2023–24 ENCOUNTER DATA VALIDATION STUDY REPORT

March 2025

DHCS
CALIFORNIA DEPARTMENT OF
HEALTH CARE SERVICES

HSAG HEALTH SERVICES
ADVISORY GROUP

TABLE OF CONTENTS

Table of Figures

Table of Tables

COMMONLY USED ABBREVIATIONS AND ACRONYMS

Following is a list of abbreviations and acronyms used throughout this report.

- » §—Section
- » ACU—data element accuracy rate
- » CA—California
- » CFR—Code of Federal Regulations
- » CHIP—Children's Health Insurance Program
- » CSA—California State Auditor
- » DAMT—Data Accuracy Measure Threshold
- » DBA—doing business as
- » DCMT—Data Completeness Measure Threshold
- » DDG—DHCS Data De-Identification Guidelines
- » DHCS—California Department of Health Care Services
- » DME—durable medical equipment
- » E&M—evaluation and management
- » EDO—encounter data omission rate
- » EDV—encounter data validation
- » FI—Fiscal Intermediary
- » HCP—Health Care Plan
- » 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
- » MRO—medical record omission rate
- » NCCI—National Correct Coding Initiative
- » NPI—national provider identifier
- » PSP—population-specific health plan
- » QMED—quality measures for encounter data

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 program (MCMC) managed care health plans (MCPs) and population-specific health plans (PSPs) (collectively referred to as "plans") 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 MCMC.

In accordance with Title 42 Code of Federal Regulations (CFR) Section (§) 438.358(c)(1), DHCS contracts with Health Services Advisory Group, Inc. (HSAG), to conduct encounter data validation (EDV) studies. DHCS agreed to conduct the EDV study annually in response to findings and recommendations from California State Auditor (CSA) audit 2018-111 (C18-16), *Department of Health Care Services: Millions of Children in Medi-Cal Are Not Receiving Preventive Health Services.*[1] For contract year 2023–24, the goal of the EDV study was to continue to examine the completeness and accuracy of the professional encounter data submitted to DHCS by the plans through a review of medical records. HSAG assessed the encounter data submitted by 21 MCPs and two PSPs.[2]

Methodology

Medical and clinical records are considered the "gold standard" for documenting access to and quality of health care services. During contract year 2023–24, HSAG evaluated MCMC encounter data completeness and accuracy via a review of medical records for physician services rendered between January 1, 2022, and December 31, 2022. 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?

---

[1] Auditor of the State of California. Department of Health Care Services: Millions of Children in Medi-Cal Are Not Receiving Preventive Health Services. March 2019. Available at: Report 2018-111 (ca.gov). Accessed on: Oct 23, 2024.

[2] Refer to Appendix A for a list of plans included in this study.

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.

» Assisted the plans 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 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—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	8.2%[+]	3.3%[+]	—
Diagnosis Code	10.7%	1.8%[+]	99.7%[+]
Procedure Code	17.3%	8.3%[+]	98.6%[+]
Procedure Code Modifier	23.5%	4.1%[+]	99.9%[+]

Key Data Elements	Medical Record Omission Rate	Encounter Data Omission Rate	Element Accuracy Rate
Rendering Provider Name	9.6%[+]	3.4%[+]	64.2%
All-Element Accuracy	—	—	45.5%
All-Element Accuracy Excluding Rendering Provider Name*	—	—	70.5%

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.

» Two data elements (*Date of Service* and *Rendering Provider Name)* of the five assessed for this study had medical record omission rates (services located in the encounter data but not supported in the medical records) of less than 10 percent, and therefore met the EDV study standard. The remaining three data elements were moderately supported by the documentation in the members' medical records with medical record omission rates ranging from 10.7 percent (*Diagnosis Code*) to 23.5 percent (*Procedure Code Modifier*).

» All five data elements shown in Table 1 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.

» Two of the five data elements (*Date of Service* and *Rendering Provider Name)* met the EDV 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 (*Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) had accuracy rates greater than 90 percent, which met the EDV study standard. Statewide, 64.2 percent of rendering provider names identified in the electronic encounter data were supported by medical record documentation.

» Nearly half of the dates of service (45.5 percent) present in both data sources contained matching values for all four key data elements (*Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Rendering Provider Name*). This accuracy rate increased to 70.5 percent when the matched values included only three data elements—*Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*.

When comparing the 2023–24 results to the 2022–23 EDV study, the number of statewide rates meeting the EDV study standards remained the same.

Recommendations

Similar to the 2022–23 EDV study, results from the 2023–24 study show continued opportunities for improvement. DHCS should continue to work with the plans to identify the factors affecting data completeness and accuracy and determine ways to improve study results that did not meet the EDV study standards.

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 plans to submit high-quality encounter data. Completeness and accuracy of these data are essential to the success of DHCS' overall management and oversight of MCMC.

In keeping with 42 CFR §438.358(c)(1), DHCS contracts with HSAG to conduct EDV studies. In addition to the procedures and quality assurance protocols DHCS maintains internally, according to §438.242, to ensure that enrollee encounter data submitted by the plans are a complete and accurate representation of the services provided to Medi-Cal members under the plans' contracts with the State, the EDV studies HSAG conducts are designed to meet the periodicity schedule required in §438.602(e) for an independent audit of the accuracy, truthfulness, and completeness of encounter data submitted by, or on behalf of, each plan. Note that §438.602(e) originated in the 2016 CHIP and Medicaid Final Rule and is effective for Medicaid managed care contracts started on or after July 1, 2017.[3]

Additionally, DHCS agreed to conduct the EDV study annually in response to findings and recommendations from CSA audit 2018-111 (C18-16), *Department of Health Care Services: Millions of Children in Medi-Cal Are Not Receiving Preventive Health Services*.[4]

For contract year 2023–24, the goal of the EDV study was to continue to examine the completeness and accuracy of the professional encounter data submitted to DHCS by the plans through a review of medical records. HSAG assessed the encounter data submitted by 21 MCPs and two PSPs.[5]

---

[3] Medicaid and Children's Health Insurance Program (CHIP) Programs; Medicaid Managed Care, CHIP Delivered in Managed Care, and Revisions Related to Third Party Liability (CHIP and Medicaid Final Rule), (May 6, 2016) Federal Register Document Citation No. 81 FR 27497.

[4] Auditor of the State of California. Department of Health Care Services: Millions of Children in Medi-Cal Are Not Receiving Preventive Health Services. March 2019. Available at: Report 2018-111 (ca.gov). Accessed on: Oct 23, 2024.

[5] Refer to Appendix A for a list of plans included in this study.

Methodology

Medical and clinical records are considered the "gold standard" for documenting access to and the quality of health care services. For contract year 2023–24, HSAG evaluated MCMC encounter data completeness and accuracy via a review of medical records for physician services rendered between January 1, 2022, and December 31, 2022. This study answered the following question:

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

Of note, DHCS included the rendering provider names in the professional encounter data by linking the rendering national provider identifier (NPI) in the encounter data to the provider data in DHCS' data warehouse. Also, as rendering provider names may not be legibly documented in members' medical records, results for the data element *Rendering Provider Name* should be interpreted with caution.

Table 2—Key Data Elements for Medical Record Review

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

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

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

 » Assisted the plans with the procurement of medical records from providers, as appropriate.

 » Reviewed medical records against the 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 plan during the study period (i.e., between January 1, 2022, and December 31, 2022), 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 population[6] 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 3.

Table 3—Criteria for Physician Visits Included in the Study

*The 274 provider data refer to the provider network data that plans submitted to DHCS using the X12 Healthcare Provider Information Transaction Set (274).

**The Fiscal Intermediary (FI) Provider Type descriptions are associated with the billing provider.

Data Element	Criteria
Criteria for Claim Type	
Claim Type	Claim Type = "4" (Medical/Physician) or other encounters submitted to DHCS in the 837 professional format
Program Code	Program Code = "02" (i.e., exclude records with Program Code = "09" which indicates fee-for-service visits)
Criteria for Providers	
FI Provider Type**	Audiologists
	Certified nurse midwife
	Certified nurse practitioner
	Community clinic
	County clinics not associated with hospital
	Group certified nurse practitioner

---

[6] SCAN Health Plan members are exceptions to this exclusion since all SCAN members are duals (i.e., have Medi-Cal and Medicare coverage).

Data Element	Criteria
	Group optometrists
	Home health agencies
	Licensed clinical social worker—group
	Licensed clinical social worker—individual
	Licensed professional clinical counselor—group
	Licensed professional clinical counselor—individual
	Licensed professionals
	Marriage and family therapist—group
	Marriage and family therapist—individual
	Multispecialty clinic
	Occupational therapists
	Optometrists
	Otherwise undesignated clinic
	Physical therapists
	Physicians
	Physicians group
	Podiatrists
	Psychologists
	Rural health clinic or federally qualified health center
	Speech therapists
	Unknown when billing provider is Kaiser for Kaiser Permanente, and Kaiser Permanente's plan partners (i.e., AAH, CalOptima, CCHP, GCHP, HPSJ—San Joaquin, HPSM, IEHP, KHS, L.A. Care, Partnership—Southeast, Partnership—Southwest, SCFHP, and SFHP). Please see Appendix A for full plan names.

Data Element	Criteria
	OR
Primary care providers based on the 274 provider data*	PROV_PRIMARYCARE_PHYSICIAN = "true" and LICENSURE_TYPE is "MD" or "NPA"
	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
	Telehealth provided in patient's home
	Telehealth provided other than in patient's home
	Urgent care facility
Criteria for Procedure Code	
Procedure Code	If all detail lines for a visit had one of 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 (e.g., durable medical equipment [DME], dental, vision, and ancillary providers).

Data Element	Criteria
	» A procedure code starting with "B," "E," "D," "K," or "V"
	» Procedure codes between A0021 and A0999 (i.e., codes for transportation services)
	» Procedure codes between A4206 and A9999 (i.e., codes for medical and surgical supplies, miscellaneous, and investigational)
	» Procedure codes between T4521 and T4544 (i.e., codes for incontinence supplies)
	» Procedure codes between L0112 and L4631 (i.e., codes for orthotic devices and procedures)
	» Procedure codes between L5000 and L9900 (i.e., codes for prosthetic devices and procedures)
	» Procedure codes with "F" as the fifth digit
	» Procedure codes related to blood pressure quality measures (i.e., G8476, G8477, G8752, G8753, G8754, G8755, G8783, G8785, G8950, and G9273)

Sampling Strategy

HSAG used a two-stage technique to select samples based on the member enrollment and 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 members[7] from the eligible population for each of the 23 participating plans. Then, for each selected sampled member, HSAG used the SURVEYSELECT procedure in SAS®[8] to randomly select one

---

[7] 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.

[8] 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.

physician visit[9] that occurred in the study period (i.e., between January 1, 2022, and December 31, 2022). Additionally, to evaluate whether any of the dates of service were omitted from DHCS' encounter data, HSAG reviewed a second date of service rendered by the same billing or rendering provider (i.e., based on billing or rendering NPI) during the review period. The providers selected the second date of service, which was within the study period and closest to the sampled date of service, from the medical records for each sampled member. If a sampled member had no second visit with the same provider during the review period, HSAG evaluated only one date of service for that member.

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

Medical Record Procurement

Once the methodology was finalized, HSAG met with the plans in early December 2023 to introduce the study and inform the plans about the medical record procurement process. During the meeting, HSAG also shared example documents such as a sample list, a template of a letter sent to providers, and medical record tracking sheets to assist the plans with preparing for medical record procurement. Also, HSAG developed a process to ensure that all plans acknowledge receipt of information about the study and subsequent milestones for the medical record procurement process.

HSAG submitted the final sample lists to the plans on January 31, 2024. Upon receiving the final sample lists, the plans began procuring the sampled members' medical records from contracted providers for services that occurred on the sampled date of service and the second date of service, if available. The plans subsequently submitted the documentation to HSAG. To improve the procurement rate, HSAG conducted another technical assistance meeting with the participating plans to review the EDV project and the procurement protocols in early February

---

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

2024. The plans 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, HSAG worked with the plans to answer questions and monitor the number of medical records submitted. HSAG provided two intermediate submission updates during the procurement period (e.g., one update on March 18, 2024, and one update on April 18, 2024), and a final submission status update following completion of the procurement period in May 2024.

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 that includes recurring training as well as policies and procedures that address physical security, electronic security, and day-to-day operations.

Review of Medical Records

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

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 validate the key data elements listed in Table 2. 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 reviewer 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 reviewer selected the date closest to the sampled date of service to validate. If the second date of

service was missing from the DHCS' encounter data, 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 4 displays the study indicators used to report the medical record review results.

Table 4—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 but not found in the members' medical records. HSAG calculated the study indicator for each key data element listed in Table 2.	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 were 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
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 calculated the study indicator for each key data element listed in Table 2.	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).	Number of key data elements (e.g., *Date of Service*) in the denominator but not found in DHCS' data warehouse.
Diagnosis Code Accuracy: Percentage of diagnosis codes supported by the medical records and the associated reasons for inaccuracy including specificity errors and inaccurate codes.	Total number of diagnosis codes that met the following two criteria: » For dates of service (i.e., including both the sample dates of service and the second dates of service) that existed in both DHCS' encounter data and the medical records. » Diagnosis codes present for both DHCS' encounter data and the medical records.	Number of diagnosis codes supported by the medical records.
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.	Total number of procedure codes that met the following two criteria: » For dates of service (i.e., including both the sample dates of service and the second dates of service) that existed in both DHCS'	Number of procedure codes supported by the medical records.

