

2021–22 Encounter Data Validation Study Report

Quality Population Health Management
California Department of Health Care Services

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Commonly Used Abbreviations and Acronyms

- ◆ **COHS**—County Organized Health System
- ◆ **COVID-19**—coronavirus disease 2019
- ◆ **CP**—Commercial Plan
- ◆ **DHCS**—California Department of Health Care Services
- ◆ **DME**—durable medical equipment
- ◆ **E&M**—evaluation and management
- ◆ **EDV**—encounter data validation
- ◆ **GMC**—Geographic Managed Care
- ◆ **HIPAA**—Health Insurance Portability and Accountability Act of 1996
- ◆ **HSAG**—Health Services Advisory Group, Inc.
- ◆ **MCMC**—Medi-Cal Managed Care program
- ◆ **MCP**—managed care health plan
- ◆ **NCCI**—National Correct Coding Initiative
- ◆ **PSP**—population-specific health plan
- ◆ **QMED**—quality measures for encounter data
- ◆ **SPEC**—Specialty

1. Executive Summary

Accurate and complete encounter data are critical to assessing quality, monitoring program integrity, and making financial decisions. Therefore, the California Department of Health Care Services (DHCS) requires its contracted Medi-Cal managed care health plans (MCPs) and population-specific health plans (PSPs) to submit high-quality encounter data. Completeness and accuracy of these data are essential to the success of DHCS' overall management and oversight of the Medi-Cal Managed Care program (MCMC).

Since contract year 2012–13, DHCS has contracted with Health Services Advisory Group, Inc. (HSAG), to conduct an encounter data validation (EDV) study. For contract year 2021–22, the goal of the EDV study was to examine, through a review of medical records, the completeness and accuracy of the professional encounter data submitted to DHCS by MCPs and PSPs.

Note that because of the coronavirus disease 2019 (COVID-19) public health emergency, DHCS determined to suspend the 2019–20 EDV medical record review and modify the 2020–21 EDV study to minimize non-critical burdens on MCP and PSP provider networks. In lieu of the 2020–21 EDV study, DHCS and HSAG developed an administrative data analysis using encounter, provider, member demographic, and member eligibility data to measure encounter data quality.

DHCS released the All Plan Letter (APL) 20-004 to communicate the suspension of EDV activities during the COVID-19 public health emergency and revised the APL to communicate the resumption of the EDV medical record review study for the 2021–22 contract year.¹

Methodology

Medical and clinical records are considered the “gold standard” for documenting access to and quality of health care services. During contract year 2021–22, HSAG evaluated MCMC encounter data completeness and accuracy via a review of medical records for physician services rendered between January 1, 2020, and December 31, 2020. The study answered the following question:

- ◆ Are the data elements *Date of Service*, *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Rendering Provider Name*, found on the professional encounters, complete and accurate when compared to information contained within the medical records?

HSAG conducted the following actions to answer the study question:

- ◆ Identified the eligible population and generated samples from data extracted from the DHCS data warehouse.

¹ All Plan Letter 20-004. Available at: [APL 22-004 \(ca.gov\)](https://www.cdph.ca.gov/Programs/OPA/Pages/APL22-004.aspx). Accessed on: May 13, 2022.

- ◆ Assisted MCPs and PSPs to procure medical records from providers, as appropriate.
- ◆ Reviewed medical records against DHCS encounter data.
- ◆ Calculated study indicators.

Key Findings from Medical Record Review

Table 1.1 displays the statewide results for each study indicator. Of note, for the medical record omission rate and encounter data omission rate, lower values indicate better performance.

Table 1.1—Statewide Results for Study Indicators

Rates shaded in gray and denoted with a cross (+) indicate having met the EDV study standards.

— indicates that the study indicator is not applicable for a data element.

*This data element is calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Elements	Medical Record Omission Rate	Encounter Data Omission Rate	Element Accuracy Rate
EDV Study Standards	Less than 10 percent	Less than 10 percent	More than 90 percent for each data element or 80 percent for all-element accuracy rate
Date of Service	14.0%	3.6% ⁺	—
Diagnosis Code	17.6%	2.4% ⁺	99.2% ⁺
Procedure Code	21.7%	8.6% ⁺	98.2% ⁺
Procedure Code Modifier	34.0%	6.9% ⁺	99.7% ⁺
Rendering Provider Name	12.8%	15.4%	64.9%
All-Element Accuracy with Rendering Provider Name	—	—	35.8%
All-Element Accuracy Excluding Rendering Provider Name*	—	—	63.4%

Encounter Data Completeness

Omissions identified in the medical records (services located in the encounter data but not supported in the medical records) and omissions identified in the encounter data (services located in the medical records but not in the encounter data) illustrate discrepancies in completeness of DHCS' encounter data. Overall, DHCS' encounter data were relatively complete for the key data elements when compared to the medical records. Below are relevant findings.

- ◆ All five of the data elements assessed for this study had medical record omission rates (services located in the encounter data but not supported in the medical records) greater than 10 percent and therefore did not meet the standard. The five data elements were moderately supported by the documentation in the members' medical records. As shown in Table 1.1 the medical record omission rates ranged from 12.8 percent (*Rendering Provider Name*) to 34.0 percent (*Procedure Code Modifier*).
- ◆ Four of the five data elements (*Date of Service*, *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) had encounter data omission rates (services located in the medical records but not in the encounter data) of less than 10 percent, indicating they met the EDV study standard. The remaining data element, *Rendering Provider Name*, had a moderate encounter data omission rate of 15.4 percent.
- ◆ None of the data elements met the study standard for both the medical record omission rate and the encounter data omission rate.

Encounter Data Accuracy

- ◆ Among the four data elements evaluated for accuracy, three data elements (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) had accuracy rates greater than 90 percent, which met the EDV study standard. Statewide, 64.9 percent of rendering provider names identified in the electronic encounter data were supported by medical record documentation.
- ◆ Approximately one third (35.8 percent) of the dates of service present in both data sources contained matching values for all four key data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Rendering Provider Name*). This number increased to 63.4 percent when the matched values included only three data elements—*Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*.

When comparing results from the 2018–19 medical record review activity, the number of statewide rates meeting the EDV standards decreased by one due to the lower medical record procurement rate in the current study.

Recommendations

Based on the study findings, HSAG's recommendations for the 2021–22 EDV study are similar to the recommendations HSAG made for the 2018–19 EDV study. In general, DHCS should continue to work with MCPs and PSPs to determine ways to improve study results that did not meet the EDV study standards.

2. Overview and Methodology

Overview

Accurate and complete encounter data are critical to assessing quality, monitoring program integrity, and making financial decisions. Therefore, DHCS requires its MCPs and PSPs to submit high-quality encounter data. DHCS relies on the quality of the encounter data to accurately and effectively monitor and improve quality of care, establish appropriate performance metrics, generate accurate and reliable reports, and obtain complete and accurate utilization information. The completeness and accuracy of these data are essential to the success of DHCS' overall management and oversight of MCMC.

Since contract year 2012–13, DHCS has contracted with HSAG to conduct an EDV study. For contract year 2021–22, the goal of the EDV study was to examine, through a review of medical records, the completeness and accuracy of the professional encounter data submitted to DHCS by MCPs and PSPs. HSAG assessed the encounter data submitted by DHCS' 25 MCPs and two PSPs.²

Note that because of the COVID-19 public health emergency, DHCS determined to suspend the 2019–20 EDV medical record review and modify the 2020–21 EDV study to minimize non-critical burdens on MCP and PSP provider networks. In lieu of the 2020–21 EDV study, DHCS and HSAG developed an administrative data analysis using encounter, provider, member demographic, and member eligibility data to measure encounter data quality.

DHCS released the APL 20-004 to communicate the suspension of EDV activities during the COVID-19 public health emergency and revised the APL to communicate the resumption of the EDV medical record review study for the 2021–22 contract year.³

Methodology

Medical and clinical records are considered the “gold standard” for documenting access to and quality of health care services. During contract year 2021–22, HSAG evaluated MCMC encounter data completeness and accuracy via a review of medical records for physician services rendered between January 1, 2020, and December 31, 2020. The study answered the following question:

- ◆ Are the data elements listed in Table 2.1 for the professional encounter data complete and accurate when compared to information contained within the medical records?

² Refer to Appendix A for a list of MCPs and PSPs included in this study.

³ All Plan Letter 20-004. Available at: [APL 22-004 \(ca.gov\)](https://www.cdph.ca.gov/Programs/OPA/Pages/APL22-004.aspx). Accessed on: May 13, 2022.

Note: As rendering provider names may not be legibly documented in members’ medical records, results for the data element *Rendering Provider Name* are limited. To augment the information collected during this study, HSAG captured additional provider information during the procurement process to assess the accuracy and completeness of the field. However, this element is not directly accessible through the medical record review process; therefore, results from this analysis were limited. In addition, the encounter data DHCS provided to HSAG did not contain the rendering provider name. To assess the accuracy and completeness of the *Rendering Provider Name* data element, HSAG linked the encounter data to the 274 provider data⁴ using the rendering provider number found in the encounter data and the provider number found in the 274 provider data. Of note, it is possible that the 274 provider data did not contain a full list of providers contracted during the study period. As such, this would render the link between the encounter data and the 274 provider data incomplete, limiting the usefulness of the *Rendering Provider Name* data element.

Table 2.1—Key Data Elements for Medical Record Review

Key Data Element	
Date of Service	Diagnosis Code
Procedure Code	Procedure Code Modifier
Rendering Provider Name	

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

- ◆ Identified the eligible population and generated samples from data extracted from the DHCS data warehouse.
- ◆ Assisted MCPs and PSPs with the procurement of medical records from providers, as appropriate.
- ◆ Reviewed medical records against DHCS encounter data.
- ◆ Calculated study indicators.

Study Population

To be eligible for the medical record review, a member had to be continuously enrolled in the same MCP or PSP during the study period (i.e., between January 1, 2020, and December 31, 2020), and had to have at least one physician visit during the study period. In addition, HSAG excluded members with Medicare or other insurance coverage from the eligible population⁵

⁴ The 274 provider data refer to the provider network data submitted to DHCS by MCPs and PSPs using the X12 Healthcare Provider Information Transaction Set (274).

⁵ Note that members enrolled in SCAN Health Plan with Medicare coverage were included in the eligible population because all SCAN Health Plan members are dual eligible. However, if a SCAN Health Plan member had insurance other than Medi-Cal or Medicare during the study period, the member was excluded.

because DHCS does not have complete encounter data for all services that these members received. In this report, HSAG refers to “physician visits” as the services that meet all criteria in Table 2.2.

Table 2.2—Criteria for Physician Visits Included in the Study

Data Element	Criteria
Criteria for Claim Type	
Claim Type	Claim Type = “4” (Medical/Physician) or Claim Type = “6” Child Health and Disability Prevention (CHDP) or Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) or other encounters submitted to DHCS in the 837 professional format
Criteria for Providers	
Provider Type	Certified nurse midwife
	Certified pediatric nurse practitioner and certified family nurse practitioner
	Clinic—otherwise undesignated
	Community clinics
	Group-certified pediatric nurse practitioner and certified family nurse practitioner
	Multi-specialty clinics
	Physicians
	Physicians group
	Podiatrists
	Rural Health Clinics and Federally Qualified Health Centers
	Unknown when billing provider is Kaiser for Kaiser NorCal, Kaiser SoCal, and Kaiser’s plan partners (i.e., AAH, CalOptima, CCAH, CCHP, GCHP, HPSJ, HPSM, IEHP, KHS, L.A. Care, Partnership, SFHP, and SCFHP). Please see Appendix A for full plan names.
OR	
Primary care providers based on the 274 provider data	PROV_PRIMARYCARE_PHYSICIAN = “true” and LICENSURE_TYPE is “MD” or “NPA”

Data Element	Criteria
OR	
Specialists based on the 274 provider data	PROV_SPECIALIST = “true” and LICENSURE_TYPE = “MD”
Criteria for Place of Service	
Place of Service	Assisted living facility
	Emergency room (hospital)
	Federally Qualified Health Center
	Group home
	Home
	Independent clinic
	Office
	Public health clinic
	Rural health clinic
	Urgent care facility
	Telehealth
Criteria for Procedure Code	
Procedure Code	<p>If all detail lines for a visit had the following procedure codes, the visit was excluded from the study since these procedure codes are for services outside the scope of work for this study.</p> <ul style="list-style-type: none"> ◆ A procedure code starting with “B,” “E,” “D,” “K,” or “V” (i.e., durable medical equipment [DME], dental, vision, and ancillary providers) ◆ Procedure codes between A0021 and A0999 (i.e., codes for transportation services) ◆ Procedure codes between A4206 and A9999 (i.e., codes for medical and surgical supplies, miscellaneous, and investigational) ◆ Procedure codes between T4521 and T4544 (i.e., codes for incontinence supplies) ◆ Procedure codes between L0112 and L4631 (i.e., codes for orthotic devices and procedures) ◆ Procedure codes between L5000 and L9900 (i.e., codes for prosthetic devices and procedures)

Data Element	Criteria
	<ul style="list-style-type: none"> ◆ Procedure codes with “F” as the fifth character were removed from the study at the direction of DHCS because it is optional to submit these procedure codes to DHCS.

Sampling Strategy

HSAG used a two-stage technique to select samples based on the member enrollment and the encounter data extracted from the DHCS data warehouse. HSAG first identified all members who met the study population eligibility criteria. HSAG then randomly selected 411 members⁶ from the eligible population for each of the 27 participating MCPs and PSPs. Then, for each selected sampled member, HSAG used the SURVEYSELECT procedure in SAS^{®7} to randomly select one physician visit⁸ that occurred in the study period (i.e., between January 1, 2020, and December 31, 2020). Additionally, to evaluate whether any dates of service were omitted from the DHCS data warehouse, HSAG reviewed a second date of service selected by the same provider’s office as that for the sampled date of service. While handling medical records for the sampled date of service, the providers selected a second date of service closest to the selected date of service from the medical records for each sampled member. If a sampled member did not have a second visit with the same provider during the review period, HSAG evaluated only one date of service for that member.

HSAG selected an equal number of cases from each MCP and PSP to ensure an adequate sample size when reporting rates at the MCP/PSP level; therefore, adjustments were required to calculate the statewide rates to account for population differences among MCPs and PSPs. When reporting statewide rates, HSAG weighted each MCP’s and PSP’s raw rates based on the volume of physician visits among the eligible population for each MCP and PSP. This approach ensured that no MCP or PSP was over- or under-represented in the statewide rates.

Medical Record Procurement

Once the methodology was finalized, HSAG conducted a conference call with MCPs and PSPs to introduce the study and inform MCPs and PSPs about the medical record procurement process. During the meeting, HSAG also shared sample documents, including a sample list

⁶ The sample size of 411 is based on a 95 percent confidence level and a margin of error of 5 percent for potential plan-to-plan comparisons. When there were less than 411 eligible members for an MCP or PSP, HSAG selected all eligible members.

⁷ SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registration.

⁸ To ensure that the medical record review includes all services provided on the same date of service, encounters with the same date of service and same rendering provider were consolidated into one visit for sampling purposes.

and medical record tracking sheets to assist MCPs and PSPs with planning for medical record procurement.

HSAG submitted the final sample lists to MCPs and PSPs on January 31, 2022. Upon receiving the final sample lists, MCPs and PSPs began procuring from contracted providers the sampled members' medical records for services that occurred during the study period. MCPs and PSPs subsequently submitted the documentation to HSAG. To improve the procurement rate, HSAG conducted another technical assistance call with participating MCPs and PSPs to review the EDV project and the procurement protocols. MCPs and PSPs were instructed to submit medical records electronically via a secure file transfer protocol site to ensure the protection of personal health information. During the procurement process, between February 2022 and May 2022, HSAG worked with MCPs and PSPs to answer questions and monitor the number of medical records submitted. HSAG provided two intermediate submission updates to MCPs and PSPs during the procurement period (one update on March 18, 2022 and one update on April 14, 2022), and a final submission status update following completion of the procurement period.

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

Review of Medical Records

Concurrent with record procurement activities, HSAG developed detailed training documents for medical record review, trained review staff on specific study protocols, and conducted interrater reliability and rater-to-standard testing. All reviewers were required to achieve a 95 percent accuracy rate prior to reviewing medical records and collecting data for the study.

HSAG's trained reviewers first verified whether the sampled date of service from the DHCS encounter data could be found in the member's medical record. If found, the reviewers documented that the date of service was valid; if not found, the reviewers reported the date of service as a *medical record omission*. The reviewers then reviewed the services provided on the selected date of service and validated the key data elements listed in Table 2.1. All reviewers entered their findings into an electronic tool to ensure data integrity.

After the reviewers evaluated the sampled date of service, they determined if the medical record contained documentation for a second date of service in the study period. If the documentation for a second date of service was available, the reviewers evaluated the services rendered on this date and validated the key data elements associated with the second date of service. If the documentation contained more than one second date of service, the reviewers selected the date closest to the sampled date of service to validate. If the second date of service was missing from the DHCS data warehouse, it was reported as an *encounter*

data omission and the missing values associated with this visit were listed as an omission for each key data element, respectively.

Study Indicators

Once HSAG’s trained reviewers completed the medical record review, HSAG analysts exported the information collected from the electronic tool, reviewed the data, and conducted the analyses. Table 2.3 displays the study indicators used to report the medical record review results. Of note, the *Rendering Provider Name* is not a data element in the DHCS encounter data; therefore, HSAG joined the DHCS encounter data, which contains the rendering provider identification numbers, with the DHCS provider data to identify the rendering provider name(s) associated with each sampled case. For certain dates of service, the rendering provider number may be linked to multiple rendering provider names based on the provider data from DHCS. However, a single date of service contributes to only one name when calculating the number of rendering provider names identified in DHCS’ data for the medical record omission.

Table 2.3—Study Indicators

Study Indicator	Denominator	Numerator
Medical Record Procurement Rate: Percentage of medical records submitted and the reasons for missing medical records.	Total number of samples.	Number of samples with medical records submitted for either the sampled date of service or the second date of service.
Second Date of Service Submission Rate: Percentage of samples with a second date of service submitted in the medical records.	Number of samples with medical records submitted for either the sampled date of service or the second date of service.	Number of samples with a second date of service submitted in the medical records.
Medical Record Omission Rate: Percentage of key data elements (e.g., Date of Service) identified in DHCS’ data warehouse that are not found in the members’ medical records. HSAG will calculate the study indicator for each key data element listed in Table 2.1.	Total number of key data elements (e.g., Date of Service) identified in DHCS’ data warehouse (i.e., based on the sample dates of service and the second dates of service that are found in DHCS’ data warehouse).	Number of key data elements (e.g., Date of Service) in the denominator but not found in the medical records.

