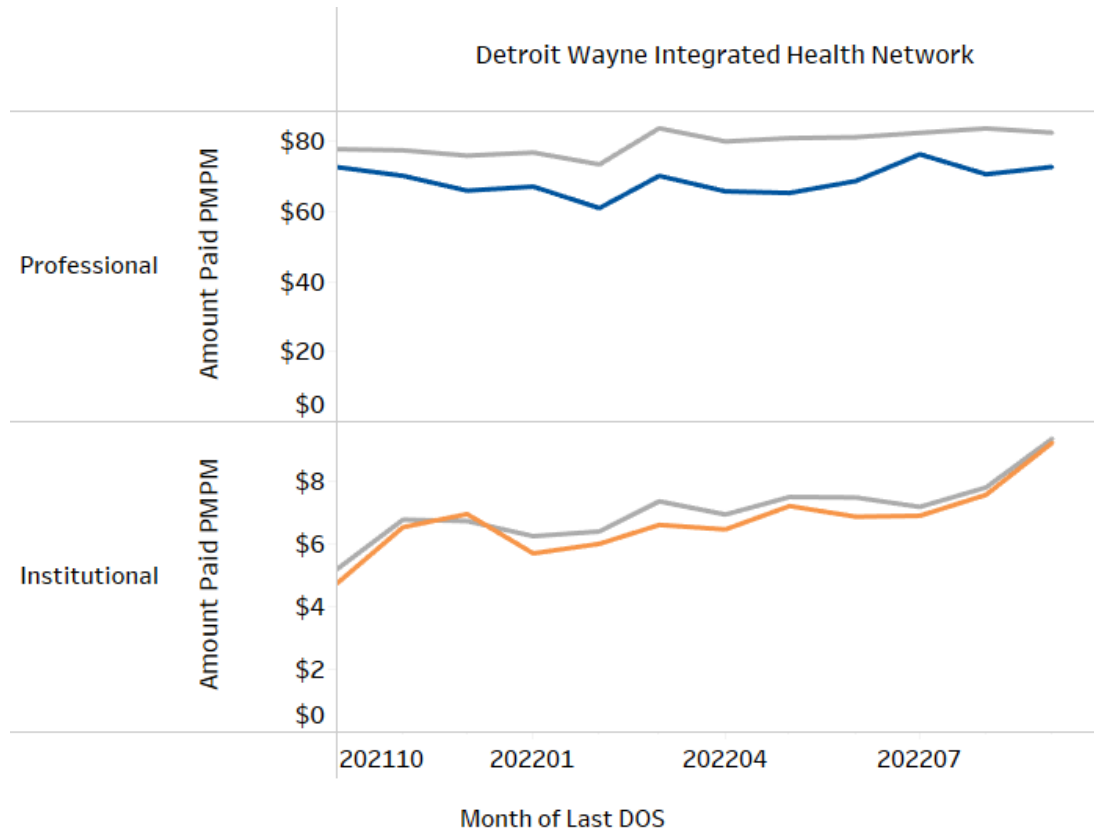


Note: The grey line indicates the all PIHP rate.

Payment Amounts Per Member Per Month

Figure J-6 displays the monthly payment amounts PMPM by service month and category of service.

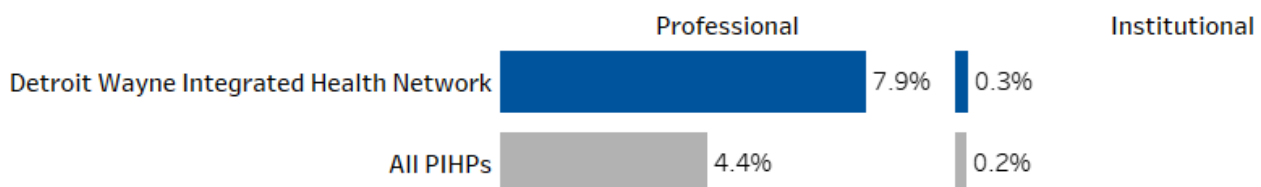
Figure J-6—Paid Amount PMPM—Detroit Wayne Integrated Health Network



Percentage of Duplicate Encounters

Figure J-7 displays the percentage of duplicate encounters.

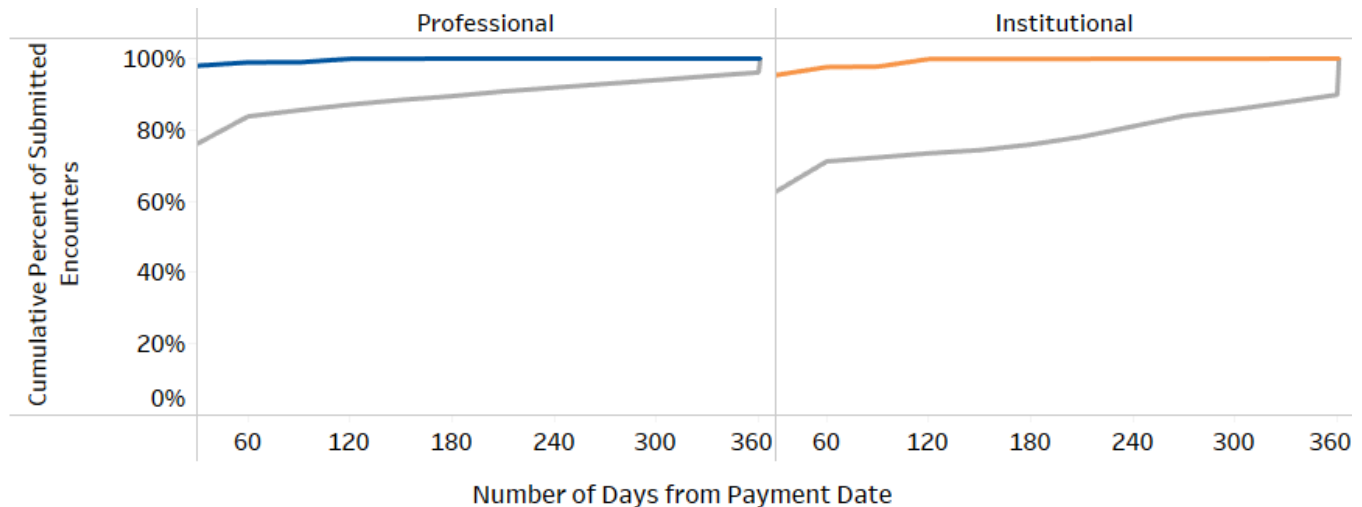
Figure J-7—Percentage of Duplicate Encounters—Detroit Wayne Integrated Health Network



Encounter Data Timeliness

Figure J-8 and Table J-1 show the cumulative percentage of encounters submitted to MDHHS from the payment date by category of service.

Figure J-8—Cumulative Percentage of Encounters Submitted to MDHHS From PIHP Payment Date by Category of Service—Detroit Wayne Integrated Health Network



Note: The grey line indicates the all PIHP rate.

Table J-1—Completeness of Encounters by Category of Service—Detroit Wayne Integrated Health Network

Number of Days From Payment Date	Cumulative Percentage of Submitted Professional Encounters	Cumulative Percentage of Submitted Institutional Encounters
Submitted Within 30 Days	98.0%	95.3%
Submitted Within 60 Days	98.9%	97.6%
Submitted Within 90 Days	98.9%	97.7%
Submitted Within 120 Days	99.9%	99.8%
Submitted Within 150 Days	99.9%	99.9%
Submitted Within 180 Days	>99.9%	99.9%
Submitted Within 210 Days	>99.9%	99.9%
Submitted Within 240 Days	>99.9%	99.9%
Submitted Within 270 Days	>99.9%	99.9%
Submitted Within 300 Days	>99.9%	99.9%
Submitted Within 330 Days	>99.9%	>99.9%
Submitted Within 360 Days	>99.9%	>99.9%
Submitted After 360 Days	100.0%	100.0%

Field-Level Completeness and Accuracy

Figure J-9 and Figure J-10 provide the percentage of encounters that are present and contain valid values for key data elements.

Figure J-9—Key Professional Encounter Data Elements—Detroit Wayne Integrated Health Network

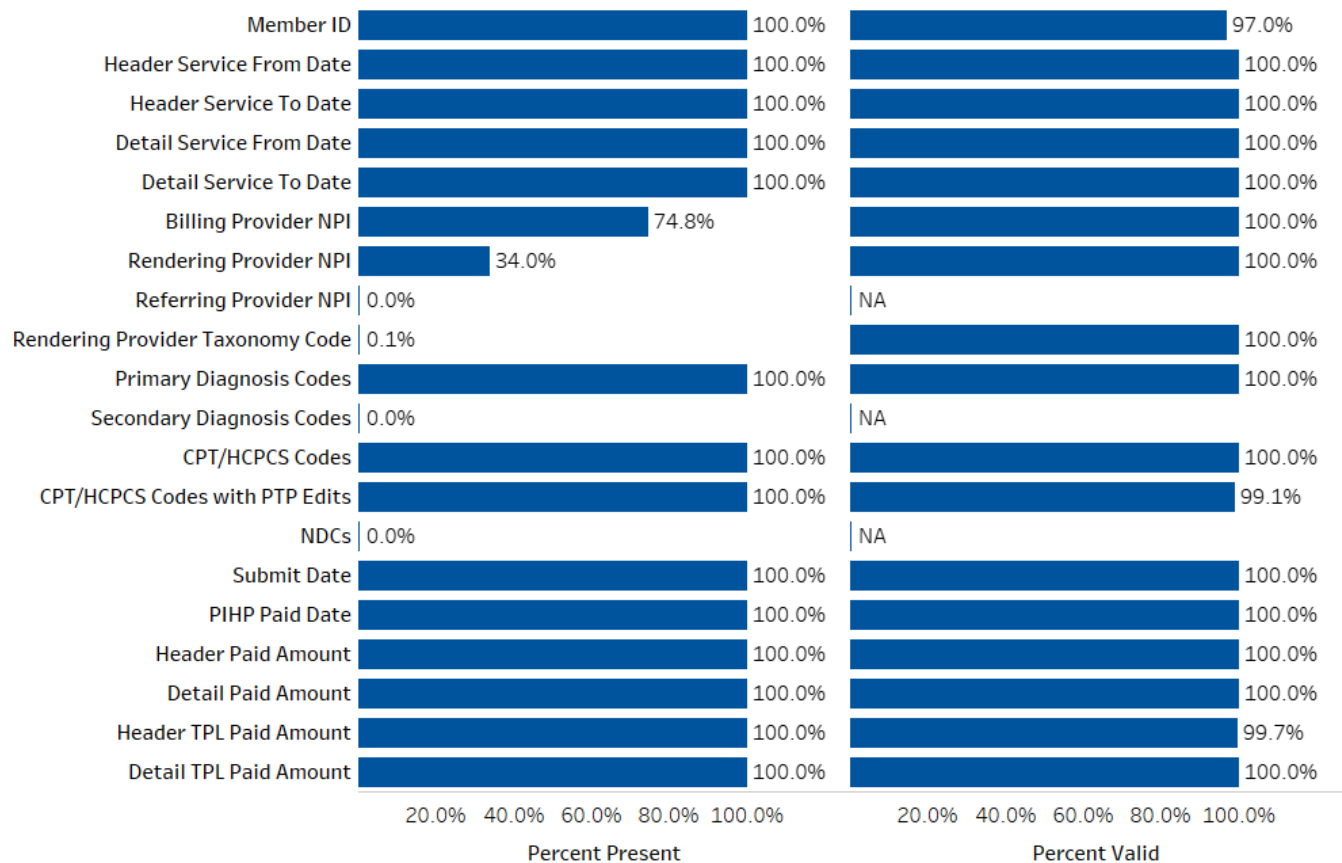
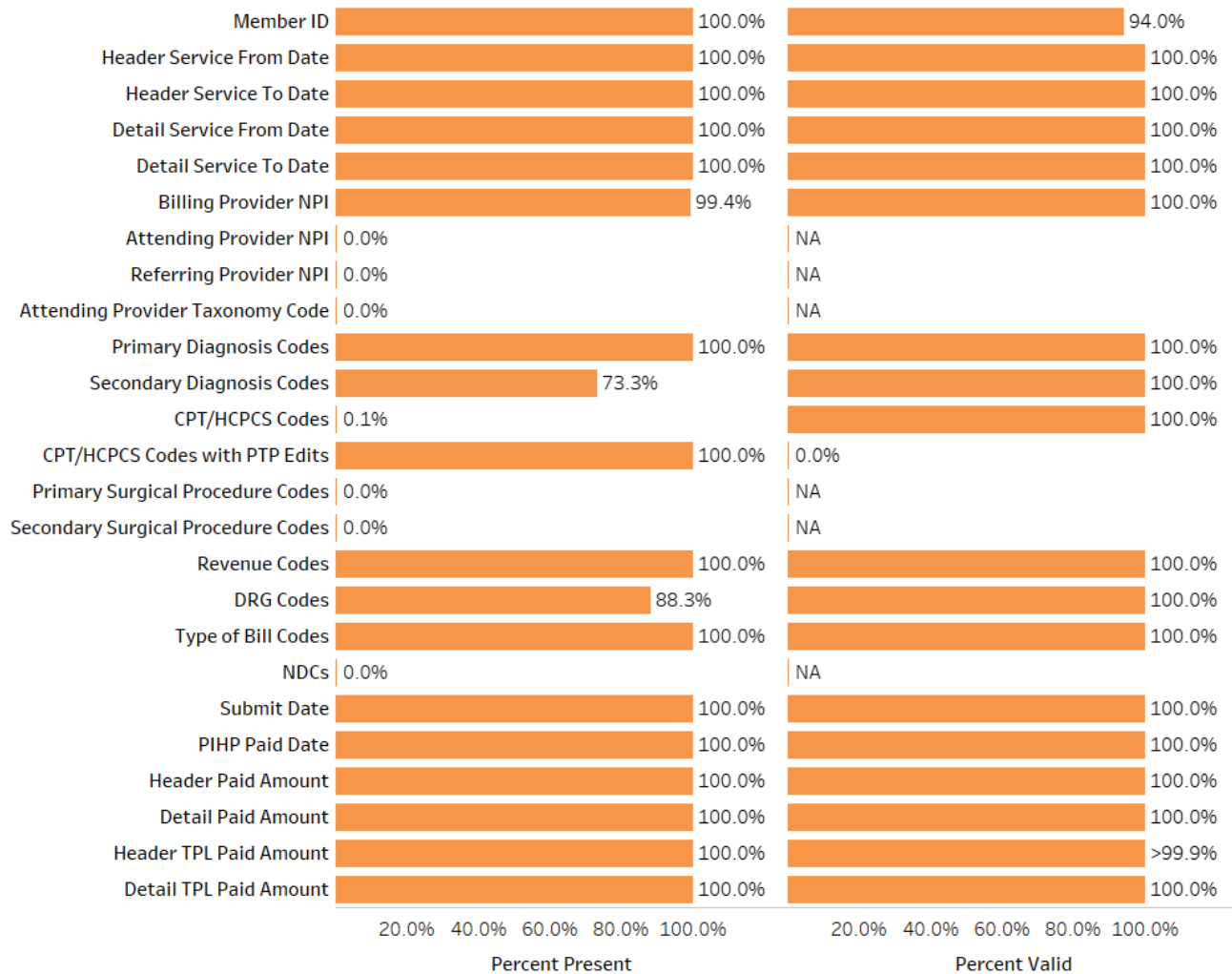


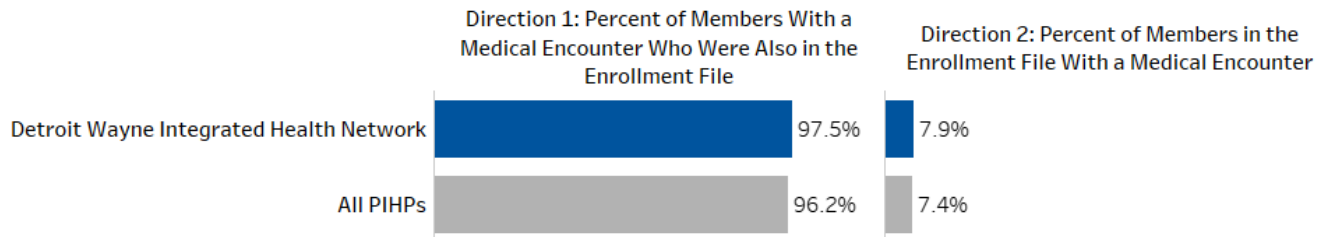
Figure J-10—Key Institutional Encounter Data Elements—Detroit Wayne Integrated Health Network



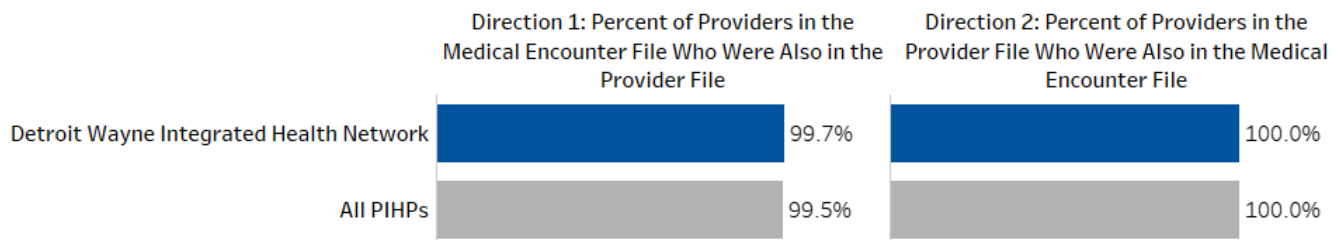
Encounter Data Referential Integrity

Figure J-11 and Figure J-12 display the referential integrity results.

**Figure J-11—Referential Integrity Comparison Between Enrollment and Medical Encounter Files—
Detroit Wayne Integrated Health Network**



**Figure J-12—Referential Integrity Comparison Between Medical Encounter and Provider Files—
Detroit Wayne Integrated Health Network**



Encounter Data Logic

Member Enrollment

Figure J-13 displays the percentage of members who were continuously enrolled.

**Figure J-13—Percentage of Members Who Were Continuously Enrolled—
Detroit Wayne Integrated Health Network**



Conclusions

Based on the examination of the IS review and administrative profile outcomes in Section 3 and Section 4, respectively, for **Detroit Wayne Integrated Health Network**, HSAG identified the following areas of strength, opportunities for improvement, and recommendations.

IS Review Conclusions

Strengths

Strength #1: Detroit Wayne Integrated Health Network demonstrated its capability to collect, process, and transmit encounter data to MDHHS. The PIHP has also established data review and correction processes that efficiently address quality concerns identified by MDHHS.

Opportunities for Improvement

Weakness #1: Detroit Wayne Integrated Health Network modified encounters from its subcontractors before submitting them to MDHHS.

Why the weakness exists: Since modifications were made to the subcontractors' encounters, it is essential to communicate these changes to each entity involved to maintain data integrity.

Recommendation: Detroit Wayne Integrated Health Network should collaborate with MDHHS to confirm that the identified changes do not require adjustments to be sent back to the subcontractors.

Weakness #2: Detroit Wayne Integrated Health Network did not indicate claim volume, accuracy, or timeliness quality checks performed for claims/encounters from its subcontractors' data.

Why the weakness exists: Claim volume and accuracy checks are crucial to validating that the submitted data align with the expected volume and values, helping identify any discrepancies or missing information. Timeliness quality checks ensure that the claims/encounters are submitted within the specified time frames, meeting MDHHS' minimum monthly requirements. The lack of these checks increases the risk of errors, omissions, or delays in data submission, which can impact the reliability and effectiveness of the overall encounter data system.

Recommendation: Detroit Wayne Integrated Health Network should establish or refine either its subcontractors' or its data monitoring reports aimed at assessing the completeness, accuracy, and timeliness of encounter data. By implementing such measures, **Detroit Wayne Integrated Health Network** can enhance the overall quality and reliability of the encounter data that it submits, aligning with industry standards and improving data usability for all stakeholders. Regularly reviewing and updating these quality checks will help maintain data integrity over time.

Administrative Profile Conclusions

Strengths

Strength #1: Detroit Wayne Integrated Health Network displayed timely submission of professional and institutional encounters after payment date, and within 120 days, had 99.9 percent of professional encounters submitted and 99.8 percent of institutional encounter submitted.

Strength #2: Across all encounters, most key data elements for **Detroit Wayne Integrated Health Network** were populated at high rates, and the majority of data elements were over 99 percent valid.

Opportunities for Improvement

Weakness #1: The member ID field had lower than expected validity rates in both professional and institutional data, with a validity rate of 97 percent and 94 percent, respectively. Additionally, 97.5 percent of members with a medical encounter were identified in the enrollment file. Combined, these findings suggest that **Detroit Wayne Integrated Health Network**'s enrollment data may not be complete.