Study Indicator	Denominator	Numerator
	encounter data and the medical records. » Procedure codes present for both DHCS' encounter data and the medical records.	
Procedure Code Modifier Accuracy: Percentage of procedure code modifiers supported by the medical records.	Total number of procedure code modifiers that met the following two criteria: » For dates of service (i.e., including both the sample dates of service and the second dates of service) that existed in both DHCS' encounter data and the medical records. » Procedure code modifiers present for both DHCS' encounter data and the medical records.	Number of procedure code modifiers supported by the medical records.
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.	Total number of rendering provider names that met the following two criteria: » For dates of service (i.e., including both the sample dates of service and the second dates of service) that existed in both DHCS' data	Number of rendering provider names supported by the medical records. If one rendering provider name from DHCS' data approximately matched the name in the medical record (e.g., a typographical error or "Rob Smith" versus "Robert Smith"), HSAG

Study Indicator	Denominator	Numerator
	warehouse and the medical records. » Rendering provider names present for both DHCS' data warehouse and the medical records.	considered the names from both sources a match.
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.	Total number of dates of service (i.e., including both the sample dates of service and second dates of service) that were 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 except the *Rendering Provider Name* field.	Total number of dates of service (i.e., including both the sample dates of service and second dates of service) that were 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 the Quality Measures for Encounter Data[10] (QMED) to evaluate the plans' performance. Table 5 shows the standards for each study indicator.

---

[10] California Department of Health Care Services, Managed Care Quality and Monitoring Division. *Quality Measures for Encounter Data—Version 1.1*; August 8, 2018. Available at: https://www.dhcs.ca.gov/formsandpubs/Documents/MMCDAPLsandPolicyLetters/APL2014/DHCSQualityMeasuresforEncounterData.pdf. Accessed on: Oct 23, 2024.

Table 5—Standards from Quality Measures for Encounter Data

* 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 QMED for measure *DCMT.003*.

** 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*.

Study Indicator	Standards
Medical record procurement rate	More than 90 percent*
Second date of service submission rate	Informational only
Medical record omission rate	Less than 10 percent*
Encounter data omission rate	Less than 10 percent*
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 is between one and 10, this report displays "S" for the numerator and rate. HSAG suppresses displaying the rate in this report to satisfy the DHCS Data De-Identification Guidelines (DDG) V2.2 de-identification standard.

MEDICAL RECORD REVIEW RESULTS

Medical Record Procurement Status

After receiving their sample files, the plans were responsible for procuring the medical records from their contracted providers. Table 6 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 plan. For ease of reference, HSAG uses plan abbreviations in this report. The names and abbreviations for all plans included in the study are shown in Appendix A.

Table 6—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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
AAH	411	345	83.9%
AHF	332	308	92.8%+
Anthem Blue Cross	411	393	95.6%+
Blue Shield Promise	411	392	95.4%+
CCAH	411	406	98.8%+
CCHP	411	399	97.1%+
CHG	411	354	86.1%
CalOptima	411	398	96.8%+
CalViva	411	397	96.6%+
CenCal	411	386	93.9%+
GCHP	411	171	41.6%
HPSJ	411	380	92.5%+
HPSM	411	401	97.6%+
Health Net	411	387	94.2%+
IEHP	411	402	97.8%+
KHS	411	405	98.5%+

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Kaiser	411	408	99.3%[+]
L.A. Care	411	339	82.5%
Molina	411	374	91.0%[+]
Partnership	411	397	96.6%[+]
SCAN	411	321	78.1%
SCFHP	411	378	92.0%[+]
SFHP	411	350	85.2%
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Overall, the statewide medical record submission rate was 90.6 percent. A total of 23 plans submitted medical records, and 17 plans had a submission rate greater than the EDV standard of 90 percent. One plan (GCHP) had a submission rate lower than 50.0 percent. The submission rates ranged from 41.6 percent (GCHP) to 99.3 percent (Kaiser).

Cases without medical records contributed to higher (i.e., poorer) medical record omission rates shown throughout the report. For example, if medical records were not submitted for a sampled date of service, all data elements (*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, the plans 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 7 lists the reasons for missing medical records at the statewide level, as well as the count and percent for each reason.

Table 7—Reasons for Missing Medical Records

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	693	78.5%

Non-Submission Reason	Count	Percent
Member was a patient of the practice; however, no documentation was available for requested dates of service.	61	6.9%
Member was not a patient of the practice.	43	4.9%
Other.	41	4.6%
Medical records were not located at the facility.	20	2.3%
Provider refused to release medical records.	13	1.5%
Closed facility.	12	1.4%
Total	**883**	**100.0%**

Table 7 shows the top reason for missing medical records was "Non-responsive provider or provider did not respond in a timely manner," accounting for 78.5 percent of the medical records that were not submitted. This could indicate that the plans have incorrect provider information or that the contacted providers were unaware of the submission requirements or submission deadline. In addition, this same reason accounted for 99.6 percent of the non-submissions for GCHP, which had the lowest medical record submission rate among the plans. 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. The third most common non-submission reason was "Member was not a patient of the practice." The two plans that contributed the most cases to this reason were Blue Shield Promise and SFHP, with nine cases and eight cases, respectively. Again, this could indicate inconsistencies between the information stored in the provider's office versus DHCS' encounter data.

Table 8 displays the number and percent of cases with one additional date of service selected and submitted for the study.

Table 8—Medical Record Submission Status for Second Date of Service

Plan	Number of Records Submitted	Number of Records with Second Date of Service	Percentage
AAH	345	252	73.0%
AHF	308	227	73.7%
Anthem Blue Cross	393	251	63.9%
Blue Shield Promise	392	251	64.0%
CCAH	406	241	59.4%
CCHP	399	253	63.4%
CHG	354	213	60.2%
CalOptima	398	251	63.1%
CalViva	397	178	44.8%
CenCal	386	201	52.1%
GCHP	171	101	59.1%
HPSJ	380	197	51.8%
HPSM	401	180	44.9%
Health Net	387	198	51.2%
IEHP	402	140	34.8%
KHS	405	231	57.0%
Kaiser	408	356	87.3%
L.A. Care	339	208	61.4%
Molina	374	210	56.1%
Partnership	397	179	45.1%
SCAN	321	147	45.8%
SCFHP	378	178	47.1%

Plan	Number of Records Submitted	Number of Records with Second Date of Service	Percentage
SFHP	350	213	60.9%
Statewide Total	**8,491**	**4,856**	**57.2%**

Overall, 57.2 percent of procured medical records contained a second date of service. The individual plan submission rates ranged from 34.8 percent (IEHP) to 87.3 percent (Kaiser). 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, IEHP's relatively low submission rate (34.8 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 plan 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, plans, and DHCS.

HSAG evaluated the medical record omission rates and the encounter data omission rates for each plan 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 1 displays the statewide and plan-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 1—Medical Record Omission and Encounter Data Omission for Date of Service

Note: Omission rates of less than 10 percent indicate that the plan met the EDV study standard. "S" indicates that the numerator for this indicator was between one and 10; therefore, this report suppresses the rate to satisfy the DHCS DDG V2.2 de-identification standard.

Medical Record Omission and Encounter Data Omission for Date of Service

Plan	Medical Record Omission	Encounter Data Omission
AAH	12.9%	4.1%
AHF	6.1%	3.9%
Anthem Blue Cross	3.7%	4.7%
Blue Shield Promise	3.9%	4.4%
CCAH	S	S
CCHP	3.9%	5.8%
CHG	12.7%	3.8%
CalOptima	2.8%	5.9%
CalViva	3.8%	2.2%
CenCal	5.1%	S
GCHP	51.4%	S
HPSJ	7.1%	3.0%
HPSM	2.5%	S
Health Net	5.5%	S
IEHP	3.6%	3.0%
KHS	S	S
Kaiser	3.1%	6.5%
L.A. Care	17.9%	4.5%
Molina	6.5%	S
Partnership	3.5%	S
SCAN	23.2%	S
SCFHP	6.7%	3.9%
SFHP	16.1%	3.8%
Statewide Rate	8.2%	3.3%

Key findings for the medical record omission rates:

» Statewide, 8.2 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 met the EDV study standard shown in Table 5.

» The medical record omission rates ranged from 2.5 percent (HPSM) to 51.4 percent (GCHP) among non-suppressed rates.

» Overall, 17 of the 23 plans (73.9 percent) met the EDV study standard.

» Of the six plans 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, a plan 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, 3.3 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 5.

» All plans met the study standard. The encounter data omission rates ranged from 2.2 percent (CalViva) to 6.5 percent (Kaiser) 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 8 shows that IEHP had a relatively low submission rate (34.8 percent) for the second date of service. Therefore, all IEHP encounter data omission rates in the report should be interpreted with caution.

Diagnosis Code Completeness

Figure 2 displays the statewide and plan-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 2—Medical Record Omission and Encounter Data Omission for Diagnosis Code

Note: Omission rates of less than 10 percent indicate that the plan met the EDV study standard.

"S" indicates that the numerator for this indicator was between one and 10; therefore, this report suppresses the rate to satisfy the DHCS DDG V2.2 de-identification standard.

Medical Record Omission and Encounter Data Omission for Diagnosis Code
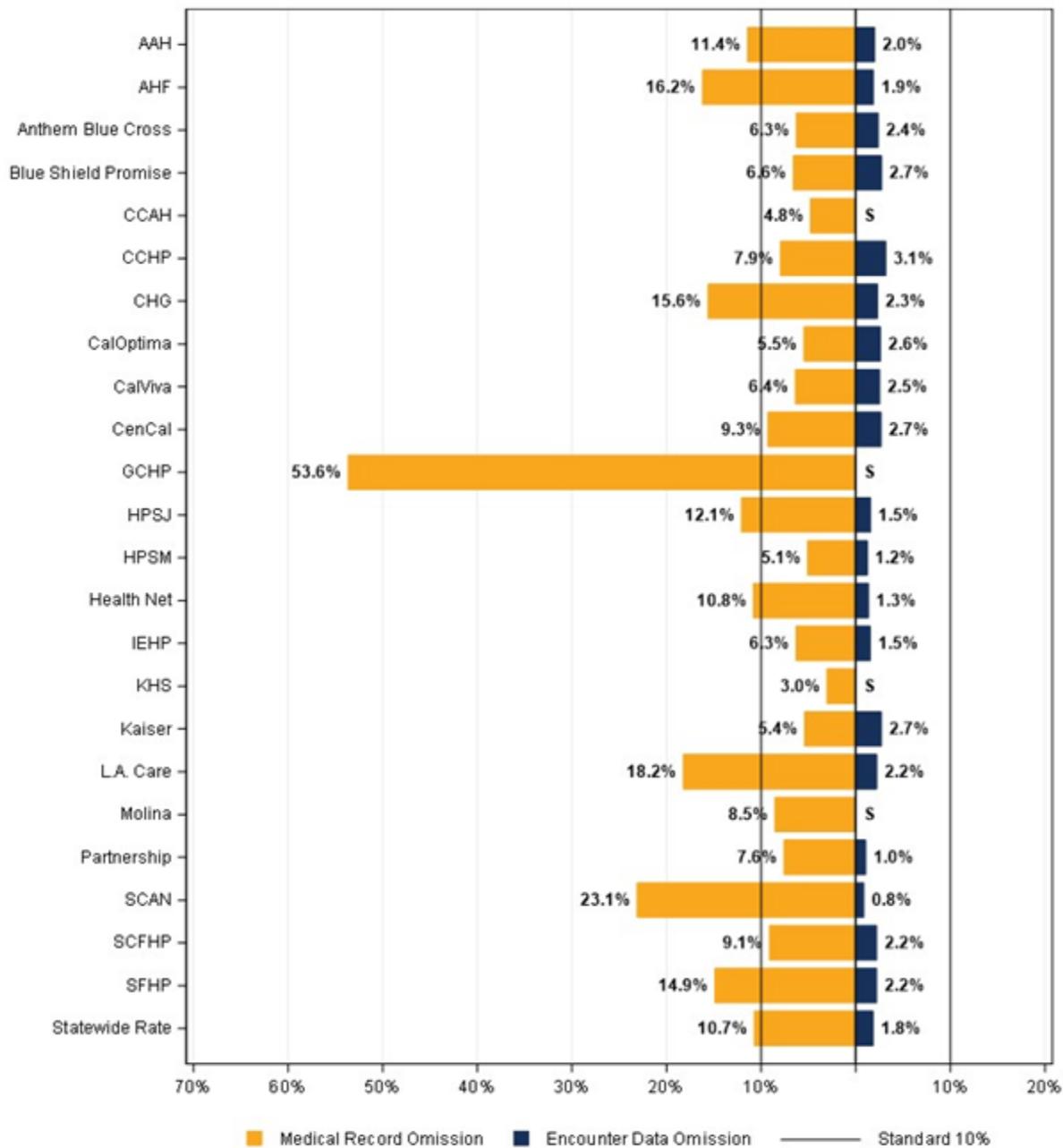
Key findings for the medical record omission rates:

» Statewide, 10.7 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 59.6 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, 58.5 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 dominant sub-category was for "Persons encountering health services for examinations," accounting for approximately 33.0 percent of the "Z" codes.

» The medical record omission rates ranged from 3.0 percent (KHS) to 53.6 percent (GCHP).

» Overall, 14 of the 23 plans (60.9 percent) met the EDV study standard.

Key findings for the encounter data omission rate:

» Statewide, 1.8 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 0.8 percent (SCAN) to 3.1 percent (CCHP) among non-suppressed rates.

» All plans met the EDV study standard.

Procedure Code Completeness

Figure 3 displays the statewide and plan-level medical record omission and encounter data omission rates for the *Procedure Code* data element. HSAG conducted the analyses at the procedure code level.

Figure 3—Medical Record Omission and Encounter Data Omission for Procedure Code

Note: Omission rates of less than 10 percent indicate that the plan met the EDV study standard.