Study Indicator	Denominator	Numerator
<p>Encounter Data Omission Rate: Percentage of key data elements (e.g., Date of Service) identified in members' medical records, but not found in DHCS' data warehouse. HSAG will calculate the study indicator for each key data element listed in Table 2.1.</p>	<p>Total number of key data elements (e.g., Date of Service) identified in members' medical records (i.e., based on the medical records procured for the sample dates of service and second dates of service).</p>	<p>Number of key data elements (e.g., Date of Service) in the denominator but not found in DHCS' data warehouse.</p>
<p>Diagnosis Code Accuracy: Percentage of diagnosis codes supported by the medical records and the associated reasons for inaccuracy including specificity errors and inaccurate codes.</p>	<p>Total number of diagnosis codes that meet the following two criteria:</p> <ul style="list-style-type: none"> ◆ For dates of service (i.e., including both the sample dates of service and the second dates of service) that exist in both DHCS' encounter data and the medical records. ◆ Diagnosis codes present for both DHCS' encounter data and the medical records. 	<p>Number of diagnosis codes supported by the medical records.</p>
<p>Procedure Code Accuracy: Percentage of procedure codes supported by the medical records and the associated reasons for inaccuracy including inaccurate codes, higher levels of service found in medical records, and lower levels of service found in medical records.</p>	<p>Total number of procedure codes that meet the following two criteria:</p> <ul style="list-style-type: none"> ◆ For dates of service (i.e., including both the sample dates of service and the second dates of service) that exist in both DHCS' encounter data and the medical records. ◆ Procedure codes present for both DHCS' encounter data and the medical records. 	<p>Number of procedure codes supported by the medical records.</p>

Study Indicator	Denominator	Numerator
<p>Procedure Code Modifier Accuracy: Percentage of procedure code modifiers supported by the medical records.</p>	<p>Total number of procedure code modifiers that meet the following two criteria:</p> <ul style="list-style-type: none"> ◆ For dates of service (i.e., including both the sample dates of service and the second dates of service) that exist in both DHCS’ encounter data and the medical records. ◆ Procedure code modifiers present for both DHCS’ encounter data and the medical records. 	<p>Number of procedure code modifiers supported by the medical records.</p>
<p>Rendering Provider Name Accuracy: Percentage of rendering provider names supported by the medical records and the associated reasons for inaccuracy including incorrect names and illegible names.</p>	<p>Total number of rendering provider names that meet the following two criteria:</p> <ul style="list-style-type: none"> ◆ For dates of service (i.e., including both the sample dates of service and the second dates of service) that exist in both DHCS’ data warehouse and the medical records. ◆ Rendering provider names present for both DHCS’ data warehouse and the medical records. 	<p>Number of rendering provider names supported by the medical records. Of note, for certain dates of service, the rendering provider number in the DHCS encounter data may be linked to multiple rendering provider names in the provider data supplied by DHCS. If one rendering provider name from the DHCS data approximately matches the name in the medical record (e.g., a typographical error or “Rob Smith” versus “Robert Smith”), HSAG will consider the names from both sources a match.</p>

Study Indicator	Denominator	Numerator
All-Element Accuracy Rate with Rendering Provider Name: Percentage of dates of service present in both DHCS' encounter data and the medical records, with the same values for all key data elements listed in Table 2.1.	Total number of dates of service (i.e., including both the sample dates of service and second dates of service) that are in both DHCS' encounter data and the medical records.	The number of dates of service in the denominator with the same diagnosis codes, procedure codes, procedure code modifiers, and rendering provider names for a given date of service.
All-Element Accuracy Rate without Rendering Provider Name: Percentage of dates of service present in both DHCS' encounter data and the medical records, with the same values for all key data elements listed in Table 2.1 except the <i>Rendering Provider Name</i> field.	Total number of dates of service (i.e., including both the sample dates of service and second dates of service) that are in both DHCS' encounter data and the medical records.	The number of dates of service in the denominator with the same diagnosis codes, procedure codes, and procedure code modifiers for a given date of service.

HSAG used the standards listed in Table 2.4 to evaluate MCPs' and PSPs' performance.

Table 2.4—Standards for Study Indicators

* The standards for these study indicators are based on the statement “Fewer than 10% of the visits identified in medical records are unmatched to DHCS encounter data; AND fewer than 10% of the DHCS encounter data are unmatched to the medical records” from quality measures for encounter data (QMED) for measure DCMT.003.⁹

** The standard for this indicator is based on the statement “No less than 80% of matched records have all key data elements matching between the medical records and the encounter data” from QMED for measure DAMT.001.¹⁰

Study Indicator	Standards
Medical record procurement rate	More than 90 percent*
Second of Date of Service Submission Rate	Informational only
Medical record omission rate	Less than 10 percent*
Encounter data omission rate	Less than 10 percent*

⁹ California Department of Health Care Services, Managed Care Quality and Monitoring Division. *Quality Measures for Encounter Data—Version 1.1*; August 8, 2018.

¹⁰ Ibid.

Study Indicator	Standards
Data element accuracy rate	More than 90 percent*
All-element accuracy rate	More than 80 percent**

This report displays numerical results for study indicators except in the following scenario:

- ◆ If the numerator falls below 11, this report displays “S” for the numerator and rate. HSAG suppresses displaying the rate in this report to satisfy the HIPAA Privacy Rule’s de-identification standard.

3. Medical Record Review Results

Medical Record Procurement Status

After receiving their sample files, MCPs and PSPs were responsible for procuring the medical records from their contracted providers. Table 3.1 shows the medical record procurement status (i.e., submitting medical records for either the sampled date of service or the second date of service) for each MCP and PSP. For ease of reference, HSAG uses MCP and PSP abbreviations in this report. The names and abbreviations for all MCPs and PSPs included in the study are shown in Appendix A.

Table 3.1—Medical Record Procurement Status

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
AAH	411	320	77.9%
AHF	253	218	86.2%
Aetna	411	242	58.9%
Anthem Blue Cross	411	375	91.2%+
Blue Shield Promise	411	358	87.1%
CCAH	411	401	97.6%+
CCHP	411	316	76.9%
CHG	411	388	94.4%+
CHW	411	387	94.2%+
CalOptima	411	401	97.6%+
CalViva	411	360	87.6%
CenCal	411	376	91.5%+
GCHP	411	376	91.5%+
HPSJ	411	358	87.1%
HPSM	411	362	88.1%
Health Net	411	319	77.6%
IEHP	411	311	75.7%
KHS	411	401	97.6%+

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Kaiser NorCal	411	411	100.0%+
Kaiser SoCal	411	410	99.8%+
L.A. Care	411	348	84.7%
Molina	411	385	93.7%+
Partnership	411	404	98.3%+
SCAN	411	321	78.1%
SCFHP	411	390	94.9%+
SFHP	411	365	88.8%
UHC	411	166	40.4%
Statewide Total	10,939	9,469	86.6%

Overall, the statewide medical record submission rate was 86.6 percent. A total of 27 MCPs/PSPs submitted medical records, and 13 had a submission rate greater than the EDV standard of 90 percent. The submission rates ranged from 40.4 percent (UHC) to 100.0 percent (Kaiser NorCal).

Cases without medical records contributed to the medical record omission results shown in the “Encounter Data Completeness” section of this report. For example, if medical records were not submitted for a sampled date of service, all data elements (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Rendering Provider Name*) associated with that date of service were scored as medical record omissions. Therefore, MCPs/PSPs with lower medical record submission rates would be expected to have higher (i.e., poorer) medical record omission rates for each key data element.

Table 3.2 lists the reasons for missing medical records at the statewide level.

Table 3.2—Reasons for Missing Medical Records

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	924	62.9%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	182	12.4%
Medical records were not located at the facility.	104	7.1%
Provider refused to release medical records.	92	6.3%

Non-Submission Reason	Count	Percent
Member was not a patient of the practice.	78	5.3%
Other.	60	4.1%
Closed facility.	30	2.0%
Total	1,470	100.0%

Table 3.2 shows that the top reason for missing medical records was “Non-responsive provider or provider did not respond in a timely manner,” accounting for over half (62.9 percent) of the medical records that were not submitted. This could indicate that the MCPs/PSPs have incorrect provider information or that the contacted providers were unaware of the submission requirements or the deadline. In addition, this reason contributed at least 80.0 percent of the non-submissions for Aetna and UHC as they were late in initiating medical record procurement. The second most common non-submission reason was “Member was a patient of the practice; however, no documentation was available for requested dates of service.” This could indicate inconsistencies between the information stored in the provider’s office versus DHCS’ encounter data or that an encounter was submitted to DHCS even though a member did not access care.

Table 3.3 displays the number and percent of cases with one additional date of service selected and submitted for the study.

Table 3.3—Medical Record Submission Status for Second Date of Service

MCP/PSP	Number of Records Submitted	Number of Records with Second Date of Service	Percent
AAH	320	147	45.9%
AHF	218	167	76.6%
Aetna	242	64	26.4%
Anthem Blue Cross	375	251	66.9%
Blue Shield Promise	358	219	61.2%
CCAH	401	224	55.9%
CCHP	316	158	50.0%
CHG	388	195	50.3%
CHW	387	207	53.5%
CalOptima	401	269	67.1%
CalViva	360	180	50.0%
CenCal	376	193	51.3%

MCP/PSP	Number of Records Submitted	Number of Records with Second Date of Service	Percent
GCHP	376	198	52.7%
HPSJ	358	197	55.0%
HPSM	362	198	54.7%
Health Net	319	158	49.5%
IEHP	311	165	53.1%
KHS	401	240	59.9%
Kaiser NorCal	411	336	81.8%
Kaiser SoCal	410	347	84.6%
L.A. Care	348	182	52.3%
Molina	385	139	36.1%
Partnership	404	254	62.9%
SCAN	321	203	63.2%
SCFHP	390	273	70.0%
SFHP	365	206	56.4%
UHC	166	71	42.8%
Statewide Total	9,469	5,441	57.5%

Overall, 57.5 percent of procured medical records contained a second date of service. The individual MCP/PSP submission rates ranged from 26.4 percent (Aetna) to 84.6 percent (Kaiser SoCal). A 100 percent submission rate is not expected for the second date of service as a member may not have had a second date of service within the review period. However, Aetna’s low submission rate (26.4 percent) may indicate potential issues during procurement (e.g., the provider did not follow the instructions to submit the second date of service, or the MCP did not properly communicate procurement instructions to the providers).

Encounter Data Completeness

HSAG evaluated encounter data completeness by identifying differences between the electronic encounter data and the members’ medical records. Medical record omission and encounter data omission represent two aspects of encounter data completeness. A medical record omission occurs when an encounter data element (e.g., *Date of Service* or *Diagnosis Code*) is not supported by documentation in a member’s medical record or the medical record could not be found. Medical record omissions suggest opportunities for improvement within the provider’s internal processes, such as billing processes and record documentation.

An encounter data omission occurs when an encounter data element (e.g., *Date of Service* or *Diagnosis Code*) is found in a member's medical record but is not present in the electronic encounter data. Encounter data omissions suggest opportunities for improvement in the submission of claims and encounters or processing procedures among the providers, MCPs and PSPs, and DHCS.

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

Date of Service Completeness

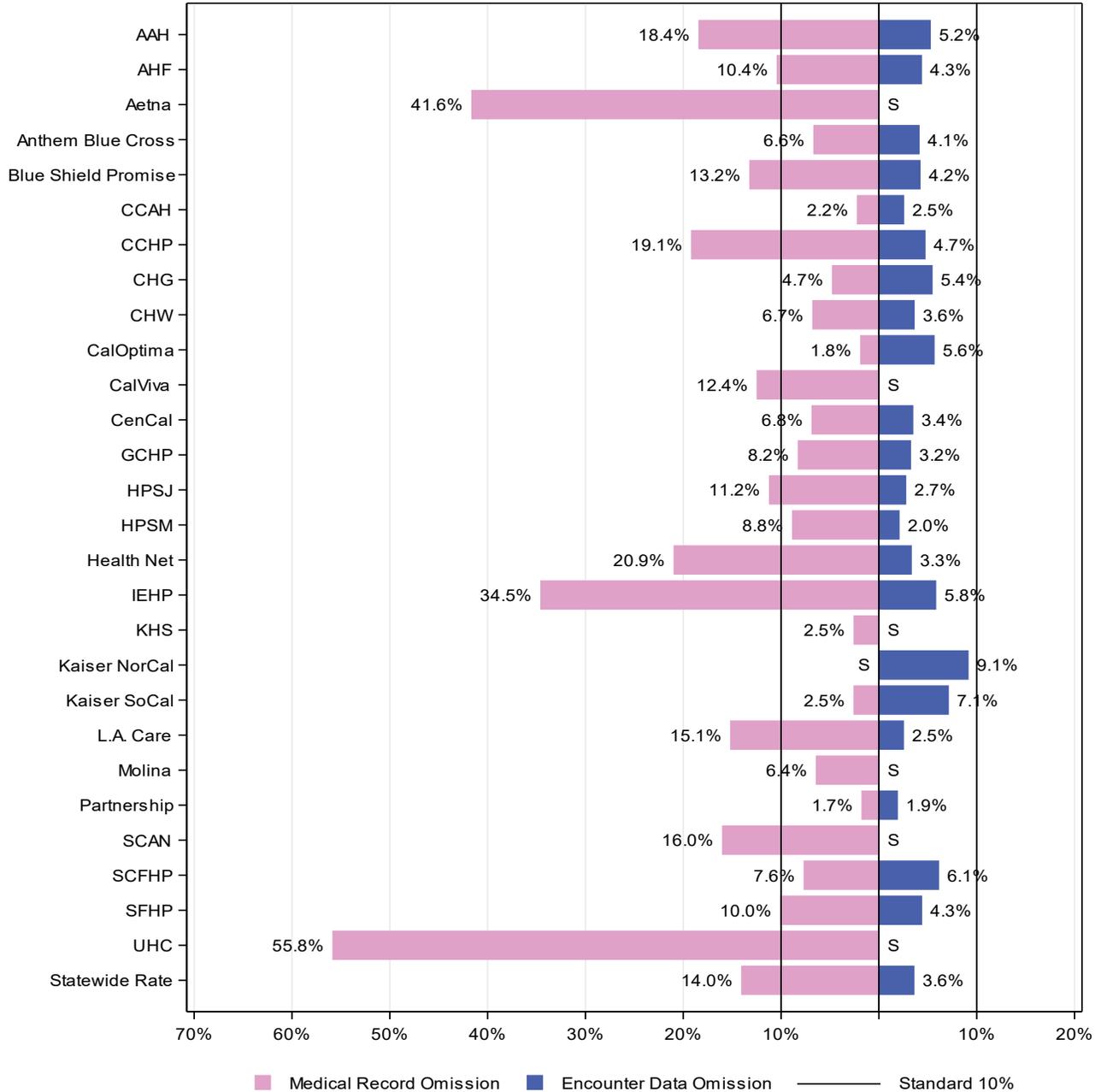
Figure 3.1 displays the statewide and MCP/PSP level medical record omission and encounter data omission rates for the *Date of Service* data element. HSAG conducted the analyses at the date of service level.

Figure 3.1—Medical Record Omission and Encounter Data Omission for Date of Service

Note: Omission rates of less than 10 percent indicate the MCP/PSP met the EDV study standard.

"S" indicates that the numerator for this indicator was less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule’s de-identification standard.

Medical Record Omission and Encounter Data Omission for Date of Service



Key findings for the medical record omission rates:

- ◆ Statewide, 14.0 percent of the dates of service in the electronic encounter data were not supported by members' medical records (i.e., medical record omission). This rate did not meet the EDV study standard shown in Table 2.4.
- ◆ The medical record omission rates ranged from 1.7 percent (Partnership) to 55.8 percent (UHC) among non-suppressed rates.
- ◆ Overall, 14 of 27 MCPs/PSPs met the EDV study standard.
- ◆ Of the 13 MCPs and PSPs that did not meet the EDV study standard, all had medical record submission rates of less than 90 percent (i.e., they did not meet the medical record submission standard). In general, an MCP or PSP with a relatively low medical record submission rate would have a relatively high medical record omission rate (i.e., poor performance) for each data element.

Key findings for the encounter data omission rates:

- ◆ Statewide, 3.6 percent of the dates of service in the medical records were not found in the electronic encounter data (i.e., encounter data omission). This rate met the EDV study standard shown in Table 2.4.
- ◆ Overall, all the MCPs and PSPs met the study standard. The encounter data omission rates ranged from 1.9 percent (Partnership) to 9.1 percent (Kaiser NorCal) among non-suppressed rates.
- ◆ The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service with no evidence of submission in the electronic encounter data. If no second date of service was available in the medical records for validation, then no date of service would have contributed to the numerator. Table 3.3 shows that Aetna had a relatively low submission rate (26.4 percent) for the second date of service. Therefore, all Aetna encounter data omission rates in the report should be interpreted with caution.

Diagnosis Code Completeness

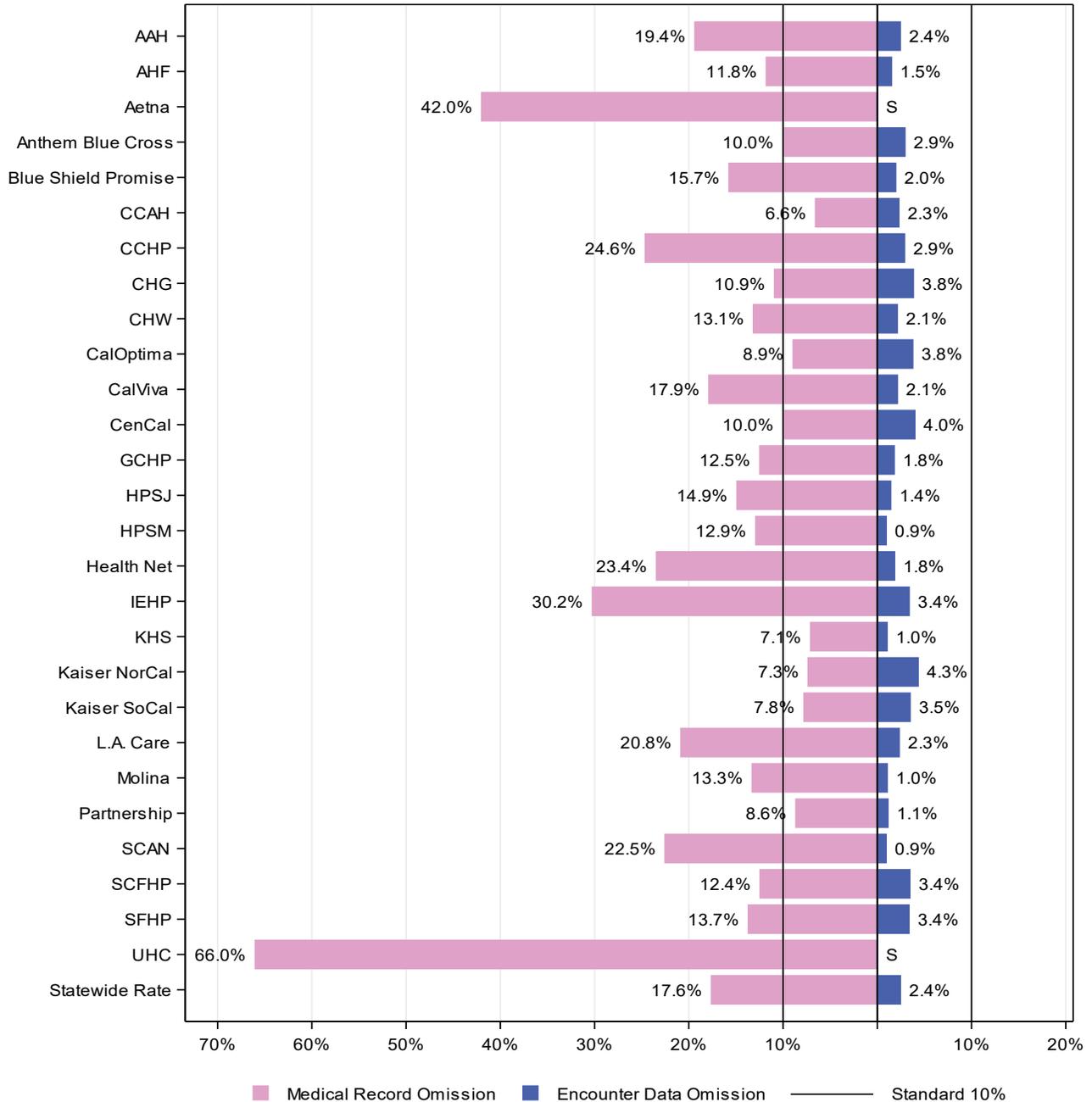
Figure 3.2 displays the statewide and MCP/PSP level medical record omission and encounter data omission rates for the *Diagnosis Code* data element. HSAG conducted the analyses at the diagnosis code level.

Figure 3.2—Medical Record Omission and Encounter Data Omission for Diagnosis Code

Note: Omission rates of less than 10 percent indicate the MCP/PSP met the EDV study standard.

"S" indicates that the numerator for this indicator was less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule’s de-identification standard.