Why the weakness exists: Linking datasets to each other to pull in additional information (i.e., enrollment start date or enrollment end date) may be important in subsequent analyses. Additionally, members identified in the encounter file should be enrolled on the date the service occurred.

Recommendation: **Detroit Wayne Integrated Health Network** should collaborate with MDHHS to ensure both entities have an accurate and complete database of enrolled members.

Weakness #2: Detroit Wayne Integrated Health Network had relatively high percentage of duplicates for professional encounters (7.9 percent).

Why the weakness exists: Duplicates could be a result of error within the internal process of encounter submission. If duplicates are not properly identified and handled, duplicate encounters can falsely indicate higher utilization of services.

Recommendation: HSAG recommends that **Detroit Wayne Integrated Health Network** examine its internal process of identifying duplicates.

Administrative Profile Results—Tabular Data

Encounter Data Summary

Member Composition

Table J-2 presents the member composition.

Table J-2—Age and Gender Distribution—Detroit Wayne Integrated Health Network

Age Category	Number of Females	Number of Males
Infant (less than 1 year)	7,871	8,031
Age 1–3 years	25,048	26,128
Age 4–7 years	33,510	35,116
Age 8–12 years	40,390	42,129
Age 13–17 years	38,447	39,825
Age 18–24 years	51,303	45,466
Age 25–34 years	82,762	60,257
Age 35–44 years	56,630	45,344
Age 45–54 years	43,717	40,338
Age 55–64 years	39,391	38,700
Age 65 and over	31,694	22,510
Total	450,763	403,844

Encounter Data Completeness

Encounter Volume by Service Month

Table J-3 and Table J-4 display the encounter volume by service month.

Table J-3—Encounter Volume: Professional Encounters—Detroit Wayne Integrated Health Network

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	95,190	771,660	123.4
November 2021	96,031	776,100	123.7
December 2021	95,264	780,898	122.0
January 2022	103,213	784,973	131.5
February 2022	103,259	787,418	131.1
March 2022	117,365	790,586	148.5

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
April 2022	108,674	793,526	137.0
May 2022	108,132	796,803	135.7
June 2022	112,303	799,797	140.4
July 2022	105,022	803,448	130.7
August 2022	111,305	807,377	137.9
September 2022	109,339	810,090	135.0

Table J-4—Encounter Volume: Institutional Encounters—Detroit Wayne Integrated Health Network

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	746	771,660	1.0
November 2021	771	776,100	1.0
December 2021	846	780,898	1.1
January 2022	676	784,973	0.9
February 2022	711	787,418	0.9
March 2022	784	790,586	1.0
April 2022	771	793,526	1.0
May 2022	749	796,803	0.9
June 2022	763	799,797	1.0
July 2022	783	803,448	1.0
August 2022	824	807,377	1.0
September 2022	1,061	810,090	1.3

Payment Amounts Per Member Per Month

Table J-5 and Table J-6 display the monthly payment amounts PMPM by service month.

Table J-5—Paid Amount PMPM: Professional Encounters—Detroit Wayne Integrated Health Network

Month of Service	Number of MM	Paid Amount PMPM
October 2021	771,660	\$72.67
November 2021	776,100	\$70.17
December 2021	780,898	\$65.95
January 2022	784,973	\$67.09
February 2022	787,418	\$60.96

Month of Service	Number of MM	Paid Amount PMPM
March 2022	790,586	\$70.16
April 2022	793,526	\$65.74
May 2022	796,803	\$65.29
June 2022	799,797	\$68.68
July 2022	803,448	\$76.33
August 2022	807,377	\$70.61
September 2022	810,090	\$72.72

Table J-6—Paid Amount PMPM: Institutional Encounters—Detroit Wayne Integrated Health Network

Month of Service	Number of MM	Paid Amount PMPM
October 2021	771,660	\$4.73
November 2021	776,100	\$6.53
December 2021	780,898	\$6.95
January 2022	784,973	\$5.70
February 2022	787,418	\$6.00
March 2022	790,586	\$6.60
April 2022	793,526	\$6.46
May 2022	796,803	\$7.20
June 2022	799,797	\$6.86
July 2022	803,448	\$6.89
August 2022	807,377	\$7.56
September 2022	810,090	\$9.22

Percentage of Duplicate Encounters

Table J-7 displays the percentage of duplicate encounters by category of service.

Table J-7—Percentage of Duplicate Encounters by Category of Service—Detroit Wayne Integrated Health Network

Category of Service	Number of Duplicate Records	Percentage of Duplicate Records
Professional	429,898	7.9%
Institutional	45	0.3%

Encounter Data Timeliness

Encounter Data Lag Triangles

Table J-8 and Table J-9 display the lag triangles between service month and submission month to MDHHS. For conciseness, lag triangles only include encounters submitted through April 2023 (a minimum of a seven-month lag); therefore, counts displayed in the total line may not equal counts displayed in encounter volume figures.

Table J-8—Encounter Data Lag Triangle: Professional Encounters—Detroit Wayne Integrated Health Network

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	13,988	3,790											17,778
202112	626	7,058	3,416										11,100
202201	1,208	3,467	14,660	7,269									26,604
202202	363	346	911	12,486	9,086								23,192
202203	4,099	9,980	194	2,421	5,905	967							23,566
202204	215	315	299	763	9,307	24,280	5,524						40,703
202205	4,287	58	1,101	176	400	1,985	17,715	6,481					32,203
202206	55	166	962	1,536	229	761	1,265	16,451	5,021				26,446
202207	80,784	80,156	79,015	83,847	82,900	93,898	1,825	3,317	19,728	13,744			539,214
202208	7,781	7,809	7,771	7,791	7,945	9,630	4,705	4,350	5,152	17,462	12,083		92,479
202209	9	9	10	8	7	495	6,292	3,741	2,994	2,529	8,390	2,134	26,618
202210	44	81	138	268	686	338	84,247	85,203	84,658	1,382	15,850	29,600	302,495
202211	58	92	46	434	407	405	272	704	1,029	814	600	2,389	7,250
202212	13	16	20	77	72	75	331	808	7,216	11,884	5,921	6,623	33,056
202301	2	5	22	20	16	18	52	71	887	72,125	81,883	82,022	237,123
202302	2	8	2	2	3	5	10	6	9	15	87	178	327
202303	0	0	1	5	4	4	4	9	11	36	59	303	436
202304	2	3	22	318	273	48	43	66	48	63	80	59	1,025
Total	113,536	113,359	108,590	117,421	117,240	132,909	122,285	121,207	126,753	120,054	124,953	123,308	1,441,615
MM	771,660	776,100	780,898	784,973	787,418	790,586	793,526	796,803	799,797	803,448	807,377	810,090	9,502,676
PMPM	0.15	0.15	0.14	0.15	0.15	0.17	0.15	0.15	0.16	0.15	0.15	0.15	0.15

Table J-9—Encounter Data Lag Triangle: Institutional Encounters—Detroit Wayne Integrated Health Network

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	428	86											514
202112	27	221	57										305
202201	17	69	457	139									682
202202	33	28	59	267	164								551
202203	37	169	13	56	188	0							463
202204	2	3	19	27	186	534	70						841
202205	105	113	134	108	107	142	499	75					1,283
202206	2	2	10	6	5	14	84	460	73				656
202207	93	84	100	61	54	72	28	84	507	248			1,331
202208	1	2	3	3	2	6	8	26	61	352	36		500
202209	0	1	0	1	2	3	33	6	11	39	277	85	458
202210	0	0	3	5	3	4	43	77	83	49	274	411	952
202211	0	2	0	1	0	4	1	7	12	28	76	307	438
202212	2	3	1	0	2	3	4	7	9	9	26	46	112
202301	1	0	1	1	0	2	4	3	9	55	124	196	396
202302	0	0	0	1	0	0	7	4	1	5	9	8	35
202303	0	1	0	1	0	2	0	0	0	1	1	1	7
202304	1	0	0	3	2	3	2	2	3	0	4	4	24
Total	749	784	857	680	715	789	783	751	769	786	827	1,058	9,548
MM	771,660	776,100	780,898	784,973	787,418	790,586	793,526	796,803	799,797	803,448	807,377	810,090	9,502,676
PMPM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Field-Level Completeness and Accuracy

Table J-10 and Table J-11 provide the percentage of encounters that are present and contain valid values for key data elements for all categories of service.

Table J-10—Key Encounter Data Elements: Professional Encounters—Detroit Wayne Integrated Health Network

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	1,441,687	1,441,687	100.0%	1,441,687	1,399,143	97.0%
Header Service From Date	1,441,687	1,441,687	100.0%	1,441,687	1,441,687	100.0%
Header Service To Date	1,441,687	1,441,687	100.0%	1,441,687	1,441,687	100.0%
Detail Service From Date	5,473,631	5,473,631	100.0%	5,473,631	5,473,631	100.0%
Detail Service To Date	5,473,631	5,473,631	100.0%	5,473,631	5,473,631	100.0%
Billing Provider NPI	1,441,687	1,078,141	74.8%	1,078,141	1,078,141	100.0%
Rendering Provider NPI	1,441,687	490,321	34.0%	490,321	490,321	100.0%
Referring Provider NPI	1,441,687	0	0.0%	0	0	NA
Rendering Provider Taxonomy Code	1,441,687	1,665	0.1%	1,954	1,954	100.0%
Primary Diagnosis Codes	1,441,687	1,441,687	100.0%	1,441,687	1,441,687	100.0%
Secondary Diagnosis Codes	1,441,687	0	0.0%	0	0	NA
CPT/HCPCS Codes	5,473,631	5,473,631	100.0%	5,473,631	5,473,631	100.0%
CPT/HCPCS Codes with PTP Edits	5,467,315	5,467,315	100.0%	5,467,315	5,418,945	99.1%
NDCs	5,473,631	0	0.0%	0	0	NA
Submit Date	5,473,631	5,473,631	100.0%	5,473,631	5,473,631	100.0%
PIHP Paid Date	5,473,631	5,473,631	100.0%	5,473,631	5,473,631	100.0%
Header Paid Amount	1,441,687	1,441,687	100.0%	1,441,687	1,441,687	100.0%
Detail Paid Amount	5,473,631	5,473,631	100.0%	5,473,631	5,473,631	100.0%
Header TPL Paid Amount	1,441,687	1,441,687	100.0%	1,441,687	1,437,831	99.7%
Detail TPL Paid Amount	5,473,631	5,473,631	100.0%	5,473,631	5,473,631	100.0%

Table J-11—Key Encounter Data Elements: Institutional Encounters—Detroit Wayne Integrated Health Network

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	9,568	9,568	100.0%	9,568	8,997	94.0%
Header Service From Date	9,568	9,568	100.0%	9,568	9,568	100.0%
Header Service To Date	9,568	9,568	100.0%	9,568	9,568	100.0%
Detail Service From Date	15,585	15,585	100.0%	15,585	15,585	100.0%
Detail Service To Date	15,585	15,585	100.0%	15,585	15,585	100.0%
Billing Provider NPI	9,568	9,514	99.4%	9,514	9,514	100.0%
Attending Provider NPI	9,568	0	0.0%	0	0	NA
Referring Provider NPI	9,568	0	0.0%	0	0	NA
Attending Provider Taxonomy Code	9,568	0	0.0%	0	0	NA
Primary Diagnosis Codes	9,568	9,568	100.0%	9,568	9,568	100.0%
Secondary Diagnosis Codes	9,568	7,011	73.3%	22,875	22,875	100.0%
CPT/HCPCS Codes	15,585	10	0.1%	10	10	100.0%
CPT/HCPCS Codes with PTP Edits	1	1	100.0%	1	0	0.0%
Primary Surgical Procedure Codes	9,568	0	0.0%	0	0	NA
Secondary Surgical Procedure Codes	9,568	0	0.0%	0	0	NA
Revenue Codes	15,585	15,585	100.0%	15,585	15,585	100.0%
DRG Codes	9,568	8,449	88.3%	8,449	8,449	100.0%
Type of Bill Codes	9,568	9,568	100.0%	9,568	9,568	100.0%
NDCs	15,585	0	0.0%	0	0	NA
Submit Date	15,585	15,585	100.0%	15,585	15,585	100.0%
PIHP Paid Date	15,585	15,585	100.0%	15,585	15,585	100.0%
Header Paid Amount	9,568	9,568	100.0%	9,568	9,568	100.0%
Detail Paid Amount	15,585	15,585	100.0%	15,585	15,585	100.0%
Header TPL Paid Amount	9,568	9,568	100.0%	9,568	9,566	>99.9%
Detail TPL Paid Amount	15,585	15,585	100.0%	15,585	15,585	100.0%

Appendix K. Results for Region 8—Oakland Community Health Network

Appendix K contains the IS review and administrative profile results, strengths, weaknesses, and recommendations, as applicable, that HSAG identified from the EDV study for **Oakland Community Health Network**.

IS Review Findings

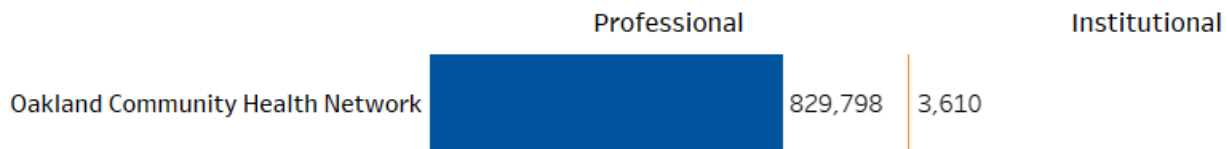
Please refer to Section 3: Information Systems Review Findings for **Oakland Community Health Network**'s specific findings, if any.

Administrative Profile Results

Encounter Data Summary

Figure K-1 displays the number of encounters by category of service.

Figure K-1—Number of Paid Encounters by Category of Service—Oakland Community Health Network



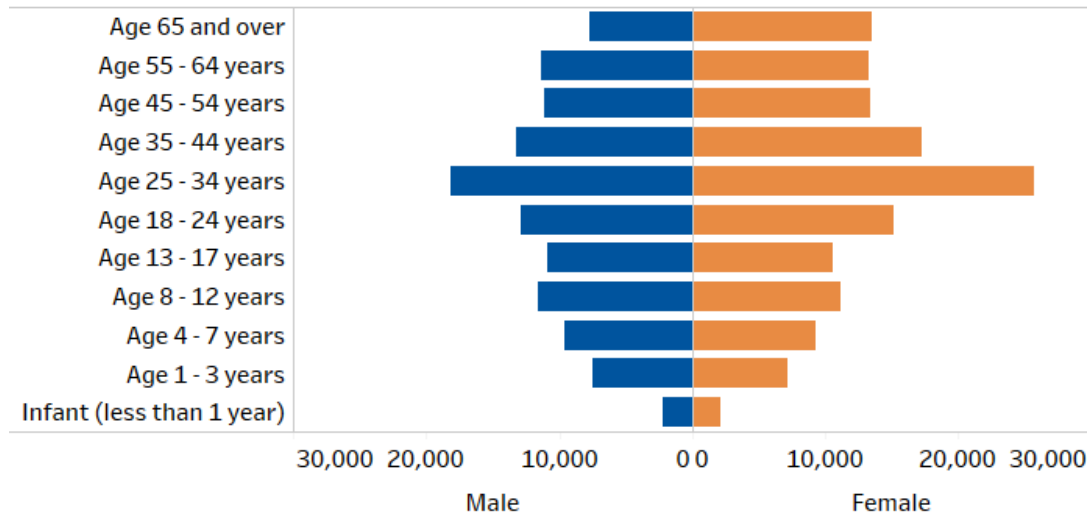
Member Composition

Figure K-2 and Figure K-3 display member demographics.

Figure K-2—Enrollment in SFY 2023—Oakland Community Health Network



Figure K-3—Age and Gender Distribution—Oakland Community Health Network

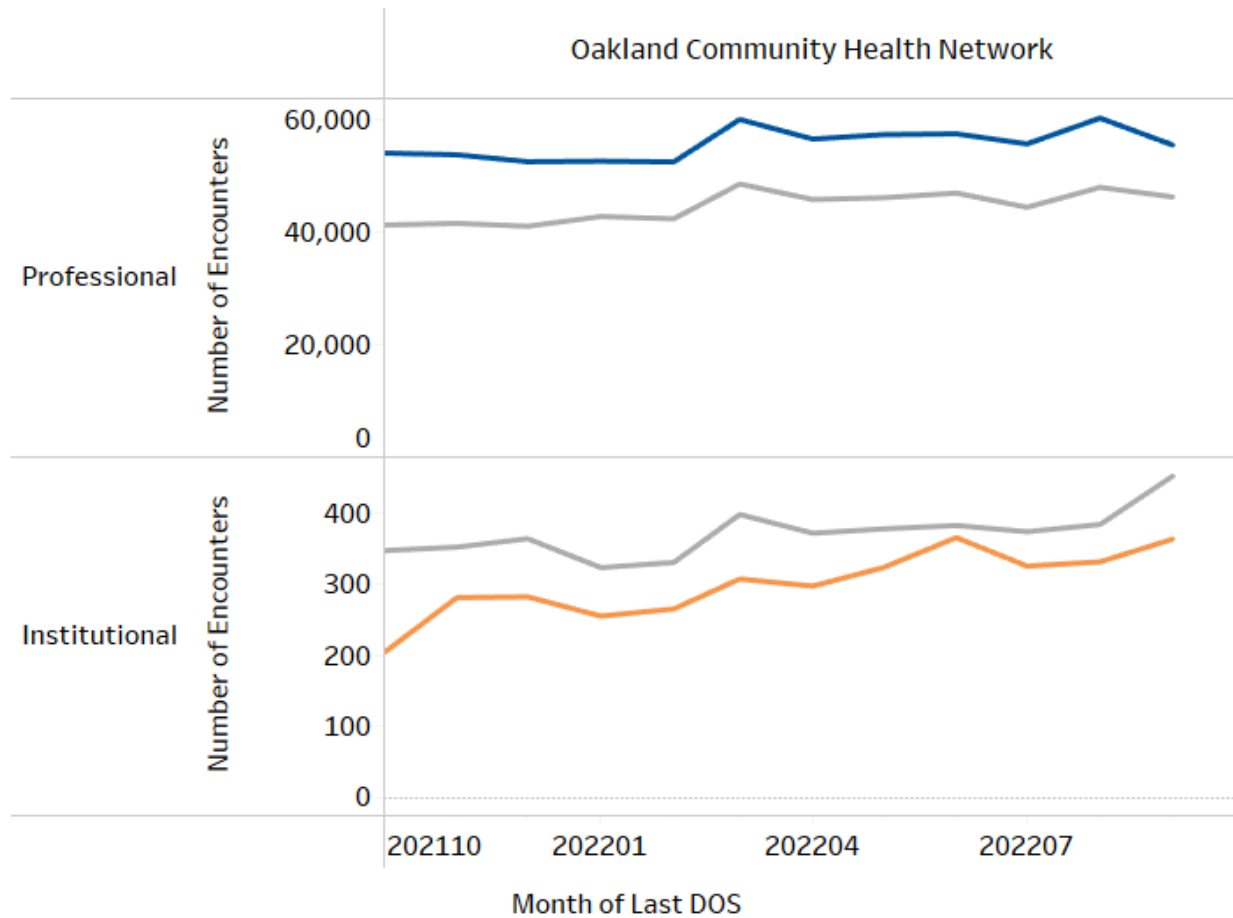


Encounter Data Completeness

Encounter Volume by Service Month

Figure K-4 displays the monthly encounter volume by service month and category of service.