Medical Record Omission and Encounter Data Omission for Procedure Code

Plan	Medical Record Omission	Encounter Data Omission
AAH	19.3%	11.8%
AHF	14.9%	4.7%
Anthem Blue Cross	11.6%	8.7%
Blue Shield Promise	17.9%	5.2%
CCAH	6.0%	8.6%
CCHP	12.5%	7.8%
CHG	23.6%	7.2%
CalOptima	14.7%	11.8%
CalViva	10.0%	11.9%
CenCal	8.4%	6.7%
GCHP	56.9%	3.6%
HPSJ	15.1%	3.2%
HPSM	9.5%	4.5%
Health Net	19.1%	6.4%
IEHP	13.0%	7.3%
KHS	6.0%	7.0%
Kaiser	9.3%	7.1%
L.A Care	26.7%	8.2%
Molina	15.0%	3.7%
Partnership	10.7%	15.2%
SCAN	36.9%	2.6%
SCFHP	15.9%	13.4%
SFHP	31.0%	7.4%
Statewide Rate	17.3%	8.3%

Legend: Medical Record Omission, Encounter Data Omission, Standard 10%
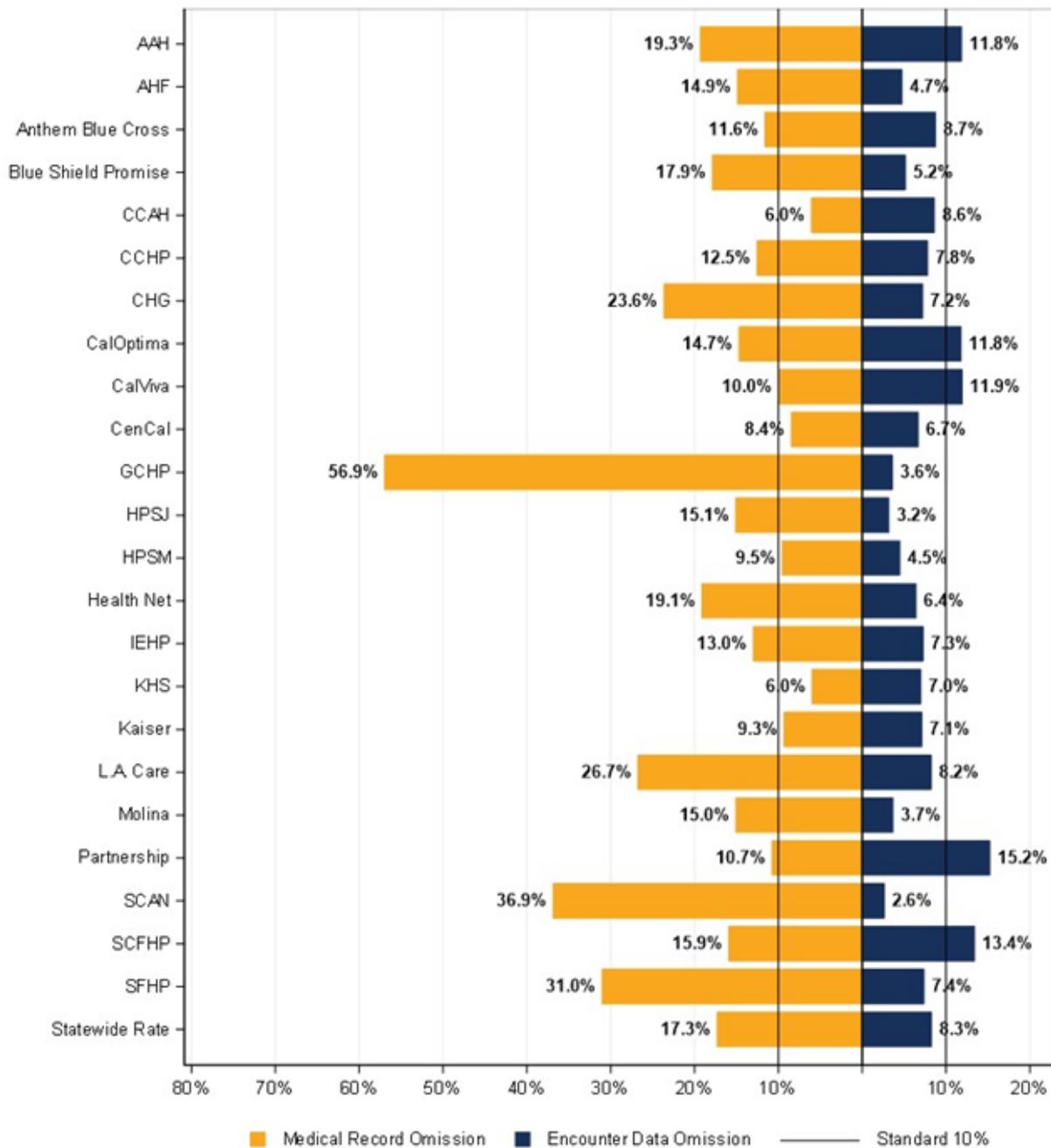
Key findings for the medical record omission rates:

» Statewide, 17.3 percent of the procedure codes in the electronic data were not supported by the members' medical records (i.e., medical record omission).

» The medical record omission rates ranged from 6.0 percent (CCAH and KHS) to 56.9 percent (GCHP).

» Only five of the 23 plans (21.7 percent) 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 45.2 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 plan.

- 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, 8.3 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 2.6 percent (SCAN) to 15.2 percent (Partnership).

» Overall, 18 of the 23 plans (78.3 percent) met the EDV study standard.

» Approximately 22.3 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 the plan's resubmissions of denied or rejected encounters to DHCS. For example, if DHCS rejected certain encounters or lines and the plan 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 plan and/or DHCS.

Procedure Code Modifier Completeness

Figure 4 displays the statewide and plan-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 4—Medical Record Omission and Encounter Data Omission for Procedure Code Modifier

Note: Omission rates of less than 10 percent indicate that the plan met the EDV study standard.

"S" indicates that the numerator for this indicator was between one and 10; therefore, this report suppresses the rate to satisfy the DHCS DDG V2.2 de-identification standard.

Medical Record Omission and Encounter Data Omission for Procedure Code Modifer
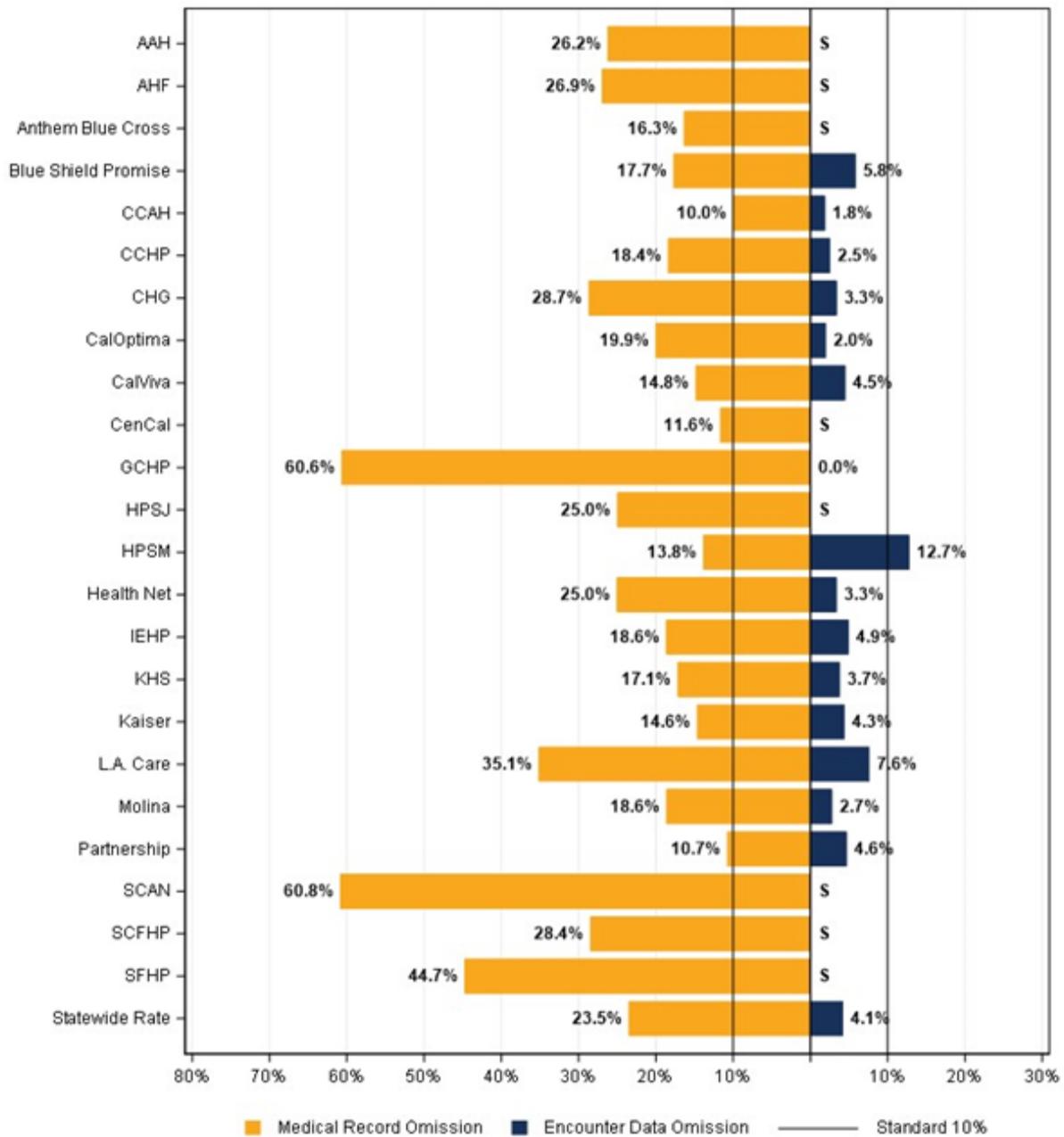
Key findings for the medical record omission rates:

» Statewide, 23.5 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 10.0 percent (CCAH) to 60.8 percent (SCAN).

» None of the plans 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 40.5 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 the plans.

- 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, 4.1 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 1.8 percent (CCAH) to 12.7 percent (HPSM) among non-suppressed rates.

» Overall, 22 of the 23 plans (95.7 percent) 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 89.0 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.
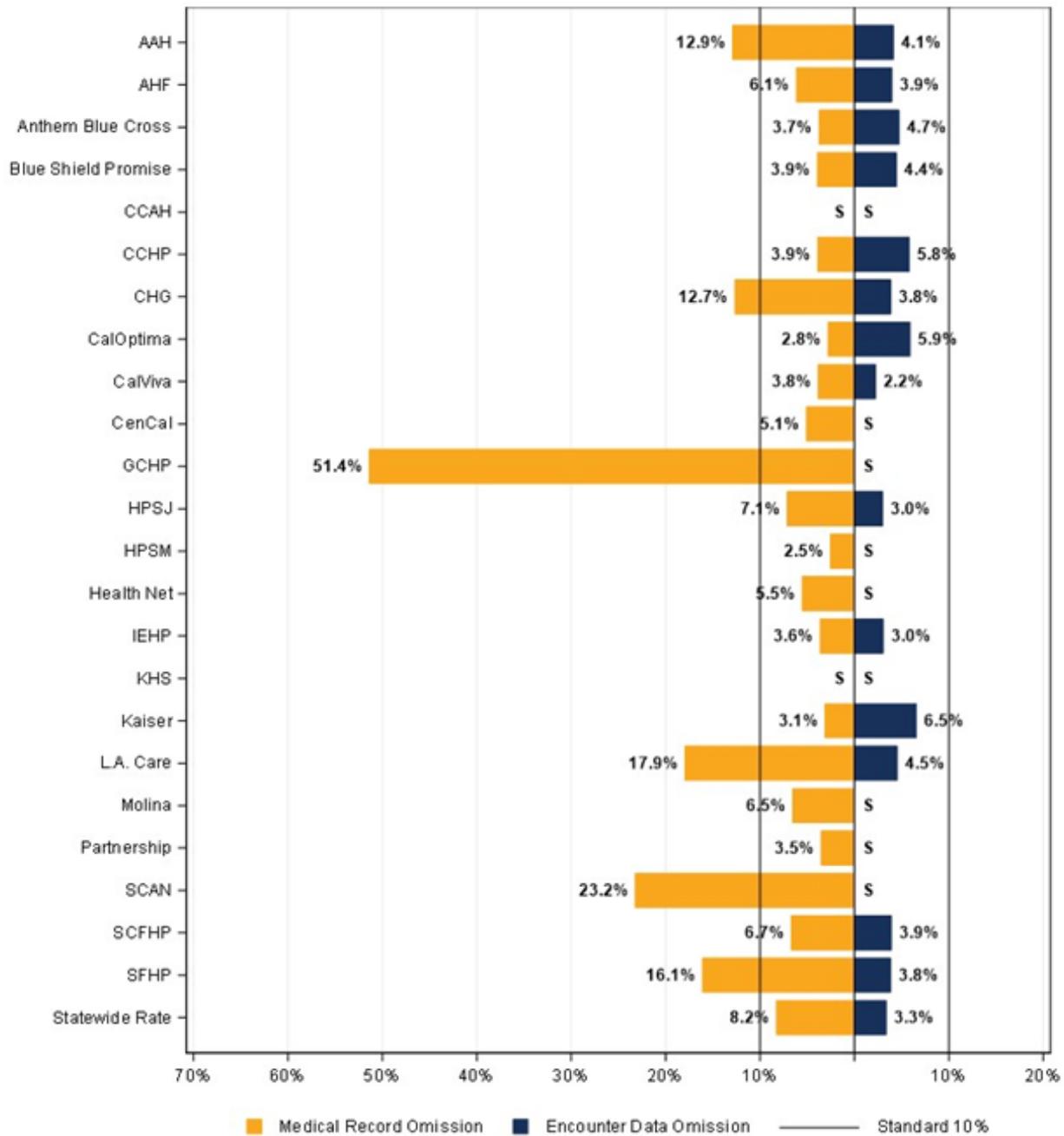
Rendering Provider Name Completeness

Figure 5 displays the statewide and plan-level medical record omission and encounter data omission rates for the *Rendering Provider Name* data element.