Medical Record Omission and Encounter Data Omission for Diagnosis Code



Key findings for the medical record omission rates:

- ◆ Statewide, 17.6 percent of the diagnosis codes in the electronic encounter data had no supporting documentation in the members' medical records (i.e., medical record omission). Non-submitted medical records accounted for 61.6 percent of the diagnosis codes omitted from the medical records. In the analysis, when no medical records were submitted for a sampled date of service, all diagnosis codes associated with that date of service were treated as medical record omissions. Of the remaining diagnosis codes that were omitted from the medical records, 58.3 percent were "Z" diagnosis codes (i.e., codes used when circumstances other than disease, injury, or external cause classifiable to categories A00-Y89 and are recorded as "diagnosis" or "problems," such as health hazards related to socioeconomic or psychosocial circumstances). Among the "Z" codes, the two dominant sub-categories are for "Persons encountering health services for examinations" and "Persons encountering health services in other circumstances" and each accounted for approximately 20 percent of the "Z" codes.¹¹
- ◆ The medical record omission rates ranged from 6.6 percent (CCAH) to 66.0 percent (UHC)
- ◆ Six MCPs met the EDV study standard.

Key findings for the encounter data omission rate:

- ◆ Statewide, 2.4 percent of the diagnosis codes identified in the medical record were not found in the electronic encounter data (i.e., encounter data omission).
- ◆ The encounter data omission rates ranged from 0.9 percent (HPSM and SCAN) to 4.3 percent (Kaiser NorCal).
- ◆ All MCPs/PSPs met the EDV study standard.

Procedure Code Completeness

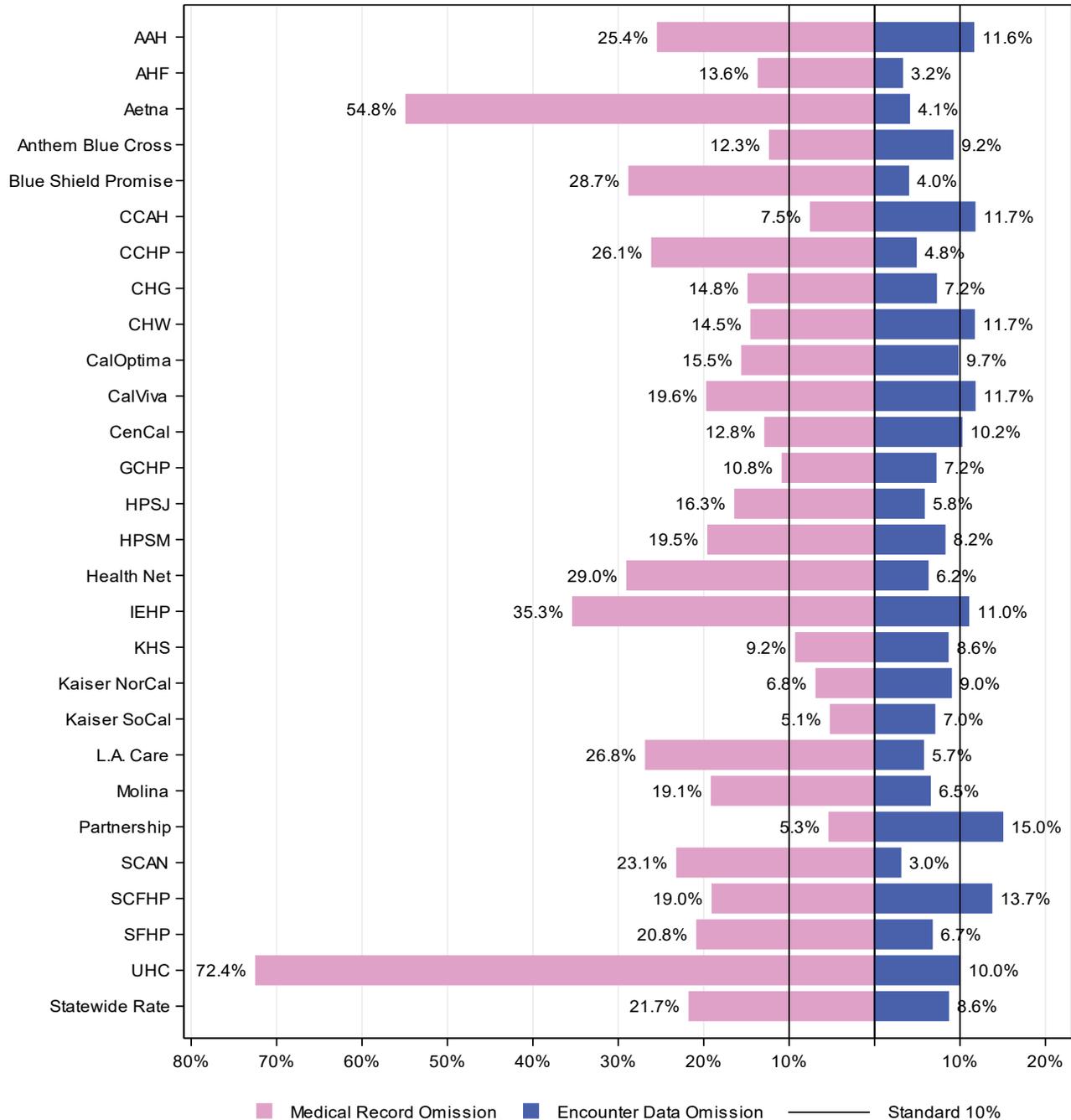
Figure 3.3 displays the statewide and MCP/PSP level medical record omission and encounter data omission rates for the *Procedure Code* data element. HSAG conducted the analyses at the procedure code level.

¹¹ "Z" diagnosis code sub-categories. Available at: <https://www.icd10data.com/ICD10CM/Codes/Z00-Z99>. Accessed on: December 19, 2022.

Figure 3.3—Medical Record Omission and Encounter Data Omission for Procedure Code

Note: Omission rates of less than 10 percent indicate the MCP/PSP met the EDV study standard.

Medical Record Omission and Encounter Data Omission for Procedure Code



Key findings for the medical record omission rates:

- ◆ Statewide, 21.7 percent of the procedure codes in the electronic encounter data were not supported by the members' medical records (i.e., medical record omission).
- ◆ The medical record omission rates ranged from 5.1 percent (Kaiser SoCal) to 72.4 percent (UHC).
- ◆ Five MCPs met the EDV study standard.
- ◆ In the analysis, when no medical records were submitted for a sampled date of service, all procedure codes associated with that date of service were treated as medical record omissions. Non-submitted medical records accounted for 55.7 percent of the procedure codes omitted from the medical records.
- ◆ Other potential contributors to the *Procedure Code* medical record omissions are listed below:
 - The provider did not document the services performed in the medical record, despite submitting the procedure code to the MCP or the PSP.
 - The provider did not perform the service that was submitted to DHCS.
 - Due to possible inclusion of the adjudication history, DHCS' encounter data contained additional procedure codes which should not have been included for comparison with the medical records.

Key findings for the encounter data omission rates:

- ◆ Statewide, 8.6 percent of the procedure codes identified in the medical records were not present in the electronic data (i.e., encounter data omission).
- ◆ The encounter data omission rates ranged from 3.0 (SCAN) to 15.0 percent (Partnership).
- ◆ Overall, 18 of 27 MCPs/PSPs met the EDV study standard.
- ◆ Approximately 24.8 percent of the procedure codes that were omitted from the electronic encounter data were due to the associated dates of service being omitted from the electronic encounter data.
- ◆ The other potential contributors to the *Procedure Code* encounter data omissions were as follows:
 - The provider made a coding error or did not submit the procedure code despite performing the service.
 - Deficiencies existed from MCPs' and PSPs' resubmissions of denied or rejected encounters to DHCS. For example, if DHCS rejected certain encounters or lines and the MCP or PSP did not resubmit them, procedure codes associated with these encounters or lines would have contributed to the *Procedure Code* encounter data omissions.
 - A lag occurred between the time the provider performed the service and the submission of the encounter to the MCP or PSP and/or DHCS.

Procedure Code Modifier Completeness

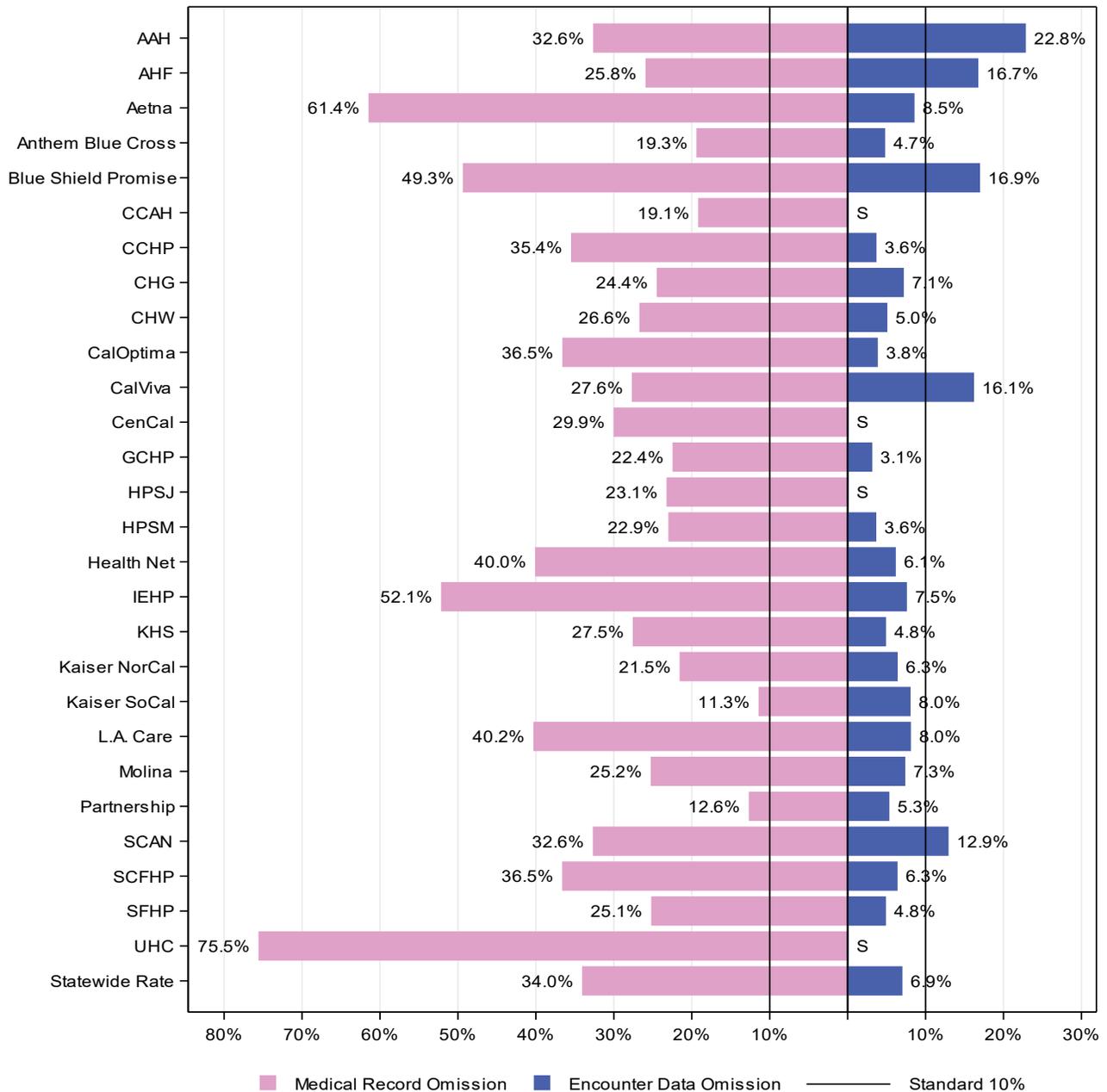
Figure 3.4 displays the statewide and MCP/PSP level medical record omission and encounter data omission rates for the *Procedure Code Modifier* data element. HSAG conducted the analyses at the procedure code modifier level.

Figure 3.4—Medical Record Omission and Encounter Data Omission for Procedure Code Modifier

Note: Omission rates of less than 10 percent indicate the MCP/PSP met the EDV study standard.

"S" indicates that the numerator for this indicator was less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule’s de-identification standard.

Medical Record Omission and Encounter Data Omission for Procedure Code Modifier



Key findings for the medical record omission rates:

- ◆ Statewide, 34.0 percent of the procedure code modifiers in the electronic encounter data were not supported by the members' medical records (i.e., medical record omission).
- ◆ The medical record omission rates ranged from 11.3 percent (Kaiser SoCal) to 75.5 percent (UHC).
- ◆ None of the MCPs or PSPs met the EDV study standard.
- ◆ In the analysis, when no medical records were submitted for a sampled date of service, all procedure code modifiers associated with that date of service were treated as medical record omissions. Non-submitted medical records accounted for 41.9 percent of the procedure code modifiers omitted from the medical records.
- ◆ Other potential contributors to *Procedure Code Modifier* medical record omissions included the following:
 - Procedure codes associated with modifiers were omitted from the medical records.
 - Providers did not document the evidence related to the modifiers in the medical records despite submitting the modifiers to MCPs and PSPs.
 - Due to the possible inclusion of the adjudication history, DHCS' encounter data contained additional procedure codes and associated modifiers which should not have been included for comparison with the medical records.

Key findings for the encounter data omission rates:

- ◆ Statewide, 6.9 percent of the procedure code modifiers identified in the medical records were not present in the electronic encounter data (i.e., encounter data omission).
- ◆ The encounter data omission rates ranged from 3.1 percent (GCHP) to 22.8 percent (AAH) among non-suppressed rates.
- ◆ Overall, 22 of the 27 MCPs and PSPs met the EDV study standard.
- ◆ The procedure code modifier most frequently found in the medical records but omitted from the electronic encounter data was "95" (telemedicine), which accounted for 91.4 percent of the omissions.
- ◆ Potential contributors to the *Procedure Code Modifier* encounter data omissions included the following:
 - Dates of service were omitted from the encounter data; therefore, all procedure code modifiers associated with those dates of service were treated as encounter data omissions.
 - Procedure codes were omitted from the encounter data; therefore, all procedure code modifiers corresponding to those procedure codes were treated as encounter data omissions.
 - The provider made a coding error or did not submit the procedure code modifiers despite performing the specific services.

Rendering Provider Name Completeness

Rendering Provider Name was not a data element in the DHCS encounter data; therefore, HSAG joined the DHCS encounter data, which contained the rendering provider identification numbers, with the DHCS provider data to identify the rendering provider name(s) associated with each sampled case. For certain dates of service, the rendering provider number may have been linked to multiple rendering provider names based on the provider data from DHCS. However, a single date of service contributes to only one name when calculating the number of rendering provider names identified in DHCS' data.

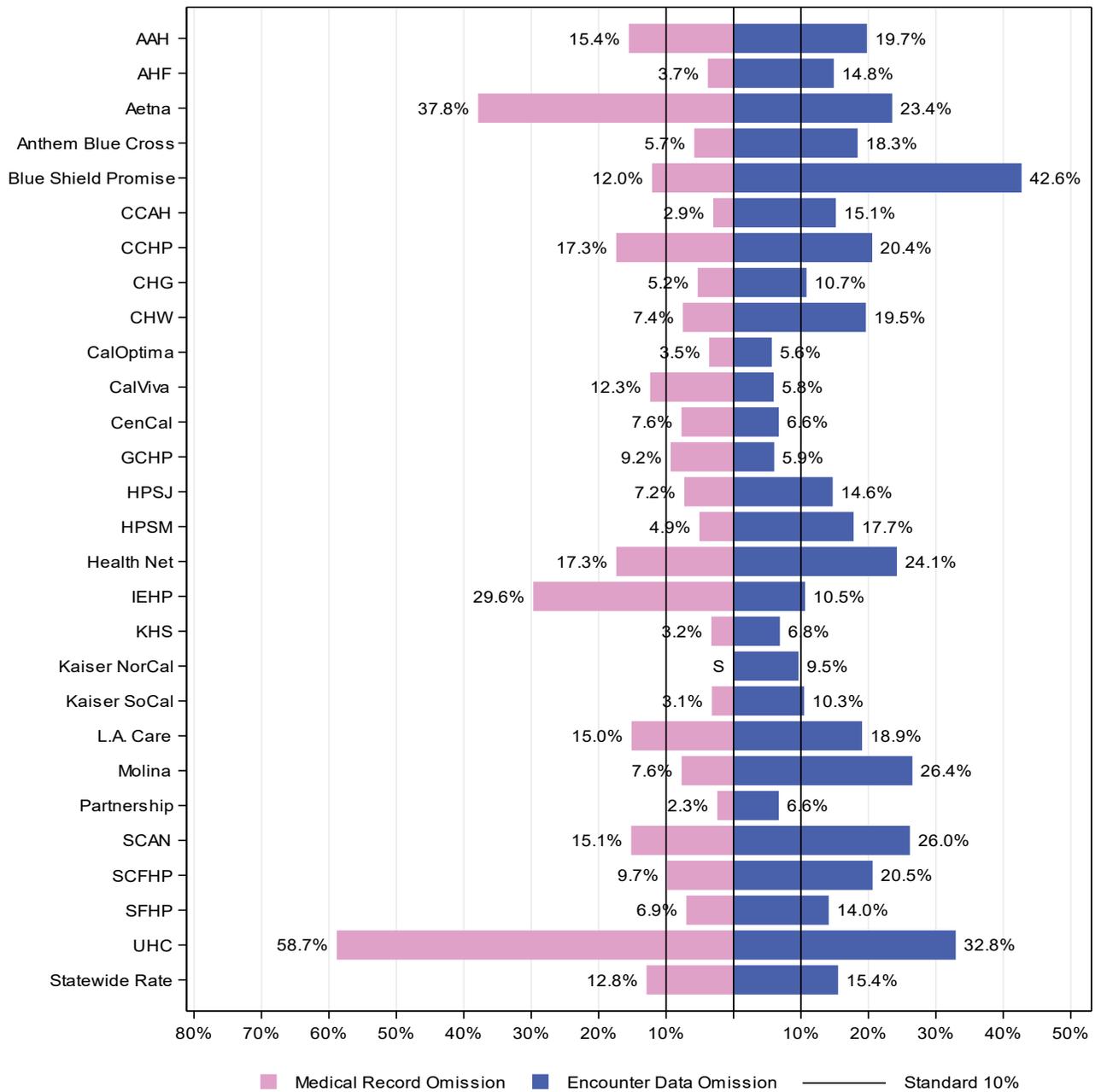
Figure 3.5 displays the statewide and MCP/PSP level medical record omission and encounter data omission rates for the *Rendering Provider Name* data element.

Figure 3.5—Medical Record Omission and Encounter Data Omission for Rendering Provider Name

Note: Omission rates of less than 10 percent indicate the MCP/PSP met the EDV study standard.

"S" indicates that the numerator for this indicator was less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule’s de-identification standard

Medical Record Omission and Encounter Data Omission for Rendering Provider Name



Key findings for the medical record omission rates:

- ◆ Statewide, 12.8 percent of the rendering provider names associated with the electronic encounter data were not found in the medical records (i.e., medical record omissions). The primary reason for the omission of rendering provider names from the medical records was that the medical records could not be located. In the analysis, when a medical record was not submitted for a sampled date of service, the rendering provider name associated with that date of service was treated as a single medical record omission.
- ◆ The medical record omission rates ranged from 2.3 percent (Partnership) to 58.7 percent (UHC) among non-suppressed rates.
- ◆ Overall, 17 of the 27 MCPs and PSPs met the EDV study standard.