Figure K-4—Encounter Volume by Service Month—Oakland Community Health Network

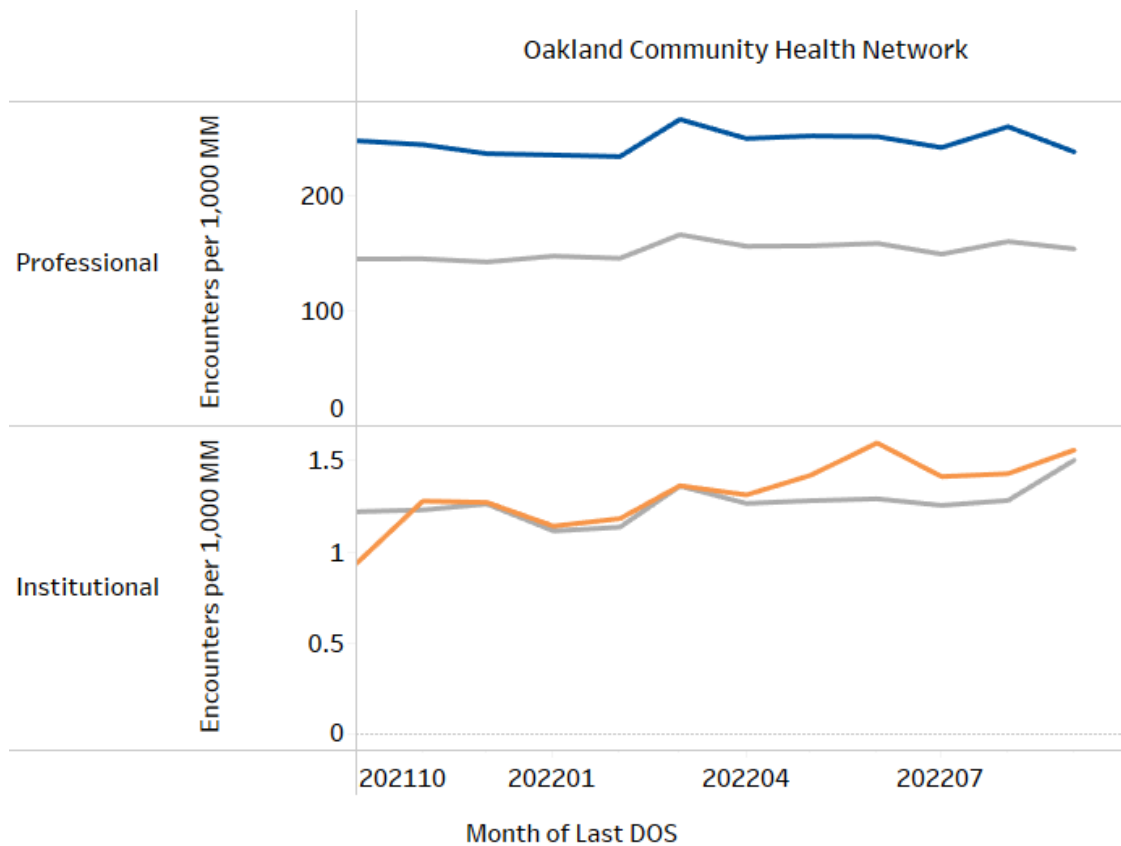


Note: The grey line indicates the all PIHP rate.

Encounter Volume Per 1,000 Member Months

Figure K-5 displays the monthly encounter volume per 1,000 MM by service month and category of service.

Figure K-5—Encounter Volume per 1,000 MM—Oakland Community Health Network

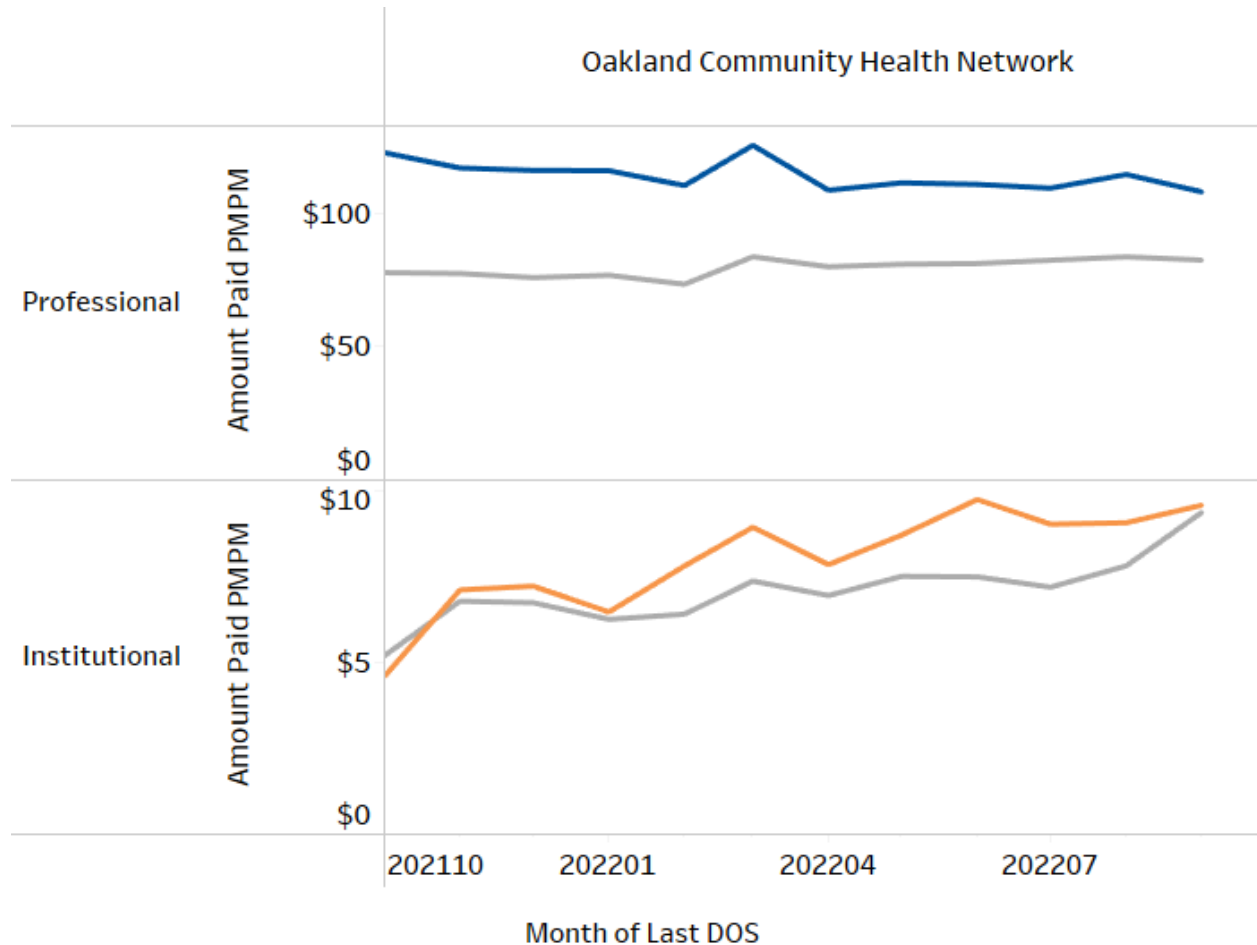


Note: The grey line indicates the all PIHP rate.

Payment Amounts Per Member Per Month

Figure K-6 displays the monthly payment amounts PMPM by service month and category of service.

Figure K-6—Paid Amount PMPM—Oakland Community Health Network

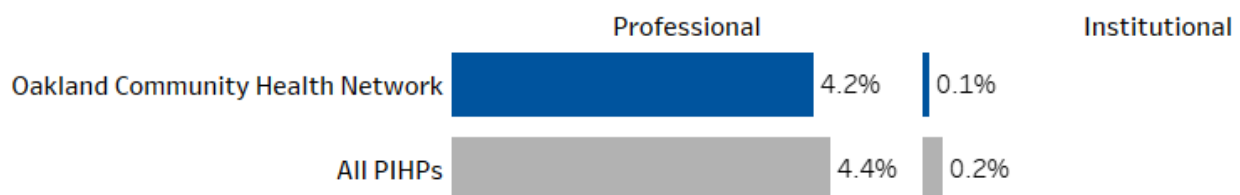


Note: The grey line indicates the all PIHP rate.

Percentage of Duplicate Encounters

Figure K-7 displays the percentage of duplicate encounters.

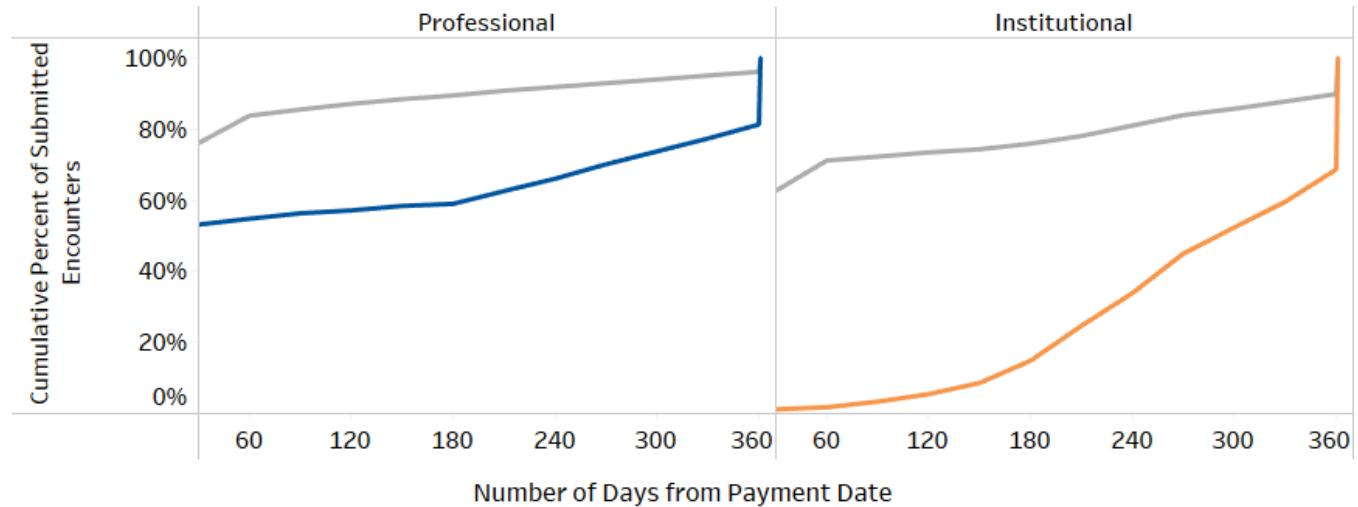
Figure K-7—Percentage of Duplicate Encounters—Oakland Community Health Network



Encounter Data Timeliness

Figure K-8 and Table K-1 show the cumulative percentage of encounters submitted to MDHHS from the payment date by category of service.

Figure K-8—Cumulative Percentage of Encounters Submitted to MDHHS From PIHP Payment Date by Category of Service—Oakland Community Health Network



Note: The grey line indicates the all PIHP rate.

Table K-1—Completeness of Encounters by Category of Service—Oakland Community Health Network

Number of Days From Payment Date	Cumulative Percentage of Submitted Professional Encounters	Cumulative Percentage of Submitted Institutional Encounters
Submitted Within 30 Days	53.1%	1.2%
Submitted Within 60 Days	54.8%	1.8%
Submitted Within 90 Days	56.3%	3.4%
Submitted Within 120 Days	57.1%	5.5%
Submitted Within 150 Days	58.4%	8.6%
Submitted Within 180 Days	59.0%	14.9%
Submitted Within 210 Days	62.6%	24.7%
Submitted Within 240 Days	66.0%	33.9%
Submitted Within 270 Days	70.1%	45.0%
Submitted Within 300 Days	73.7%	52.3%
Submitted Within 330 Days	77.3%	59.6%
Submitted Within 360 Days	81.3%	68.6%
Submitted After 360 Days	100.0%	100.0%

Field-Level Completeness and Accuracy

Figure K-9 and Figure K-10 provide the percentage of encounters that are present and contain valid values for key data elements.

Figure K-9—Key Professional Encounter Data Elements—Oakland Community Health Network

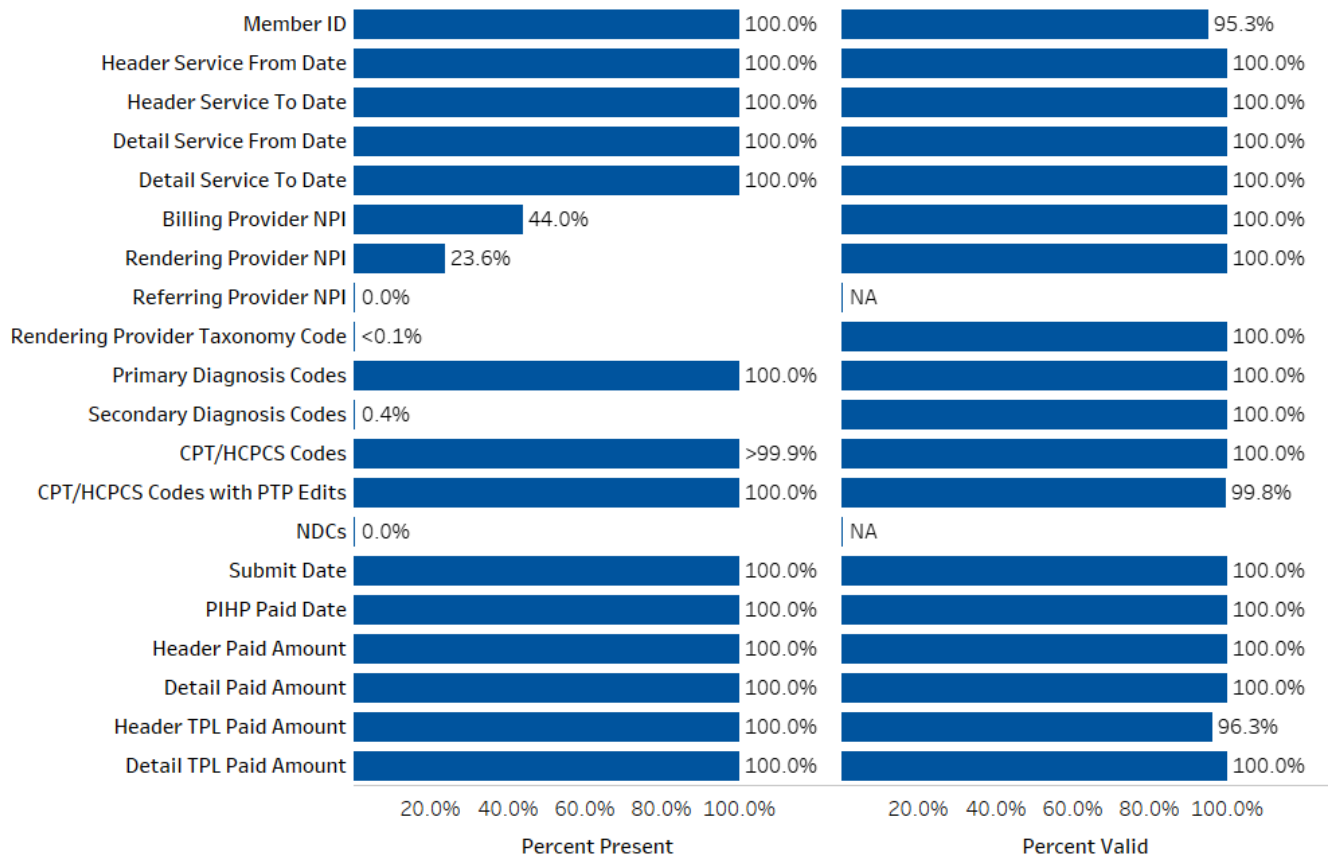
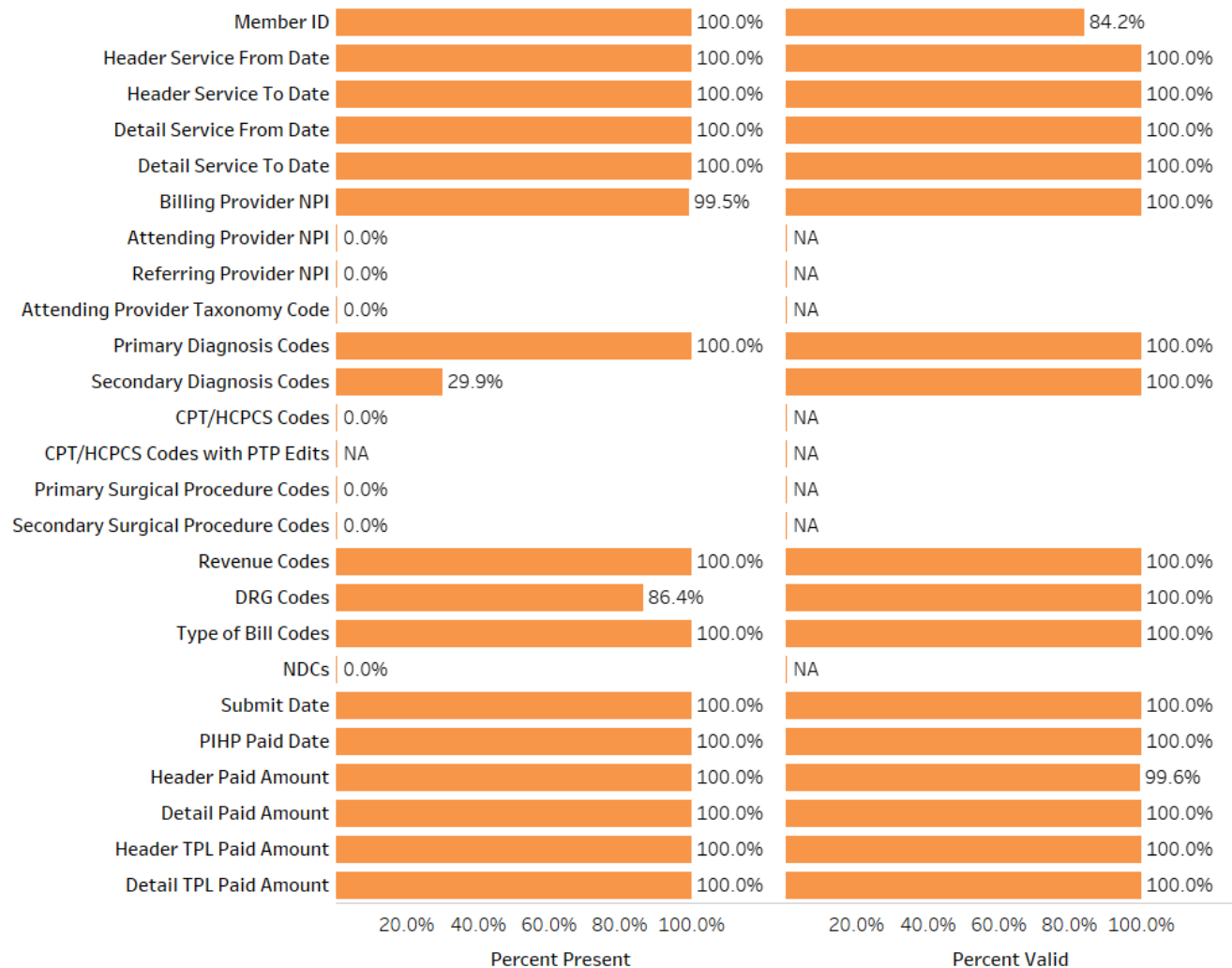


Figure K-10—Key Institutional Encounter Data Elements—Oakland Community Health Network



Encounter Data Referential Integrity

Figure K-11 and Figure K-12 display the referential integrity results.

Figure K-11—Referential Integrity Comparison Between Enrollment and Medical Encounter Files—Oakland Community Health Network

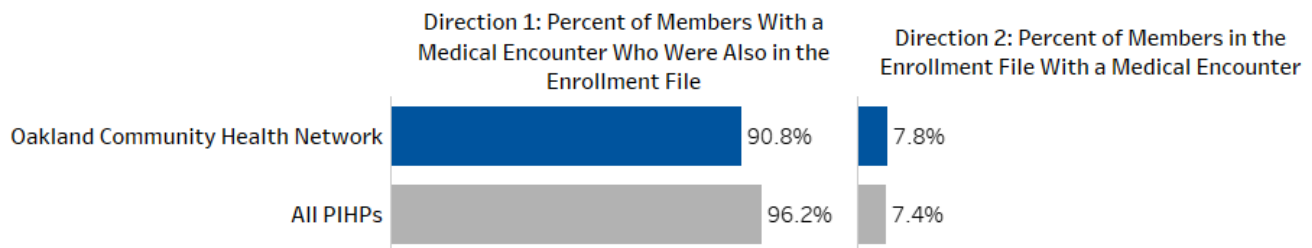
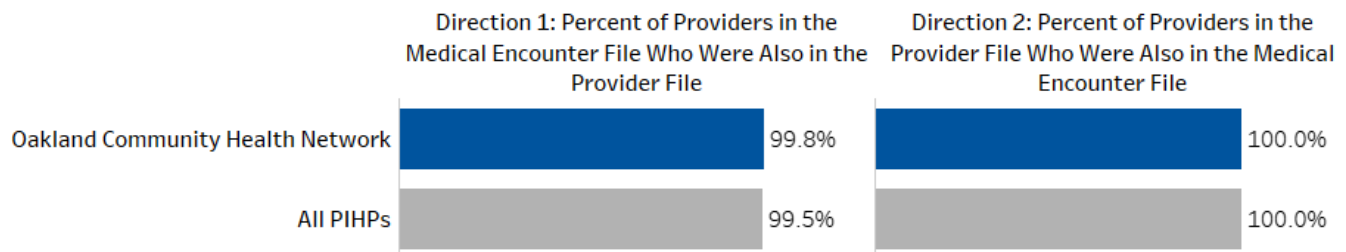


Figure K-12—Referential Integrity Comparison Between Medical Encounter and Provider Files—Oakland Community Health Network



Encounter Data Logic

Member Enrollment

Figure K-13 displays the percentage of members who were continuously enrolled.