Figure 5—Medical Record Omission and Encounter Data Omission for Rendering Provider Name

Note: Omission rates of less than 10 percent indicate that the plan met the EDV study standard.

"S" indicates that the numerator for this indicator was between one and 10; therefore, this report suppresses the rate to satisfy the DHCS DDG V2.2 de-identification standard.

Medical Record Omission and Encounter Data Omission for Rendering Provider Name

Plan	Medical Record Omission	Encounter Data Omission
AAH	13.6%	4.1%
AHF	6.9%	3.8%
Anthem Blue Cross	4.6%	4.7%
Blue Shield Promise	4.1%	4.4%
CCAH	2.5%	S
CCHP	4.4%	5.7%
CHG	13.7%	4.1%
CalOptima	3.1%	5.7%
CalViva	5.1%	2.1%
CenCal	6.6%	S
GCHP	52.2%	S
HPSJ	9.4%	3.0%
HPSM	3.6%	S
Health Net	8.0%	S
IEHP	5.8%	3.1%
KHS	2.2%	S
Kaiser	3.1%	6.5%
L.A. Care	19.4%	4.6%
Molina	7.0%	S
Partnership	4.6%	S
SCAN	23.9%	S
SCFHP	7.2%	3.9%
SFHP	16.6%	3.6%
Statewide Rate	9.6%	3.4%

Legend: Medical Record Omission, Encounter Data Omission, Standard 10%
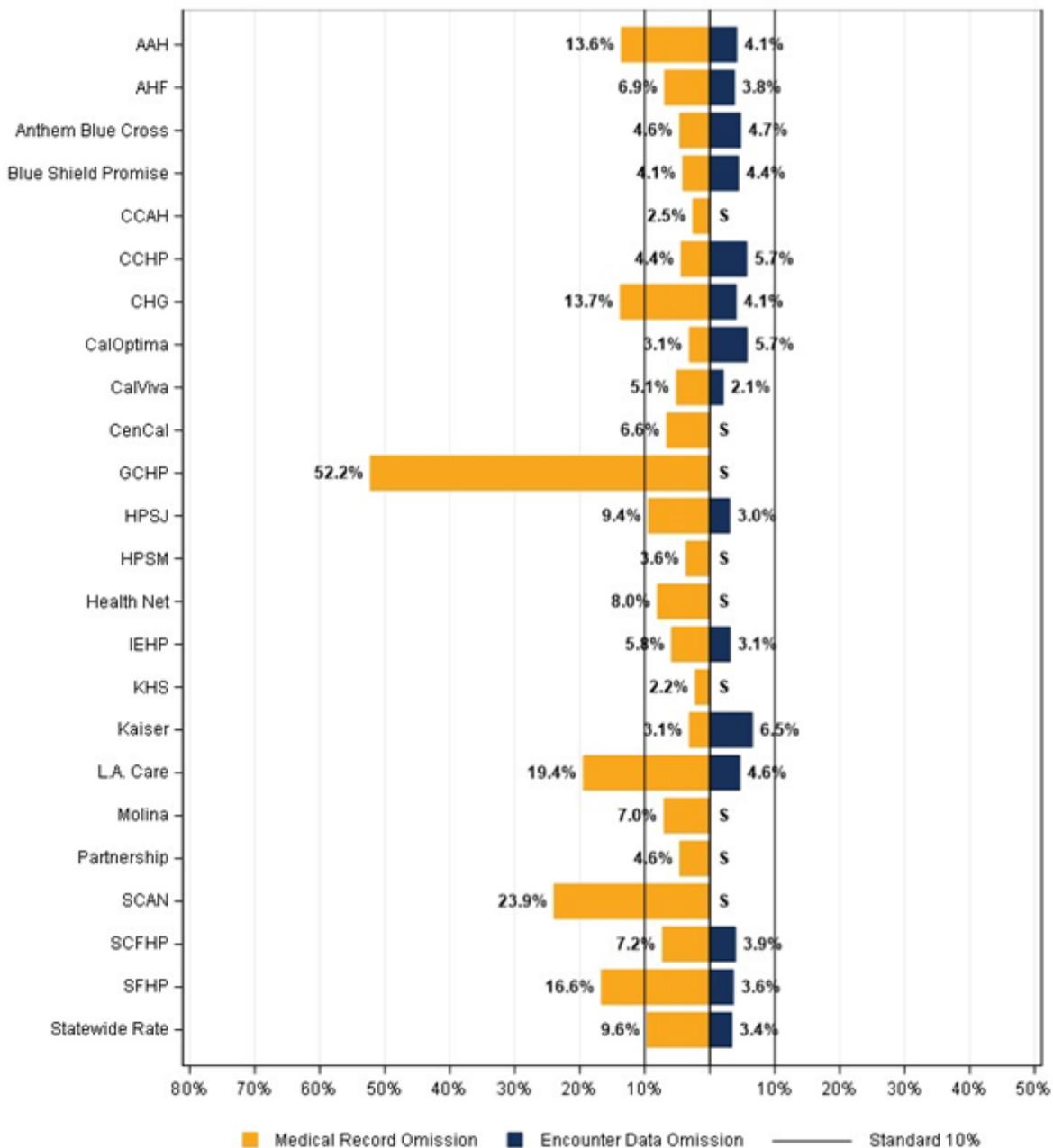
Key findings for the medical record omission rates:

» Statewide, 9.6 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 were not submitted for the study. 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 2.2 percent (KHS) to 52.2 percent (GCHP).

» Overall, 17 of the 23 plans (73.9 percent) met the EDV study standard.

Key findings for the encounter data omission rates:

» Statewide, 3.4 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 2.1 percent (CalViva) to 6.5 percent (Kaiser) among non-suppressed rates.

» All plans 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.

• The plans 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 the plans 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 dark blue) show the accuracy rates, and the remaining bars to the right display the proportion of inaccuracy reasons. The longest horizontal bar to the right indicates the dominant reason for the inaccuracy.

Diagnosis Code Accuracy

Figure 6 displays the statewide and the plan-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. Because error percentages from the specificity errors were less than 0.5 percent, HSAG did not display them in Figure 6.

Figure 6—Accuracy Results and Inaccuracy Reasons for Diagnosis Code

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

To satisfy the DHCS DDG V2.2 de-identification standard, this report suppresses results if the numerator for the inaccuracy reason is between one and 10.

Accuracy Results and Inaccuracy Reasons for Diagnosis Code
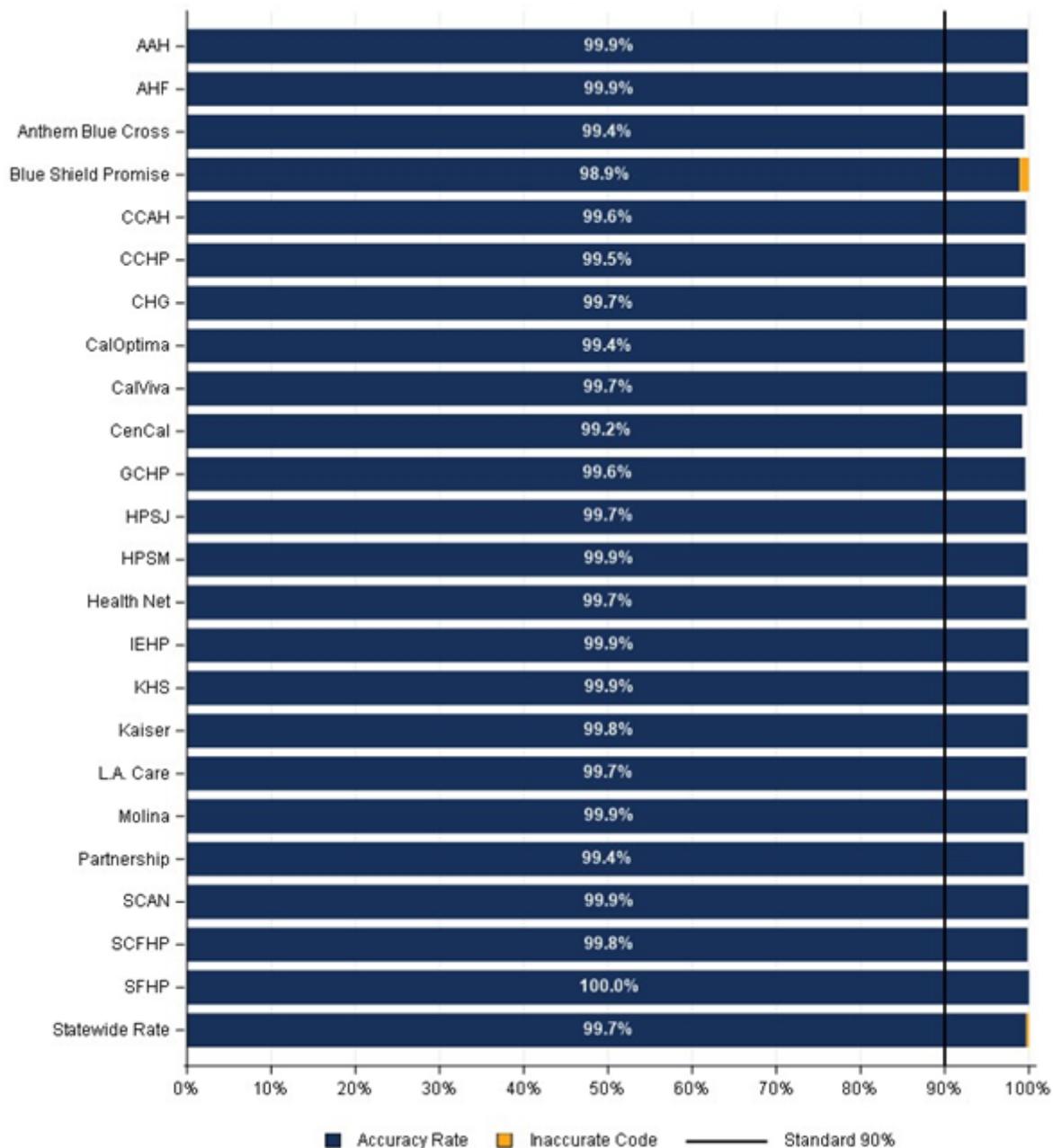
Key findings for the accuracy rates:

» Statewide, 99.7 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 98.9 percent (Blue Shield Promise) to 100.0 percent (SFHP).

» All plans met the EDV study standard.

» At the statewide and plan levels, the percentages of diagnosis codes with inaccurate codes were very low; therefore, the data labels were not displayed in Figure 6.

Procedure Code Accuracy

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 and 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.

Because error percentages from the higher and lower level of service found in medical records were less than 0.5 percent, HSAG did not display them in Figure 7.

Figure 7—Accuracy Results and Inaccuracy Reasons for Procedure Code

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

To satisfy the DHCS DDG V2.2 de-identification standard, this report suppresses results if the numerator for the inaccuracy reason is between one and 10.

Accuracy Results and Inaccuracy Reasons for Procedure Code

AAH	97.4%
AHF	99.8%
Anthem Blue Cross	98.5%
Blue Shield Promise	97.7%
CCAH	99.3%
CCHP	98.1%
CHG	99.1%
CalOptima	99.0%
CalViva	99.2%
CenCal	99.5%
GCHP	100.0%
HPSJ	95.6%
HPSM	97.4%
Health Net	98.0%
IEHP	99.0%
KHS	99.4%
Kaiser	98.4%
L.A. Care	98.3%
Molina	97.4%
Partnership	99.5%
SCAN	99.8%
SCFHP	99.7%
SFHP	99.6%
Statewide Rate	98.6%

Legend: ■ Accuracy Rate ■ Inaccurate Code — Standard 90%
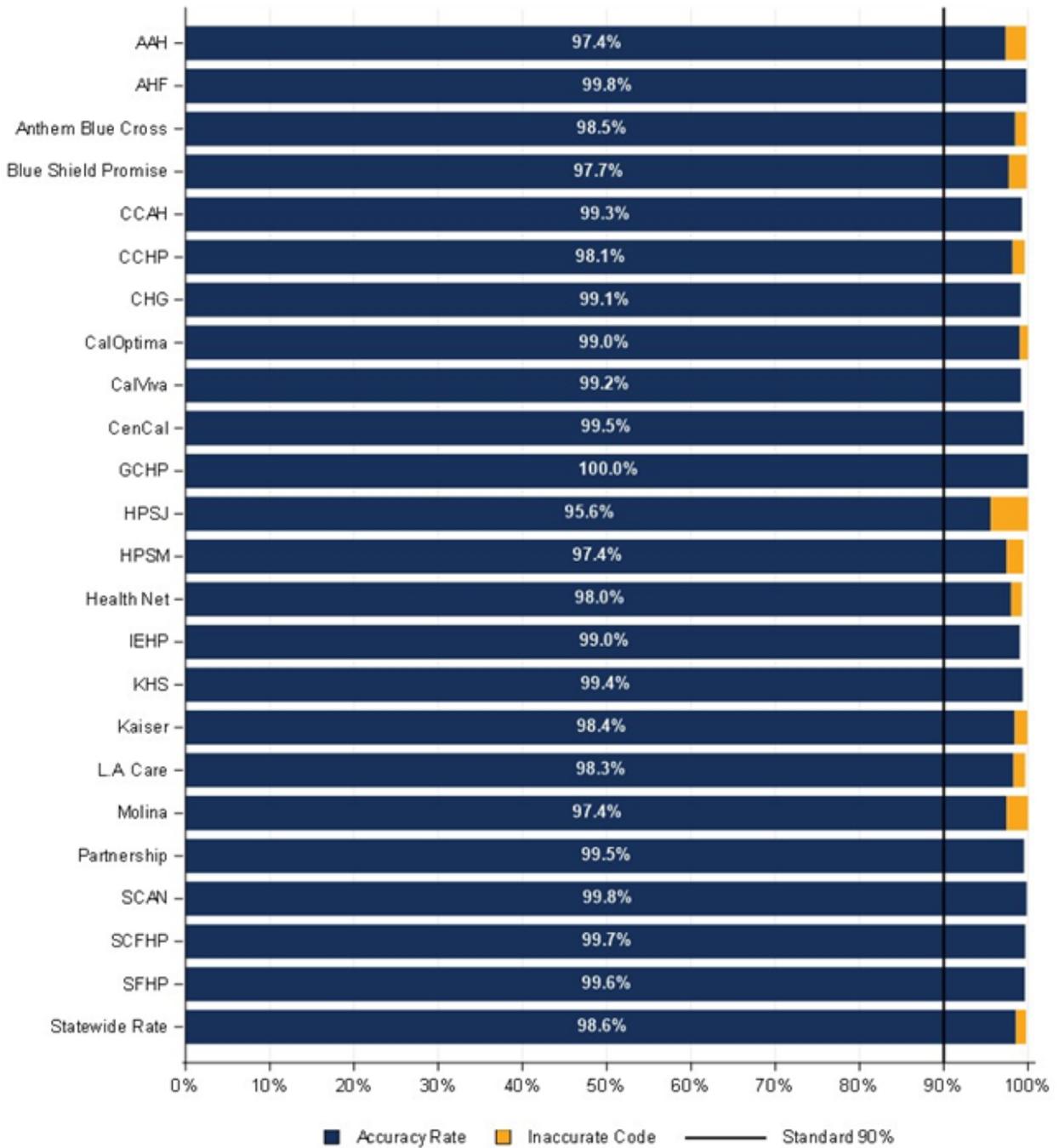
Key findings for the accuracy rates:

» Statewide, 98.6 percent of procedure codes were accurate when present in both the electronic encounter data and the medical record. The accuracy rates ranged from 95.6 percent (HPSJ) to 100.0 percent (GCHP).