Key findings for the encounter data omission rates:

- ◆ Statewide, 15.4 percent of the rendering provider names in the medical records were not found in the DHCS data warehouse (i.e., encounter data omission).
- ◆ The encounter data omission rates ranged from 5.6 percent (CalOptima) to 42.6 percent (Blue Shield Promise).
- ◆ Overall, seven of the 27 MCPs and PSPs met the EDV study standard.
- ◆ Potential contributors to the *Rendering Provider Name* encounter data omissions included the following:
 - Dates of service were omitted from the encounter data; therefore, all rendering provider names associated with those dates of service were treated as encounter data omissions.
 - MCPs and PSPs did not populate the rendering provider identification number field or populated the field with an invalid rendering provider identification number when submitting data to DHCS; therefore, the rendering provider names were not identifiable in the DHCS data warehouse.
 - The provider files submitted to DHCS by MCPs and PSPs were incomplete or inaccurate; therefore, the rendering provider names could not be cross-referenced in the DHCS data warehouse although the rendering provider identification numbers in the encounter data were valid.

Encounter Data Accuracy

Encounter data accuracy was evaluated for dates of service that existed in both the electronic encounter data and the medical records and which had values present in both data sources for the evaluated data element. HSAG considered the encounter data elements (e.g., *Diagnosis Code* and *Procedure Code*) accurate if documentation in the medical record supported the values contained in the electronic encounter data. Higher accuracy rates for each data element indicate better performance.

To assist with subsequent investigations conducted by DHCS, HSAG separated inaccurate values for the key data elements into different categories so that the reader could identify the

dominant reason(s) for the inaccurate values. In this section, the left-most horizontal bars (shaded purple) show the accuracy rates, and the remaining bars to the right display the proportions of inaccurate codes for each category. The longest horizontal bar to the right indicates the dominant reason for the inaccuracy. Of note, the percentage for each sub-category (i.e., each inaccuracy bar) was different from the error type rate listed in the rate spreadsheets (e.g., file [CA2021-22 EDV RateSheets Unsuppressed.xlsx](#)) delivered to DHCS in September 2022 since they had different denominators. Using diagnosis code as an example, the list below illustrates the difference:

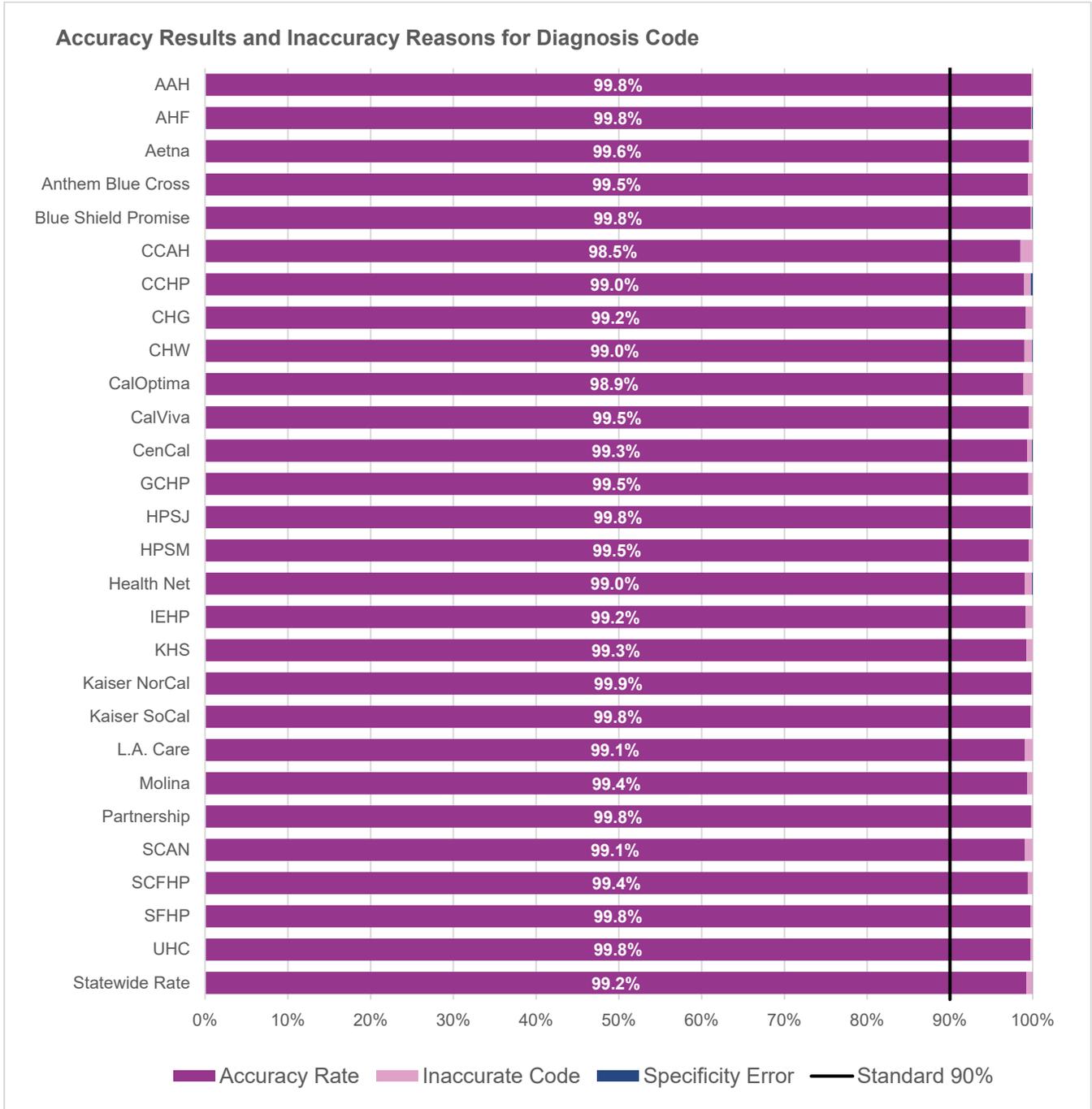
- ◆ The denominator for the inaccuracy bars to the right of the chart is the number of accurate and inaccurate diagnosis codes.
- ◆ The denominator for the error type rate listed in the rate spreadsheets is the number of inaccurate diagnosis codes.

Diagnosis Code Accuracy

Figure 3.6 displays the statewide and the MCP/PSP level accuracy rates for the data element *Diagnosis Code*. In addition, errors found in the diagnosis coding were separated into two categories: specificity errors and inaccurate codes. Specificity errors occur when the documentation supports a more specific code than was listed in the DHCS encounter data (i.e., unspecified abdominal pain [R10.9] when the provider noted during the exam that the abdominal pain was in the right lower quadrant [R10.31]). Specificity errors also include diagnosis codes that do not have the required fourth or fifth digit. An inaccurate code occurs when the diagnosis code submitted by the provider should have been selected from a different family of codes based on the documentation in the medical record (i.e., R51 [headache] versus the documentation supporting G43 [migraine]) or when documentation in the medical records did not support the diagnosis code.

Figure 3.6—Accuracy Results and Inaccuracy Reasons for Diagnosis Code

Note: Data element accuracy rates greater than 90 percent indicate that the MCP/PSP met the EDV study standard.



Key findings for the accuracy rates:

- ◆ Statewide, 99.2 percent of the diagnosis codes were accurate when the diagnosis codes were present in both the electronic encounter data and the medical records. The accuracy rates ranged from 98.5 percent (CCAH) to 99.9 percent (Kaiser NorCal).
- ◆ All MCPs and PSPs met the EDV study standard.
- ◆ At the statewide and MCP/PSP levels, the percentages of diagnosis codes with inaccurate codes or specificity errors were both very low; therefore, the data labels were not displayed in Figure 3.6.

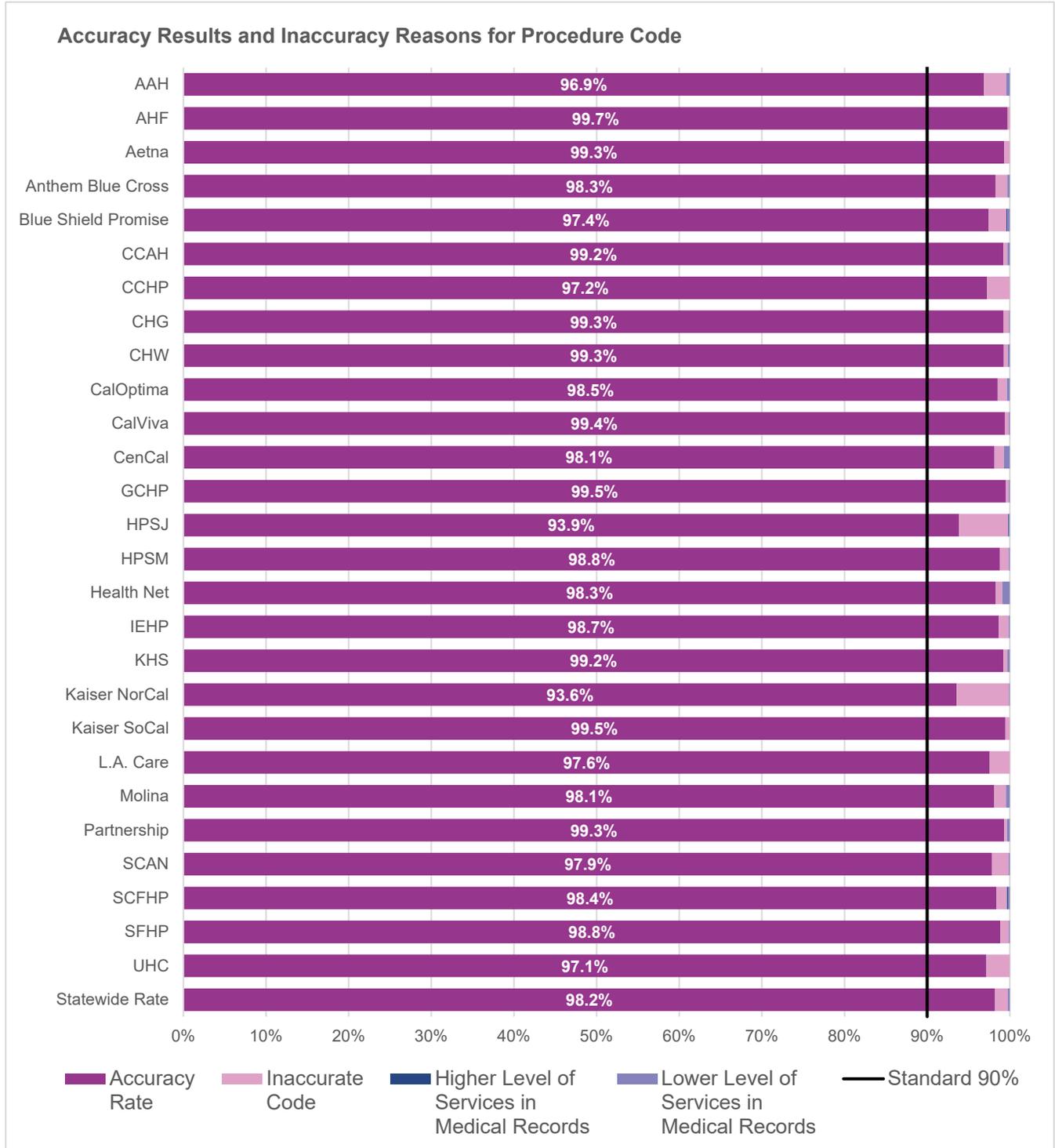
Procedure Code Accuracy

Figure 3.7 displays the statewide and MCP/PSP level accuracy rates for the data element *Procedure Code*. Errors found in the procedure coding were separated into three categories: higher level of service found in medical records, lower level of service found in medical records, and inaccurate codes.

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

Figure 3.7—Accuracy Results and Inaccuracy Reasons for Procedure Code

Note: Data element accuracy rates greater than 90 percent indicate that the MCP/PSP met the EDV study standard.



Key findings for the accuracy rates:

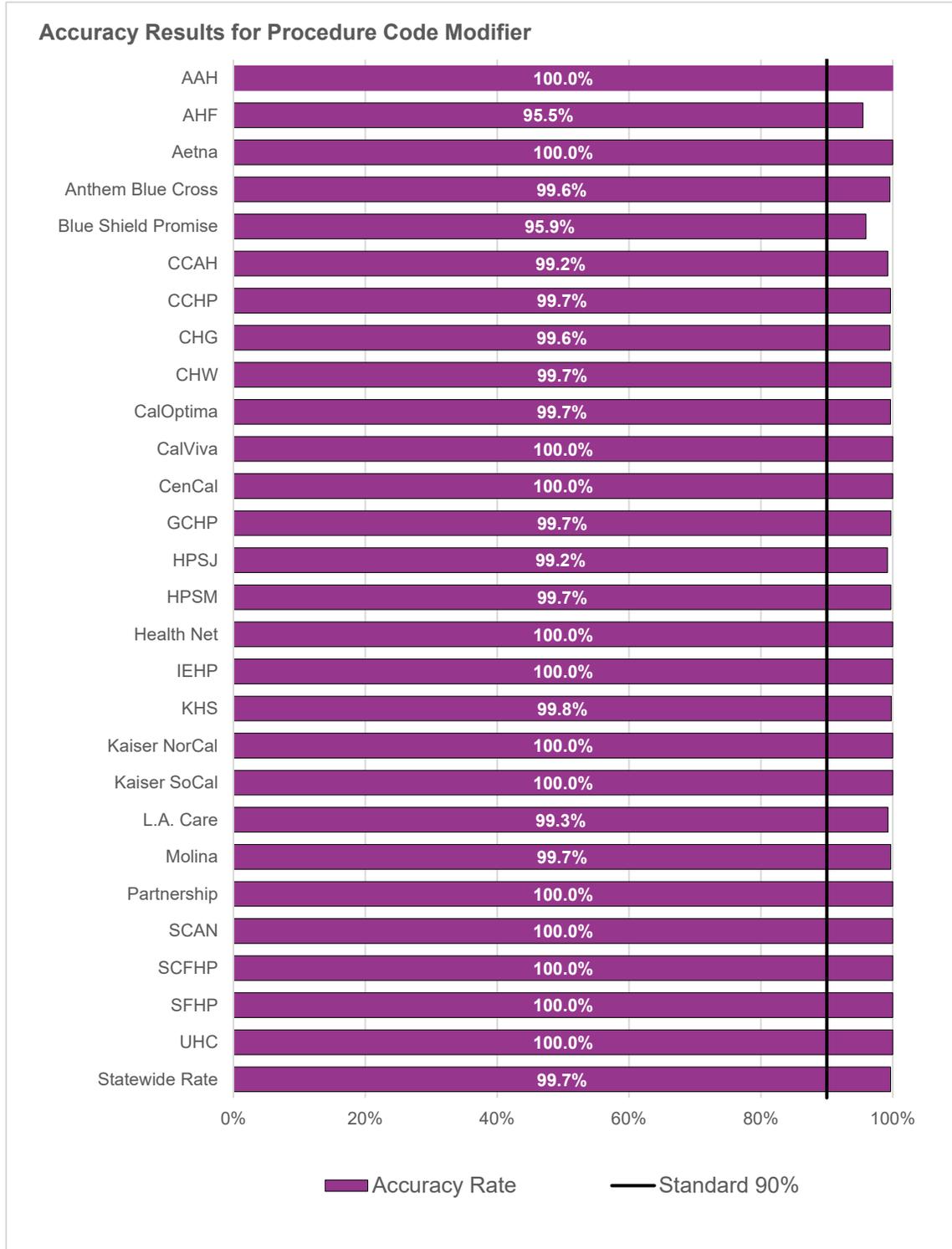
- ◆ Statewide 98.2 percent of procedure codes were accurate when present in both the electronic encounter data and the medical record. The accuracy rates ranged from 93.6 percent (Kaiser NorCal) to 99.7 percent (AHF).
- ◆ All MCPs and PSPs met the EDV study standard.
- ◆ At the statewide and MCP/PSP levels, the percentages of procedure codes that were inaccurate or required a higher or lower level code were low; therefore, the data labels were not displayed in Figure 3.7.

Procedure Code Modifier Accuracy

Figure 3.8 displays the statewide and MCP/PSP level accuracy rates for the data element *Procedure Code Modifier*. The errors for this data element could not be separated into subcategories and therefore are not presented in the figure.

Figure 3.8—Accuracy Results for Procedure Code Modifier

Note: Data element accuracy rates greater than 90 percent indicate that the MCP/PSP met the EDV study standard.



Key findings for the accuracy rates:

- ◆ Statewide, 99.7 percent of the procedure code modifiers were accurate when the procedure code modifiers were present in both the electronic encounter data and the medical records.
- ◆ All 27 MCPs and PSPs met the EDV study standard.

Rendering Provider Name Accuracy

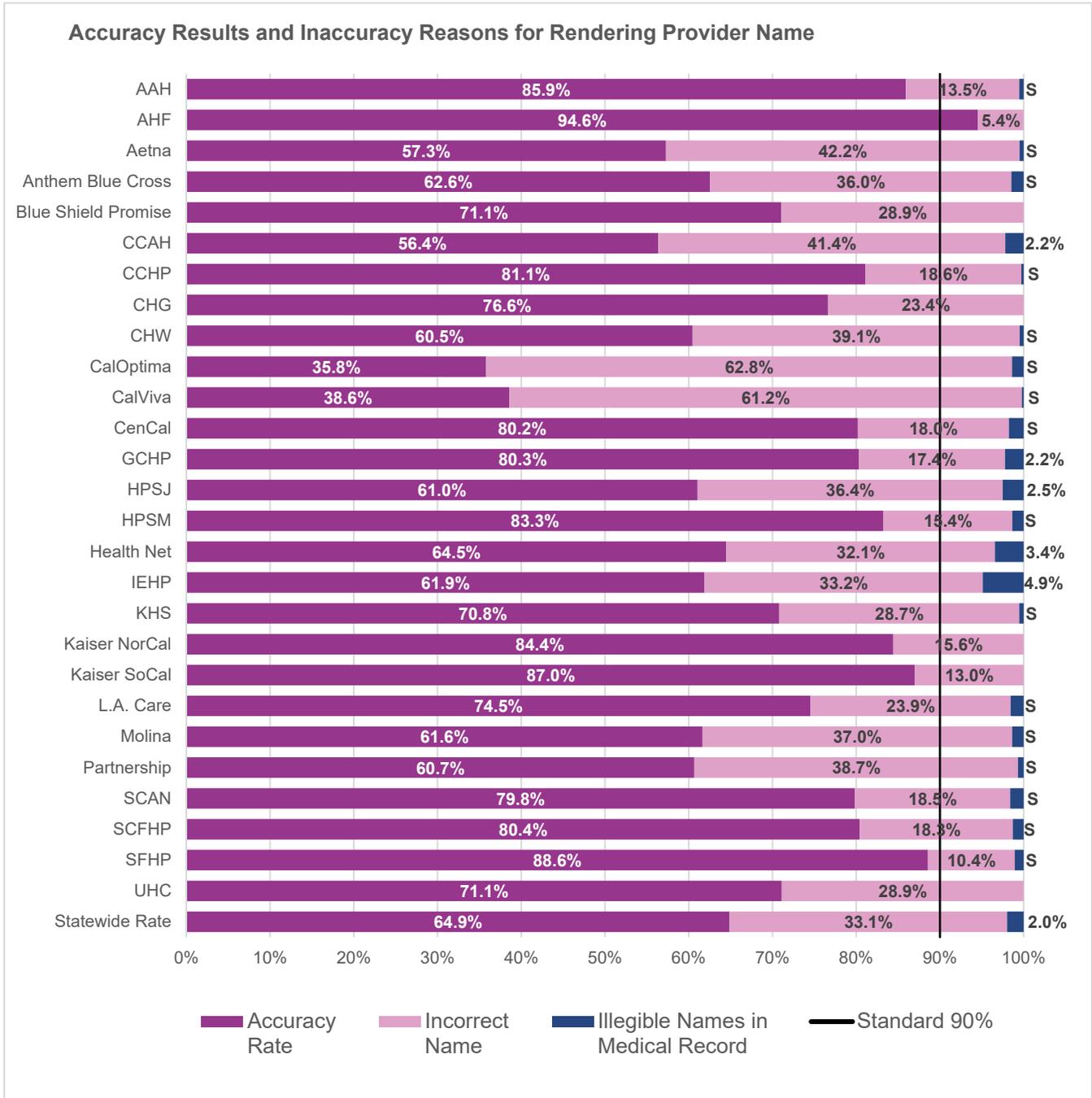
Figure 3.9 displays the statewide and MCP/PSP level accuracy rates for the data element *Rendering Provider Name*. For certain dates of service, the rendering provider number in the DHCS encounter data may have been linked to multiple rendering provider names in the provider data supplied by DHCS. If one rendering provider name from the DHCS data approximately matched the name in the medical record (e.g., a typographical error or “Rob Smith” versus “Robert Smith”), HSAG considered the names from both sources a match.