Figure K-13—Percentage of Members Who Were Continuously Enrolled—Oakland Community Health Network



Conclusions

Based on the examination of the IS review and administrative profile outcomes in Section 3 and Section 4, respectively, for **Oakland Community Health Network**, HSAG identified the following areas of strength, opportunities for improvement, and recommendations.

IS Review Conclusions

Strengths

Strength #1: Oakland Community Health Network demonstrated its capability to collect, process, and transmit encounter data to MDHHS. The PIHP has also established data review and correction processes that efficiently address quality concerns identified by MDHHS.

Strength #2: While MRR can be labor- and resource-intensive process for conducting data quality checks, **Oakland Community Health Network** indicated its usage as a method for assessing its subcontractors' data. The use of this method enhances the reliability, accuracy, and contextual understanding of its subcontractors' encounter data. This reflects **Oakland Community Health Network's** commitment to delivering high-quality healthcare data.

Opportunities for Improvement

Weakness #1: Oakland Community Health Network modified encounters from its subcontractors before submitting them to MDHHS.

Why the weakness exists: Since modifications were made to the subcontractors' encounters, it is essential to communicate these changes to each entity involved to maintain data integrity.

Recommendation: **Oakland Community Health Network** should collaborate with MDHHS to confirm that the identified changes do not require adjustments to be sent back to the subcontractors.

Weakness #2: Oakland Community Health Network did not indicate claim volume or timeliness quality checks performed for claims/encounters from its subcontractors' data.

Why the weakness exists: Claim volume checks are crucial to validating that the submitted data align with the expected volume, helping identify any discrepancies or missing information. Timeliness quality checks ensure that the claims/encounters are submitted within the specified time frames, meeting MDHHS' minimum monthly requirements. The lack of these checks increases the risk of errors, omissions, or delays in data submission, which can impact the reliability and effectiveness of the overall encounter data system.

Recommendation: **Oakland Community Health Network** should establish or refine either its subcontractors' or its data monitoring reports aimed at assessing the completeness, accuracy, and timeliness of encounter data. By implementing such measures, **Oakland Community Health Network** can enhance the overall quality and reliability of the encounter data that it submits, aligning with

industry standards and improving data usability for all stakeholders. Regularly reviewing and updating these quality checks will help maintain data integrity over time.

Administrative Profile Conclusions

Strengths

Strength #1: Across all encounters, most key data elements for **Oakland Community Health Network** were populated at high rates, and the majority of data elements were over 99 percent valid.

Opportunities for Improvement

Weakness #1: Oakland Community Health Network did not submit professional or institutional encounters timely. For professional encounters, **Oakland Community Health Network** submitted 57.1 percent of encounters within 120 days, and within 360 days, submitted 81.3 percent of encounters. For institutional encounters, **Oakland Community Health Network** submitted 5.5 percent of encounters within 120 days, and within 360 days, submitted 68.6 percent of encounters.

Why the weakness exists: The timely submission of encounters is crucial to guarantee that conducted analyses include comprehensive data. Failure to submit encounters in a timely manner may lead to incomplete analyses and inaccurate results.

Recommendation: Oakland Community Health Network should monitor its encounter data submission to MDHHS to ensure encounters are submitted after payment.

Weakness #2: The member ID field had lower than expected validity rates in both professional and institutional data, with a validity rate of 95.3 percent and 84.2 percent, respectively. Additionally, 90.8 percent of members with a medical encounter were identified in the enrollment file. Combined, these findings suggest that **Oakland Community Health Network's** enrollment data may not be complete.

Why the weakness exists: Linking datasets to each other to pull in additional information (i.e., enrollment start date or enrollment end date) may be important in subsequent analyses. Additionally, members identified in the encounter file should be enrolled on the date the service occurred.

Recommendation: Oakland Community Health Network should collaborate with MDHHS to ensure both entities have an accurate and complete database of enrolled members.

Weakness #3: Although not required to be populated, 44.0 percent and 23.6 percent of professional encounters contained a billing provider NPI and a rendering provider NPI, respectively.

Why the weakness exists: Billing and rendering provider information is important for proper provider identification.

Recommendation: Oakland Community Health Network should determine the completeness of key provider data elements by implementing quality checks to ensure these fields are populated.

Weakness #4: Oakland Community Health Network had relatively high percentage of duplicates for professional encounters (4.2 percent).

Why the weakness exists: Duplicates could be a result of error within the internal process of encounter submission. If duplicates are not properly identified and handled, duplicate encounters can falsely indicate higher utilization of services.

Recommendation: HSAG recommends that **Oakland Community Health Network** examine its internal process of identifying duplicates.

Administrative Profile Results—Tabular Data

Encounter Data Summary

Member Composition

Table K-2 presents the member composition.

Table K-2—Age and Gender Distribution—Oakland Community Health Network

Age Category	Number of Females	Number of Males
Infant (less than 1 year)	2,128	2,168
Age 1–3 years	7,142	7,471
Age 4–7 years	9,350	9,594
Age 8–12 years	11,140	11,553
Age 13–17 years	10,615	10,933
Age 18–24 years	15,165	12,850
Age 25–34 years	25,773	18,187
Age 35–44 years	17,350	13,208
Age 45–54 years	13,359	11,166
Age 55–64 years	13,304	11,364
Age 65 and over	13,530	7,781
Total	138,856	116,275

Encounter Data Completeness

Encounter Volume by Service Month

Table K-3 and Table K-4 display the encounter volume by service month.

Table K-3—Encounter Volume: Professional Encounters—Oakland Community Health Network

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	53,988	218,258	247.4
November 2021	53,695	220,048	244.0
December 2021	52,460	222,091	236.2
January 2022	52,556	223,635	235.0
February 2022	52,427	224,350	233.7
March 2022	59,966	225,487	265.9
April 2022	56,487	226,565	249.3
May 2022	57,273	227,654	251.6
June 2022	57,410	228,764	251.0
July 2022	55,618	230,310	241.5
August 2022	60,209	231,927	259.6
September 2022	55,401	233,132	237.6

Table K-4—Encounter Volume: Institutional Encounters—Oakland Community Health Network

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	204	218,258	0.9
November 2021	281	220,048	1.3
December 2021	282	222,091	1.3
January 2022	255	223,635	1.1
February 2022	265	224,350	1.2
March 2022	307	225,487	1.4
April 2022	297	226,565	1.3
May 2022	323	227,654	1.4
June 2022	365	228,764	1.6
July 2022	325	230,310	1.4
August 2022	331	231,927	1.4
September 2022	363	233,132	1.6

Payment Amounts Per Member Per Month

Table K-5 and Table K-6 display the monthly payment amounts PMPM by service month.

Table K-5—Paid Amount PMPM: Professional Encounters—Oakland Community Health Network

Month of Service	Number of MM	Paid Amount PMPM
October 2021	218,258	\$122.74
November 2021	220,048	\$117.02
December 2021	222,091	\$116.12
January 2022	223,635	\$116.02
February 2022	224,350	\$110.44
March 2022	225,487	\$125.51
April 2022	226,565	\$108.69
May 2022	227,654	\$111.46
June 2022	228,764	\$110.87
July 2022	230,310	\$109.46
August 2022	231,927	\$114.59
September 2022	233,132	\$108.07

Table K-6—Paid Amount PMPM: Institutional Encounters—Oakland Community Health Network

Month of Service	Number of MM	Paid Amount PMPM
October 2021	218,258	\$4.58
November 2021	220,048	\$7.10
December 2021	222,091	\$7.21
January 2022	223,635	\$6.46
February 2022	224,350	\$7.79
March 2022	225,487	\$8.92
April 2022	226,565	\$7.83
May 2022	227,654	\$8.69
June 2022	228,764	\$9.72
July 2022	230,310	\$9.01
August 2022	231,927	\$9.05
September 2022	233,132	\$9.56

Percentage of Duplicate Encounters

Table K-7 displays the percentage of duplicate encounters by category of service.

Table K-7—Percentage of Duplicate Encounters by Category of Service—Oakland Community Health Network

Category of Service	Number of Duplicate Records	Percentage of Duplicate Records
Professional	87,557	4.2%
Institutional	6	0.1%

Encounter Data Timeliness

Encounter Data Lag Triangles

Table K-8 and Table K-9 display the lag triangles between service month and submission month to MDHHS. For conciseness, lag triangles only include encounters submitted through April 2023 (a minimum of a seven-month lag); therefore, counts displayed in the total line may not equal counts displayed in encounter volume figures.

Table K-8—Encounter Data Lag Triangle: Professional Encounters—Oakland Community Health Network

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	2,582												2,582
202111	9,836	6,521											16,357
202112	4,380	8,908	4,472										17,760
202201	980	2,759	12,166	5,154									21,059
202202	3,943	3,864	6,289	17,176	7,041								38,313
202203	2,512	2,975	410	2,132	17,095	12,841							37,965
202204	7,949	7,625	6,329	7,212	7,772	20,920	10,748						68,555
202205	744	951	366	1,945	1,313	3,470	21,091	7,149					37,029
202206	95	77	2,593	602	689	267	3,576	27,699	16,780				52,378
202207	225	263	101	153	167	798	264	988	17,960	10,156			31,075
202208	1,568	1,614	834	844	649	1,242	874	1,036	2,385	24,355	20,285		55,686
202209	156	102	53	61	78	96	70	163	191	452	17,639	11,846	30,907
202210	1,293	1,226	1,164	1,162	1,109	1,379	1,132	1,269	1,425	1,392	2,676	18,426	33,653
202211	528	534	537	594	624	746	697	578	487	678	1,829	7,777	15,609
202212	1	4	89	9	10	7	6	25	69	81	100	168	569
202301	177	203	168	172	171	147	109	98	82	57	141	314	1,839
202302	0	0	0	0	0	0	0	0	0	0	0	0	0
202303	3,120	2,979	2,952	2,940	2,899	3,312	3,334	3,311	3,441	3,359	3,590	3,589	38,826

Month of Service													
Submission Month	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	Total
202304	26,331	25,869	26,502	24,269	24,727	28,484	27,540	28,163	28,862	29,098	30,462	29,132	329,439
Total	66,420	66,474	65,025	64,425	64,344	73,709	69,441	70,479	71,682	69,628	76,722	71,252	829,601
MM	218,258	220,048	222,091	223,635	224,350	225,487	226,565	227,654	228,764	230,310	231,927	233,132	2,712,221
PMPM	0.30	0.30	0.29	0.29	0.29	0.33	0.31	0.31	0.31	0.30	0.33	0.31	0.31

Table K-9—Encounter Data Lag Triangle: Institutional Encounters—Oakland Community Health Network

Month of Service													
Submission Month	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	Total
202110	0												0
202111	0	0											0
202112	0	0	0										0
202201	0	0	0	0									0
202202	0	0	0	0	0								0
202203	0	0	0	0	0	0							0
202204	0	0	0	0	0	0	0						0
202205	0	0	0	0	0	1	0	0					1
202206	0	0	0	0	0	0	0	0	0				0
202207	4	2	0	1	0	1	0	1	0	0			9
202208	0	0	0	0	0	0	0	0	1	0	0		1
202209	0	0	0	0	0	0	0	1	1	1	0	0	3
202210	0	0	0	0	0	0	0	0	0	0	0	0	0
202211	0	0	0	0	0	0	0	0	1	0	0	0	1
202212	0	0	0	0	0	0	0	0	0	0	1	0	1
202301	0	0	0	0	0	0	0	0	0	0	0	0	0
202302	0	0	0	0	0	0	0	0	0	0	0	0	0
202303	203	278	285	253	265	305	294	317	358	317	319	353	3,547
202304	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	207	280	285	254	265	307	294	319	361	318	320	353	3,563
MM	218,258	220,048	222,091	223,635	224,350	225,487	226,565	227,654	228,764	230,310	231,927	233,132	2,712,221
PMPM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Field-Level Completeness and Accuracy

Table K-10 and Table K-11 provide the percentage of encounters that are present and contain valid values for key data elements for all categories of service.

Table K-10—Key Encounter Data Elements: Professional Encounters—Oakland Community Health Network

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	829,798	829,798	100.0%	829,798	791,199	95.3%
Header Service From Date	829,798	829,798	100.0%	829,798	829,798	100.0%
Header Service To Date	829,798	829,798	100.0%	829,798	829,798	100.0%
Detail Service From Date	2,061,635	2,061,635	100.0%	2,061,635	2,061,635	100.0%
Detail Service To Date	2,061,635	2,061,635	100.0%	2,061,635	2,061,635	100.0%
Billing Provider NPI	829,798	365,007	44.0%	365,007	365,007	100.0%
Rendering Provider NPI	829,798	196,149	23.6%	196,149	196,149	100.0%
Referring Provider NPI	829,798	0	0.0%	0	0	NA
Rendering Provider Taxonomy Code	829,798	57	<0.1%	57	57	100.0%
Primary Diagnosis Codes	829,798	829,798	100.0%	829,798	829,798	100.0%
Secondary Diagnosis Codes	829,798	2,981	0.4%	6,881	6,881	100.0%
CPT/HCPCS Codes	2,061,635	2,061,025	>99.9%	2,061,025	2,061,025	100.0%
CPT/HCPCS Codes with PTP Edits	2,059,850	2,059,850	100.0%	2,059,850	2,056,248	99.8%
NDCs	2,061,635	0	0.0%	0	0	NA
Submit Date	2,061,635	2,061,635	100.0%	2,061,635	2,061,635	100.0%
PIHP Paid Date	2,061,635	2,061,635	100.0%	2,061,635	2,061,635	100.0%
Header Paid Amount	829,798	829,798	100.0%	829,798	829,798	100.0%
Detail Paid Amount	2,061,635	2,061,635	100.0%	2,061,635	2,061,635	100.0%
Header TPL Paid Amount	829,798	829,798	100.0%	829,798	799,482	96.3%
Detail TPL Paid Amount	2,061,635	2,061,635	100.0%	2,061,635	2,061,635	100.0%

Table K-11—Key Encounter Data Elements: Institutional Encounters—Oakland Community Health Network

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	3,610	3,610	100.0%	3,610	3,041	84.2%
Header Service From Date	3,610	3,610	100.0%	3,610	3,610	100.0%
Header Service To Date	3,610	3,610	100.0%	3,610	3,610	100.0%
Detail Service From Date	7,490	7,490	100.0%	7,490	7,490	100.0%
Detail Service To Date	7,490	7,490	100.0%	7,490	7,490	100.0%
Billing Provider NPI	3,610	3,592	99.5%	3,592	3,592	100.0%
Attending Provider NPI	3,610	0	0.0%	0	0	NA
Referring Provider NPI	3,610	0	0.0%	0	0	NA
Attending Provider Taxonomy Code	3,610	0	0.0%	0	0	NA
Primary Diagnosis Codes	3,610	3,610	100.0%	3,610	3,610	100.0%
Secondary Diagnosis Codes	3,610	1,079	29.9%	2,228	2,228	100.0%
CPT/HCPCS Codes	7,490	0	0.0%	0	0	NA
CPT/HCPCS Codes with PTP Edits	0	0	NA	0	0	NA
Primary Surgical Procedure Codes	3,610	0	0.0%	0	0	NA
Secondary Surgical Procedure Codes	3,610	0	0.0%	0	0	NA
Revenue Codes	7,490	7,490	100.0%	7,490	7,490	100.0%
DRG Codes	3,610	3,118	86.4%	3,118	3,118	100.0%
Type of Bill Codes	3,610	3,610	100.0%	3,610	3,610	100.0%
NDCs	7,490	0	0.0%	0	0	NA
Submit Date	7,490	7,490	100.0%	7,490	7,490	100.0%
PIHP Paid Date	7,490	7,490	100.0%	7,490	7,490	100.0%
Header Paid Amount	3,610	3,610	100.0%	3,610	3,596	99.6%
Detail Paid Amount	7,490	7,490	100.0%	7,490	7,490	100.0%
Header TPL Paid Amount	3,610	3,610	100.0%	3,610	3,610	100.0%
Detail TPL Paid Amount	7,490	7,490	100.0%	7,490	7,490	100.0%

Appendix L. Results for Region 9—Macomb County Community Mental Health

Appendix L contains the IS review and administrative profile results, strengths, weaknesses, and recommendations, as applicable, that HSAG identified from the EDV study for **Macomb County Community Mental Health**.

IS Review Findings

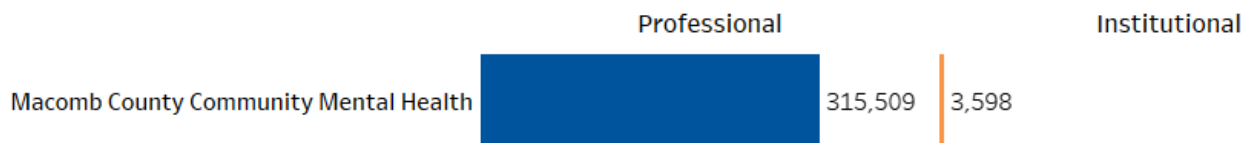
Please refer to Section 3: Information Systems Review Findings for **Macomb County Community Mental Health**'s specific findings, if any.

Administrative Profile Results

Encounter Data Summary

Figure L-1 displays the number of encounters by category of service.

Figure L-1—Number of Paid Encounters by Category of Service—Macomb County Community Mental Health



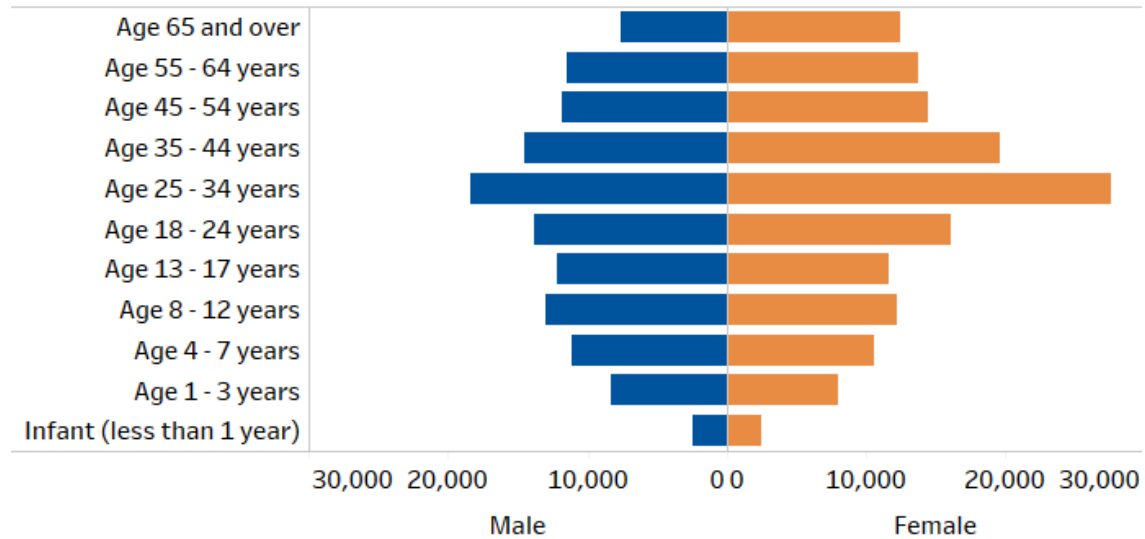
Member Composition

Figure L-2 and Figure L-3 display member demographics.