» All plans met the EDV study standard.

» At the statewide and plan levels, the percentages of procedure codes that were inaccurate were low; therefore, the data labels were not displayed in Figure 7.

Procedure Code Modifier Accuracy

Figure 8 displays the statewide and plan-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 8—Accuracy Results for Procedure Code Modifier

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

Accuracy Results for Procedure Code Modifier

Plan	Accuracy Rate
AAH	100.0%
AHF	100.0%
Anthem Blue Cross	100.0%
Blue Shield Promise	99.8%
CCAH	100.0%
CCHP	99.8%
CHG	99.7%
CalOptima	99.9%
CalViva	100.0%
CenCal	99.8%
GCHP	99.4%
HPSJ	100.0%
HPSM	99.3%
Health Net	99.5%
IEHP	100.0%
KHS	100.0%
Kaiser	100.0%
L.A. Care	100.0%
Molina	100.0%
Partnership	100.0%
SCAN	99.3%
SCFHP	100.0%
SFHP	99.3%
Statewide Rate	99.9%

Legend: Accuracy Rate ▪ — Standard 90%
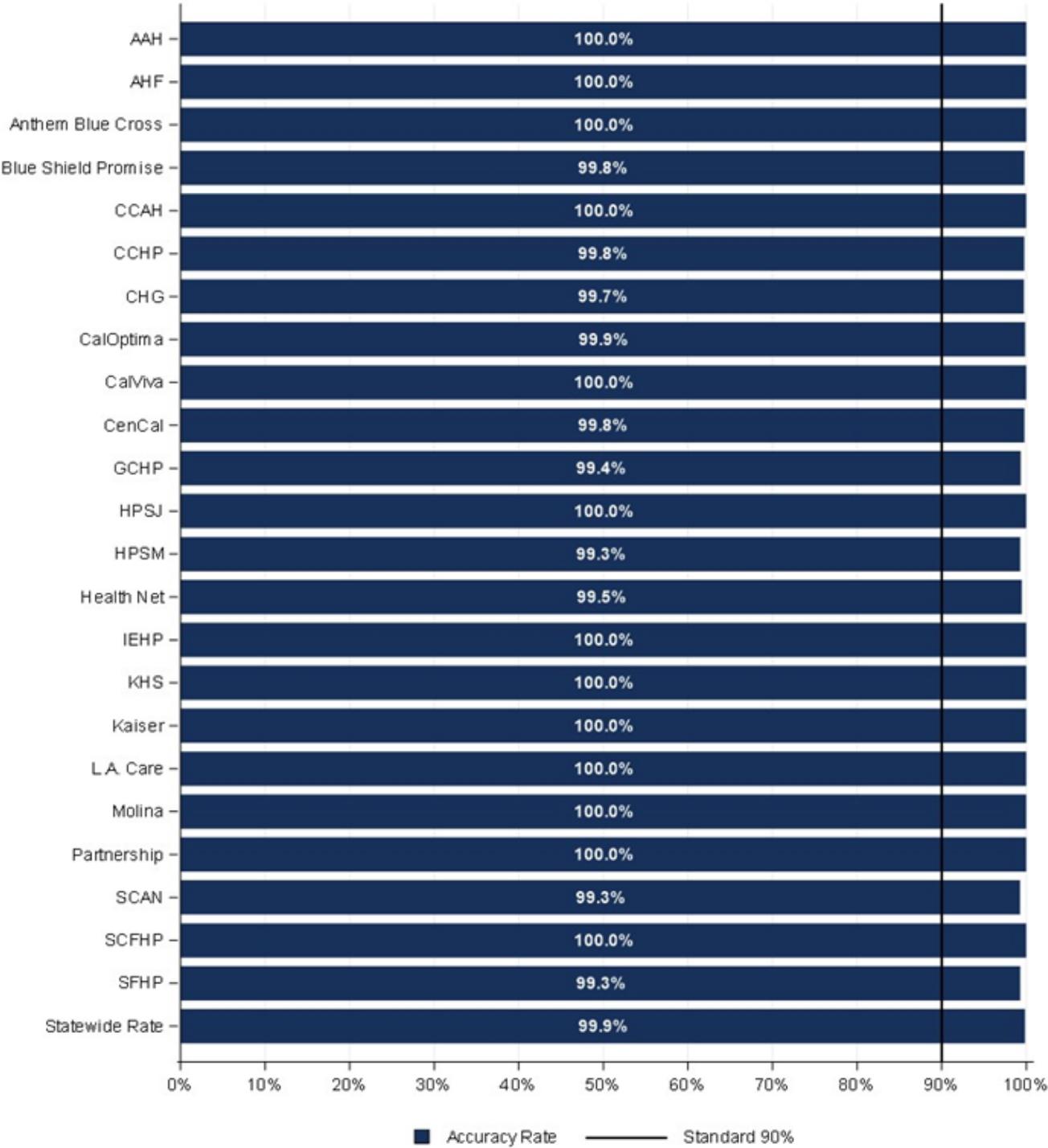
Key findings for the accuracy rates:

» Statewide, 99.9 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 plans met the EDV study standard.

Rendering Provider Name Accuracy

Figure 9 displays the statewide and plan-level accuracy rates for the data element *Rendering Provider Name*. If the rendering provider name from DHCS' data warehouse 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 9—Accuracy Results and Inaccuracy Reasons for Rendering Provider Name

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

To satisfy the DHCS DDG V2.2 de-identification standard, this report suppresses results if the numerator for the inaccuracy reason is between one and 10.

Accuracy Results and Inaccuracy Reasons for Rendering Provider Name
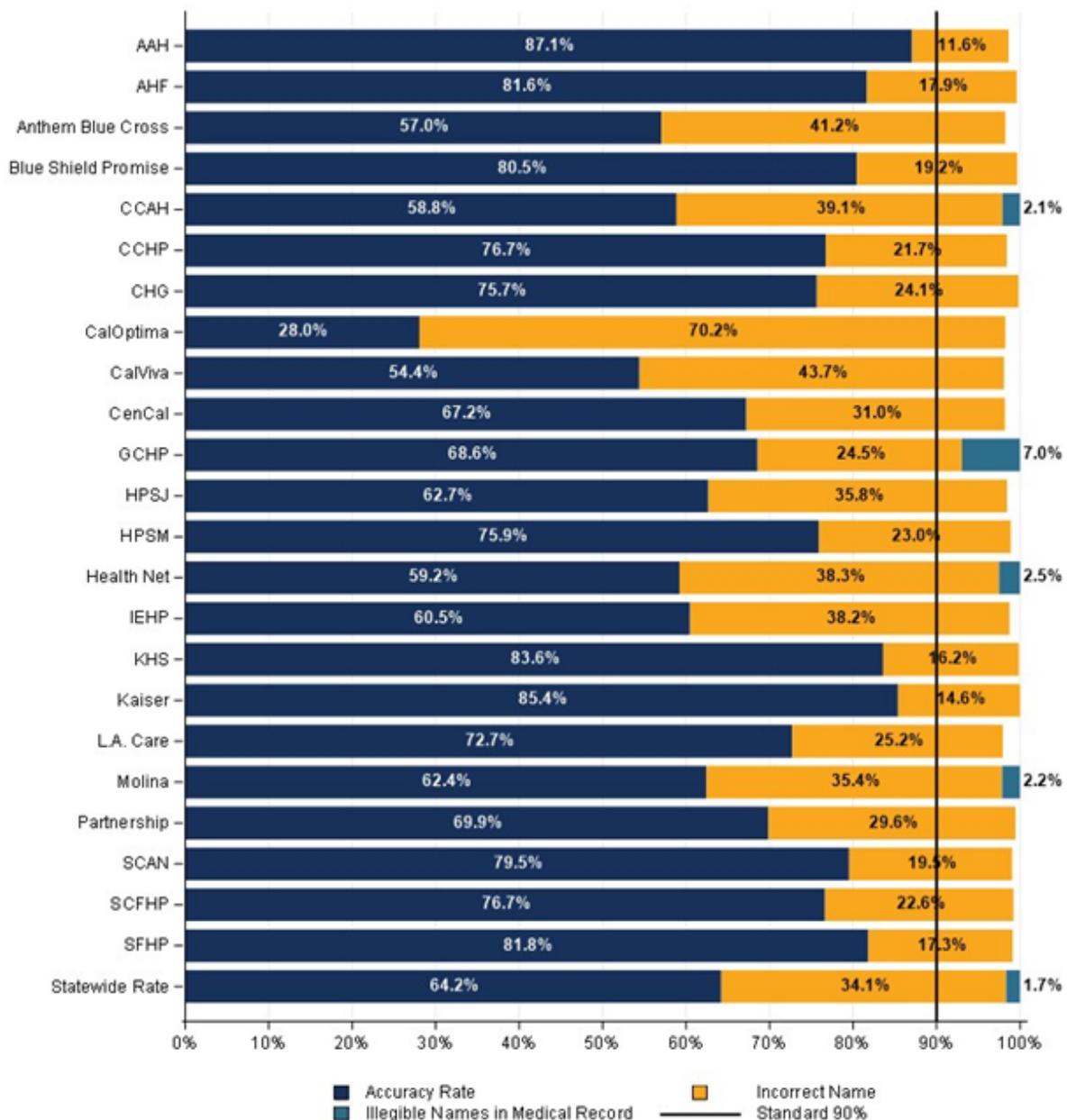
Key findings for the accuracy rates:

» Statewide, 64.2 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 plan rates ranged from 28.0 percent (CalOptima) to 87.1 percent (AAH).

» None of the plans 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 last column of Table 11 was the number of inaccurate (i.e., incorrect name or illegible name) rendering provider names.

All-Element Accuracy

Table 9 displays the statewide and plan-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 DHCS' encounter data and in the medical records with exactly the same values for key data elements listed in Table 2. The denominator is the total number of dates of service that matched in both data sources. The numerator is the total number of dates of service with 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 DHCS' encounter data have greater completeness and accuracy for all key data elements when compared to the medical records.

Table 9—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.

Plan	Accuracy Results		
	Number of Dates of Service Present in Both Sources	**Accuracy Rate**	**Accuracy Rate Excluding Rendering Provider Name***
AAH	514	67.3%	76.8%
AHF	489	48.3%	59.1%
Anthem Blue Cross	568	43.1%	74.5%
Blue Shield Promise	564	58.0%	69.5%
CCAH	626	43.6%	75.7%
CCHP	570	61.9%	77.0%
CHG	504	48.2%	62.3%
CalOptima	562	17.1%	64.4%
CalViva	529	37.6%	69.6%
CenCal	561	50.3%	77.5%
GCHP	233	57.1%	80.3%[+]
HPSJ	522	41.6%	66.7%
HPSM	541	53.6%	71.7%
Health Net	531	35.8%	62.9%
IEHP	479	43.2%	72.0%
KHS	626	63.6%	75.2%
Kaiser	658	74.2%	84.3%[+]
L.A. Care	444	51.6%	70.7%
Molina	559	44.9%	74.2%
Partnership	550	50.9%	70.4%
SCAN	424	62.3%	74.3%
SCFHP	517	53.4%	69.6%

Plan	Accuracy Results		
	Number of Dates of Service Present in Both Sources	**Accuracy Rate**	**Accuracy Rate Excluding Rendering Provider Name***
SFHP	454	59.7%	70.9%
Statewide Total	**12,025**	**45.5%**	**70.5%**

Key findings for the all-element accuracy rates:

» Statewide, 45.5 percent of the dates of service present in both data sources contained accurate values for all four key data elements (*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.

» None of the 23 plans met the EDV study standard of 80 percent when the *Rendering Provider Name* field was part of the calculation.

» The rates among the 23 plans ranged from 17.1 percent (CalOptima) to 74.2 percent (Kaiser).

» With the *Rendering Provider Name* data element excluded from the calculation of the all-element accuracy rate, the statewide rate improved to 70.5 percent and the variation among the 23 plans narrowed (i.e., ranged from 59.1 percent [AHF] to 84.3 percent [Kaiser]). In addition, two plans met the standard, GCHP (80.3 percent) and Kaiser (84.3 percent).