Errors found in the rendering provider names were separated into two categories: incorrect names and illegible names.

Figure 3.9—Accuracy Results and Inaccuracy Reasons for Rendering Provider Name

Note: Data element accuracy rates greater than 90 percent indicate that the MCP/PSP met the EDV study standard.

"S" indicates that the numerator for the indicator was less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule’s de-identification standard



Key findings for the accuracy rates:

- ◆ Statewide, 64.9 percent of rendering provider names were accurate when the rendering provider names were present in both the DHCS data warehouse and the medical records.
- ◆ The MCP/PSP rates ranged from 35.8 percent (CalOptima) to 94.6 percent (AHF).
- ◆ One PSP (AHF) met the EDV study standard.
- ◆ Comparing the “Incorrect Name” and “Illegible Names in Medical Record” inaccuracy reasons, “Incorrect Name” is the primary reason for the inaccurate rendering provider names (i.e., the majority of errors in the rendering provider names were associated with discrepancies between the name in the medical record and the name in the DHCS data warehouse, not due to illegible names in the medical records).

Of note, the denominator for the percentages in the figure was the number of accurate and inaccurate rendering provider names, while the denominator for the error rates listed in the rate spreadsheets or in Table 4.2 was the number of inaccurate (i.e., incorrect name or illegible name) rendering provider names.

All-Element Accuracy

Table 3.4 displays the statewide and the MCP/PSP level all-element accuracy rates, calculated with and without the *Rendering Provider Name* data element included in the calculation, which describe the percentage of dates of service present in both the DHCS data warehouse and in the medical records with identical values for key data elements listed in Table 2.1. The denominator is the total number of dates of service that matched in both data sources. The numerator is the total number of dates of service with the same values for all key data elements with and without the *Rendering Provider Name* data element. Higher all-element accuracy rates indicate that the values populated in the DHCS data warehouse have greater completeness and accuracy for all key data elements when compared to the medical records.

Table 3.4—All-Element Accuracy Results

Note: The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

*This data element is calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

MCP/PSP	Accuracy Results		
	Number of Dates of Service Present in Both Sources	Accuracy Rate	Accuracy Rate Excluding Rendering Provider Name*
AAH	453	45.0%	65.1%
AHF	354	54.2%	66.4%
Aetna	264	31.1%	68.2%

MCP/PSP	Accuracy Results		
	Number of Dates of Service Present in Both Sources	Accuracy Rate	Accuracy Rate Excluding Rendering Provider Name*
Anthem Blue Cross	564	35.6%	66.8%
Blue Shield Promise	481	24.1%	58.4%
CCAH	584	32.2%	65.8%
CCHP	427	52.7%	75.6%
CHG	524	49.2%	65.6%
CHW	512	35.4%	66.2%
CalOptima	588	19.9%	59.0%
CalViva	472	19.1%	57.6%
CenCal	533	49.2%	64.4%
GCHP	513	56.3%	73.7%
HPSJ	501	35.7%	68.9%
HPSM	528	48.5%	67.6%
Health Net	412	28.4%	60.9%
IEHP	326	37.1%	59.5%
KHS	619	43.6%	67.2%
Kaiser NorCal	640	66.4%	71.6%
Kaiser SoCal	657	70.2%	83.9%+
L.A. Care	471	37.4%	61.8%
Molina	499	25.3%	59.7%
Partnership	631	42.6%	69.6%
SCAN	500	37.8%	64.8%
SCFHP	557	45.6%	69.5%
SFHP	529	62.0%	74.3%
UHC	202	22.8%	51.5%
Statewide Total	13,341	35.8%	63.4%

Key findings for the all-element accuracy rates:

- ◆ Statewide, 35.8 percent of the dates of service present in both data sources contained accurate values for all four key data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Rendering Provider Name*). The low statewide all-element accuracy rates were caused by the medical record omission, encounter data omission, and element inaccuracy from all four key data elements, with *Rendering Provider Name* contributing the most and *Procedure Code Modifier* contributing the least to the all-element inaccuracy.
- ◆ Of the 27 MCPs and PSPs, none met the EDV study standard of 80 percent.
- ◆ The rates among the 27 MCPs and PSPs ranged from 19.1 percent (CalViva) to 70.2 percent (Kaiser SoCal).

With the *Rendering Provider Name* data element excluded from the calculation of the all-element accuracy rate, the statewide rate improved to 63.4 percent and the variation among the 27 MCPs and PSPs narrowed (i.e., ranged from 51.5 percent [UHC] to 83.9 percent [Kaiser SoCal, which met the standard]).

Conclusions

Encounter Data Completeness

Table 4.1 displays the medical record and encounter data omission rates for each key data element.

Table 4.1—Encounter Data Completeness Summary

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission		Encounter Data Omission	
	Statewide Rate	MCP/PSP Range	Statewide Rate	MCP/PSP Range
Date of Service	14.0%	1.7%–55.8%	3.6%+	1.9%–9.1%
Diagnosis Code	17.6%	6.6%–66.0%	2.4%+	0.9%–4.3%
Procedure Code	21.7%	5.1%–72.4%	8.6%+	3.0%–15.0%
Procedure Code Modifier	34.0%	11.3%–75.5%	6.9%+	3.1%–22.8%
Rendering Provider Name	12.8%	2.3%–58.7%	15.4%	5.6%–42.6%

Based on the cases sampled for medical record review, HSAG found that the documentation in the members' medical records supported the key data elements in the electronic data at different rates. None of the five data elements met the EDV study standard at the statewide level. The range of medical record omission rates from 12.8 percent for *Rendering Provider Name* to 34.0 percent for *Procedure Code Modifier* indicates that the five data elements were moderately supported by the medical records.

The variation in rates among the MCPs/PSPs varied widely. The two data elements with the largest difference between the lowest rate and the highest rate were *Procedure Code* (67.3 percentage points) and *Procedure Code Modifier* (64.2 percentage points).

As determined by the medical record review, the potential reasons for the medical record omissions are as follows:

- ◆ The medical record was not submitted for the study.

- ◆ The provider did not document the services performed in the medical record despite submitting a claim or encounter.
- ◆ A data entry error existed for one or more elements (e.g., *Date of Service*).
- ◆ The provider did not perform the service.

The encounter data omission rates reveal that four of the five key data elements (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*), when found in the medical records, were well supported by the electronic encounter data extracted from DHCS' data warehouse. As displayed in Table 4.1, all four of these data elements had statewide encounter data omission rates of less than 10 percent and met the EDV study standards. The remaining data element, *Rendering Provider Name*, was moderately supported by the electronic encounter data. For example, 15.4 percent of the rendering provider names documented in the medical records were absent from DHCS' data warehouse.

The variations among MCP and PSP encounter data omission rates depended on the data element. For example, the encounter data omission rates among MCPs/PSPs varied widely for the *Rendering Provider Name* data element (i.e., a difference of 37.0 percentage points) while the range was much narrower for the *Diagnosis Code* data element (i.e., a difference of 3.4 percentage points).

The potential reasons for encounter data omissions included the following:

- ◆ MCPs and PSPs did not populate the rendering provider identification number field or populated it with an invalid rendering provider identification number when submitting data to DHCS, or the provider files submitted by MCPs or PSPs to DHCS were incomplete or inaccurate.
- ◆ The provider's billing office made a coding error or did not submit the procedure codes or modifiers despite performing the specific services.
- ◆ Deficiencies existed in MCPs' or PSPs' encounter data submission processes or a deficiency existed in the resubmission of denied or rejected encounters to DHCS.
- ◆ A lag occurred between the provider's performance of the service and submission of the encounter to the MCP or PSP and/or DHCS.

Due to the COVID-19 public health emergency, DHCS suspended the 2019–20 EDV medical record review and modified the 2020–21 EDV study. When compared with results from the 2018–19 medical record review activity, the statewide medical record omission rates for *Date of Service* and *Rendering Provider Name* changed from "Met Standard" to "Not Met Standard" status due to the lower medical record procurement rate in the current study, while the rates for the other three data elements improved slightly. For the statewide encounter data omission rates, three data elements met the EDV study standard in the 2018–19 study while four data elements met the study standard in the current study. The improvement in the *Diagnosis Code* field rates was due to DHCS' data warehouse being able to store all diagnosis codes instead of only two diagnosis codes per encounter from the 2018–19 study. In both years the *Rendering Provider Name* data element failed to meet the study standard for the encounter omission.

Encounter Data Accuracy

Table 4.2 displays the element accuracy rates for each key data element and the all-element accuracy rates calculated with and without the *Rendering Provider Name* data element included in the calculation.

Table 4.2—Encounter Data Accuracy Summary

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element.

*This data element is calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Elements	Statewide	MCP Range	Main Error Type
Diagnosis Code	99.2% ⁺	98.5%–99.9%	Inaccurate code (96.7%)
Procedure Code	98.2% ⁺	93.6%–99.7%	Incorrect code (79.9%); Lower level of services in medical records (19.2%)
Procedure Code Modifier	99.7% ⁺	95.5%–100.0%	—
Rendering Provider Name	64.9%	35.8%–94.6%	Incorrect name (94.1%); Illegible name in medical records (5.9%)
All-Element Accuracy	35.8%	19.1%–70.2%	—
All-Element Accuracy Excluding Rendering Provider Name*	63.4%	51.5%–83.9%	—

The key data elements *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Rendering Provider Name* were evaluated for accuracy if the individual data element was present in both the DHCS electronic encounter data and the medical records. Three of the elements (*Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) met the EDV study standard and were found to be highly accurate. However, the *Rendering Provider Name* element rate was much lower at 64.9 percent and did not meet the EDV study standard.

The accuracy rate for the five key data elements can be affected by different types of errors. The error affecting the *Diagnosis Code* data element was almost entirely an inaccurate code error. For the *Procedure Code* data element, 79.9 percent of the identified errors were associated with the use of inaccurate codes not supported by the DHCS Medi-Cal provider

manuals and National Correct Coding Initiative (NCCI) coding standards, and 19.2 percent involved providers submitting a higher-level service code than that supported in the medical records. Finally, most rendering provider name errors (94.1 percent) were associated with rendering provider name discrepancies between the medical records and the DHCS data warehouse rather than with illegible names in the medical records.

Over one-third of the dates of service (35.8 percent) present in both data sources accurately represented all four data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Rendering Provider Name*) when compared to the members' medical records. At the MCP/PSP level, the all-element accuracy rate ranged from 19.1 percent (CalViva) to 70.2 percent (Kaiser SoCal). While all key data elements contributed to the low statewide all-element accuracy rate, the *Rendering Provider Name* data element contributed most to the inaccuracy. This effect can be seen when the all-element accuracy is calculated excluding the *Rendering Provider Name* data element. As shown in Table 4.2, the accuracy rate increased from 35.8 percent (*All-Element Accuracy*) to 63.4 percent (*All-Element Accuracy Excluding Rendering Provider Name*) when the data element *Rendering Provider Name* was excluded from the calculation.

When comparing statewide results from the 2018–19 medical record review activity, the accuracy rates for the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements were similar, with each data element meeting the standard in both years. The *Rendering Provider Name* data element rate increased slightly this year, from 63.5 percent to 64.9 percent, but did not meet the standard.

Recommendations

While some improvements were made in the completeness and accuracy of DHCS' encounter data when compared to the 2018–19 EDV medical record review study, results from the 2021–22 study show continued opportunities for improvement. DHCS should continue to work with MCPs and PSPs to determine ways to improve those study indicators listed in Table 4.3 that are marked with an "X."

Table 4.3—Grid of MCPs and PSPs Not Meeting EDV Study Standards

MRO = Medical record omission rate

EDO = Encounter data omission rate

ACU = Data element accuracy rate

MCP/PSP	Date of Service	Diagnosis Code	Procedure Code		Procedure Code Modifier		Rendering Provider Name		
	MRO	MRO	MRO	EDO	MRO	EDO	MRO	EDO	ACU
AAH	X	X	X	X	X	X	X	X	X
AHF	X	X	X		X	X		X	
Aetna	X	X	X		X		X	X	X
Anthem Blue Cross		X	X		X			X	X
Blue Shield Promise	X	X	X		X	X	X	X	X
CCAH				X	X			X	X
CCHP	X	X	X		X		X	X	X
CHG		X	X		X			X	X
CHW		X	X	X	X			X	X
CalOptima			X		X				X
CalViva	X	X	X	X	X	X	X		X
CenCal		X	X	X	X				X
GCHP		X	X		X				X
HPSJ	X	X	X		X			X	X
HPSM		X	X		X			X	X
Health Net	X	X	X		X		X	X	X
IEHP	X	X	X	X	X		X	X	X
KHS					X				X
Kaiser NorCal					X				X
Kaiser SoCal					X			X	X
L.A. Care	X	X	X		X		X	X	X
Molina		X	X		X			X	X
Partnership				X	X				X
SCAN	X	X	X		X	X	X	X	X

	Date of Service	Diagnosis Code	Procedure Code		Procedure Code Modifier		Rendering Provider Name		
	MRO	MRO	MRO	EDO	MRO	EDO	MRO	EDO	ACU
MCP/PSP		X	X	X	X			X	X
SCFHP		X	X		X			X	X
SFHP	X	X	X		X			X	X
UHC	X	X	X	X	X		X	X	X

Study Limitations

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

- ◆ The study findings relied solely on the documentation contained in the members' medical records; therefore, results are dependent on the overall quality of physicians' medical records. For example, a physician may have performed a service but may not have documented it in the member's medical record. As such, HSAG would have counted it as a negative finding. This study was unable to distinguish cases in which a service was not performed versus those in which a service was performed but not documented in the medical record.
- ◆ The findings for the data element *Rendering Provider Name* should be reviewed with caution because rendering provider names are not generally included or legible in members' medical records.
- ◆ The findings from this study are associated with encounters from January 1, 2020, to December 31, 2020; as such, the results may not reflect the current quality of DHCS' encounter data.
- ◆ The findings from this study are associated with physician visits and may not be applicable to other claim types.
- ◆ Aetna and UHC had low rates of medical record procurement. Cases without medical records contributed to the medical record omission results shown in this report. For example, if medical records were not submitted for a sampled date of service, all data elements (i.e., *Date of Service*, *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Rendering Provider Name*) associated with that date of service were scored as medical record omissions. Therefore, MCPs/PSPs with lower medical record submission rates would be expected to have higher (i.e., poorer) medical record omission rates for each key data element. For this reason, rates for these plans should be interpreted with caution.
- ◆ The COVID-19 public health emergency may have impacted the medical records for the services that occurred in 2020.

Appendix A. MCPs and PSPs Included in the Study

Table A.1 presents the names, reporting units, and model types of MCPs and PSPs included in this EDV study.

Table A.1—MCPs and PSPs Included in the Study

* Region 1 includes Butte, Colusa, Glenn, Plumas, Sierra, Sutter, and Tehama counties; Region 2 includes Alpine, Amador, Calaveras, El Dorado, Inyo, Mariposa, Mono, Nevada, Placer, Tuolumne, and Yuba counties.

MCP/PSP Name	MCP/PSP Abbreviation	MCP/PSP County/ Reporting Unit	Model
Aetna Better Health of California	Aetna	Sacramento	Geographic Managed Care (GMC)
		San Diego	GMC
AIDS Healthcare Foundation	AHF	Los Angeles	Specialty (SPEC)
Alameda Alliance for Health	AAH	Alameda	Local Initiative
Blue Cross of California Partnership Plan, Inc., DBA Anthem Blue Cross Partnership Plan	Anthem Blue Cross	Alameda	Commercial Plan (CP)
		Contra Costa	CP
		Fresno	CP
		Kings	CP
		Madera	CP
		Sacramento	GMC
		San Francisco	CP
		Santa Clara	CP
		Tulare	Local Initiative
		Region 1*	Regional
		Region 2*	Regional
San Benito	San Benito		
Blue Shield of California Promise Health Plan	Blue Shield Promise	San Diego	GMC

MCP/PSP Name	MCP/PSP Abbreviation	MCP/PSP County/ Reporting Unit	Model
California Health & Wellness Plan	CHW	Imperial	Imperial
		Region 1*	Regional
		Region 2*	Regional
CalOptima	CalOptima	Orange	County Organized Health System (COHS)
CalViva Health	CalViva	Fresno	Local Initiative
		Kings	Local Initiative
		Madera	Local Initiative
CenCal Health	CenCal	Santa Barbara	COHS
		San Luis Obispo	COHS
Central California Alliance for Health	CCAH	Merced	COHS
		Monterey/Santa Cruz	COHS
Community Health Group Partnership Plan	CHG	San Diego	GMC
Contra Costa Health Plan	CCHP	Contra Costa	Local Initiative
Gold Coast Health Plan	GCHP	Ventura	COHS
Health Net Community Solutions, Inc.	Health Net	Kern	CP
		Los Angeles	CP
		Sacramento	GMC
		San Diego	GMC
		San Joaquin	CP
		Stanislaus	CP
		Tulare	CP
Health Plan of San Joaquin	HPSJ	San Joaquin	Local Initiative
		Stanislaus	Local Initiative
Health Plan of San Mateo	HPSM	San Mateo	COHS

APPENDIX A. MCPs AND PSPs INCLUDED IN THE STUDY

MCP/PSP Name	MCP/PSP Abbreviation	MCP/PSP County/ Reporting Unit	Model
Inland Empire Health Plan	IEHP	Riverside/San Bernardino	Local Initiative
KP Cal, LLC (Kaiser NorCal)	Kaiser NorCal	KP North (Amador, El Dorado, Placer, and Sacramento counties)	GMC/Regional
KP Cal, LLC (Kaiser SoCal)	Kaiser SoCal	San Diego	GMC
Kern Health Systems, DBA Kern Family Health Care	KHS	Kern	Local Initiative
L.A. Care Health Plan	L.A. Care	Los Angeles	Local Initiative
Molina Healthcare of California	Molina	Riverside/San Bernardino	CP
		Sacramento	GMC
		San Diego	GMC
		Imperial	Imperial
Partnership HealthPlan of California	Partnership	Southwest (Marin, Mendocino, Sonoma, and Lake counties)	COHS
		Southeast (Napa, Solano, and Yolo counties)	COHS
		Northwest (Del Norte and Humboldt counties)	COHS
		Northeast (Lassen, Modoc, Shasta, Siskiyou, and Trinity counties)	COHS
San Francisco Health Plan	SFHP	San Francisco	Local Initiative
Santa Clara Family Health Plan	SCFHP	Santa Clara	Local Initiative

APPENDIX A. MCPs AND PSPs INCLUDED IN THE STUDY

MCP/PSP Name	MCP/PSP Abbreviation	MCP/PSP County/ Reporting Unit	Model
SCAN Health Plan	SCAN	Los Angeles	SPEC
		Riverside	SPEC
		San Bernardino	SPEC
UnitedHealthcare Community Plan	UHC	San Diego	GMC

Appendix B. Findings for Aetna Better Health of California (Aetna)

Medical Record Procurement Status

Table B.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for Aetna.

Table B.1—Medical Record Procurement Status for Aetna

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Aetna	411	242	58.9%
Statewide Total	10,939	9,469	86.6%

Table B.2 lists the reasons for missing medical records for Aetna.