Figure L-2—Enrollment in SFY 2023—Macomb County Community Mental Health



Figure L-3—Age and Gender Distribution—Macomb County Community Mental Health

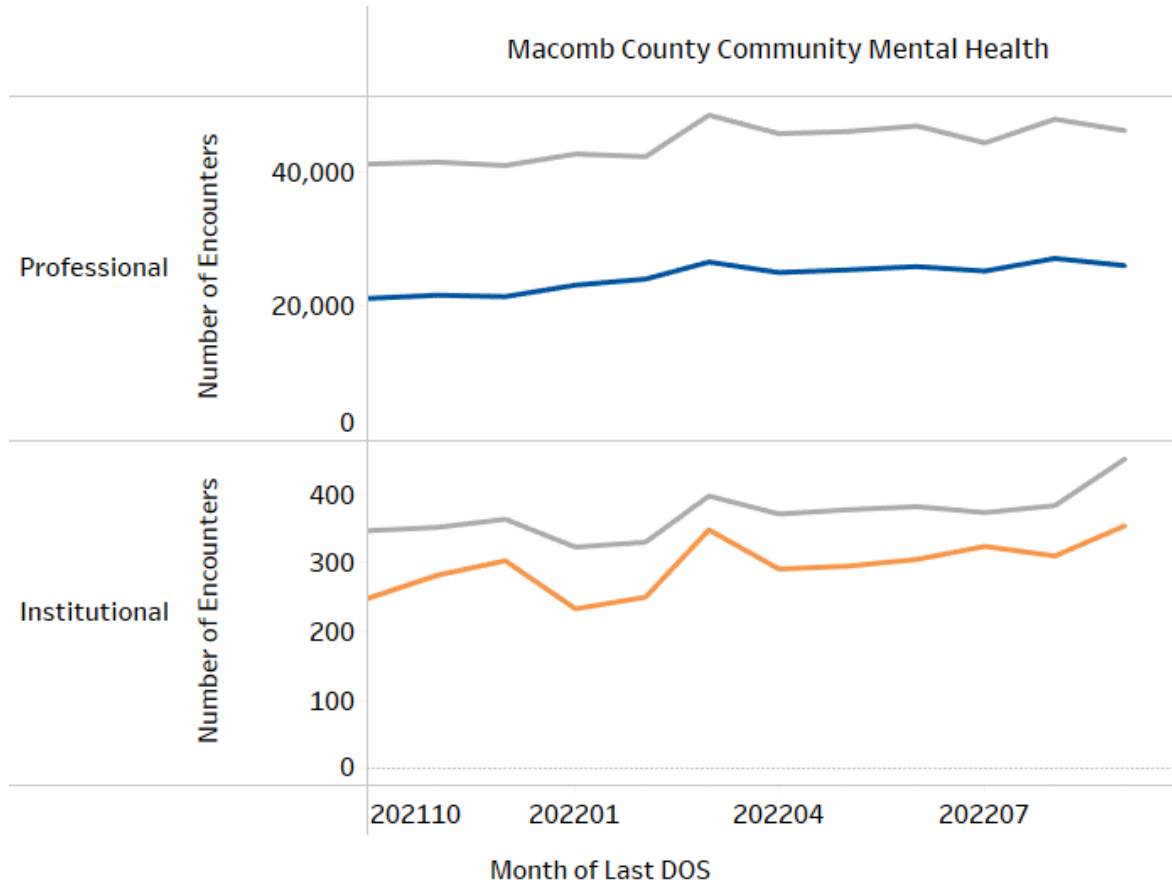


Encounter Data Completeness

Encounter Volume by Service Month

Figure L-4 displays the monthly encounter volume by service month and category of service.

Figure L-4—Encounter Volume by Service Month—Macomb County Community Mental Health

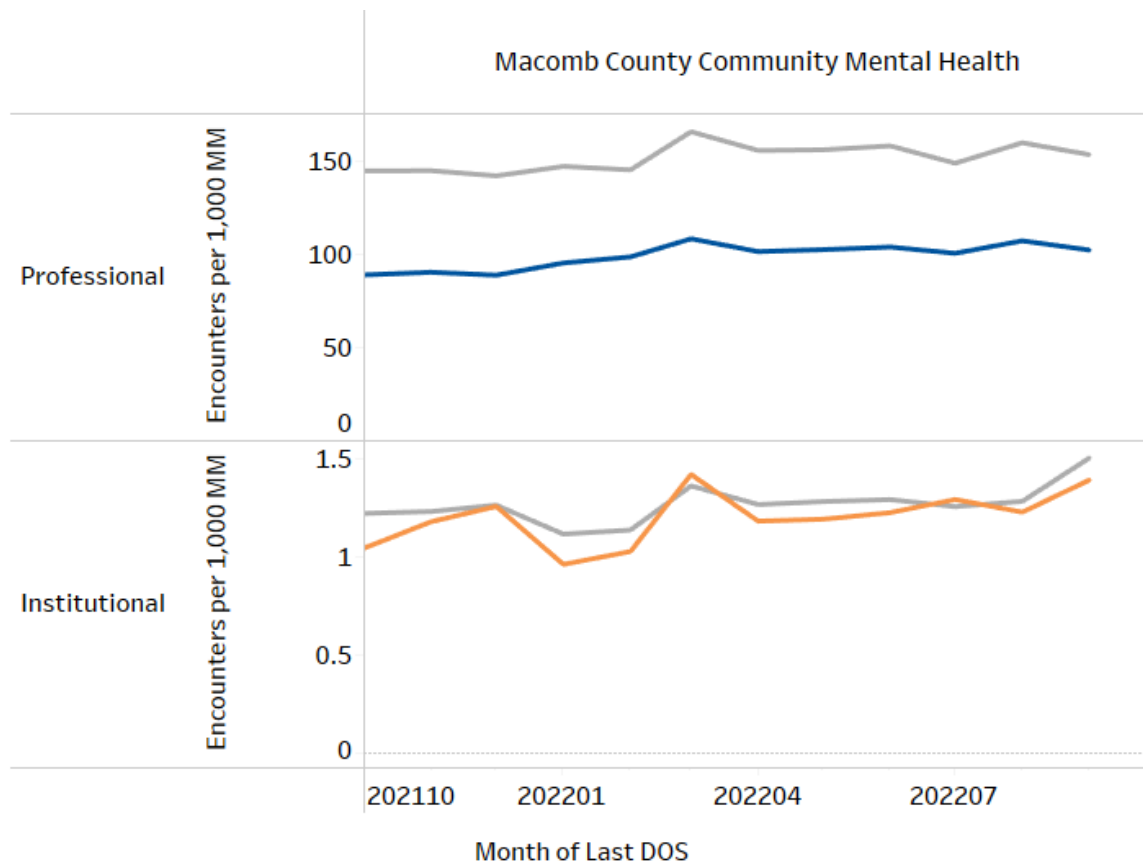


Note: The grey line indicates the all PIHP rate.

Encounter Volume Per 1,000 Member Months

Figure L-5 displays the monthly encounter volume per 1,000 MM by service month and category of service.

Figure L-5—Encounter Volume per 1,000 MM—Macomb County Community Mental Health

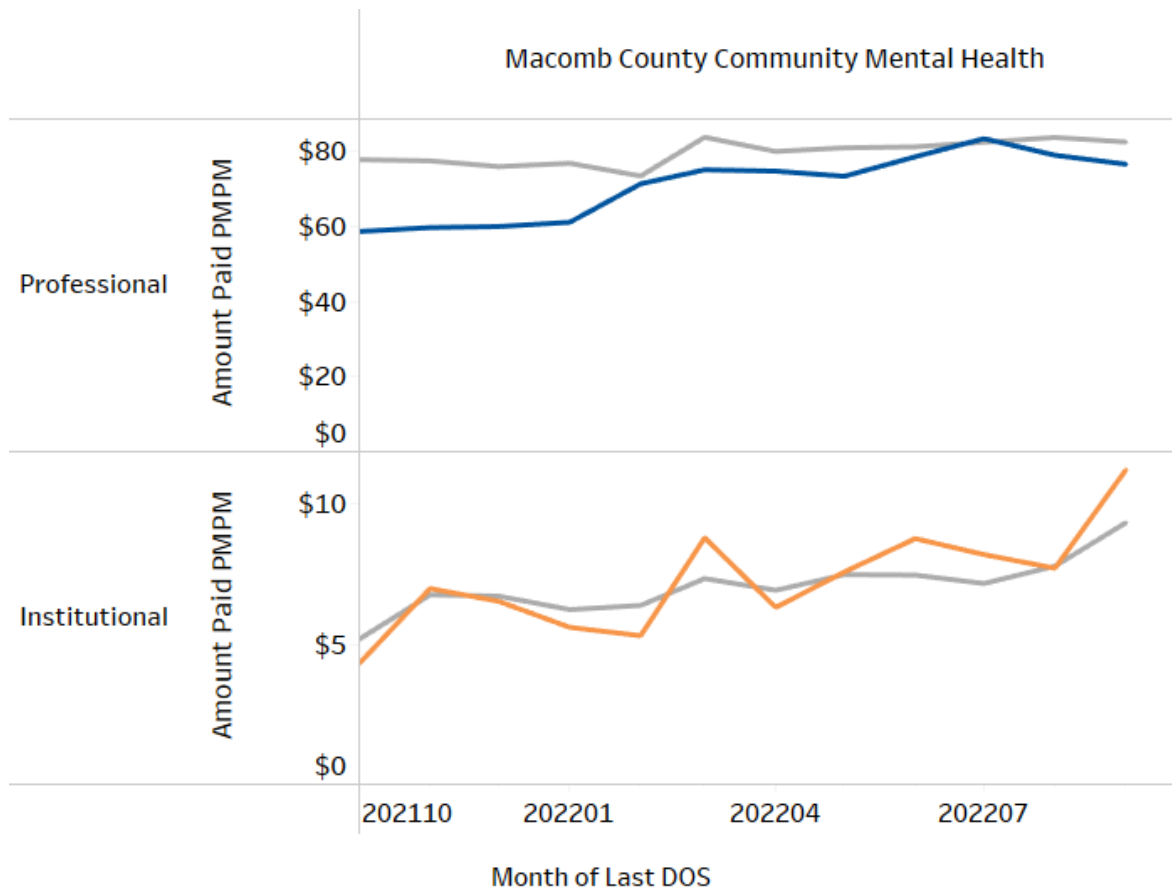


Note: The grey line indicates the all PIHP rate.

Payment Amounts Per Member Per Month

Figure L-6 displays the monthly payment amounts PMPM by service month and category of service.

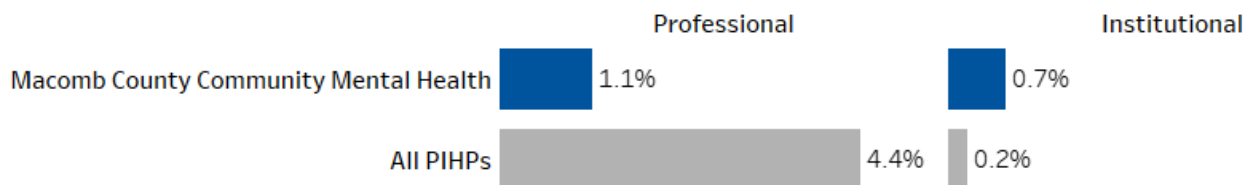
Figure L-6—Paid Amount PMPM—Macomb County Community Mental Health



Percentage of Duplicate Encounters

Figure L-7 displays the percentage of duplicate encounters.

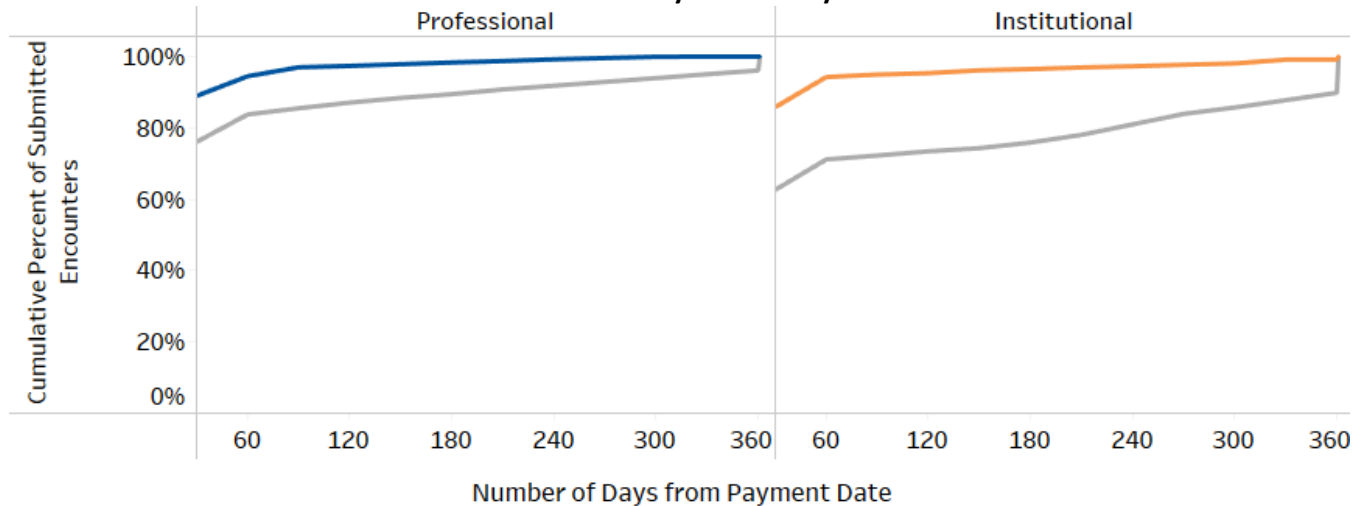
Figure L-7—Percentage of Duplicate Encounters—Macomb County Community Mental Health



Encounter Data Timeliness

Figure L-8 and Table L-1 show the cumulative percentage of encounters submitted to MDHHS from the payment date by category of service.

Figure L-8—Cumulative Percentage of Encounters Submitted to MDHHS From PIHP Payment Date by Category of Service—Macomb County Community Mental Health



Note: The grey line indicates the all PIHP rate.

Table L-1—Completeness of Encounters by Category of Service—Macomb County Community Mental Health

Number of Days From Payment Date	Cumulative Percentage of Submitted Professional Encounters	Cumulative Percentage of Submitted Institutional Encounters
Submitted Within 30 Days	88.9%	85.8%
Submitted Within 60 Days	94.5%	94.2%
Submitted Within 90 Days	97.0%	94.9%
Submitted Within 120 Days	97.4%	95.3%
Submitted Within 150 Days	97.8%	96.1%
Submitted Within 180 Days	98.3%	96.5%
Submitted Within 210 Days	98.7%	96.9%
Submitted Within 240 Days	99.2%	97.3%
Submitted Within 270 Days	99.6%	97.7%
Submitted Within 300 Days	99.9%	98.1%
Submitted Within 330 Days	>99.9%	99.1%
Submitted Within 360 Days	>99.9%	99.2%
Submitted After 360 Days	100.0%	100.0%

Field-Level Completeness and Accuracy

Figure L-9 and Figure L-10 provide the percentage of encounters that are present and contain valid values for key data elements.

Figure L-9—Key Professional Encounter Data Elements—Macomb County Community Mental Health

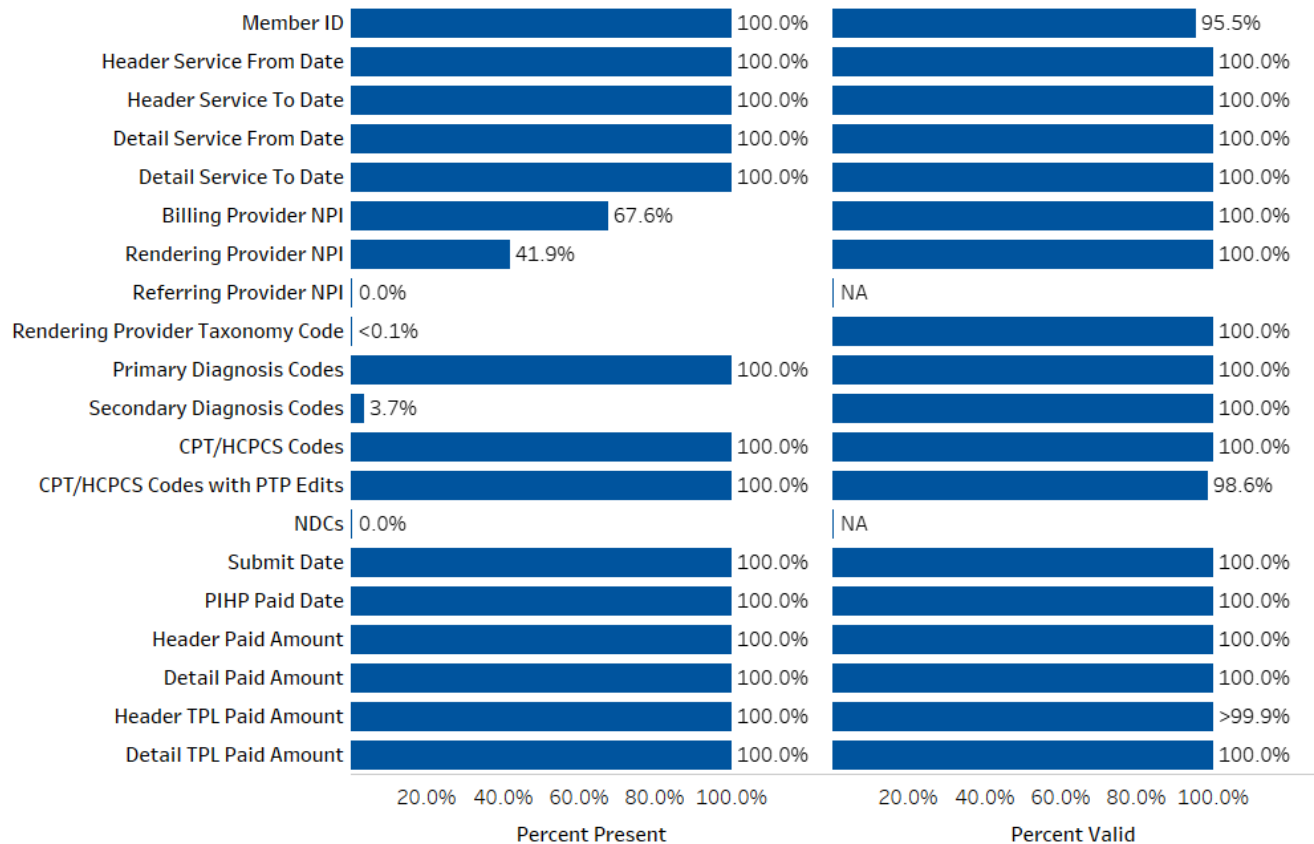
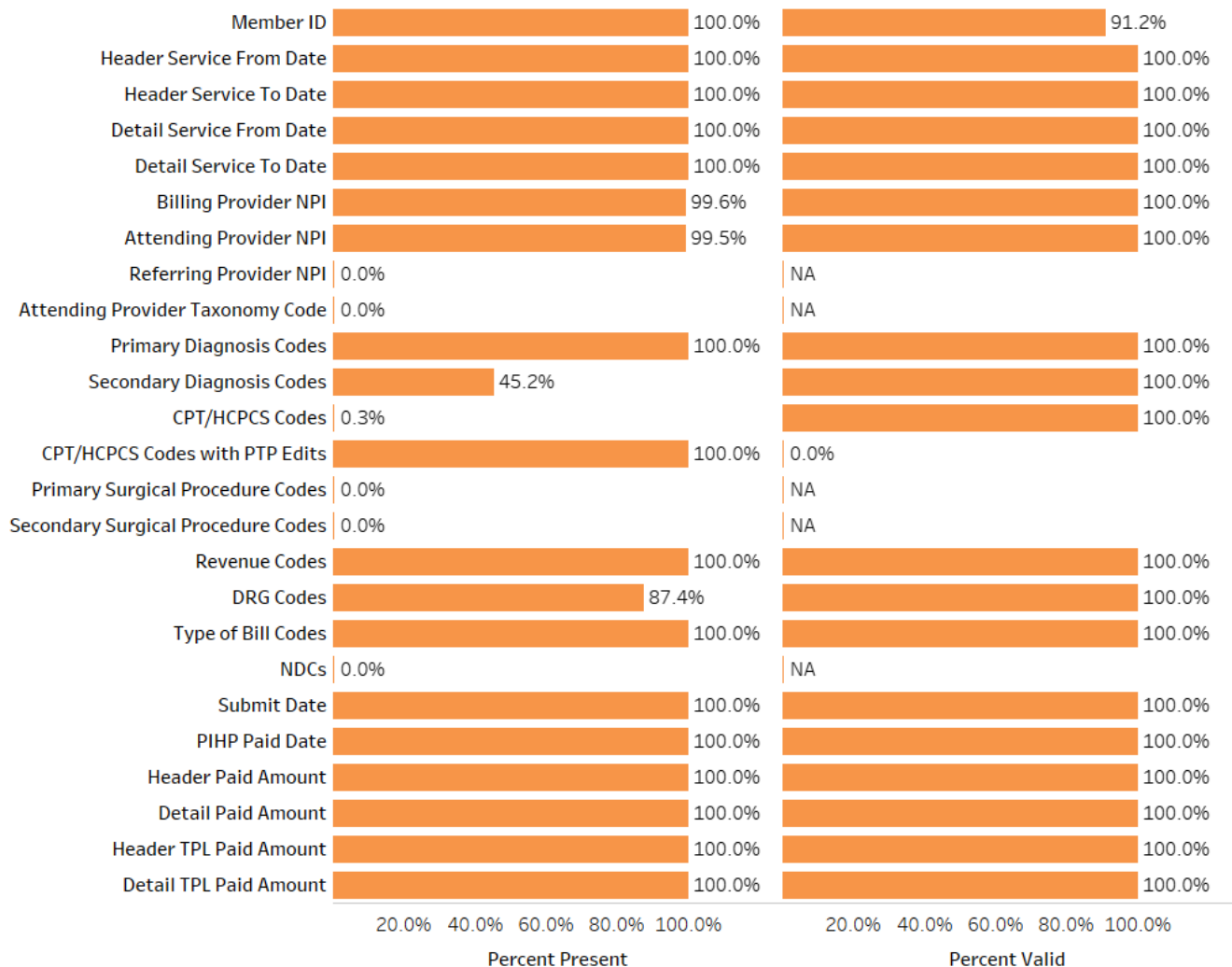