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Encounter Data Completeness

Table 10 displays the medical record and encounter data omission rates for each key data element.

Table 10—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	Plan Range	Statewide Rate	Plan Range
Date of Service	8.2%+	2.5%–51.4%	3.3%+	2.2%–6.5%
Diagnosis Code	10.7%	3.0%–53.6%	1.8%+	0.8%–3.1%
Procedure Code	17.3%	6.0%–56.9%	8.3%+	2.6%–15.2%
Procedure Code Modifier	23.5%	10.0%–60.8%	4.1%+	1.8%–12.7%
Rendering Provider Name	9.6%+	2.2%–52.2%	3.4%+	2.1%–6.5%

Based on the cases sampled for the 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. Two of the five medical record omission data elements met the EDV study standard at the statewide level. The remaining three data elements were moderately supported by the medical records based on the range of medical record omission rates from 10.7 percent for *Diagnosis Code* to 23.5 percent for *Procedure Code Modifier*.

The variations in rates among the plans varied widely. For example, the data element with the widest range was *Procedure Code* (50.9 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 statewide encounter data omission rates in Table 10 show that all five key data elements met the EDV study standards. This reveals that all five key data elements, when found in the medical records, were well supported by the electronic encounter data extracted from DHCS' data warehouse.

The variations among plan-specific encounter data omission rates depended on the data element. For example, the encounter data omission rates for the *Procedure Code* data element had a range of 12.6 percentage points, while the range was narrower for the *Diagnosis Code* data element (i.e., a range of 2.3 percentage points).

The potential reasons for encounter data omissions included the following:

» The provider's billing office made a coding error or did not submit the procedure codes or modifiers despite performing the specific services.

» Deficiencies existed in the plans' 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 plan and/or DHCS.

When comparing the 2023–24 results to the 2022–23 EDV study, the statewide medical record omission rates improved slightly for four of the five data elements (*Date of Service*, *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*). While the *Rendering Provider Name* data element rate increased slightly, it remained below the 10 percent standard. Despite the slightly improved rates for *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier,* the rates remained above the 10 percent study standard. The improvements are likely due to increased medical record procurement rates in the current study. For the statewide encounter data omission rates, all five data elements met the EDV study standard in the 2022–23 study, and all five data elements again met the study standard in the 2023–24 study.

Encounter Data Accuracy

Table 11 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 11—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	Plan Range	Main Error Type(s)
Diagnosis Code	99.7%[+]	98.9%–100.0%	Inaccurate code (99.3%)
Procedure Code	98.6%[+]	95.6%–100.0%	Inaccurate code (80.5%); Lower level of services in medical records (11.9%); Higher level of services in medical records (7.6%)
Procedure Code Modifier	99.9%[+]	99.3%–100.0%	—
Rendering Provider Name	64.2%	28.0%–87.1%	Incorrect name (95.1%); Illegible name in medical records (4.9%)
All-Element Accuracy	45.5%	17.1%–74.2%	—
All-Element Accuracy Excluding Rendering Provider Name*	70.5%	59.1%–84.3%	—

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 data 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* data element accuracy rate was much lower at 64.2 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, 80.5 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, while 11.9 percent involved providers submitting a lower-level service code than that supported by the medical record and 7.6 percent involved providers submitting a higher-level service code than that supported in the medical records. Finally, most rendering provider name errors (95.1 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.

As shown in Table 11, nearly half of the dates of service (45.5 percent) present in both data sources accurately represented all four data elements (*Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Rendering Provider Name*) when compared to the members' medical records. At the plan level, the all-element accuracy rate ranged from 17.1 percent (CalOptima) to 74.2 percent (Kaiser). 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 11, the all-element accuracy rate increased from 45.5 percent (*All-Element Accuracy*) to 70.5 percent (*All-Element Accuracy Excluding Rendering Provider Name*) when the data element *Rendering Provider Name* was excluded from the calculation.

When comparing the 2023–24 statewide results to the 2022–23 EDV study results, the accuracy rates for the *Diagnosis Code* and *Procedure Code Modifier* data elements increased slightly, while the *Procedure Code* data element decreased slightly. However, each of the three data elements met the standard in both study years. The *Rendering Provider Name* data element rate increased slightly for the 2023–24 study but did not meet the standard for either study year. Overall, with better medical record omission, encounter data omission, and element

accuracy rates from some of the key data elements, the all-element accuracy rate increased from 2022–23 to 2023–24, but did not meet the standard of 80 percent.

Recommendations

Similar to the 2022–23 EDV study, results from the 2023–24 study show continued opportunities for improvement. DHCS should continue to work with the plans to identify the factors affecting data completeness and accuracy and determine ways to improve study results that did not meet the EDV study standards (i.e., those study indicators listed in Table 12 that are marked with an "X").

Table 12—Grid of Plans Not Meeting EDV Study Standards

MRO = Medical record omission rate

EDO = Encounter data omission rate

ACU = Data element accuracy rate

	Date of Service	Diagnosis Code	Procedure Code		Procedure Code Modifier		Rendering Provider Name	
Plan	MRO	MRO	MRO	EDO	MRO	EDO	MRO	ACU
AAH	X	X	X	X	X		X	X
AHF		X	X		X			X
Anthem Blue Cross			X		X			X
Blue Shield Promise			X		X			X
CCAH					X			X
CCHP			X		X			X
CHG	X	X	X		X		X	X
CalOptima			X	X	X			X
CalViva			X	X	X			X
CenCal					X			X

	Date of Service	Diagnosis Code	Procedure Code		Procedure Code Modifier		Rendering Provider Name	
Plan	**MRO**	**MRO**	**MRO**	**EDO**	**MRO**	**EDO**	**MRO**	**ACU**
GCHP	X	X	X		X		X	X
HPSJ		X	X		X			X
HPSM					X	X		X
Health Net		X	X		X			X
IEHP			X		X			X
KHS					X			X
Kaiser					X			X
L.A. Care	X	X	X		X		X	X
Molina			X		X			X
Partnership			X	X	X			X
SCAN	X	X	X		X		X	X
SCFHP			X	X	X			X
SFHP	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 interpreted with caution because rendering provider names may not be included or legible in members' medical records.

» The findings from this study are associated with encounters from January 1, 2022, to December 31, 2022; 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.

APPENDIX A. PLANS INCLUDED IN THE STUDY

Table A.1 presents the names, abbreviations, reporting units, and Health Care Plan (HCP) Codes used before and after January 2024 for the plans included in this EDV medical record review study.

Table A.1—Plans Included in the Study

Note the following regarding the table content:

» Since, beginning in 2024, DHCS dispersed the counties that originally comprised Region 1 and Region 2, HSAG accounted for the counties previously included in Region 1 and Region 2 separately. HSAG included applicable counties from Region 1 and Region 2 for the applicable plans.

» The counties included for each plan are counties the plan served in calendar year 2022 and is continuing to serve in 2024.

» The following plans were not included due to their exit from the MCMC market as of December 31, 2023:

- Aetna Better Health of California (Aetna)
- California Health & Wellness Plan (CHW)

* CHW served these counties during the 2023–24 EDV study review period, and Health Net procured the medical records for these counties for the study.

Plan Name	Plan Abbreviation	Plan County/ Reporting Unit	HCP Code during EDV Review Period	HCP Code Starting 2024
AIDS Healthcare Foundation	AHF	Los Angeles	915	915
Alameda Alliance for Health	AAH	Alameda	300	531
Blue Cross of California Partnership Plan, Inc., DBA Anthem Blue Cross Partnership Plan	Anthem Blue Cross	Alpine	100	385
		Amador	101	101
		Calaveras	103	103
		El Dorado	105	386
		Fresno	362	362
		Inyo	107	107

Plan Name	Plan Abbreviation	Plan County/ Reporting Unit	HCP Code during EDV Review Period	HCP Code Starting 2024
		Kings	363	363
		Madera	364	364
		Mono	109	109
		Sacramento	190	190
		San Francisco	343	343
		Santa Clara	345	345
		Tulare	311	311
		Tuolumne	116	116
Blue Shield of California Promise Health Plan	Blue Shield Promise	San Diego	167	167
CalOptima	CalOptima	Orange	506	506
CalViva Health	CalViva	Fresno	315	315
		Kings	316	316
		Madera	317	317
CenCal Health	CenCal	Santa Barbara	502	502
		San Luis Obispo	501	501
Central California Alliance for Health	CCAH	Merced	514	514
		Monterey/Santa Cruz	508, 505	508, 505
Community Health Group Partnership Plan	CHG	San Diego	029	029
Contra Costa Health Plan	CCHP	Contra Costa	301	532

Plan Name	Plan Abbreviation	Plan County/ Reporting Unit	HCP Code during EDV Review Period	HCP Code Starting 2024
Gold Coast Health Plan	GCHP	Ventura	515	515
Health Net Community Solutions, Inc.	Health Net	Amador*	119	380
		Calaveras*	121	381
		Inyo*	128	382
		Los Angeles	352	352
		Mono*	133	383
		Sacramento	150	150
		San Joaquin	354	354
		Stanislaus	361	361
		Tulare	353	353
		Tuolumne*	141	384
Health Plan of San Joaquin	HPSJ	San Joaquin	308	308
		Stanislaus	312	312
Health Plan of San Mateo	HPSM	San Mateo	503	503
Inland Empire Health Plan	IEHP	Riverside/San Bernardino	305, 306	305, 306
Kaiser Permanente	Kaiser	KP North (Amador, El Dorado, Placer, and Sacramento counties)	177, 178, 179, 170	177, 387, 662, 170
		San Diego	079	079
Kern Health Systems, DBA Kern Family Health Care	KHS	Kern	303	303

Plan Name	Plan Abbreviation	Plan County/ Reporting Unit	HCP Code during EDV Review Period	HCP Code Starting 2024
L.A. Care Health Plan	L.A. Care	Los Angeles	304	304
Molina Healthcare of California	Molina	Riverside/San Bernardino	355, 356	355, 356
		Sacramento	130	130
		San Diego	131	131
Partnership HealthPlan of California	Partnership	Southwest (Lake, Marin, Mendocino, and Sonoma counties)	511, 510, 512, 513	511, 510, 512, 513
		Southeast (Napa, Solano, and Yolo counties)	507, 504, 509	507, 504, 509
		Northwest (Del Norte and Humboldt counties)	523, 517	523, 517
		Northeast (Lassen, Modoc, Shasta, Siskiyou, and Trinity counties)	518, 519, 520, 521, 522	518, 519, 520, 521, 522
San Francisco Health Plan	SFHP	San Francisco	307	307
Santa Clara Family Health Plan	SCFHP	Santa Clara	309	309
SCAN Health Plan	SCAN	Los Angeles	200, 201	200, 201
		Riverside	204, 205	204, 205
		San Bernardino	206, 207	206, 207

APPENDIX B. FINDINGS FOR AIDS HEALTHCARE FOUNDATION (AHF)

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 AHF.

Table B.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
AHF	332	308	92.8%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table B.2 lists the reasons for missing medical records for AHF, as well as the count and percent for each reason.

Table B.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.	17	70.8%
Other.	3	12.5%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	2	8.3%
Member was not a patient of the practice.	1	4.2%
Provider refused to release medical records.	1	4.2%
AHF Total	**24**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
AHF	308	227	73.7%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table B.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 B.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.

"S" indicates that the numerator for this indicator was between one and 10; therefore,

this report suppresses the rate to satisfy the DHCS Data De-Identification Guidelines V2.2 de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	AHF Rate	Statewide Rate	Denominator	AHF Rate	Statewide Rate
Date of Service	521	6.1%[+]	**8.2%[+]**	509	3.9%[+]	**3.3%[+]**
Diagnosis Code	2,077	16.2%	**10.7%**	1,774	1.9%[+]	**1.8%[+]**
Procedure Code	1,158	14.9%	**17.3%**	1,035	4.7%[+]	**8.3%[+]**
Procedure Code Modifier	286	26.9%	**23.5%**	218	S[+]	**4.1%[+]**
Rendering Provider Name	521	6.9%[+]	**9.6%[+]**	504	3.8%[+]	**3.4%[+]**

Encounter Data Accuracy

Table B.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 B.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.

[1]This 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	1,741	99.9%[+]	**99.7%[+]**	—
Procedure Code	986	99.8%[+]	**98.6%[+]**	—
Procedure Code Modifier	209	100.0%[+]	**99.9%[+]**	—
Rendering Provider Name	485	81.6%	**64.2%**	Incorrect name (97.8%)
All-Element Accuracy	489	48.3%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	489	59.1%	**70.5%**	—

APPENDIX C. FINDINGS FOR ALAMEDA ALLIANCE FOR HEALTH (AAH)

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 AAH.

Table C.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
AAH	411	345	83.9%
Statewide Total	**9,374**	**8,491**	**90.6%**[+]

Table C.2 lists the reasons for missing medical records for AAH, as well as the count and percent for each reason.

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

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.	41	62.1%
Other.	13	19.7%
Member was not a patient of the practice.	6	9.1%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	3	4.5%
Provider refused to release medical records.	3	4.5%
AAH Total	**66**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
AAH	345	252	73.0%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table C.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 C.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.

"S" indicates that the numerator for this indicator was between one and 10; therefore,

this report suppresses the rate to satisfy the DHCS Data De-Identification Guidelines V2.2 de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	AAH Rate	Statewide Rate	Denominator	AAH Rate	Statewide Rate
Date of Service	590	12.9%	**8.2%**[+]	536	4.1%[+]	**3.3%**[+]
Diagnosis Code	1,736	11.4%	**10.7%**	1,569	2.0%[+]	**1.8%**[+]
Procedure Code	1,125	19.3%	**17.3%**	1,030	11.8%	**8.3%**[+]
Procedure Code Modifier	420	26.2%	**23.5%**	316	S[+]	**4.1%**[+]
Rendering Provider Name	590	13.6%	**9.6%**[+]	532	4.1%[+]	**3.4%**[+]

Encounter Data Accuracy

Table C.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 C.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.