Table B.2—Reasons for Missing Medical Records for Aetna

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	156	92.3%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	7	4.1%
Member was not a patient of the practice.	3	1.8%
Medical records were not located at the facility.	2	1.2%
Other.	1	0.6%
Aetna Total	169	100.0%

Table B.3 displays the number and percent of records with a second date of service submitted for Aetna.

Table B.3—Medical Record Submission Status for Second Date of Service for Aetna

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
Aetna	242	64	26.4%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table B.4 displays the medical record omission and encounter data omission rates for Aetna. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table B.4—Encounter Data Completeness Summary for Aetna

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

"S" indicates that the numerator for this indicator was less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule's de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Aetna Rate	Statewide Rate	Denominator	Aetna Rate	Statewide Rate
Date of Service	452	41.6%	14.0%	273	S ⁺	3.6%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Aetna Rate	Statewide Rate	Denominator	Aetna Rate	Statewide Rate
Diagnosis Code	1,191	42.0%	17.6%	700	S ⁺	2.4%⁺
Procedure Code	992	54.8%	21.7%	467	4.1% ⁺	8.6%⁺
Procedure Code Modifier	391	61.4%	34.0%	165	8.5% ⁺	6.9%⁺
Rendering Provider Name	331	37.8%	12.8%	269	23.4%	15.4%

Encounter Data Accuracy

Table B.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for Aetna. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table B.5—Encounter Data Accuracy Summary for Aetna

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	Aetna Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	691	99.6% ⁺	99.2%⁺	—
Procedure Code	448	99.3% ⁺	98.2%⁺	—
Procedure Code Modifier	151	100.0% ⁺	99.7%⁺	—
Rendering Provider Name	206	57.3%	64.9%	Incorrect name (98.9%)
All-Element Accuracy	264	31.1%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	264	68.2%	63.4%	—

Appendix C. Findings for AIDS Healthcare Foundation (AHF)

Medical Record Procurement Status

Table C.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for AHF.

Table C.1—Medical Record Procurement Status for AHF

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
AHF	253	218	86.2%
Statewide Total	10,939	9,469	86.6%

Table C.2 lists the reasons for missing medical records for AHF.

Table C.2—Reasons for Missing Medical Records for AHF

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	19	54.3%
Other.	15	42.9%
Closed facility.	1	2.9%
AHF Total	35	100.0%

Table C.3 displays the number and percent of records with a second date of service submitted for AHF.

Table C.3—Medical Record Submission Status for Second Date of Service for AHF

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
AHF	218	167	76.6%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table C.4 displays the medical record omission and encounter data omission rates for AHF. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table C.4—Encounter Data Completeness Summary for AHF

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	AHF Rate	Statewide Rate	Denominator	AHF Rate	Statewide Rate
Date of Service	395	10.4%	14.0%	370	4.3% ⁺	3.6%⁺
Diagnosis Code	1,563	11.8%	17.6%	1,400	1.5% ⁺	2.4%⁺
Procedure Code	897	13.6%	21.7%	801	3.2% ⁺	8.6%⁺
Procedure Code Modifier	209	25.8%	34.0%	186	16.7%	6.9%⁺
Rendering Provider Name	324	3.7% ⁺	12.8%	366	14.8%	15.4%

Encounter Data Accuracy

Table C.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for AHF. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table C.5—Encounter Data Accuracy Summary for AHF

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	AHF Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,379	99.8% ⁺	99.2%⁺	—
Procedure Code	775	99.7% ⁺	98.2%⁺	—
Procedure Code Modifier	155	95.5% ⁺	99.7%⁺	—

Key Data Element	Denominator	AHF Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Rendering Provider Name	312	94.6% ⁺	64.9%	—
All-Element Accuracy	354	54.2%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	354	66.4%	63.4%	—

Appendix D. Findings for Alameda Alliance for Health (AAH)

Medical Record Procurement Status

Table D.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for AAH.

Table D.1—Medical Record Procurement Status for AAH

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
AAH	411	320	77.9%
Statewide Total	10,939	9,469	86.6%

Table D.2 lists the reasons for missing medical records for AAH.

Table D.2—Reasons for Missing Medical Records for AAH

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Provider refused to release medical records.	53	58.2%
Other.	16	17.6%
Member was not a patient of the practice.	10	11.0%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	8	8.8%
Medical records were not located at the facility.	4	4.4%
AAH Total	91	100.0%

Table D.3 displays the number and percent of records with a second date of service submitted for AAH.

Table D.3—Medical Record Submission Status for Second Date of Service for AAH

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
AAH	320	147	45.9%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table D.4 displays the medical record omission and encounter data omission rates for AAH. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table D.4—Encounter Data Completeness Summary for AAH

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	AAH Rate	Statewide Rate	Denominator	AAH Rate	Statewide Rate
Date of Service	555	18.4%	14.0%	478	5.2% ⁺	3.6%⁺
Diagnosis Code	1,390	19.4%	17.6%	1,149	2.4% ⁺	2.4%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	AAH Rate	Statewide Rate	Denominator	AAH Rate	Statewide Rate
Procedure Code	941	25.4%	21.7%	794	11.6%	8.6%+
Procedure Code Modifier	347	32.6%	34.0%	303	22.8%	6.9%+
Rendering Provider Name	454	15.4%	12.8%	478	19.7%	15.4%

Encounter Data Accuracy

Table D.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for AAH. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table D.5—Encounter Data Accuracy Summary for AAH

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	AAH Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,121	99.8% ⁺	99.2%⁺	—
Procedure Code	702	96.9% ⁺	98.2%⁺	—
Procedure Code Modifier	234	100.0% ⁺	99.7%⁺	—
Rendering Provider Name	384	85.9%	64.9%	Incorrect name (96.3%)
All-Element Accuracy	453	45.0%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	453	65.1%	63.4%	—

Appendix E. Findings for Anthem Blue Cross Partnership Plan (Anthem Blue Cross)

Medical Record Procurement Status

Table E.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for Anthem Blue Cross.

Table E.1—Medical Record Procurement Status for Anthem Blue Cross

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Anthem Blue Cross	411	375	91.2% ⁺
Statewide Total	10,939	9,469	86.6%

Table E.2 lists the reasons for missing medical records for Anthem Blue Cross.

Table E.2—Reasons for Missing Medical Records for Anthem Blue Cross

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	29	80.6%
Provider refused to release medical records.	3	8.3%
Member was not a patient of the practice.	1	2.8%
Closed facility.	1	2.8%
Medical records were not located at the facility.	1	2.8%
Other.	1	2.8%
Anthem Blue Cross Total	36	100.0%

Table E.3 displays the number and percent of records with a second date of service submitted for Anthem Blue Cross.

Table E.3—Medical Record Submission Status for Second Date of Service for Anthem Blue Cross

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
Anthem Blue Cross	375	251	66.9%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table E.4 displays the medical record omission and encounter data omission rates for Anthem Blue Cross. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS’ electronic encounter data, and the numerator is the number of dates of service identified in DHCS’ electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS’ electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table E.4—Encounter Data Completeness Summary for Anthem Blue Cross

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Anthem Blue Cross Rate	Statewide Rate	Denominator	Anthem Blue Cross Rate	Statewide Rate
Date of Service	604	6.6% ⁺	14.0%	588	4.1% ⁺	3.6%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Anthem Blue Cross Rate	Statewide Rate	Denominator	Anthem Blue Cross Rate	Statewide Rate
Diagnosis Code	1,619	10.0%	17.6%	1,501	2.9% ⁺	2.4%⁺
Procedure Code	1,311	12.3%	21.7%	1,266	9.2% ⁺	8.6%⁺
Procedure Code Modifier	575	19.3%	34.0%	487	4.7% ⁺	6.9%⁺
Rendering Provider Name	507	5.7% ⁺	12.8%	585	18.3%	15.4%

Encounter Data Accuracy

Table E.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for Anthem Blue Cross. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table E.5—Encounter Data Accuracy Summary for Anthem Blue Cross

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	Anthem Blue Cross Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,457	99.5% ⁺	99.2%⁺	—
Procedure Code	1,150	98.3% ⁺	98.2%⁺	—
Procedure Code Modifier	464	99.6% ⁺	99.7%⁺	—
Rendering Provider Name	478	62.6%	64.9%	Incorrect name (96.1%)
All-Element Accuracy	564	35.6%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	564	66.8%	63.4%	—

Appendix F. Findings for Blue Shield of California Promise Health Plan (Blue Shield Promise)

Medical Record Procurement Status

Table F.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for Blue Shield Promise.

Table F.1—Medical Record Procurement Status for Blue Shield Promise

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (*) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Blue Shield Promise	411	358	87.1%
Statewide Total	10,939	9,469	86.6%

Table F.2 lists the reasons for missing medical records for Blue Shield Promise.

Table F.2—Reasons for Missing Medical Records for Blue Shield Promise

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	33	62.3%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	12	22.6%
Medical records were not located at the facility.	4	7.5%
Closed facility.	3	5.7%
Member was not a patient of the practice.	1	1.9%
Blue Shield Promise Total	53	100.0%

Table F.3 displays the number and percent of records with a second date of service submitted for Blue Shield Promise.

Table F.3—Medical Record Submission Status for Second Date of Service for Blue Shield Promise

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
Blue Shield Promise	358	219	61.2%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table F.4 displays the medical record omission and encounter data omission rates for Blue Shield Promise. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table F.4—Encounter Data Completeness Summary for Blue Shield Promise

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Blue Shield Promise Rate	Statewide Rate	Denominator	Blue Shield Promise Rate	Statewide Rate
Date of Service	554	13.2%	14.0%	502	4.2% ⁺	3.6%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Blue Shield Promise Rate	Statewide Rate	Denominator	Blue Shield Promise Rate	Statewide Rate
Diagnosis Code	1,551	15.7%	17.6%	1,333	2.0% ⁺	2.4%⁺
Procedure Code	1,364	28.7%	21.7%	1,012	4.0% ⁺	8.6%⁺
Procedure Code Modifier	485	49.3%	34.0%	296	16.9%	6.9%⁺
Rendering Provider Name	326	12.0%	12.8%	500	42.6%	15.4%

Encounter Data Accuracy

Table F.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for Blue Shield Promise. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table F.5—Encounter Data Accuracy Summary for Blue Shield Promise

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	Blue Shield Promise Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,307	99.8% ⁺	99.2%⁺	—
Procedure Code	972	97.4% ⁺	98.2%⁺	—
Procedure Code Modifier	246	95.9% ⁺	99.7%⁺	—
Rendering Provider Name	287	71.1%	64.9%	Incorrect name (100.0%)
All-Element Accuracy	481	24.1%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	481	58.4%	63.4%	—

Appendix G. Findings for California Health & Wellness Plan (CHW)

Medical Record Procurement Status

Table G.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for CHW.

Table G.1—Medical Record Procurement Status for CHW

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CHW	411	387	94.2%+
Statewide Total	10,939	9,469	86.6%

Table G.2 lists the reasons for missing medical records for CHW.

Table G.2—Reasons for Missing Medical Records for CHW

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	15	62.5%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	6	25.0%
Medical records were not located at the facility.	3	12.5%
CHW Total	24	100.0%

Table G.3 displays the number and percent of records with a second date of service submitted for CHW.

Table G.3—Medical Record Submission Status for Second Date of Service for CHW

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
CHW	387	207	53.5%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table G.4 displays the medical record omission and encounter data omission rates for CHW. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS’ electronic encounter data, and the numerator is the number of dates of service identified in DHCS’ electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS’ electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table G.4—Encounter Data Completeness Summary for CHW

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CHW Rate	Statewide Rate	Denominator	CHW Rate	Statewide Rate
Date of Service	549	6.7% ⁺	14.0%	531	3.6% ⁺	3.6% ⁺
Diagnosis Code	1,385	13.1%	17.6%	1,229	2.1% ⁺	2.4% ⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CHW Rate	Statewide Rate	Denominator	CHW Rate	Statewide Rate
Procedure Code	975	14.5%	21.7%	944	11.7%	8.6%⁺
Procedure Code Modifier	492	26.6%	34.0%	380	5.0% ⁺	6.9%⁺
Rendering Provider Name	459	7.4% ⁺	12.8%	528	19.5%	15.4%

Encounter Data Accuracy

Table G.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for CHW. Encounter data accuracy was evaluated for dates of service that existed in both DHCS’ electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS’ electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table G.5—Encounter Data Accuracy Summary for CHW

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	CHW Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,203	99.0% ⁺	99.2%⁺	—
Procedure Code	834	99.3% ⁺	98.2%⁺	—
Procedure Code Modifier	361	99.7% ⁺	99.7%⁺	—
Rendering Provider Name	425	60.5%	64.9%	Incorrect name (98.8%)
All-Element Accuracy	512	35.4%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	512	66.2%	63.4%	—

Appendix H. Findings for CalOptima

Medical Record Procurement Status

Table H.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for CalOptima.

Table H.1—Medical Record Procurement Status for CalOptima

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CalOptima	411	401	97.6%+
Statewide Total	10,939	9,469	86.6%

Table H.2 lists the reasons for missing medical records for CalOptima.

Table H.2—Reasons for Missing Medical Records for CalOptima

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	6	60.0%
Other.	3	30.0%
Medical records were not located at the facility.	1	10.0%
CalOptima Total	10	100.0%

Table H.3 displays the number and percent of records with a second date of service submitted for CalOptima.

Table H.3—Medical Record Submission Status for Second Date of Service for CalOptima

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
CalOptima	401	269	67.1%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table H.4 displays the medical record omission and encounter data omission rates for CalOptima. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table H.4—Encounter Data Completeness Summary for CalOptima

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CalOptima Rate	Statewide Rate	Denominator	CalOptima Rate	Statewide Rate
Date of Service	599	1.8% ⁺	14.0%	623	5.6% ⁺	3.6%⁺
Diagnosis Code	1,771	8.9% ⁺	17.6%	1,676	3.8% ⁺	2.4%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CalOptima Rate	Statewide Rate	Denominator	CalOptima Rate	Statewide Rate
Procedure Code	1,371	15.5%	21.7%	1,283	9.7% ⁺	8.6%⁺
Procedure Code Modifier	923	36.5%	34.0%	609	3.8% ⁺	6.9%⁺
Rendering Provider Name	599	3.5% ⁺	12.8%	612	5.6% ⁺	15.4%

Encounter Data Accuracy

Table H.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for CalOptima. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table H.5—Encounter Data Accuracy Summary for CalOptima

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	CalOptima Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,613	98.9% ⁺	99.2%⁺	—
Procedure Code	1,158	98.5% ⁺	98.2%⁺	—
Procedure Code Modifier	586	99.7% ⁺	99.7%⁺	—
Rendering Provider Name	578	35.8%	64.9%	Incorrect name (97.8%)
All-Element Accuracy	588	19.9%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	588	59.0%	63.4%	—

Appendix I. Findings for CalViva Health (CalViva)

Medical Record Procurement Status

Table I.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for CalViva.

Table I.1—Medical Record Procurement Status for CalViva

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CalViva	411	360	87.6%
Statewide Total	10,939	9,469	86.6%

Table I.2 lists the reasons for missing medical records for CalViva.

Table I.2—Reasons for Missing Medical Records for CalViva

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Provider refused to release medical records.	21	41.2%
Non-responsive provider or provider did not respond in a timely manner.	13	25.5%
Member was not a patient of the practice.	7	13.7%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	5	9.8%
Medical records were not located at the facility.	3	5.9%
Closed facility.	2	3.9%
CalViva Total	51	100.0%

Table I.3 displays the number and percent of records with a second date of service submitted for CalViva.

Table I.3—Medical Record Submission Status for Second Date of Service for CalViva

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
CalViva	360	180	50.0%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table I.4 displays the medical record omission and encounter data omission rates for CalViva. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table I.4—Encounter Data Completeness Summary for CalViva

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

"S" indicates that the numerator for this indicator was less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule's de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CalViva Rate	Statewide Rate	Denominator	CalViva Rate	Statewide Rate
Date of Service	539	12.4%	14.0%	479	S ⁺	3.6%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CalViva Rate	Statewide Rate	Denominator	CalViva Rate	Statewide Rate
Diagnosis Code	1,343	17.9%	17.6%	1,127	2.1% ⁺	2.4%⁺
Procedure Code	1,039	19.6%	21.7%	946	11.7%	8.6%⁺
Procedure Code Modifier	424	27.6%	34.0%	366	16.1%	6.9%⁺
Rendering Provider Name	514	12.3%	12.8%	479	5.8% ⁺	15.4%

Encounter Data Accuracy

Table I.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for CalViva. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table I.5—Encounter Data Accuracy Summary for CalViva

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	CalViva Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,103	99.5% ⁺	99.2%⁺	—
Procedure Code	835	99.4% ⁺	98.2%⁺	—
Procedure Code Modifier	307	100.0% ⁺	99.7%⁺	—
Rendering Provider Name	451	38.6%	64.9%	Incorrect name (99.6%)
All-Element Accuracy	472	19.1%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	472	57.6%	63.4%	—

Appendix J. Findings for CenCal Health (CenCal)

Medical Record Procurement Status

Table J.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for CenCal.

Table J.1—Medical Record Procurement Status for CenCal

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CenCal	411	376	91.5%+
Statewide Total	10,939	9,469	86.6%

Table J.2 lists the reasons for missing medical records for CenCal.

Table J.2—Reasons for Missing Medical Records for CenCal

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	15	42.9%
Medical records were not located at the facility.	14	40.0%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	3	8.6%
Member was not a patient of the practice.	2	5.7%
Closed facility.	1	2.9%
CenCal Total	35	100.0%

Table J.3 displays the number and percent of records with a second date of service submitted for CenCal.

Table J.3—Medical Record Submission Status for Second Date of Service for CenCal

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
CenCal	376	193	51.3%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table J.4 displays the medical record omission and encounter data omission rates for CenCal. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table J.4—Encounter Data Completeness Summary for CenCal

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

"S" indicates that the numerator for this indicator was less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule's de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CenCal Rate	Statewide Rate	Denominator	CenCal Rate	Statewide Rate
Date of Service	572	6.8% ⁺	14.0%	552	3.4% ⁺	3.6%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CenCal Rate	Statewide Rate	Denominator	CenCal Rate	Statewide Rate
Diagnosis Code	1,179	10.0%	17.6%	1,105	4.0% ⁺	2.4%⁺
Procedure Code	1,294	12.8%	21.7%	1,256	10.2%	8.6%⁺
Procedure Code Modifier	471	29.9%	34.0%	338	S ⁺	6.9%⁺
Rendering Provider Name	552	7.6% ⁺	12.8%	546	6.6% ⁺	15.4%

Encounter Data Accuracy

Table J.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for CenCal. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table J.5—Encounter Data Accuracy Summary for CenCal

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	CenCal Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,061	99.3% ⁺	99.2%⁺	—
Procedure Code	1,128	98.1% ⁺	98.2%⁺	—
Procedure Code Modifier	330	100.0% ⁺	99.7%⁺	—
Rendering Provider Name	510	80.2%	64.9%	Incorrect name (91.1%)
All-Element Accuracy	533	49.2%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	533	64.4%	63.4%	—

Appendix K. Findings for Central California Alliance for Health (CCAH)

Medical Record Procurement Status

Table K.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for CCAH.

Table K.1—Medical Record Procurement Status for CCAH

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CCAH	411	401	97.6%+
Statewide Total	10,939	9,469	86.6%

Table K.2 lists the reasons for missing medical records for CCAH.

Table K.2—Reasons for Missing Medical Records for CCAH

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Closed facility.	6	60.0%
Non-responsive provider or provider did not respond in a timely manner.	2	20.0%
Other.	2	20.0%
CCAH Total	10	100.0%

Table K.3 displays the number and percent of records with a second date of service submitted for CCAH.