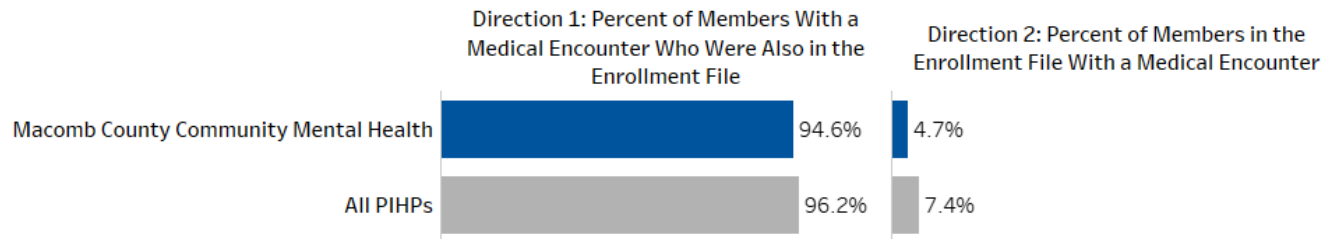
Figure L-10—Key Institutional Encounter Data Elements—Macomb County Community Mental Health



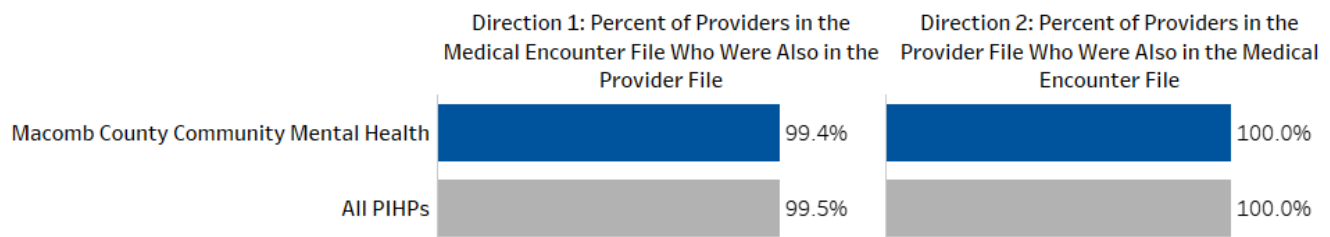
Encounter Data Referential Integrity

Figure L-11 and Figure L-12 display the referential integrity results.

**Figure L-11—Referential Integrity Comparison Between Enrollment and Medical Encounter Files—
Macomb County Community Mental Health**



**Figure L-12—Referential Integrity Comparison Between Medical Encounter and Provider Files—
Macomb County Community Mental Health**



Encounter Data Logic

Member Enrollment

Figure L-13 displays the percentage of members who were continuously enrolled.

Figure L-13—Percentage of Members Who Were Continuously Enrolled—Macomb County Community Mental Health



Conclusions

Based on the examination of the IS review and administrative profile outcomes in Section 3 and Section 4, respectively, for **Macomb County Community Mental Health**, HSAG identified the following areas of strength, opportunities for improvement, and recommendations.

IS Review Conclusions

Strengths

Strength #1: Macomb County Community Mental Health demonstrated its capability to collect, process, and transmit encounter data to MDHHS. The PIHP has also established data review and correction processes that efficiently address quality concerns identified by MDHHS.

Strength #2: Macomb County Community Mental Health has a robust system for monitoring encounter data submissions designed to oversee the accuracy, completeness, and timeliness of encounter data, which includes encounter data submissions from its own data warehouse and directly from its subcontractors.

Strength #3: While MRR can be labor- and resource-intensive process for conducting data quality checks, **Macomb County Community Mental Health** indicated its usage as a method for assessing its subcontractors' data. The use of this method enhances the reliability, accuracy, and contextual understanding of its subcontractors' encounter data. This reflects **Macomb County Community Mental Health's** commitment to delivering high-quality healthcare data.

Opportunities for Improvement

Weakness #1: None were identified.

Why the weakness exists: Not applicable.

Recommendation: None were identified.

Administrative Profile Conclusions

Strengths

Strength #1: Macomb County Community Mental Health displayed timely submission of professional and institutional encounters after payment date, and within 60 days, submitted 94.5 percent and 94.2 percent of encounters, respectively.

Strength #2: Across all encounters, most key data elements for **Macomb County Community Mental Health** were populated at high rates, and the majority of data elements were over 98 percent valid.

Opportunities for Improvement

Weakness #1: The member ID field had lower than expected validity rates in both professional and institutional data, with a validity rate of 95.5 percent and 91.2 percent, respectively. Additionally, 94.6 percent of members with a medical encounter were identified in the enrollment file. Combined, these findings suggest that **Macomb County Community Mental Health**’s enrollment data may not be complete.

Why the weakness exists: Linking datasets to each other to pull in additional information (i.e., enrollment start date or enrollment end date) may be important in subsequent analyses. Additionally, members identified in the encounter file should be enrolled on the date the service occurred.

Recommendation: **Macomb County Community Mental Health** should collaborate with MDHHS to ensure both entities have an accurate and complete database of enrolled members.

Administrative Profile Results—Tabular Data

Encounter Data Summary

Member Composition

Table L-2 presents the member composition.

Table L-2—Age and Gender Distribution—Macomb County Community Mental Health

Age Category	Number of Females	Number of Males
Infant (less than 1 year)	2,413	2,515
Age 1–3 years	7,948	8,377
Age 4–7 years	10,632	11,090
Age 8–12 years	12,240	13,005
Age 13–17 years	11,651	12,167
Age 18–24 years	16,114	13,779
Age 25–34 years	27,590	18,372
Age 35–44 years	19,602	14,503
Age 45–54 years	14,501	11,894
Age 55–64 years	13,729	11,450
Age 65 and over	12,479	7,644
Total	148,899	124,796

Encounter Data Completeness

Encounter Volume by Service Month

Table L-3 and Table L-4 display the encounter volume by service month.

Table L-3—Encounter Volume: Professional Encounters—Macomb County Community Mental Health

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	21,196	237,973	89.1
November 2021	21,683	239,625	90.5
December 2021	21,472	241,476	88.9
January 2022	23,190	242,924	95.5
February 2022	24,087	243,951	98.7
March 2022	26,624	245,464	108.5
April 2022	25,058	246,673	101.6
May 2022	25,452	247,997	102.6
June 2022	25,947	249,425	104.0
July 2022	25,279	251,130	100.7
August 2022	27,164	252,998	107.4
September 2022	26,094	254,791	102.4

Table L-4—Encounter Volume: Institutional Encounters—Macomb County Community Mental Health

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	248	237,973	1.0
November 2021	282	239,625	1.2
December 2021	303	241,476	1.3
January 2022	233	242,924	1.0
February 2022	250	243,951	1.0
March 2022	348	245,464	1.4
April 2022	291	246,673	1.2
May 2022	295	247,997	1.2
June 2022	305	249,425	1.2
July 2022	324	251,130	1.3
August 2022	310	252,998	1.2
September 2022	354	254,791	1.4

Payment Amounts Per Member Per Month

Table L-5 and Table L-6 display the monthly payment amounts PMPM by service month.

Table L-5—Paid Amount PMPM: Professional Encounters—Macomb County Community Mental Health

Month of Service	Number of MM	Paid Amount PMPM
October 2021	237,973	\$58.64
November 2021	239,625	\$59.68
December 2021	241,476	\$59.97
January 2022	242,924	\$61.10
February 2022	243,951	\$71.34
March 2022	245,464	\$75.07
April 2022	246,673	\$74.72
May 2022	247,997	\$73.35
June 2022	249,425	\$78.56
July 2022	251,130	\$83.39
August 2022	252,998	\$78.96
September 2022	254,791	\$76.57

Table L-6—Paid Amount PMPM: Institutional Encounters—Macomb County Community Mental Health

Month of Service	Number of MM	Paid Amount PMPM
October 2021	237,973	\$4.32
November 2021	239,625	\$7.00
December 2021	241,476	\$6.54
January 2022	242,924	\$5.61
February 2022	243,951	\$5.31
March 2022	245,464	\$8.81
April 2022	246,673	\$6.32
May 2022	247,997	\$7.59
June 2022	249,425	\$8.78
July 2022	251,130	\$8.21
August 2022	252,998	\$7.72
September 2022	254,791	\$11.24

Percentage of Duplicate Encounters

Table L-7 displays the percentage of duplicate encounters by category of service.

Table L-7—Percentage of Duplicate Encounters by Category of Service—Macomb County Community Mental Health

Category of Service	Number of Duplicate Records	Percentage of Duplicate Records
Professional	14,305	1.1%
Institutional	46	0.7%

Encounter Data Timeliness

Encounter Data Lag Triangles

Table L-8 and Table L-9 display the lag triangles between service month and submission month to MDHHS. For conciseness, lag triangles only include encounters submitted through April 2023 (a minimum of a seven-month lag); therefore, counts displayed in the total line may not equal counts displayed in encounter volume figures.

Table L-8—Encounter Data Lag Triangle: Professional Encounters—Macomb County Community Mental Health

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	4,605	750											5,355
202112	1,704	1,767	11										3,482
202201	4,215	8,996	4,758	0									17,969
202202	2,174	2,277	7,871	10,926	307								23,555
202203	274	191	849	2,942	10,424	0							14,680
202204	160	163	237	1,283	2,386	11,155	713						16,097
202205	23	20	11	367	307	1,727	11,350	1,970					15,775
202206	62	41	39	26	189	359	1,742	10,456	14				12,928
202207	20	24	22	23	66	373	244	2,127	11,850	2,115			16,864
202208	1,526	1,384	1,189	1,273	3,186	4,794	4,510	4,901	7,227	14,649	1,516		46,155
202209	6,578	6,315	6,248	5,859	6,493	6,458	5,810	6,065	5,657	6,377	18,173	2,173	82,206
202210	922	987	1,042	1,066	919	481	488	451	1,700	1,890	5,417	20,736	36,099
202211	2	1	2	9	628	1,123	852	717	277	285	565	1,102	5,563
202212	0	0	0	0	0	0	0	0	0	0	0	0	0
202301	67	108	318	135	324	1,687	1,017	913	1,452	1,800	1,748	2,274	11,843
202302	69	102	207	935	464	131	114	68	125	141	2,183	2,232	6,771

Month of Service													
Submission Month	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	Total
202303	0	0	0	0	0	0	0	0	0	0	0	0	0
202304	2	0	0	3	3	4	3	2	3	4	12	71	107
Total	22,403	23,126	22,804	24,847	25,696	28,292	26,843	27,670	28,305	27,261	29,614	28,588	315,449
MM	237,973	239,625	241,476	242,924	243,951	245,464	246,673	247,997	249,425	251,130	252,998	254,791	2,954,427
PMPM	0.09	0.10	0.09	0.10	0.11	0.12	0.11	0.11	0.11	0.11	0.12	0.11	0.11

Table L-9—Encounter Data Lag Triangle: Institutional Encounters—Macomb County Community Mental Health

Month of Service													
Submission Month	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	Total
202110	0												0
202111	223	58											281
202112	4	75	0										79
202201	5	123	185	0									313
202202	4	8	99	199	40								350
202203	2	4	9	13	181	12							221
202204	0	2	2	7	10	300	72						393
202205	0	0	0	0	5	9	162	54					230
202206	0	0	0	1	2	7	34	183	32				259
202207	1	0	0	0	2	6	5	26	205	75			320
202208	0	0	0	0	1	0	0	2	11	117	0		131
202209	1	0	0	1	0	2	4	5	29	101	244	65	452
202210	0	0	0	0	0	1	0	3	4	9	19	185	221
202211	0	0	0	0	0	0	0	1	1	4	7	34	47
202212	0	0	0	0	0	0	0	0	0	0	0	0	0
202301	0	0	0	1	6	8	5	9	9	13	23	48	122
202302	11	13	10	14	7	11	14	13	15	16	17	19	160
202303	0	0	0	0	0	0	0	0	0	0	0	0	0
202304	0	0	0	0	0	2	0	0	1	1	1	5	10
Total	251	283	305	236	254	358	296	296	307	336	311	356	3,589
MM	237,973	239,625	241,476	242,924	243,951	245,464	246,673	247,997	249,425	251,130	252,998	254,791	2,954,427
PMPM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Field-Level Completeness and Accuracy

Table L-10 and Table L-11 provide the percentage of encounters that are present and contain valid values for key data elements for all categories of service.

Table L-10—Key Encounter Data Elements: Professional Encounters—Macomb County Community Mental Health

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	315,509	315,509	100.0%	315,509	301,312	95.5%
Header Service From Date	315,509	315,509	100.0%	315,509	315,509	100.0%
Header Service To Date	315,509	315,509	100.0%	315,509	315,509	100.0%
Detail Service From Date	1,255,922	1,255,922	100.0%	1,255,922	1,255,922	100.0%
Detail Service To Date	1,255,922	1,255,922	100.0%	1,255,922	1,255,922	100.0%
Billing Provider NPI	315,509	213,166	67.6%	213,166	213,166	100.0%
Rendering Provider NPI	315,509	132,190	41.9%	132,190	132,190	100.0%
Referring Provider NPI	315,509	0	0.0%	0	0	NA
Rendering Provider Taxonomy Code	315,509	45	<0.1%	138	138	100.0%
Primary Diagnosis Codes	315,509	315,509	100.0%	315,509	315,509	100.0%
Secondary Diagnosis Codes	315,509	11,538	3.7%	22,373	22,373	100.0%
CPT/HCPCS Codes	1,255,922	1,255,922	100.0%	1,255,922	1,255,922	100.0%
CPT/HCPCS Codes with PTP Edits	1,253,115	1,253,115	100.0%	1,253,115	1,235,617	98.6%
NDCs	1,255,922	0	0.0%	0	0	NA
Submit Date	1,255,922	1,255,922	100.0%	1,255,922	1,255,922	100.0%
PIHP Paid Date	1,255,922	1,255,922	100.0%	1,255,922	1,255,922	100.0%
Header Paid Amount	315,509	315,509	100.0%	315,509	315,509	100.0%
Detail Paid Amount	1,255,922	1,255,922	100.0%	1,255,922	1,255,922	100.0%
Header TPL Paid Amount	315,509	315,509	100.0%	315,509	315,478	>99.9%
Detail TPL Paid Amount	1,255,922	1,255,922	100.0%	1,255,922	1,255,922	100.0%

Table L-11—Key Encounter Data Elements: Institutional Encounters—Macomb County Community Mental Health

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	3,598	3,598	100.0%	3,598	3,281	91.2%
Header Service From Date	3,598	3,598	100.0%	3,598	3,598	100.0%
Header Service To Date	3,598	3,598	100.0%	3,598	3,598	100.0%
Detail Service From Date	6,457	6,457	100.0%	6,457	6,457	100.0%
Detail Service To Date	6,457	6,457	100.0%	6,457	6,457	100.0%
Billing Provider NPI	3,598	3,582	99.6%	3,582	3,582	100.0%
Attending Provider NPI	3,598	3,580	99.5%	3,580	3,580	100.0%
Referring Provider NPI	3,598	0	0.0%	0	0	NA
Attending Provider Taxonomy Code	3,598	0	0.0%	0	0	NA
Primary Diagnosis Codes	3,598	3,598	100.0%	3,598	3,598	100.0%
Secondary Diagnosis Codes	3,598	1,626	45.2%	8,611	8,611	100.0%
CPT/HCPCS Codes	6,457	18	0.3%	18	18	100.0%
CPT/HCPCS Codes with PTP Edits	12	12	100.0%	12	0	0.0%
Primary Surgical Procedure Codes	3,598	0	0.0%	0	0	NA
Secondary Surgical Procedure Codes	3,598	0	0.0%	0	0	NA
Revenue Codes	6,457	6,457	100.0%	6,457	6,457	100.0%
DRG Codes	3,598	3,145	87.4%	3,145	3,145	100.0%
Type of Bill Codes	3,598	3,598	100.0%	3,598	3,598	100.0%
NDCs	6,457	0	0.0%	0	0	NA
Submit Date	6,457	6,457	100.0%	6,457	6,457	100.0%
PIHP Paid Date	6,457	6,457	100.0%	6,457	6,457	100.0%
Header Paid Amount	3,598	3,598	100.0%	3,598	3,598	100.0%
Detail Paid Amount	6,457	6,457	100.0%	6,457	6,457	100.0%
Header TPL Paid Amount	3,598	3,598	100.0%	3,598	3,598	100.0%
Detail TPL Paid Amount	6,457	6,457	100.0%	6,457	6,457	100.0%

Appendix M. Results for Region 10 PIHP

Appendix M contains the IS review and administrative profile results, strengths, weaknesses, and recommendations, as applicable, that HSAG identified from the EDV study for **Region 10 PIHP**.

IS Review Findings

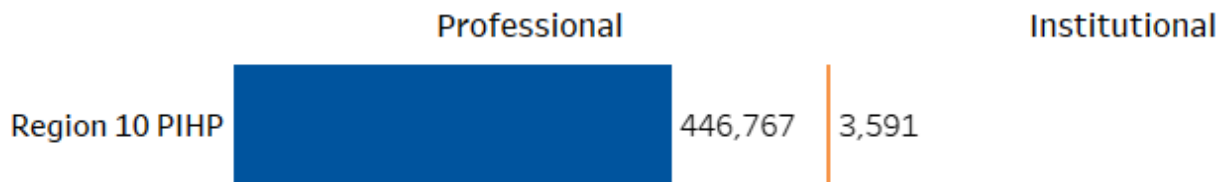
Please refer to Section 3: Information Systems Review Findings for **Region 10 PIHP**'s specific findings, if any.

Administrative Profile Results

Encounter Data Summary

Figure M-1 displays the number of encounters by category of service.

Figure M-1—Number of Paid Encounters by Category of Service—Region 10 PIHP



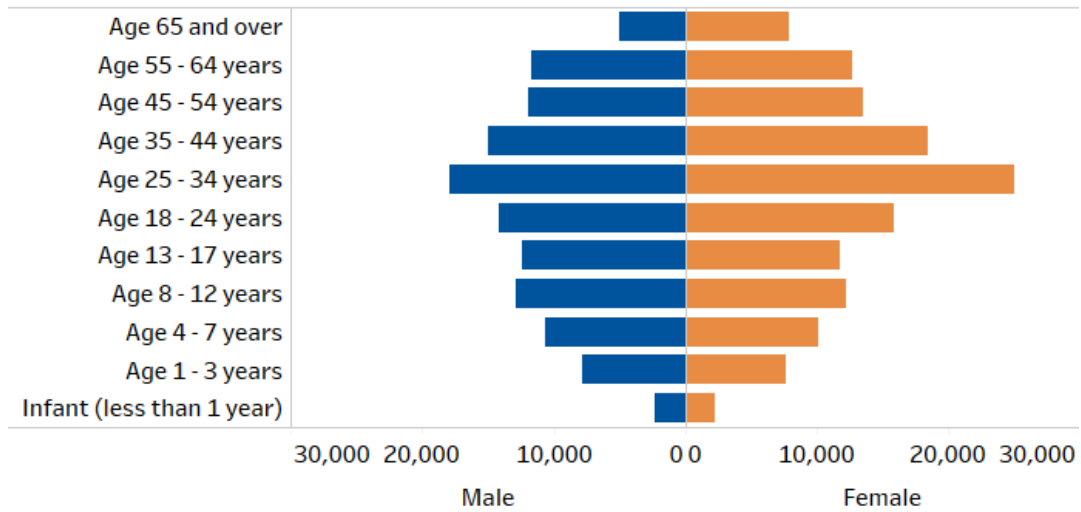
Member Composition

Figure M-2 and Figure M-3 display member demographics.