[1]This 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	1,538	99.9%[+]	**99.7%**[+]	—
Procedure Code	908	97.4%[+]	**98.6%**[+]	—
Procedure Code Modifier	310	100.0%[+]	**99.9%**[+]	—
Rendering Provider Name	510	87.1%	**64.2%**	Incorrect name (89.4%)
All-Element Accuracy	514	67.3%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	514	76.8%	**70.5%**	—

APPENDIX D. FINDINGS FOR ANTHEM BLUE CROSS PARTNERSHIP PLAN (ANTHEM BLUE CROSS)

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 Anthem Blue Cross.

Table D.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Anthem Blue Cross	411	393	95.6%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table D.2 lists the reasons for missing medical records for Anthem Blue Cross, as well as the count and percent for each reason.

Table D.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.	15	83.3%
Provider refused to release medical records.	2	11.1%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	1	5.6%
Anthem Blue Cross Total	**18**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
Anthem Blue Cross	393	251	63.9%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table D.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 D.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.

"S" indicates that the numerator for this indicator was between one and 10; therefore,

this report suppresses the rate to satisfy the DHCS Data De-Identification Guidelines V2.2 de-identification standard.

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	590	3.7%[+]	**8.2%[+]**	596	4.7%[+]	**3.3%[+]**
Diagnosis Code	1,724	6.3%[+]	**10.7%**	1,655	2.4%[+]	**1.8%[+]**
Procedure Code	1,252	11.6%	**17.3%**	1,213	8.7%[+]	**8.3%[+]**
Procedure Code Modifier	484	16.3%	**23.5%**	410	S[+]	**4.1%[+]**
Rendering Provider Name	590	4.6%[+]	**9.6%[+]**	591	4.7%[+]	**3.4%[+]**

Encounter Data Accuracy

Table D.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 D.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.

[1]This 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	1,616	99.4%[+]	**99.7%**[+]	—
Procedure Code	1,107	98.5%[+]	**98.6%**[+]	—
Procedure Code Modifier	405	100.0%[+]	**99.9%**[+]	—
Rendering Provider Name	563	57.0%	**64.2%**	Incorrect name (95.9%)

Key Data Element	Denominator	Anthem Blue Cross Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	568	43.1%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	568	74.5%	**70.5%**	—

APPENDIX E. FINDINGS FOR BLUE SHIELD OF CALIFORNIA PROMISE HEALTH PLAN (BLUE SHIELD PROMISE)

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 Blue Shield Promise.

Table E.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Blue Shield Promise	411	392	95.4%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table E.2 lists the reasons for missing medical records for Blue Shield Promise, as well as the count and percent for each reason.

Table E.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
Member was not a patient of the practice.	9	47.4%
Medical records were not located at the facility.	8	42.1%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	1	5.3%
Non-responsive provider or provider did not respond in a timely manner.	1	5.3%
Blue Shield Promise Total	**19**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
Blue Shield Promise	392	251	64.0%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table E.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 E.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	587	3.9%[+]	**8.2%[+]**	590	4.4%[+]	**3.3%[+]**
Diagnosis Code	1,625	6.6%[+]	**10.7%**	1,560	2.7%[+]	**1.8%[+]**
Procedure Code	1,434	17.9%	**17.3%**	1,242	5.2%[+]	**8.3%[+]**
Procedure Code Modifier	555	17.7%	**23.5%**	485	5.8%[+]	**4.1%[+]**
Rendering Provider Name	587	4.1%[+]	**9.6%[+]**	589	4.4%[+]	**3.4%[+]**

Encounter Data Accuracy

Table E.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 E.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.

[1]This 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	1,518	98.9%[+]	**99.7%[+]**	—
Procedure Code	1,178	97.7%[+]	**98.6%[+]**	—
Procedure Code Modifier	457	99.8%[+]	**99.9%[+]**	—
Rendering Provider Name	563	80.5%	**64.2%**	Incorrect name (98.2%)

Key Data Element	Denominator	Blue Shield Promise Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	564	58.0%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	564	69.5%	**70.5%**	—

APPENDIX F. FINDINGS FOR CALOPTIMA

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 CalOptima.

Table F.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CalOptima	411	398	96.8%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table F.2 lists the reasons for missing medical records for CalOptima, as well as the count and percent for each reason.

Table F.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.	7	53.8%
Other.	5	38.5%
Closed facility.	1	7.7%
CalOptima Total	**13**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
CalOptima	398	251	63.1%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table F.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 F.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	578	2.8%[+]	**8.2%[+]**	597	5.9%[+]	**3.3%[+]**
Diagnosis Code	1,702	5.5%[+]	**10.7%**	1,652	2.6%[+]	**1.8%[+]**
Procedure Code	1,423	14.7%	**17.3%**	1,376	11.8%	**8.3%[+]**
Procedure Code Modifier	1,003	19.9%	**23.5%**	819	2.0%[+]	**4.1%[+]**
Rendering Provider Name	578	3.1%[+]	**9.6%[+]**	594	5.7%[+]	**3.4%[+]**

Encounter Data Accuracy

Table F.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 F.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.

[1]This 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	1,609	99.4%[+]	**99.7%[+]**	—
Procedure Code	1,214	99.0%[+]	**98.6%[+]**	—
Procedure Code Modifier	803	99.9%[+]	**99.9%[+]**	—
Rendering Provider Name	560	28.0%	**64.2%**	Incorrect name (97.5%)

Key Data Element	Denominator	CalOptima Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	562	17.1%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	562	64.4%	**70.5%**	—

APPENDIX G. FINDINGS FOR CALVIVA HEALTH (CALVIVA)

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 CalViva.

Table G.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CalViva	411	397	96.6%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table G.2 lists the reasons for missing medical records for CalViva, as well as the count and percent for each reason.

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

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

Non-Submission Reason	Count	Percent
Member was not a patient of the practice.	5	35.7%
Other.	4	28.6%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	3	21.4%
Non-responsive provider or provider did not respond in a timely manner.	2	14.3%
CalViva Total	**14**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
CalViva	397	178	44.8%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table G.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 G.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.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CalViva Rate	Statewide Rate	Denominator	CalViva Rate	Statewide Rate
Date of Service	550	3.8%+	**8.2%+**	541	2.2%+	**3.3%+**
Diagnosis Code	1,662	6.4%+	**10.7%**	1,596	2.5%+	**1.8%+**
Procedure Code	1,183	10.0%	**17.3%**	1,209	11.9%	**8.3%+**
Procedure Code Modifier	554	14.8%	**23.5%**	494	4.5%+	**4.1%+**
Rendering Provider Name	550	5.1%+	**9.6%+**	533	2.1%+	**3.4%+**

Encounter Data Accuracy

Table G.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 G.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.

[1]This 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	1,556	99.7%[+]	**99.7%[+]**	—
Procedure Code	1,065	99.2%[+]	**98.6%[+]**	—
Procedure Code Modifier	472	100.0%[+]	**99.9%[+]**	—
Rendering Provider Name	522	54.4%	**64.2%**	Incorrect name (95.8%)

Key Data Element	Denominator	CalViva Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	529	37.6%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	529	69.6%	**70.5%**	—

APPENDIX H. FINDINGS FOR CENCAL HEALTH (CENCAL)

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 CenCal.

Table H.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CenCal	411	386	93.9%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table H.2 lists the reasons for missing medical records for CenCal, as well as the count and percent for each reason.

Table H.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.	14	56.0%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	5	20.0%
Other.	3	12.0%
Medical records were not located at the facility.	2	8.0%
Closed facility.	1	4.0%
CenCal Total	**25**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
CenCal	386	201	52.1%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table H.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 H.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 between one and 10; therefore,

this report suppresses the rate to satisfy the DHCS Data De-Identification Guidelines V2.2 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	591	5.1%[+]	**8.2%[+]**	569	S[+]	**3.3%[+]**
Diagnosis Code	1,090	9.3%[+]	**10.7%**	1,016	2.7%[+]	**1.8%[+]**
Procedure Code	1,267	8.4%[+]	**17.3%**	1,243	6.7%[+]	**8.3%[+]**
Procedure Code Modifier	516	11.6%	**23.5%**	462	S[+]	**4.1%[+]**
Rendering Provider Name	591	6.6%[+]	**9.6%[+]**	560	S[+]	**3.4%[+]**

Encounter Data Accuracy

Table H.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 H.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.

[1]This 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	989	99.2%[+]	**99.7%[+]**	—
Procedure Code	1,160	99.5%[+]	**98.6%[+]**	—
Procedure Code Modifier	456	99.8%[+]	**99.9%[+]**	—
Rendering Provider Name	552	67.2%	**64.2%**	Incorrect name (94.5%)
All-Element Accuracy	561	50.3%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	561	77.5%	**70.5%**	—

APPENDIX I. FINDINGS FOR CENTRAL CALIFORNIA ALLIANCE FOR HEALTH (CCAH)

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 CCAH.

Table I.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CCAH	411	406	98.8%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table I.2 lists the reasons for missing medical records for CCAH, as well as the count and percent for each reason.

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

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.	4	80.0%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	1	20.0%
CCAH Total	**5**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
CCAH	406	241	59.4%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table I.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 I.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 between one and 10; therefore,

this report suppresses the rate to satisfy the DHCS Data De-Identification Guidelines V2.2 de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CCAH Rate	Statewide Rate	Denominator	CCAH Rate	Statewide Rate
Date of Service	633	S[+]	**8.2%[+]**	634	S[+]	**3.3%[+]**
Diagnosis Code	1,470	4.8%[+]	**10.7%**	1,409	S[+]	**1.8%[+]**
Procedure Code	1,175	6.0%[+]	**17.3%**	1,208	8.6%[+]	**8.3%[+]**
Procedure Code Modifier	653	10.0%	**23.5%**	599	1.8%[+]	**4.1%[+]**
Rendering Provider Name	633	2.5%[+]	**9.6%[+]**	625	S[+]	**3.4%[+]**

Encounter Data Accuracy

Table I.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 I.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.

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

Key Data Element	Denominator	CCAH Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,400	99.6%[+]	**99.7%[+]**	—
Procedure Code	1,104	99.3%[+]	**98.6%[+]**	—
Procedure Code Modifier	588	100.0%[+]	**99.9%[+]**	—
Rendering Provider Name	617	58.8%	**64.2%**	Incorrect name (94.9%); Illegible name in medical records (5.1%)
All-Element Accuracy	626	43.6%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	626	75.7%	**70.5%**	—

APPENDIX J. FINDINGS FOR COMMUNITY HEALTH GROUP PARTNERSHIP PLAN (CHG)

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 CHG.

Table J.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CHG	411	354	86.1%
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table J.2 lists the reasons for missing medical records for CHG, as well as the count and percent for each reason.

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

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	77.2%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	11	19.3%
Closed facility.	1	1.8%
Other.	1	1.8%
CHG Total	**57**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
CHG	354	213	60.2%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table J.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 J.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	577	12.7%	**8.2%**[+]	524	3.8%[+]	**3.3%**[+]
Diagnosis Code	1,771	15.6%	**10.7%**	1,530	2.3%[+]	**1.8%**[+]
Procedure Code	1,486	23.6%	**17.3%**	1,223	7.2%[+]	**8.3%**[+]
Procedure Code Modifier	527	28.7%	**23.5%**	389	3.3%[+]	**4.1%**[+]
Rendering Provider Name	576	13.7%	**9.6%**[+]	518	4.1%[+]	**3.4%**[+]

Encounter Data Accuracy

Table J.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 J.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.

[1]This 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	1,495	99.7%[+]	**99.7%[+]**	—
Procedure Code	1,135	99.1%[+]	**98.6%[+]**	—
Procedure Code Modifier	376	99.7%[+]	**99.9%[+]**	—
Rendering Provider Name	497	75.7%	**64.2%**	Incorrect name (99.2%)

Key Data Element	Denominator	CHG Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	504	48.2%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	504	62.3%	**70.5%**	—

APPENDIX K. FINDINGS FOR CONTRA COSTA HEALTH PLAN (CCHP)

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 CCHP.

Table K.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CCHP	411	399	97.1%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table K.2 lists the reasons for missing medical records for CCHP, as well as the count and percent for each reason.

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

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	33.3%
Closed facility.	4	33.3%
Medical records were not located at the facility.	1	8.3%
Non-responsive provider or provider did not respond in a timely manner.	1	8.3%
Other.	1	8.3%
Provider refused to release medical records.	1	8.3%
CCHP Total	**12**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
CCHP	399	253	63.4%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table K.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 K.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	593	3.9%+	**8.2%+**	605	5.8%+	**3.3%+**
Diagnosis Code	1,437	7.9%+	**10.7%**	1,366	3.1%+	**1.8%+**
Procedure Code	1,174	12.5%	**17.3%**	1,114	7.8%+	**8.3%+**
Procedure Code Modifier	528	18.4%	**23.5%**	442	2.5%+	**4.1%+**
Rendering Provider Name	593	4.4%+	**9.6%+**	601	5.7%+	**3.4%+**

Encounter Data Accuracy

Table K.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 K.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.

[1]This 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	1,323	99.5%[+]	**99.7%[+]**	—
Procedure Code	1,027	98.1%[+]	**98.6%[+]**	—
Procedure Code Modifier	431	99.8%[+]	**99.9%[+]**	—
Rendering Provider Name	567	76.7%	**64.2%**	Incorrect name (93.2%)

Key Data Element	Denominator	CCHP Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	570	61.9%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	570	77.0%	**70.5%**	—

APPENDIX L. FINDINGS FOR GOLD COAST HEALTH PLAN (GCHP)

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 GCHP.

Table L.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
GCHP	411	171	41.6%
Statewide Total	**9,374**	**8,491**	**90.6%**[+]

Table L.2 lists the reasons for missing medical records for GCHP, as well as the count and percent for each reason.