Table K.3—Medical Record Submission Status for Second Date of Service for CCAH

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
CCAHA	401	224	55.9%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table K.4 displays the medical record omission and encounter data omission rates for CCAH. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS’ electronic encounter data, and the numerator is the number of dates of service identified in DHCS’ electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS’ electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table K.4—Encounter Data Completeness Summary for CCAH

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

"S" indicates that the numerator for this indicator was less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule’s de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CCAHA Rate	Statewide Rate	Denominator	CCAHA Rate	Statewide Rate
Date of Service	597	2.2% ⁺	14.0%	599	2.5% ⁺	3.6%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CAAH Rate	Statewide Rate	Denominator	CAAH Rate	Statewide Rate
Diagnosis Code	1,374	6.6% ⁺	17.6%	1,314	2.3% ⁺	2.4%⁺
Procedure Code	1,123	7.5% ⁺	21.7%	1,177	11.7%	8.6%⁺
Procedure Code Modifier	655	19.1%	34.0%	537	S ⁺	6.9%⁺
Rendering Provider Name	517	2.9% ⁺	12.8%	591	15.1%	15.4%

Encounter Data Accuracy

Table K.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for CCAH. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table K.5—Encounter Data Accuracy Summary for CCAH

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	CCA Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,284	98.5% ⁺	99.2%⁺	—
Procedure Code	1,039	99.2% ⁺	98.2%⁺	—
Procedure Code Modifier	530	99.2% ⁺	99.7%⁺	—
Rendering Provider Name	502	56.4%	64.9%	Incorrect name (95.0%); Illegible name in medical records (5.0%)
All-Element Accuracy	584	32.2%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	584	65.8%	63.4%	—

Appendix L. Findings for Community Health Group Partnership Plan (CHG)

Medical Record Procurement Status

Table L.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for CHG.

Table L.1—Medical Record Procurement Status for CHG

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CHG	411	388	94.4% ⁺
Statewide Total	10,939	9,469	86.6%

Table L.2 lists the reasons for missing medical records for CHG.

Table L.2—Reasons for Missing Medical Records for CHG

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Medical records were not located at the facility.	13	56.5%
Non-responsive provider or provider did not respond in a timely manner.	7	30.4%
Provider refused to release medical records.	3	13.0%
CHG Total	23	100.0%

Table L.3 displays the number and percent of records with a second date of service submitted for CHG.

Table L.3—Medical Record Submission Status for Second Date of Service for CHG

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
CHG	388	195	50.3%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table L.4 displays the medical record omission and encounter data omission rates for CHG. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS’ electronic encounter data, and the numerator is the number of dates of service identified in DHCS’ electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS’ electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table L.4—Encounter Data Completeness Summary for CHG

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CHG Rate	Statewide Rate	Denominator	CHG Rate	Statewide Rate
Date of Service	550	4.7% ⁺	14.0%	554	5.4% ⁺	3.6% ⁺
Diagnosis Code	1,496	10.9%	17.6%	1,386	3.8% ⁺	2.4% ⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CHG Rate	Statewide Rate	Denominator	CHG Rate	Statewide Rate
Procedure Code	1,102	14.8%	21.7%	1,012	7.2% ⁺	8.6%⁺
Procedure Code Modifier	328	24.4%	34.0%	267	7.1% ⁺	6.9%⁺
Rendering Provider Name	519	5.2% ⁺	12.8%	551	10.7%	15.4%

Encounter Data Accuracy

Table L.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for CHG. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table L.5—Encounter Data Accuracy Summary for CHG

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	CHG Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,333	99.2% ⁺	99.2%⁺	—
Procedure Code	939	99.3% ⁺	98.2%⁺	—
Procedure Code Modifier	248	99.6% ⁺	99.7%⁺	—
Rendering Provider Name	492	76.6%	64.9%	Incorrect name (100.0%)
All-Element Accuracy	524	49.2%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	524	65.6%	63.4%	—

Appendix M. Findings for Contra Costa Health Plan (CCHP)

Medical Record Procurement Status

Table M.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for CCHP.

Table M.1—Medical Record Procurement Status for CCHP

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CCHP	411	316	76.9%
Statewide Total	10,939	9,469	86.6%

Table M.2 lists the reasons for missing medical records for CCHP.

Table M.2—Reasons for Missing Medical Records for CCHP

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	77	81.1%
Medical records were not located at the facility.	6	6.3%
Member was not a patient of the practice.	5	5.3%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	3	3.2%
Closed facility.	2	2.1%
Other.	2	2.1%
CCHP Total	95	100.0%

Table M.3 displays the number and percent of records with a second date of service submitted for CCHP.

Table M.3—Medical Record Submission Status for Second Date of Service for CCHP

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
CCHP	316	158	50.0%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table M.4 displays the medical record omission and encounter data omission rates for CCHP. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS’ electronic encounter data, and the numerator is the number of dates of service identified in DHCS’ electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS’ electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table M.4—Encounter Data Completeness Summary for CCHP

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CCHP Rate	Statewide Rate	Denominator	CCHP Rate	Statewide Rate
Date of Service	528	19.1%	14.0%	448	4.7% ⁺	3.6%⁺
Diagnosis Code	1,162	24.6%	17.6%	902	2.9% ⁺	2.4%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CCHP Rate	Statewide Rate	Denominator	CCHP Rate	Statewide Rate
Procedure Code	982	26.1%	21.7%	763	4.8% ⁺	8.6%⁺
Procedure Code Modifier	455	35.4%	34.0%	305	3.6% ⁺	6.9%⁺
Rendering Provider Name	428	17.3%	12.8%	445	20.4%	15.4%

Encounter Data Accuracy

Table M.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for CCHP. Encounter data accuracy was evaluated for dates of service that existed in both DHCS’ electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS’ electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table M.5—Encounter Data Accuracy Summary for CCHP

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	CCHP Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	876	99.0% ⁺	99.2%⁺	—
Procedure Code	726	97.2% ⁺	98.2%⁺	—
Procedure Code Modifier	294	99.7% ⁺	99.7%⁺	—
Rendering Provider Name	354	81.1%	64.9%	Incorrect name (98.5%)
All-Element Accuracy	427	52.7%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	427	75.6%	63.4%	—

Appendix N. Findings for Gold Coast Health Plan (GCHP)

Medical Record Procurement Status

Table N.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for GCHP.

Table N.1—Medical Record Procurement Status for GCHP

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
GCHP	411	376	91.5%+
Statewide Total	10,939	9,469	86.6%

Table N.2 lists the reasons for missing medical records for GCHP.

Table N.2—Reasons for Missing Medical Records for GCHP

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	25	71.4%
Closed facility.	7	20.0%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	3	8.6%
GCHP Total	35	100.0%

Table N.3 displays the number and percent of records with a second date of service submitted for GCHP.

Table N.3—Medical Record Submission Status for Second Date of Service for GCHP

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
GCHP	376	198	52.7%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table N.4 displays the medical record omission and encounter data omission rates for GCHP. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS’ electronic encounter data, and the numerator is the number of dates of service identified in DHCS’ electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS’ electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table N.4—Encounter Data Completeness Summary for GCHP

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	GCHP Rate	Statewide Rate	Denominator	GCHP Rate	Statewide Rate
Date of Service	559	8.2% ⁺	14.0%	530	3.2% ⁺	3.6% ⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	GCHP Rate	Statewide Rate	Denominator	GCHP Rate	Statewide Rate
Diagnosis Code	1,315	12.5%	17.6%	1,172	1.8%+	2.4%+
Procedure Code	945	10.8%	21.7%	908	7.2%+	8.6%+
Procedure Code Modifier	447	22.4%	34.0%	358	3.1%+	6.9%+
Rendering Provider Name	543	9.2%+	12.8%	524	5.9%+	15.4%

Encounter Data Accuracy

Table N.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for GCHP. Encounter data accuracy was evaluated for dates of service that existed in both DHCS’ electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS’ electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table N.5—Encounter Data Accuracy Summary for GCHP

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	GCHP Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,151	99.5% ⁺	99.2%⁺	—
Procedure Code	843	99.5% ⁺	98.2%⁺	—
Procedure Code Modifier	347	99.7% ⁺	99.7%⁺	—
Rendering Provider Name	493	80.3%	64.9%	Incorrect name (88.7%); Illegible name in medical records (11.3%)
All-Element Accuracy	513	56.3%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	513	73.7%	63.4%	—

Appendix O. Findings for Health Net Community Solutions, Inc. (Health Net)

Medical Record Procurement Status

Table O.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for Health Net.

Table O.1—Medical Record Procurement Status for Health Net

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Health Net	411	319	77.6%
Statewide Total	10,939	9,469	86.6%

Table O.2 lists the reasons for missing medical records for Health Net.

Table O.2—Reasons for Missing Medical Records for Health Net

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	49	53.3%
Member was not a patient of the practice.	13	14.1%
Medical records were not located at the facility.	13	14.1%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	7	7.6%
Provider refused to release medical records.	7	7.6%
Other.	2	2.2%
Closed facility.	1	1.1%
Health Net Total	92	100.0%

Table O.3 displays the number and percent of records with a second date of service submitted for Health Net.

Table O.3—Medical Record Submission Status for Second Date of Service for Health Net

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
Health Net	319	158	49.5%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table O.4 displays the medical record omission and encounter data omission rates for Health Net. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table O.4—Encounter Data Completeness Summary for Health Net

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Health Net Rate	Statewide Rate	Denominator	Health Net Rate	Statewide Rate
Date of Service	521	20.9%	14.0%	426	3.3% ⁺	3.6%⁺
Diagnosis Code	1,473	23.4%	17.6%	1,149	1.8% ⁺	2.4%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Health Net Rate	Statewide Rate	Denominator	Health Net Rate	Statewide Rate
Procedure Code	1,249	29.0%	21.7%	946	6.2% ⁺	8.6%⁺
Procedure Code Modifier	360	40.0%	34.0%	230	6.1% ⁺	6.9%⁺
Rendering Provider Name	388	17.3%	12.8%	423	24.1%	15.4%

Encounter Data Accuracy

Table O.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for Health Net. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table O.5—Encounter Data Accuracy Summary for Health Net

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	Health Net Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,128	99.0% ⁺	99.2%⁺	—
Procedure Code	887	98.3% ⁺	98.2%⁺	—
Procedure Code Modifier	216	100.0% ⁺	99.7%⁺	—
Rendering Provider Name	321	64.5%	64.9%	Incorrect name (90.4%); Illegible name in medical records (9.6%)
All-Element Accuracy	412	28.4%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	412	60.9%	63.4%	—

Appendix P. Findings for Health Plan of San Joaquin (HPSJ)

Medical Record Procurement Status

Table P.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for HPSJ.

Table P.1—Medical Record Procurement Status for HPSJ

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
HPSJ	411	358	87.1%
Statewide Total	10,939	9,469	86.6%

Table P.2 lists the reasons for missing medical records for HPSJ.

Table P.2—Reasons for Missing Medical Records for HPSJ

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	48	90.6%
Closed facility.	4	7.5%
Member was not a patient of the practice.	1	1.9%
HPSJ Total	53	100.0%

Table P.3 displays the number and percent of records with a second date of service submitted for HPSJ.

Table P.3—Medical Record Submission Status for Second Date of Service for HPSJ

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
HPSJ	358	197	55.0%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table P.4 displays the medical record omission and encounter data omission rates for HPSJ. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table P.4—Encounter Data Completeness Summary for HPSJ

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

"S" indicates that the numerator for this indicator was less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule's de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	HPSJ Rate	Statewide Rate	Denominator	HPSJ Rate	Statewide Rate
Date of Service	564	11.2%	14.0%	515	2.7% ⁺	3.6%⁺
Diagnosis Code	1,471	14.9%	17.6%	1,270	1.4% ⁺	2.4%⁺
Procedure Code	1,187	16.3%	21.7%	1,054	5.8% ⁺	8.6%⁺
Procedure Code Modifier	497	23.1%	34.0%	392	S ⁺	6.9%⁺
Rendering Provider Name	473	7.2% ⁺	12.8%	514	14.6%	15.4%

Encounter Data Accuracy

Table P.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for HPSJ. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table P.5—Encounter Data Accuracy Summary for HPSJ

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	HPSJ Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,252	99.8% ⁺	99.2%⁺	—
Procedure Code	993	93.9% ⁺	98.2%⁺	Incorrect code (96.7%)
Procedure Code Modifier	382	99.2% ⁺	99.7%⁺	—

Key Data Element	Denominator	HPSJ Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Rendering Provider Name	439	61.0%	64.9%	Incorrect name (93.6%); Illegible name in medical records (6.4%)
All-Element Accuracy	501	35.7%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	501	68.9%	63.4%	—

Appendix Q. Findings for Health Plan of San Mateo (HPSM)

Medical Record Procurement Status

Table Q.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for HPSM.

Table Q.1—Medical Record Procurement Status for HPSM

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
HPSM	411	362	88.1%
Statewide Total	10,939	9,469	86.6%

Table Q.2 lists the reasons for missing medical records for HPSM.

Table Q.2—Reasons for Missing Medical Records for HPSM

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	44	89.8%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	4	8.2%
Closed facility.	1	2.0%
HPSM Total	49	100.0%

Table Q.3 displays the number and percent of records with a second date of service submitted for HPSM.

Table Q.3—Medical Record Submission Status for Second Date of Service for HPSM

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
HPSM	362	198	54.7%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table Q.4 displays the medical record omission and encounter data omission rates for HPSM. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table Q.4—Encounter Data Completeness Summary for HPSM

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	HPSM Rate	Statewide Rate	Denominator	HPSM Rate	Statewide Rate
Date of Service	579	8.8% ⁺	14.0%	539	2.0% ⁺	3.6%⁺
Diagnosis Code	1,699	12.9%	17.6%	1,494	0.9% ⁺	2.4%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	HPSM Rate	Statewide Rate	Denominator	HPSM Rate	Statewide Rate
Procedure Code	1,041	19.5%	21.7%	913	8.2% ⁺	8.6%⁺
Procedure Code Modifier	454	22.9%	34.0%	363	3.6% ⁺	6.9%⁺
Rendering Provider Name	465	4.9% ⁺	12.8%	537	17.7%	15.4%

Encounter Data Accuracy

Table Q.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for HPSM. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table Q.5—Encounter Data Accuracy Summary for HPSM

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	HPSM Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,480	99.5% ⁺	99.2%⁺	—
Procedure Code	838	98.8% ⁺	98.2%⁺	—
Procedure Code Modifier	350	99.7% ⁺	99.7%⁺	—
Rendering Provider Name	442	83.3%	64.9%	Incorrect name (91.9%)
All-Element Accuracy	528	48.5%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	528	67.6%	63.4%	—

Appendix R. Findings for Inland Empire Health Plan (IEHP)

Medical Record Procurement Status

Table R.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for IEHP.

Table R.1—Medical Record Procurement Status for IEHP

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
IEHP	411	311	75.7%
Statewide Total	10,939	9,469	86.6%

Table R.2 lists the reasons for missing medical records for IEHP.

Table R.2—Reasons for Missing Medical Records for IEHP

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Member was a patient of the practice; however, no documentation was available for requested dates of service.	66	66.0%
Member was not a patient of the practice.	28	28.0%
Non-responsive provider or provider did not respond in a timely manner.	2	2.0%
Closed facility.	1	1.0%
Medical records were not located at the facility.	1	1.0%
Other.	1	1.0%
Provider refused to release medical records.	1	1.0%
IEHP Total	100	100.0%

Table R.3 displays the number and percent of records with a second date of service submitted for IEHP.

Table R.3—Medical Record Submission Status for Second Date of Service for IEHP

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
IEHP	311	165	53.1%
Statewial	9,469	5,441	57.5%

Encounter Data Completeness

Table R.4 displays the medical record omission and encounter data omission rates for IEHP. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table R.4—Encounter Data Completeness Summary for IEHP

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	IEHP Rate	Statewide Rate	Denominator	IEHP Rate	Statewide Rate
Date of Service	498	34.5%	14.0%	346	5.8% ⁺	3.6%⁺
Diagnosis Code	1,353	30.2%	17.6%	977	3.4% ⁺	2.4%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	IEHP Rate	Statewide Rate	Denominator	IEHP Rate	Statewide Rate
Procedure Code	1,039	35.3%	21.7%	755	11.0%	8.6%⁺
Procedure Code Modifier	411	52.1%	34.0%	213	7.5% ⁺	6.9%⁺
Rendering Provider Name	436	29.6%	12.8%	343	10.5%	15.4%

Encounter Data Accuracy

Table R.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for IEHP. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table R.5—Encounter Data Accuracy Summary for IEHP

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	IEHP Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	944	99.2% ⁺	99.2%⁺	—
Procedure Code	672	98.7% ⁺	98.2%⁺	—
Procedure Code Modifier	197	100.0% ⁺	99.7%⁺	—
Rendering Provider Name	307	61.9%	64.9%	Incorrect name (87.2%); Illegible name in medical records (12.8%)
All-Element Accuracy	326	37.1%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	326	59.5%	63.4%	—

Appendix S. Findings for Kaiser Permanente North (Kaiser NorCal)

Medical Record Procurement Status

Table S.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for Kaiser NorCal.

Table S.1—Medical Record Procurement Status for Kaiser NorCal

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Kaiser NorCal	411	411	100.0% ⁺
Statewide Total	10,939	9,469	86.6%

Table S.2 displays the number and percent of records with a second date of service submitted for Kaiser NorCal.

Table S.2—Medical Record Submission Status for Second Date of Service for Kaiser NorCal

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
Kaiser NorCal	411	336	81.8%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table S.3 displays the medical record omission and encounter data omission rates for Kaiser NorCal. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS’ electronic encounter data, and the numerator is the number of dates of service identified in DHCS’ electronic encounter data that were not found in the medical records submitted for the study.

- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS’ electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table S.3—Encounter Data Completeness Summary for Kaiser NorCal

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

"S" indicates that the numerator for this indicator was less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule’s de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Kaiser NorCal Rate	Statewide Rate	Denominator	Kaiser NorCal Rate	Statewide Rate
Date of Service	649	S ⁺	14.0%	704	9.1% ⁺	3.6%⁺
Diagnosis Code	1,623	7.3% ⁺	17.6%	1,572	4.3% ⁺	2.4%⁺
Procedure Code	1,068	6.8% ⁺	21.7%	1,093	9.0% ⁺	8.6%⁺
Procedure Code Modifier	396	21.5%	34.0%	332	6.3% ⁺	6.9%⁺
Rendering Provider Name	640	S ⁺	12.8%	703	9.5% ⁺	15.4%

Encounter Data Accuracy

Table S.4 displays the element accuracy rates for each key data element and the all-element accuracy rate for Kaiser NorCal. Encounter data accuracy was evaluated for dates of service that existed in both DHCS’ electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS’ electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table S.4—Encounter Data Accuracy Summary for Kaiser NorCal

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	Kaiser NorCal Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,504	99.9% ⁺	99.2%⁺	—
Procedure Code	995	93.6% ⁺	98.2%⁺	Incorrect code (98.4%)
Procedure Code Modifier	311	100.0% ⁺	99.7%⁺	—
Rendering Provider Name	636	84.4%	64.9%	Incorrect name (100.0%)

Key Data Element	Denominator	Kaiser NorCal Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	640	66.4%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	640	71.6%	63.4%	—

Appendix T. Findings for Kaiser Permanente South (Kaiser SoCal)

Medical Record Procurement Status

Table T.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for Kaiser SoCal.

Table T.1—Medical Record Procurement Status for Kaiser SoCal

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Kaiser SoCal	411	410	99.8% ⁺
Statewide Total	10,939	9,469	86.6%

Table T.2 lists the reasons for missing medical records for Kaiser SoCal.

Table T.2—Reasons for Missing Medical Records for Kaiser SoCal

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Member was a patient of the practice; however, no documentation was available for requested dates of service.	1	100.0%
Kaiser SoCal Total	1	100.0%

Table T.3 displays the number and percent of records with a second date of service submitted for Kaiser SoCal.