Figure M-2—Enrollment in SFY 2023—Region 10 PIHP



Figure M-3—Age and Gender Distribution—Region 10 PIHP

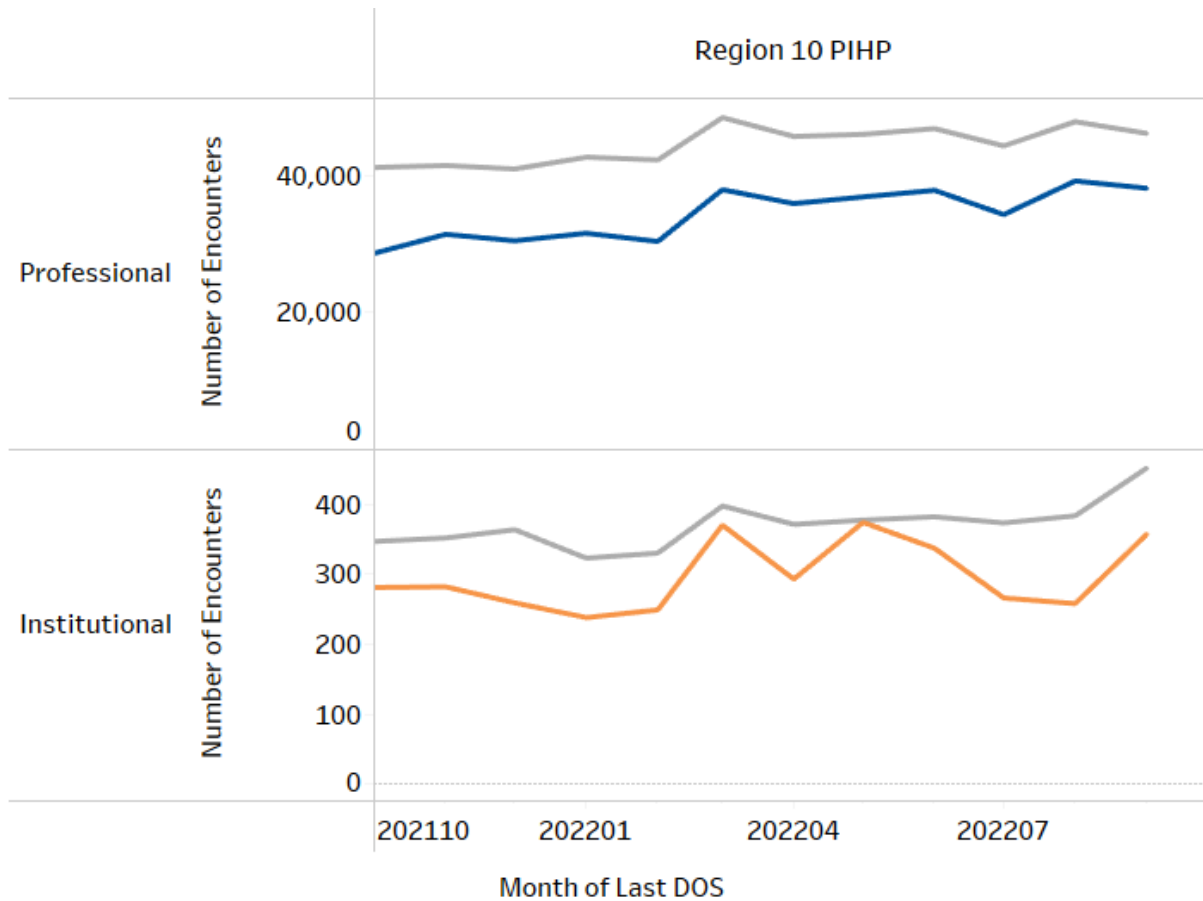


Encounter Data Completeness

Encounter Volume by Service Month

Figure M-4 displays the monthly encounter volume by service month and category of service.

Figure M-4—Encounter Volume by Service Month—Region 10 PIHP

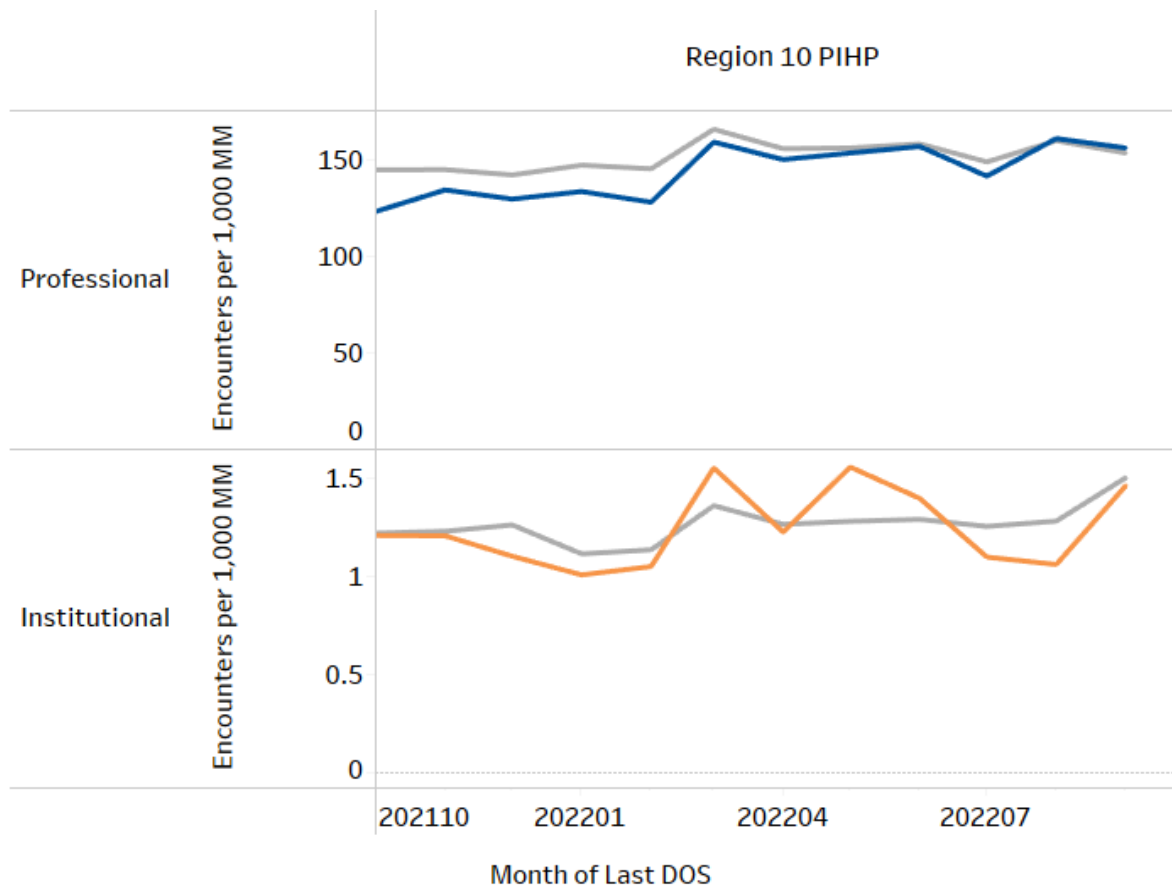


Note: The grey line indicates the all PIHP rate.

Encounter Volume Per 1,000 Member Months

Figure M-5 displays the monthly encounter volume per 1,000 MM by service month and category of service.

Figure M-5—Encounter Volume per 1,000 MM—Region 10 PIHP

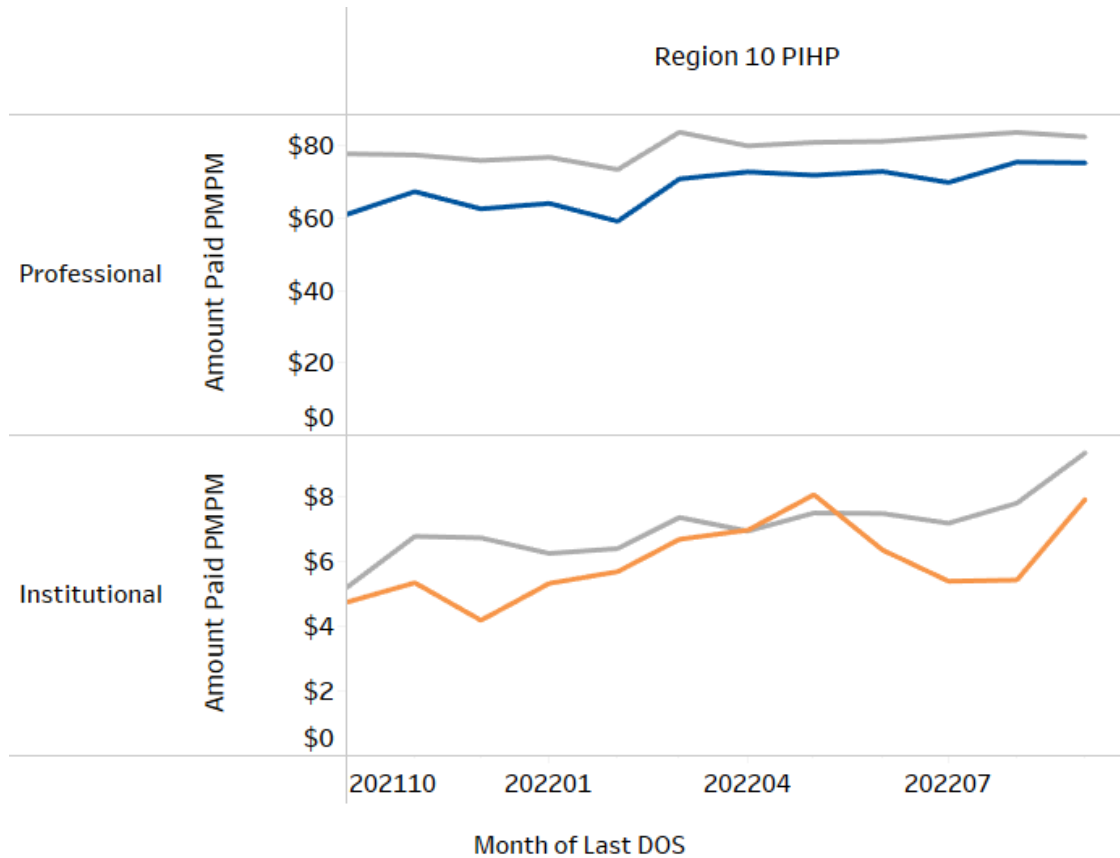


Note: The grey line indicates the all PIHP rate.

Payment Amounts Per Member Per Month

Figure M-6 displays the monthly payment amounts PMPM by service month and category of service.

Figure M-6—Paid Amount PMPM—Region 10 PIHP

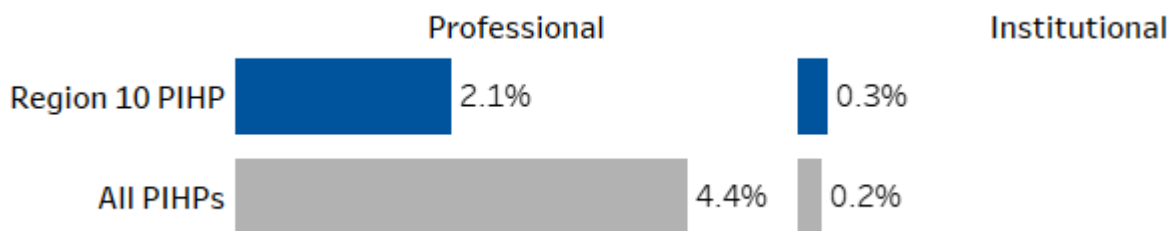


Note: The grey line indicates the all PIHP rate.

Percentage of Duplicate Encounters

Figure M-7 displays the percentage of duplicate encounters.

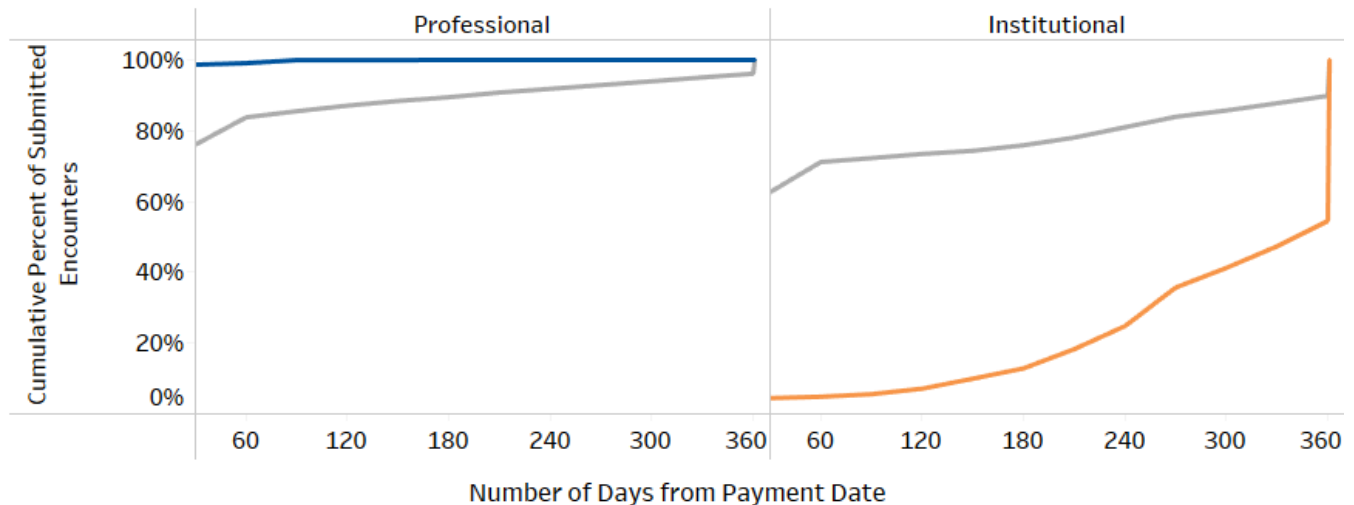
Figure M-7—Percentage of Duplicate Encounters—Region 10 PIHP



Encounter Data Timeliness

Figure M-8 and Table M-1 show the cumulative percentage of encounters submitted to MDHHS from the payment date by category of service.

Figure M-8—Cumulative Percentage of Encounters Submitted to MDHHS From PIHP Payment Date by Category of Service—Region 10 PIHP



Note: The grey line indicates the all PIHP rate.

Table M-1—Completeness of Encounters by Category of Service—Region 10 PIHP

Number of Days From Payment Date	Cumulative Percentage of Submitted Professional Encounters	Cumulative Percentage of Submitted Institutional Encounters
Submitted Within 30 Days	98.6%	4.5%
Submitted Within 60 Days	99.1%	4.8%
Submitted Within 90 Days	99.9%	5.6%
Submitted Within 120 Days	99.9%	7.1%
Submitted Within 150 Days	99.9%	9.9%
Submitted Within 180 Days	>99.9%	12.9%
Submitted Within 210 Days	>99.9%	18.3%
Submitted Within 240 Days	>99.9%	24.8%
Submitted Within 270 Days	>99.9%	35.7%
Submitted Within 300 Days	>99.9%	41.2%
Submitted Within 330 Days	>99.9%	47.4%
Submitted Within 360 Days	>99.9%	54.5%
Submitted After 360 Days	100.0%	100.0%

Field-Level Completeness and Accuracy

Figure M-9 and Figure M-10 provide the percentage of encounters that are present and contain valid values for key data elements.

Figure M-9—Key Professional Encounter Data Elements—Region 10 PIHP

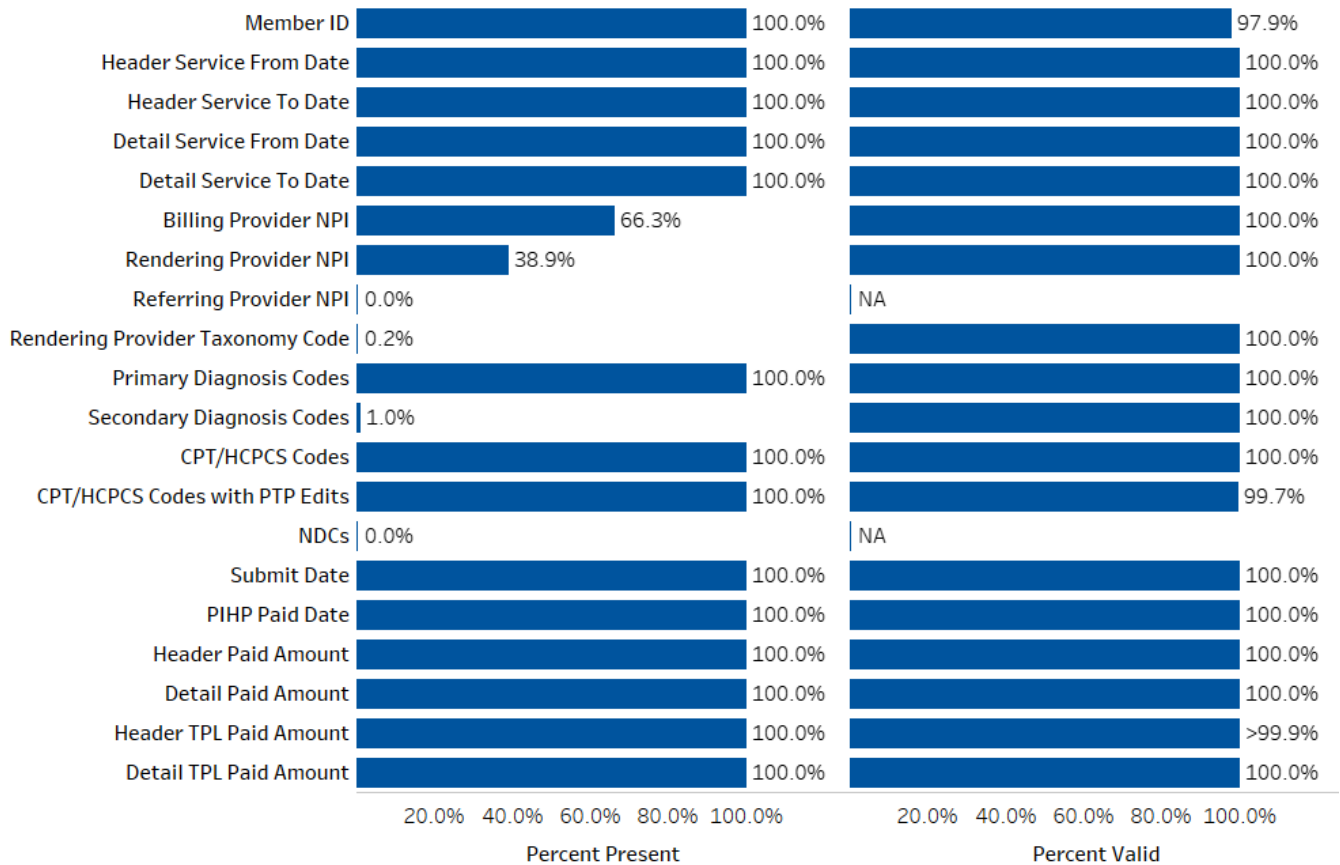
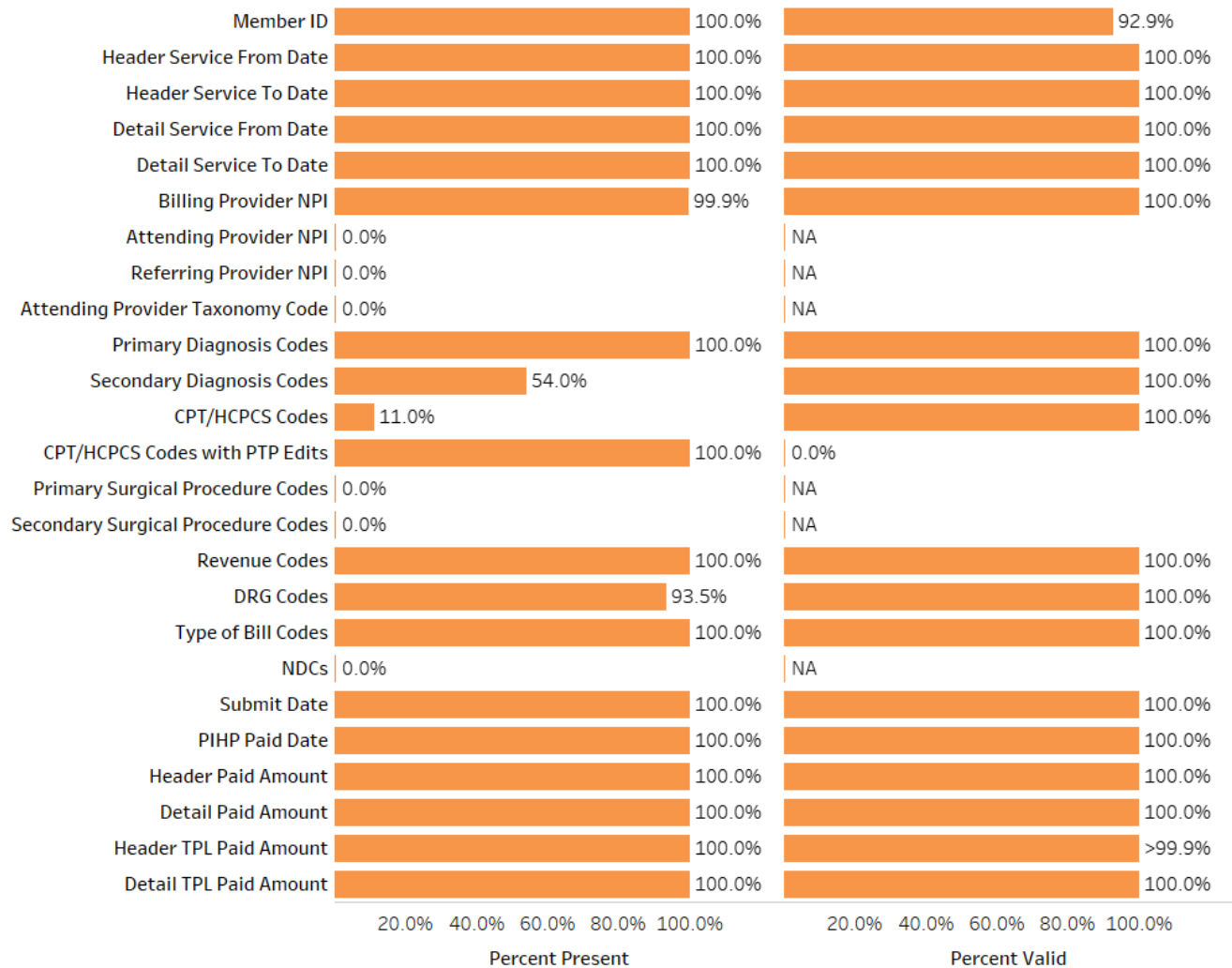


Figure M-10—Key Institutional Encounter Data Elements—Region 10 PIHP



Encounter Data Referential Integrity

Figure M-11 and Figure M-12 display the referential integrity results.