Table T.3—Medical Record Submission Status for Second Date of Service for Kaiser SoCal

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
Kaiser SoCal	410	347	84.6%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table T.4 displays the medical record omission and encounter data omission rates for Kaiser SoCal. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table T.4—Encounter Data Completeness Summary for Kaiser SoCal

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Kaiser SoCal Rate	Statewide Rate	Denominator	Kaiser SoCal Rate	Statewide Rate
Date of Service	674	2.5% ⁺	14.0%	707	7.1% ⁺	3.6%⁺
Diagnosis Code	1,776	7.8% ⁺	17.6%	1,697	3.5% ⁺	2.4%⁺
Procedure Code	1,186	5.1% ⁺	21.7%	1,210	7.0% ⁺	8.6%⁺
Procedure Code Modifier	247	11.3%	34.0%	238	8.0% ⁺	6.9%⁺
Rendering Provider Name	644	3.1% ⁺	12.8%	696	10.3%	15.4%

Encounter Data Accuracy

Table T.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for Kaiser SoCal. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table T.5—Encounter Data Accuracy Summary for Kaiser SoCal

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	Kaiser SoCal Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,638	99.8% ⁺	99.2%⁺	—
Procedure Code	1,125	99.5% ⁺	98.2%⁺	—
Procedure Code Modifier	219	100.0% ⁺	99.7%⁺	—

Key Data Element	Denominator	Kaiser SoCal Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Rendering Provider Name	624	87.0%	64.9%	Incorrect name (100.0%)
All-Element Accuracy	657	70.2%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	657	83.9% ⁺	63.4%	—

Appendix U. Findings for Kern Health Systems (KHS)

Medical Record Procurement Status

Table U.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for KHS.

Table U.1—Medical Record Procurement Status for KHS

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
KHS	411	401	97.6%+
Statewide Total	10,939	9,469	86.6%

Table U.2 lists the reasons for missing medical records for KHS.

Table U.2—Reasons for Missing Medical Records for KHS

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Member was a patient of the practice; however, no documentation was available for requested dates of service.	6	60.0%
Member was not a patient of the practice.	2	20.0%
Medical records were not located at the facility.	1	10.0%
Non-responsive provider or provider did not respond in a timely manner.	1	10.0%
KHS Total	10	100.0%

Table U.3 displays the number and percent of records with a second date of service submitted for KHS.

Table U.3—Medical Record Submission Status for Second Date of Service for KHS

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
KHS	401	240	59.9%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table U.4 displays the medical record omission and encounter data omission rates for KHS. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table U.4—Encounter Data Completeness Summary for KHS

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

"S" indicates that the numerator for this indicator was less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule's de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	KHS Rate	Statewide Rate	Denominator	KHS Rate	Statewide Rate
Date of Service	635	2.5%+	14.0%	626	S+	3.6%+
Diagnosis Code	1,442	7.1%+	17.6%	1,354	1.0%+	2.4%+
Procedure Code	1,291	9.2%+	21.7%	1,282	8.6%+	8.6%+
Procedure Code Modifier	597	27.5%	34.0%	455	4.8%+	6.9%+
Rendering Provider Name	598	3.2%+	12.8%	621	6.8%+	15.4%

Encounter Data Accuracy

Table U.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for KHS. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.

- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table U.5—Encounter Data Accuracy Summary for KHS

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	KHS Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,340	99.3% ⁺	99.2%⁺	—
Procedure Code	1,172	99.2% ⁺	98.2%⁺	—
Procedure Code Modifier	433	99.8% ⁺	99.7%⁺	—
Rendering Provider Name	579	70.8%	64.9%	Incorrect name (98.2%)
All-Element Accuracy	619	43.6%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	619	67.2%	63.4%	—

Appendix V. Findings for L.A. Care Health Plan (L.A. Care)

Medical Record Procurement Status

Table V.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for L.A. Care.

Table V.1—Medical Record Procurement Status for L.A. Care

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
L.A. Care	411	348	84.7%
Statewide Total	10,939	9,469	86.6%

Table V.2 lists the reasons for missing medical records for L.A. Care.

Table V.2—Reasons for Missing Medical Records for L.A. Care

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	43	68.3%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	7	11.1%
Other.	6	9.5%
Member was not a patient of the practice.	3	4.8%
Provider refused to release medical records.	3	4.8%
Medical records were not located at the facility.	1	1.6%
L.A. Care Total	63	100.0%

Table V.3 displays the number and percent of records with a second date of service submitted for L.A. Care.

Table V.3—Medical Record Submission Status for Second Date of Service for L.A. Care

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
L.A. Care	348	182	52.3%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table V.4 displays the medical record omission and encounter data omission rates for L.A. Care. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table V.4—Encounter Data Completeness Summary for L.A. Care

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	L.A. Care Rate	Statewide Rate	Denominator	L.A. Care Rate	Statewide Rate
Date of Service	555	15.1%	14.0%	483	2.5% ⁺	3.6%⁺
Diagnosis Code	1,488	20.8%	17.6%	1,206	2.3% ⁺	2.4%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	L.A. Care Rate	Statewide Rate	Denominator	L.A. Care Rate	Statewide Rate
Procedure Code	1,288	26.8%	21.7%	1,000	5.7% ⁺	8.6%⁺
Procedure Code Modifier	460	40.2%	34.0%	299	8.0% ⁺	6.9%⁺
Rendering Provider Name	453	15.0%	12.8%	475	18.9%	15.4%

Encounter Data Accuracy

Table V.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for L.A. Care. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table V.5—Encounter Data Accuracy Summary for L.A. Care

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	L.A. Care Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,178	99.1% ⁺	99.2%⁺	—
Procedure Code	943	97.6% ⁺	98.2%⁺	—
Procedure Code Modifier	275	99.3% ⁺	99.7%⁺	—
Rendering Provider Name	385	74.5%	64.9%	Incorrect name (93.9%)
All-Element Accuracy	471	37.4%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	471	61.8%	63.4%	—

Appendix W. Findings for Molina Healthcare of California (Molina)

Medical Record Procurement Status

Table W.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for Molina.

Table W.1—Medical Record Procurement Status for Molina

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Molina	411	385	93.7% ⁺
Statewide Total	10,939	9,469	86.6%

Table W.2 lists the reasons for missing medical records for Molina.

Table W.2—Reasons for Missing Medical Records for Molina

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	26	100.0%
Molina Total	26	100.0%

Table W.3 displays the number and percent of records with a second date of service submitted for Molina.

Table W.3—Medical Record Submission Status for Second Date of Service for Molina

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
Molina	385	139	36.1%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table W.4 displays the medical record omission and encounter data omission rates for Molina. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table W.4—Encounter Data Completeness Summary for Molina

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

"S" indicates that the numerator for this indicator was less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule's de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Molina Rate	Statewide Rate	Denominator	Molina Rate	Statewide Rate
Date of Service	533	6.4% ⁺	14.0%	501	S ⁺	3.6% ⁺
Diagnosis Code	1,635	13.3%	17.6%	1,433	1.0% ⁺	2.4% ⁺
Procedure Code	1,315	19.1%	21.7%	1,138	6.5% ⁺	8.6% ⁺
Procedure Code Modifier	441	25.2%	34.0%	356	7.3% ⁺	6.9% ⁺
Rendering Provider Name	395	7.6% ⁺	12.8%	496	26.4%	15.4%

Encounter Data Accuracy

Table W.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for Molina. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table W.5—Encounter Data Accuracy Summary for Molina

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	Molina Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,418	99.4% ⁺	99.2%⁺	—
Procedure Code	1,064	98.1% ⁺	98.2%⁺	—
Procedure Code Modifier	330	99.7% ⁺	99.7%⁺	—

Key Data Element	Denominator	Molina Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Rendering Provider Name	365	61.6%	64.9%	Incorrect name (96.4%)
All-Element Accuracy	499	25.3%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	499	59.7%	63.4%	—

Appendix X. Findings for Partnership HealthPlan of California (Partnership)

Medical Record Procurement Status

Table X.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for Partnership.

Table X.1—Medical Record Procurement Status for Partnership

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Partnership	411	404	98.3%+
Statewide Total	10,939	9,469	86.6%

Table X.2 lists the reasons for missing medical records for Partnership.

Table X.2—Reasons for Missing Medical Records for Partnership

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Member was a patient of the practice; however, no documentation was available for requested dates of service.	4	57.1%
Other.	3	42.9%
Partnership Total	7	100.0%

Table X.3 displays the number and percent of records with a second date of service submitted for Partnership.

Table X.3—Medical Record Submission Status for Second Date of Service for Partnership

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
Partnership	404	254	62.9%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table X.4 displays the medical record omission and encounter data omission rates for Partnership. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table X.4—Encounter Data Completeness Summary for Partnership

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Partnership Rate	Statewide Rate	Denominator	Partnership Rate	Statewide Rate
Date of Service	642	1.7% ⁺	14.0%	643	1.9% ⁺	3.6%⁺
Diagnosis Code	1,633	8.6% ⁺	17.6%	1,509	1.1% ⁺	2.4%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Partnership Rate	Statewide Rate	Denominator	Partnership Rate	Statewide Rate
Procedure Code	941	5.3% ⁺	21.7%	1,048	15.0%	8.6%⁺
Procedure Code Modifier	453	12.6%	34.0%	418	5.3% ⁺	6.9%⁺
Rendering Provider Name	609	2.3% ⁺	12.8%	637	6.6% ⁺	15.4%

Encounter Data Accuracy

Table X.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for Partnership. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table X.5—Encounter Data Accuracy Summary for Partnership

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	Partnership Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,492	99.8%+	99.2%+	—
Procedure Code	891	99.3%+	98.2%+	—
Procedure Code Modifier	396	100.0%+	99.7%+	—
Rendering Provider Name	595	60.7%	64.9%	Incorrect name (98.3%)
All-Element Accuracy	631	42.6%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	631	69.6%	63.4%	—

Appendix Y. Findings for San Francisco Health Plan (SFHP)

Medical Record Procurement Status

Table Y.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for SFHP.

Table Y.1—Medical Record Procurement Status for SFHP

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
SFHP	411	365	88.8%
Statewide Total	10,939	9,469	86.6%

Table Y.2 lists the reasons for missing medical records for SFHP.

Table Y.2—Reasons for Missing Medical Records for SFHP

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	35	76.1%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	5	10.9%
Other.	3	6.5%
Member was not a patient of the practice.	2	4.3%
Medical records were not located at the facility.	1	2.2%
SFHP Total	46	100.0%

Table Y.3 displays the number and percent of records with a second date of service submitted for SFHP.

Table Y.3—Medical Record Submission Status for Second Date of Service for SFHP

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
SFHP	365	206	56.4%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table Y.4 displays the medical record omission and encounter data omission rates for SFHP. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table Y.4—Encounter Data Completeness Summary for SFHP

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	SFHP Rate	Statewide Rate	Denominator	SFHP Rate	Statewide Rate
Date of Service	588	10.0%	14.0%	553	4.3% ⁺	3.6%⁺
Diagnosis Code	1,433	13.7%	17.6%	1,280	3.4% ⁺	2.4%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	SFHP Rate	Statewide Rate	Denominator	SFHP Rate	Statewide Rate
Procedure Code	981	20.8%	21.7%	833	6.7%+	8.6%+
Procedure Code Modifier	474	25.1%	34.0%	373	4.8%+	6.9%+
Rendering Provider Name	508	6.9%+	12.8%	550	14.0%	15.4%

Encounter Data Accuracy

Table Y.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for SFHP. Encounter data accuracy was evaluated for dates of service that existed in both DHCS’ electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS’ electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table Y.5—Encounter Data Accuracy Summary for SFHP

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	SFHP Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,237	99.8% ⁺	99.2%⁺	—
Procedure Code	777	98.8% ⁺	98.2%⁺	—
Procedure Code Modifier	355	100.0% ⁺	99.7%⁺	—
Rendering Provider Name	473	88.6%	64.9%	Incorrect name (90.7%)
All-Element Accuracy	529	62.0%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	529	74.3%	63.4%	—

Appendix Z. Findings for Santa Clara Family Health Plan (SCFHP)

Medical Record Procurement Status

Table Z.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for SCFHP.

Table Z.1—Medical Record Procurement Status for SCFHP

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
SCFHP	411	390	94.9% ⁺
Statewide Total	10,939	9,469	86.6%

Table Z.2 lists the reasons for missing medical records for SCFHP.

Table Z.2—Reasons for Missing Medical Records for SCFHP

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Member was a patient of the practice; however, no documentation was available for requested dates of service.	13	61.9%
Non-responsive provider or provider did not respond in a timely manner.	4	19.0%
Other.	4	19.0%
SCFHP Total	21	100.0%

Table Z.3 displays the number and percent of records with a second date of service submitted for SCFHP.

Table Z.3—Medical Record Submission Status for Second Date of Service for SCFHP

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
SCFHP	390	273	70.0%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table Z.4 displays the medical record omission and encounter data omission rates for SCFHP. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table Z.4—Encounter Data Completeness Summary for SCFHP

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	SCFHP Rate	Statewide Rate	Denominator	SCFHP Rate	Statewide Rate
Date of Service	603	7.6% ⁺	14.0%	593	6.1% ⁺	3.6% ⁺
Diagnosis Code	1,343	12.4%	17.6%	1,218	3.4% ⁺	2.4% ⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	SCFHP Rate	Statewide Rate	Denominator	SCFHP Rate	Statewide Rate
Procedure Code	1,058	19.0%	21.7%	993	13.7%	8.6%⁺
Procedure Code Modifier	468	36.5%	34.0%	317	6.3% ⁺	6.9%⁺
Rendering Provider Name	515	9.7% ⁺	12.8%	585	20.5%	15.4%

Encounter Data Accuracy

Table Z.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for SCFHP. Encounter data accuracy was evaluated for dates of service that existed in both DHCS’ electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS’ electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table Z.5—Encounter Data Accuracy Summary for SCFHP

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	SCFHP Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,176	99.4%+	99.2%+	—
Procedure Code	857	98.4%+	98.2%+	—
Procedure Code Modifier	297	100.0%+	99.7%+	—
Rendering Provider Name	465	80.4%	64.9%	Incorrect name (93.4%)
All-Element Accuracy	557	45.6%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	557	69.5%	63.4%	—

Appendix AA. Findings for SCAN Health Plan (SCAN)

Medical Record Procurement Status

Table AA.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for SCAN.

Table AA.1—Medical Record Procurement Status for SCAN

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
SCAN	411	321	78.1%
Statewide Total	10,939	9,469	86.6%

Table AA.2 lists the reasons for missing medical records for SCAN.

Table AA.2—Reasons for Missing Medical Records for SCAN

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	79	87.8%
Medical records were not located at the facility.	11	12.2%
SCAN Total	90	100.0%

Table AA.3 displays the number and percent of records with a second date of service submitted for SCAN.

Table AA.3—Medical Record Submission Status for Second Date of Service for SCAN

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
SCAN	321	203	63.2%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table AA.4 displays the medical record omission and encounter data omission rates for SCAN. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS' electronic encounter data, and the numerator is the number of dates of service identified in DHCS' electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS' electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table AA.4—Encounter Data Completeness Summary for SCAN

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

"S" indicates that the numerator for this indicator was less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule's de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	SCAN Rate	Statewide Rate	Denominator	SCAN Rate	Statewide Rate
Date of Service	595	16.0%	14.0%	506	S ⁺	3.6%⁺
Diagnosis Code	2,478	22.5%	17.6%	1,938	0.9% ⁺	2.4%⁺
Procedure Code	912	23.1%	21.7%	723	3.0% ⁺	8.6%⁺
Procedure Code Modifier	181	32.6%	34.0%	140	12.9%	6.9%⁺
Rendering Provider Name	438	15.1%	12.8%	503	26.0%	15.4%

Encounter Data Accuracy

Table AA.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for SCAN. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table AA.5—Encounter Data Accuracy Summary for SCAN

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	SCAN Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,920	99.1% ⁺	99.2%⁺	—
Procedure Code	701	97.9% ⁺	98.2%⁺	—
Procedure Code Modifier	122	100.0% ⁺	99.7%⁺	—

Key Data Element	Denominator	SCAN Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Rendering Provider Name	372	79.8%	64.9%	Incorrect name (92.0%)
All-Element Accuracy	500	37.8%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	500	64.8%	63.4%	—

Appendix BB. Findings for UnitedHealthcare Community Plan (UHC)

Medical Record Procurement Status

Table BB.1 shows the medical record procurement status (i.e., number of medical records submitted for either the sampled date of service or the second date of service) for UHC.

Table BB.1—Medical Record Procurement Status for UHC

Note: Medical record procurement rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
UHC	411	166	40.4%
Statewide Total	10,939	9,469	86.6%

Table BB.2 lists the reasons for missing medical records for UHC.

Table BB.2—Reasons for Missing Medical Records for UHC

Note: Total may not equal 100 percent due to rounding.

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	196	80.0%
Medical records were not located at the facility.	25	10.2%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	22	9.0%
Other.	1	0.4%
Provider refused to release medical records.	1	0.4%
UHC Total	245	100.0%

Table BB.3 displays the number and percent of records with a second date of service submitted for UHC.

Table BB.3—Medical Record Submission Status for Second Date of Service for UHC

MCP/PSP	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
UHC	166	71	42.8%
Statewide Total	9,469	5,441	57.5%

Encounter Data Completeness

Table BB.4 displays the medical record omission and encounter data omission rates for UHC. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Medical record omission rate: The denominator for the medical record omission rate is the number of dates of service identified in DHCS’ electronic encounter data, and the numerator is the number of dates of service identified in DHCS’ electronic encounter data that were not found in the medical records submitted for the study.
- ◆ Encounter data omission rate: The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service from the medical records that were not found in DHCS’ electronic encounter data.

HSAG evaluated the medical record omission rate and the encounter data omission rate using the date of service selected by HSAG and an additional date of service selected by the provider, if one was available. For both rates, lower values indicate better performance.

Table BB.4—Encounter Data Completeness Summary for UHC

Note: Omission rates of less than 10 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standards.

"S" indicates that the numerator for this indicator was less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule’s de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	UHC Rate	Statewide Rate	Denominator	UHC Rate	Statewide Rate
Date of Service	457	55.8%	14.0%	206	S ⁺	3.6%⁺

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	UHC Rate	Statewide Rate	Denominator	UHC Rate	Statewide Rate
Diagnosis Code	1,203	66.0%	17.6%	414	S ⁺	2.4%⁺
Procedure Code	885	72.4%	21.7%	271	10.0%	8.6%⁺
Procedure Code Modifier	355	75.5%	34.0%	90	S ⁺	6.9%⁺
Rendering Provider Name	327	58.7%	12.8%	201	32.8%	15.4%

Encounter Data Accuracy

Table BB.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for UHC. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the medical records. In addition, both data sources had values for the data element *Diagnosis Code*.
- ◆ Numerator: The numerator for the accuracy rate is the number of diagnosis codes in the denominator that were correctly coded based on the medical records submitted for the study.

The all-element accuracy rate denotes the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.

Table BB.5—Encounter Data Accuracy Summary for UHC

Note: Data element accuracy rates greater than 90 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard. The all-element accuracy rates greater than 80 percent are shaded in gray and denoted with a cross (+) to show that they met the EDV study standard.

— Indicates that the error type analysis was not applicable to a given data element, or the denominator for the error rate was too small (i.e., less than 30) to report a valid rate and/or the numerator for the error rate was less than 11.

¹This data element was calculated based on the results from the *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier* data elements.

Key Data Element	Denominator	UHC Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	409	99.8%+	99.2%+	—
Procedure Code	244	97.1%+	98.2%+	—
Procedure Code Modifier	87	100.0%+	99.7%+	—
Rendering Provider Name	135	71.1%	64.9%	Incorrect name (100.0%)
All-Element Accuracy	202	22.8%	35.8%	—
All-Element Accuracy Excluding Rendering Provider Name ¹	202	51.5%	63.4%	—