Figure M-11—Referential Integrity Comparison Between Enrollment and Medical Encounter Files—Region 10 PIHP

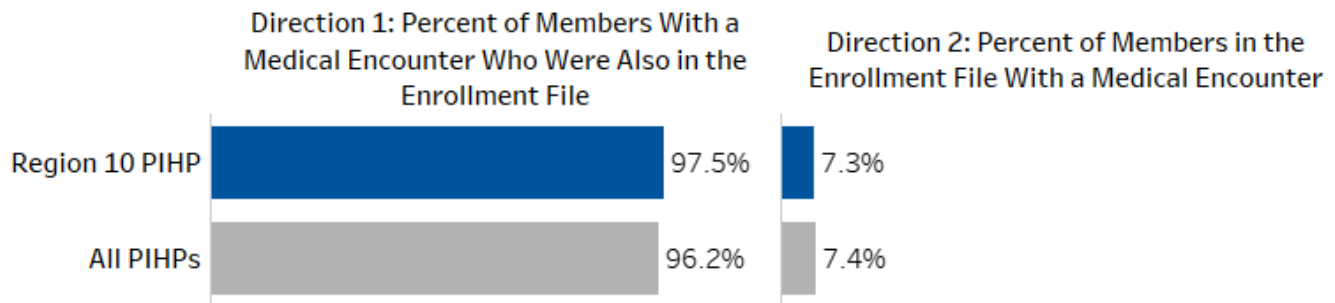
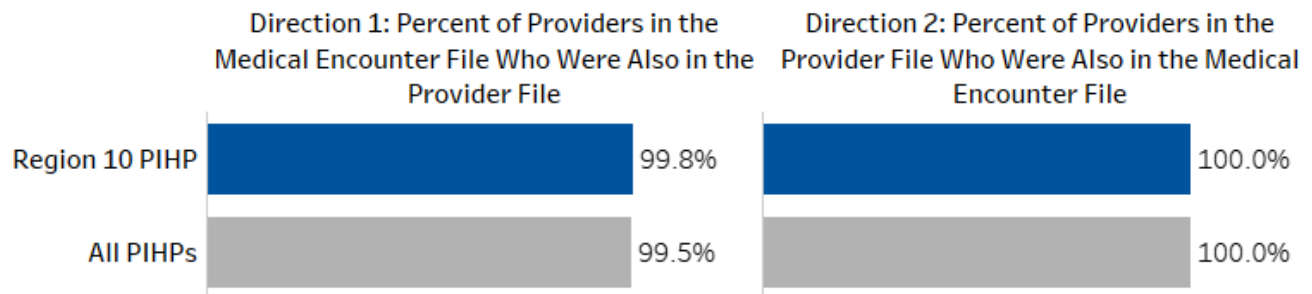


Figure M-12—Referential Integrity Comparison Between Medical Encounter and Provider Files—Region 10 PIHP

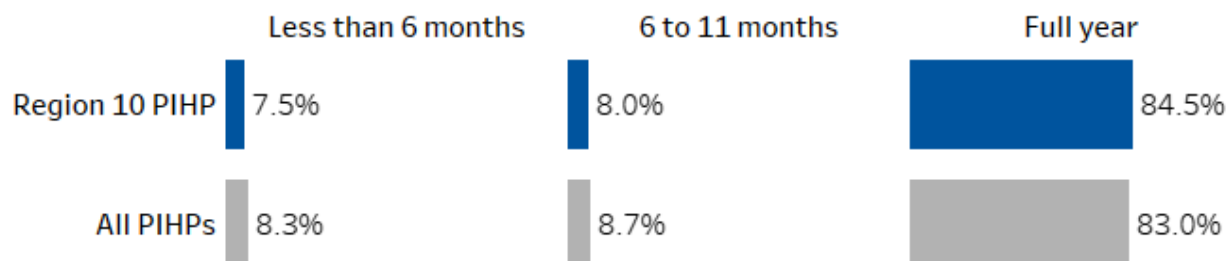


Encounter Data Logic

Member Enrollment

Figure M-13 displays the percentage of members who were continuously enrolled.

Figure M-13—Percentage of Members Who Were Continuously Enrolled—Region 10 PIHP



Conclusions

Based on the examination of the IS review and administrative profile outcomes in Section 3 and Section 4, respectively, for **Region 10 PIHP**, HSAG identified the following areas of strength, opportunities for improvement, and recommendations.

IS Review Conclusions

Strengths

Strength #1: Region 10 PIHP demonstrated its capability to collect, process, and transmit encounter data to MDHHS. The PIHP has also established data review and correction processes that efficiently address quality concerns identified by MDHHS.

Strength #2: Region 10 PIHP has a robust system for monitoring encounter data submissions designed to oversee the accuracy, completeness, and timeliness of encounter data, which includes encounter data submissions from its own data warehouse and directly from its subcontractors.

Strength #3: While MRR can be labor- and resource-intensive process for conducting data quality checks, **Region 10 PIHP** indicated its usage as a method for assessing its subcontractors' data. The use of this method enhances the reliability, accuracy, and contextual understanding of its subcontractors' encounter data. This reflects **Region 10 PIHP's** commitment to delivering high-quality healthcare data.

Opportunities for Improvement

Weakness #1: None were identified.

Why the weakness exists: Not applicable.

Recommendation: None were identified.

Administrative Profile Conclusions

Strengths

Strength #1: Region 10 PIHP displayed timely submission of professional encounters after payment date, with 99.1 percent of encounters submitted within 60 days.

Strength #2: Across all encounters, most key data elements for **Region 10 PIHP** were populated at high rates, and the majority of data elements were over 99 percent valid.

Opportunities for Improvement

Weakness #1: Region 10 PIHP did not submit institutional encounters timely, where 7.1 percent of institutional encounters were submitted within 120 days of payment, and 54.5 percent of encounters were submitted within 360 days.

Why the weakness exists: The timely submission of encounters is crucial to guarantee that conducted analyses include comprehensive data. Failure to submit encounters in a timely manner may lead to incomplete analyses and inaccurate results.

Recommendation: **Region 10 PIHP** should monitor its encounter data submission to MDHHS to ensure encounters are submitted after payment.

Weakness #2: The member ID field had lower than expected validity rates in both professional and institutional data, with a validity rate of 97.9 percent and 92.9 percent, respectively. Additionally, 97.5 percent of members with a medical encounter were identified in the enrollment file. Combined, these findings suggest that **Region 10 PIHP**'s enrollment data may not be complete.

Why the weakness exists: Linking datasets to each other to pull in additional information (i.e., enrollment start date or enrollment end date) may be important in subsequent analyses. Additionally, members identified in the encounter file should be enrolled on the date the service occurred.

Recommendation: **Region 10 PIHP** should collaborate with MDHHS to ensure both entities have an accurate and complete database of enrolled members.

Administrative Profile Results—Tabular Data

Encounter Data Summary

Member Composition

Table M-2 presents the member composition.

Table M-2—Age and Gender Distribution—Region 10 PIHP

Age Category	Number of Females	Number of Males
Infant (less than 1 year)	2,274	2,398
Age 1–3 years	7,639	7,894
Age 4–7 years	10,119	10,703
Age 8–12 years	12,221	12,929
Age 13–17 years	11,723	12,454
Age 18–24 years	15,861	14,157
Age 25–34 years	25,080	17,911
Age 35–44 years	18,483	14,959
Age 45–54 years	13,499	11,916
Age 55–64 years	12,756	11,702
Age 65 and over	7,932	4,982
Total	137,587	122,005

Encounter Data Completeness

Encounter Volume by Service Month

Table M-3 and Table M-4 display the encounter volume by service month.

Table M-3—Encounter Volume: Professional Encounters—Region 10 PIHP

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	28,686	232,680	123.3
November 2021	31,453	233,874	134.5
December 2021	30,513	235,173	129.7
January 2022	31,611	236,493	133.7
February 2022	30,413	237,372	128.1
March 2022	37,979	238,444	159.3
April 2022	35,948	239,288	150.2

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
May 2022	36,918	240,346	153.6
June 2022	37,886	241,302	157.0
July 2022	34,337	242,443	141.6
August 2022	39,245	243,567	161.1
September 2022	38,188	244,428	156.2

Table M-4—Encounter Volume: Institutional Encounters—Region 10 PIHP

Month of Service	Number of Encounters	Number of MM	Encounter Volume per 1,000 MM
October 2021	281	232,680	1.2
November 2021	282	233,874	1.2
December 2021	259	235,173	1.1
January 2022	238	236,493	1.0
February 2022	249	237,372	1.0
March 2022	370	238,444	1.6
April 2022	293	239,288	1.2
May 2022	374	240,346	1.6
June 2022	337	241,302	1.4
July 2022	266	242,443	1.1
August 2022	258	243,567	1.1
September 2022	357	244,428	1.5

Payment Amounts Per Member Per Month

Table M-5 and Table M-6 display the monthly payment amounts PMPM by service month.

Table M-5—Paid Amount PMPM: Professional Encounters—Region 10 PIHP

Month of Service	Number of MM	Paid Amount PMPM
October 2021	232,680	\$61.00
November 2021	233,874	\$67.33
December 2021	235,173	\$62.56
January 2022	236,493	\$64.07
February 2022	237,372	\$59.12
March 2022	238,444	\$70.84
April 2022	239,288	\$72.77

Month of Service	Number of MM	Paid Amount PMPM
May 2022	240,346	\$71.86
June 2022	241,302	\$72.89
July 2022	242,443	\$69.85
August 2022	243,567	\$75.50
September 2022	244,428	\$75.27

Table M-6—Paid Amount PMPM: Institutional Encounters—Region 10 PIHP

Month of Service	Number of MM	Paid Amount PMPM
October 2021	232,680	\$4.74
November 2021	233,874	\$5.34
December 2021	235,173	\$4.18
January 2022	236,493	\$5.32
February 2022	237,372	\$5.68
March 2022	238,444	\$6.68
April 2022	239,288	\$6.96
May 2022	240,346	\$8.06
June 2022	241,302	\$6.35
July 2022	242,443	\$5.39
August 2022	243,567	\$5.42
September 2022	244,428	\$7.92

Percentage of Duplicate Encounters

Table M-7 displays the percentage of duplicate encounters by category of service.

Table M-7—Percentage of Duplicate Encounters by Category of Service—Region 10 PIHP

Category of Service	Number of Duplicate Records	Percentage of Duplicate Records
Professional	23,157	2.1%
Institutional	18	0.3%

Encounter Data Timeliness

Encounter Data Lag Triangles

Table M-8 and Table M-9 display the lag triangles between service month and submission month to MDHHS. For conciseness, lag triangles only include encounters submitted through April 2023 (a minimum of a seven-month lag); therefore, counts displayed in the total line may not equal counts displayed in encounter volume figures.

Table M-8—Encounter Data Lag Triangle: Professional Encounters—Region 10 PIHP

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	11,712	7,747											19,459
202112	3,428	6,813	6,398										16,639
202201	4,213	12,720	8,650	8,174									33,757
202202	528	712	12,109	8,651	8,078								30,078
202203	2,960	1,514	496	11,498	9,270	8,855							34,593
202204	797	861	1,436	3,572	13,470	12,949	6,058						39,143
202205	1,000	991	749	555	726	17,959	27,005	9,684					58,669
202206	5,743	857	950	948	797	521	4,412	23,679	8,136				46,043
202207	79	132	32	48	89	133	537	5,112	26,088	6,051			38,301
202208	69	29	26	55	45	107	167	613	5,568	27,368	9,809		43,856
202209	54	96	600	27	24	40	44	107	665	2,610	25,702	7,320	37,289
202210	119	1,151	619	319	132	176	185	236	285	682	5,721	23,907	33,532
202211	103	44	36	79	81	89	105	103	126	239	686	5,804	7,495
202212	95	116	69	77	68	102	113	117	192	214	528	4,259	5,950
202301	74	66	40	57	67	64	58	82	107	124	190	303	1,232
202302	44	42	36	63	41	42	48	61	55	31	85	67	615
202303	1	1	2	1	0	0	2	0	3	5	4	10	29
202304	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	31,019	33,892	32,248	34,124	32,888	41,037	38,734	39,794	41,225	37,324	42,725	41,670	446,680
MM	232,680	233,874	235,173	236,493	237,372	238,444	239,288	240,346	241,302	242,443	243,567	244,428	2,865,410
PMPM	0.13	0.14	0.14	0.14	0.14	0.17	0.16	0.17	0.17	0.15	0.18	0.17	0.16

Table M-9—Encounter Data Lag Triangle: Institutional Encounters—Region 10 PIHP

Submission Month	Month of Service												Total
	202110	202111	202112	202201	202202	202203	202204	202205	202206	202207	202208	202209	
202110	0												0
202111	6	2											8
202112	0	0	0										0
202201	1	2	1	0									4
202202	1	3	4	3	0								11
202203	0	0	0	1	1	0							2
202204	0	0	2	2	4	5	0						13
202205	0	0	0	1	2	7	11	0					21
202206	0	0	0	0	2	1	4	8	1				16
202207	0	0	0	0	0	0	2	3	8	1			14
202208	0	1	0	3	0	0	0	4	3	5	4		20
202209	0	0	0	0	1	1	0	5	2	0	6	0	15
202210	0	1	0	0	0	0	0	0	2	2	3	6	14
202211	0	0	0	0	0	1	0	0	0	0	2	3	6
202212	0	0	0	1	0	0	0	0	1	0	2	2	6
202301	0	0	0	0	0	0	0	0	0	0	0	0	0
202302	0	0	0	0	0	0	0	1	0	0	0	2	3
202303	115	95	90	72	105	120	103	117	113	90	83	128	1,231
202304	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	123	104	97	83	115	135	120	138	130	98	100	141	1,384
MM	232,680	233,874	235,173	236,493	237,372	238,444	239,288	240,346	241,302	242,443	243,567	244,428	2,865,410
PMPM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Field-Level Completeness and Accuracy

Table M-10 and Table M-11 provide the percentage of encounters that are present and contain valid values for key data elements for all categories of service.

Table M-10—Key Encounter Data Elements: Professional Encounters—Region 10 PIHP

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	446,767	446,767	100.0%	446,767	437,471	97.9%
Header Service From Date	446,767	446,767	100.0%	446,767	446,767	100.0%
Header Service To Date	446,767	446,767	100.0%	446,767	446,767	100.0%
Detail Service From Date	1,089,530	1,089,530	100.0%	1,089,530	1,089,530	100.0%
Detail Service To Date	1,089,530	1,089,530	100.0%	1,089,530	1,089,530	100.0%
Billing Provider NPI	446,767	296,214	66.3%	296,214	296,214	100.0%
Rendering Provider NPI	446,767	173,782	38.9%	173,782	173,782	100.0%
Referring Provider NPI	446,767	0	0.0%	0	0	NA
Rendering Provider Taxonomy Code	446,767	743	0.2%	798	798	100.0%
Primary Diagnosis Codes	446,767	446,767	100.0%	446,767	446,767	100.0%
Secondary Diagnosis Codes	446,767	4,317	1.0%	8,574	8,574	100.0%
CPT/HCPCS Codes	1,089,530	1,089,530	100.0%	1,089,530	1,089,530	100.0%
CPT/HCPCS Codes with PTP Edits	1,087,692	1,087,692	100.0%	1,087,692	1,084,503	99.7%
NDCs	1,089,530	0	0.0%	0	0	NA
Submit Date	1,089,530	1,089,530	100.0%	1,089,530	1,089,530	100.0%
PIHP Paid Date	1,089,530	1,089,530	100.0%	1,089,530	1,089,530	100.0%
Header Paid Amount	446,767	446,767	100.0%	446,767	446,767	100.0%
Detail Paid Amount	1,089,530	1,089,530	100.0%	1,089,530	1,089,530	100.0%
Header TPL Paid Amount	446,767	446,767	100.0%	446,767	446,745	>99.9%
Detail TPL Paid Amount	1,089,530	1,089,530	100.0%	1,089,530	1,089,530	100.0%

Table M-11—Key Encounter Data Elements: Institutional Encounters—Region 10 PIHP

Data Element	Percent Present			Percent Valid		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
Member ID	3,591	3,591	100.0%	3,591	3,335	92.9%
Header Service From Date	3,591	3,591	100.0%	3,591	3,591	100.0%
Header Service To Date	3,591	3,591	100.0%	3,591	3,591	100.0%
Detail Service From Date	6,278	6,278	100.0%	6,278	6,278	100.0%
Detail Service To Date	6,278	6,278	100.0%	6,278	6,278	100.0%
Billing Provider NPI	3,591	3,587	99.9%	3,587	3,587	100.0%
Attending Provider NPI	3,591	0	0.0%	0	0	NA
Referring Provider NPI	3,591	0	0.0%	0	0	NA
Attending Provider Taxonomy Code	3,591	0	0.0%	0	0	NA
Primary Diagnosis Codes	3,591	3,591	100.0%	3,591	3,591	100.0%
Secondary Diagnosis Codes	3,591	1,940	54.0%	3,786	3,786	100.0%
CPT/HCPCS Codes	6,278	690	11.0%	690	690	100.0%
CPT/HCPCS Codes with PTP Edits	690	690	100.0%	690	0	0.0%
Primary Surgical Procedure Codes	3,591	0	0.0%	0	0	NA
Secondary Surgical Procedure Codes	3,591	0	0.0%	0	0	NA
Revenue Codes	6,278	6,278	100.0%	6,278	6,278	100.0%
DRG Codes	3,591	3,356	93.5%	3,356	3,356	100.0%
Type of Bill Codes	3,591	3,591	100.0%	3,591	3,591	100.0%
NDCs	6,278	0	0.0%	0	0	NA
Submit Date	6,278	6,278	100.0%	6,278	6,278	100.0%
PIHP Paid Date	6,278	6,278	100.0%	6,278	6,278	100.0%
Header Paid Amount	3,591	3,591	100.0%	3,591	3,591	100.0%
Detail Paid Amount	6,278	6,278	100.0%	6,278	6,278	100.0%
Header TPL Paid Amount	3,591	3,591	100.0%	3,591	3,590	>99.9%
Detail TPL Paid Amount	6,278	6,278	100.0%	6,278	6,278	100.0%