Table L.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.	239	99.6%
Other.	1	0.4%
GCHP Total	**240**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
GCHP	171	101	59.1%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table L.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 L.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.

"S" indicates that the numerator for this indicator was between one and 10; therefore,

this report suppresses the rate to satisfy the DHCS Data De-Identification Guidelines V2.2 de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	GCHP Rate	Statewide Rate	Denominator	GCHP Rate	Statewide Rate
Date of Service	479	51.4%	**8.2%+**	241	S+	**3.3%+**
Diagnosis Code	1,029	53.6%	**10.7%**	486	S+	**1.8%+**
Procedure Code	873	56.9%	**17.3%**	390	3.6%+	**8.3%+**
Procedure Code Modifier	391	60.6%	**23.5%**	154	0.0%+	**4.1%+**
Rendering Provider Name	479	52.2%	**9.6%+**	237	S+	**3.4%+**

Encounter Data Accuracy

Table L.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 L.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.

[1]This 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	477	99.6%[+]	**99.7%[+]**	—
Procedure Code	376	100.0%[+]	**98.6%[+]**	—
Procedure Code Modifier	154	99.4%[+]	**99.9%[+]**	—
Rendering Provider Name	229	68.6%	**64.2%**	Incorrect name (77.8%); Illegible name in medical records (22.2%)
All-Element Accuracy	233	57.1%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	233	80.3%[+]	**70.5%**	—

APPENDIX M. FINDINGS FOR HEALTH NET COMMUNITY SOLUTIONS, INC. (HEALTH NET)

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 Health Net.

Table M.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Health Net	411	387	94.2%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table M.2 lists the reasons for missing medical records for Health Net, as well as the count and percent for each reason.

Table M.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.	13	54.2%
Member was not a patient of the practice.	6	25.0%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	3	12.5%
Closed facility.	1	4.2%
Other.	1	4.2%
Health Net Total	**24**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
Health Net	387	198	51.2%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table M.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 M.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.

"S" indicates that the numerator for this indicator was between one and 10; therefore,

this report suppresses the rate to satisfy the DHCS Data De-Identification Guidelines V2.2 de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Health Net Rate	Statewide Rate	Denominator	Health Net Rate	Statewide Rate
Date of Service	562	5.5%[+]	**8.2%[+]**	541	S[+]	**3.3%[+]**
Diagnosis Code	1,669	10.8%	**10.7%**	1,509	1.3%[+]	**1.8%[+]**
Procedure Code	1,356	19.1%	**17.3%**	1,172	6.4%[+]	**8.3%[+]**
Procedure Code Modifier	504	25.0%	**23.5%**	391	3.3%[+]	**4.1%[+]**
Rendering Provider Name	562	8.0%[+]	**9.6%[+]**	527	S[+]	**3.4%[+]**

Encounter Data Accuracy

Table M.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 M.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.

[1]This 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	1,489	99.7%[+]	**99.7%[+]**	—
Procedure Code	1,097	98.0%[+]	**98.6%[+]**	—
Procedure Code Modifier	378	99.5%[+]	**99.9%[+]**	—
Rendering Provider Name	517	59.2%	**64.2%**	Incorrect name (93.8%); Illegible name in medical records (6.2%)
All-Element Accuracy	531	35.8%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	531	62.9%	**70.5%**	—

APPENDIX N. FINDINGS FOR HEALTH PLAN OF SAN JOAQUIN (HPSJ)

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 HPSJ.

Table N.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
HPSJ	411	380	92.5%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table N.2 lists the reasons for missing medical records for HPSJ, as well as the count and percent for each reason.

Table N.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.	25	80.6%
Member was not a patient of the practice.	2	6.5%
Medical records were not located at the facility.	2	6.5%
Other.	1	3.2%
Provider refused to release medical records.	1	3.2%
HPSJ Total	**31**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
HPSJ	380	197	51.8%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table N.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 N.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 between one and 10; therefore,

this report suppresses the rate to satisfy the DHCS Data De-Identification Guidelines V2.2 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	562	7.1%[+]	**8.2%[+]**	538	3.0%[+]	**3.3%[+]**
Diagnosis Code	1,591	12.1%	**10.7%**	1,421	1.5%[+]	**1.8%[+]**
Procedure Code	1,222	15.1%	**17.3%**	1,072	3.2%[+]	**8.3%[+]**
Procedure Code Modifier	537	25.0%	**23.5%**	412	S[+]	**4.1%[+]**
Rendering Provider Name	562	9.4%[+]	**9.6%[+]**	525	3.0%[+]	**3.4%[+]**

Encounter Data Accuracy

Table N.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 N.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.

[1]This 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	1,399	99.7%[+]	**99.7%[+]**	—
Procedure Code	1,038	95.6%[+]	**98.6%[+]**	Inaccurate code (100.0%)
Procedure Code Modifier	403	100.0%[+]	**99.9%[+]**	—
Rendering Provider Name	509	62.7%	**64.2%**	Incorrect name (95.8%)
All-Element Accuracy	522	41.6%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	522	66.7%	**70.5%**	—

APPENDIX O. FINDINGS FOR HEALTH PLAN OF SAN MATEO (HPSM)

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 HPSM.

Table O.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
HPSM	411	401	97.6%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table O.2 lists the reasons for missing medical records for HPSM, as well as the count and percent for each reason.

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

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

Non-Submission Reason	Count	Percent
Member was not a patient of the practice.	3	30.0%
Provider refused to release medical records.	3	30.0%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	2	20.0%
Closed facility.	1	10.0%
Non-responsive provider or provider did not respond in a timely manner.	1	10.0%
HPSM Total	**10**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
HPSM	401	180	44.9%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table O.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 O.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.

"S" indicates that the numerator for this indicator was between one and 10; therefore,

this report suppresses the rate to satisfy the DHCS Data De-Identification Guidelines V2.2 de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	HPSM Rate	Statewide Rate	Denominator	HPSM Rate	Statewide Rate
Date of Service	555	2.5%[+]	**8.2%[+]**	549	S[+]	**3.3%[+]**
Diagnosis Code	1,461	5.1%[+]	**10.7%**	1,404	1.2%[+]	**1.8%[+]**
Procedure Code	1,037	9.5%[+]	**17.3%**	982	4.5%[+]	**8.3%[+]**
Procedure Code Modifier	326	13.8%	**23.5%**	322	12.7%	**4.1%[+]**
Rendering Provider Name	555	3.6%[+]	**9.6%[+]**	543	S[+]	**3.4%[+]**

Encounter Data Accuracy

Table O.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 O.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.

[1]This 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	1,387	99.9%[+]	**99.7%[+]**	—
Procedure Code	938	97.4%[+]	**98.6%[+]**	—
Procedure Code Modifier	281	99.3%[+]	**99.9%[+]**	—
Rendering Provider Name	535	75.9%	**64.2%**	Incorrect name (95.3%)
All-Element Accuracy	541	53.6%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	541	71.7%	**70.5%**	—

APPENDIX P. FINDINGS FOR INLAND EMPIRE HEALTH PLAN (IEHP)

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 IEHP.

Table P.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
IEHP	411	402	97.8%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table P.2 lists the reasons for missing medical records for IEHP, as well as the count and percent for each reason.

Table P.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.	2	22.2%
Closed facility.	2	22.2%
Medical records were not located at the facility.	2	22.2%
Other.	2	22.2%
Non-responsive provider or provider did not respond in a timely manner.	1	11.1%
IEHP Total	**9**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
IEHP	402	140	34.8%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table P.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 P.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	497	3.6%+	**8.2%+**	494	3.0%+	**3.3%+**
Diagnosis Code	1,383	6.3%+	**10.7%**	1,316	1.5%+	**1.8%+**
Procedure Code	1,057	13.0%	**17.3%**	992	7.3%+	**8.3%+**
Procedure Code Modifier	360	18.6%	**23.5%**	308	4.9%+	**4.1%+**
Rendering Provider Name	497	5.8%+	**9.6%+**	483	3.1%+	**3.4%+**

Encounter Data Accuracy

Table P.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 P.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.

[1]This 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	1,296	99.9%[+]	**99.7%[+]**	—
Procedure Code	920	99.0%[+]	**98.6%[+]**	—
Procedure Code Modifier	293	100.0%[+]	**99.9%[+]**	—
Rendering Provider Name	468	60.5%	**64.2%**	Incorrect name (96.8%)

Key Data Element	Denominator	IEHP Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	479	43.2%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	479	72.0%	**70.5%**	—

APPENDIX Q. FINDINGS FOR KAISER PERMANENTE (KAISER)

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 Kaiser.

Table Q.1—Medical Record Procurement Status for Kaiser

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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Kaiser	411	408	99.3%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table Q.2 lists the reasons for missing medical records for Kaiser, as well as the count and percent for each reason.

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

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.	3	100.0%
Kaiser Total	**3**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
Kaiser	408	356	87.3%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table Q.4 displays the medical record omission and encounter data omission rates for Kaiser. 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 Kaiser

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 Rate	Statewide Rate	Denominator	Kaiser Rate	Statewide Rate
Date of Service	679	3.1%+	**8.2%+**	704	6.5%+	**3.3%+**
Diagnosis Code	1,835	5.4%+	**10.7%**	1,784	2.7%+	**1.8%+**
Procedure Code	1,183	9.3%+	**17.3%**	1,155	7.1%+	**8.3%+**
Procedure Code Modifier	335	14.6%	**23.5%**	299	4.3%+	**4.1%+**
Rendering Provider Name	679	3.1%+	**9.6%+**	704	6.5%+	**3.4%+**

Encounter Data Accuracy

Table Q.5 displays the element accuracy rates for each key data element and the all-element accuracy rate for Kaiser. 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 Kaiser

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.

[1]This 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 Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	1,736	99.8%[+]	**99.7%[+]**	—
Procedure Code	1,073	98.4%[+]	**98.6%[+]**	—
Procedure Code Modifier	286	100.0%[+]	**99.9%[+]**	—
Rendering Provider Name	658	85.4%	**64.2%**	Incorrect name (100.0%)

Key Data Element	Denominator	Kaiser Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	658	74.2%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	658	84.3%[+]	**70.5%**	—

APPENDIX R. FINDINGS FOR KERN HEALTH SYSTEMS (KHS)

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 KHS.

Table R.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
KHS	411	405	98.5%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table R.2 lists the reasons for missing medical records for KHS, as well as the count and percent for each reason.

Table R.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	100.0%
KHS Total	**6**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
KHS	405	231	57.0%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table R.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 R.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 between one and 10; therefore,

this report suppresses the rate to satisfy the DHCS Data De-Identification Guidelines V2.2 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	636	S[+]	**8.2%[+]**	628	S[+]	**3.3%[+]**
Diagnosis Code	1,547	3.0%[+]	**10.7%**	1,510	S[+]	**1.8%[+]**
Procedure Code	1,176	6.0%[+]	**17.3%**	1,189	7.0%[+]	**8.3%[+]**
Procedure Code Modifier	718	17.1%	**23.5%**	618	3.7%[+]	**4.1%[+]**
Rendering Provider Name	636	2.2%[+]	**9.6%[+]**	624	S[+]	**3.4%[+]**

Encounter Data Accuracy

Table R.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 R.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.

[1]This 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	1,500	99.9%[+]	**99.7%[+]**	—
Procedure Code	1,106	99.4%[+]	**98.6%[+]**	—
Procedure Code Modifier	595	100.0%[+]	**99.9%[+]**	—
Rendering Provider Name	622	83.6%	**64.2%**	Incorrect name (99.0%)
All-Element Accuracy	626	63.6%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	626	75.2%	**70.5%**	—

APPENDIX S. FINDINGS FOR L.A. CARE HEALTH PLAN (L.A. CARE)

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 L.A. Care.

Table S.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
L.A. Care	411	339	82.5%
Statewide Total	**9,374**	**8,491**	**90.6%**[+]

Table S.2 lists the reasons for missing medical records for L.A. Care, as well as the count and percent for each reason.

Table S.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.	63	87.5%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	5	6.9%
Member was not a patient of the practice.	2	2.8%
Medical records were not located at the facility.	2	2.8%
L.A. Care Total	**72**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
L.A. Care	339	208	61.4%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table S.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 S.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	541	17.9%	**8.2%**+	465	4.5%+	**3.3%**+
Diagnosis Code	1,570	18.2%	**10.7%**	1,313	2.2%+	**1.8%**+
Procedure Code	1,190	26.7%	**17.3%**	950	8.2%+	**8.3%**+
Procedure Code Modifier	339	35.1%	**23.5%**	238	7.6%+	**4.1%**+
Rendering Provider Name	541	19.4%	**9.6%**+	457	4.6%+	**3.4%**+

Encounter Data Accuracy

Table S.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 S.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.

[1]This 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	1,284	99.7%[+]	**99.7%[+]**	—
Procedure Code	872	98.3%[+]	**98.6%[+]**	—
Procedure Code Modifier	220	100.0%[+]	**99.9%[+]**	—
Rendering Provider Name	436	72.7%	**64.2%**	Incorrect name (92.4%)

Key Data Element	Denominator	L.A. Care Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	444	51.6%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	444	70.7%	**70.5%**	—

APPENDIX T. FINDINGS FOR MOLINA HEALTHCARE OF CALIFORNIA (MOLINA)

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 Molina.

Table T.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Molina	411	374	91.0%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table T.2 lists the reasons for missing medical records for Molina, as well as the count and percent for each reason.

Table T.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.	36	97.3%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	1	2.7%
Molina Total	**37**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
Molina	374	210	56.1%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table T.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 T.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 between one and 10; therefore,

this report suppresses the rate to satisfy the DHCS Data De-Identification Guidelines V2.2 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	598	6.5%[+]	**8.2%[+]**	564	S[+]	**3.3%[+]**
Diagnosis Code	1,760	8.5%[+]	**10.7%**	1,619	S[+]	**1.8%[+]**
Procedure Code	1,423	15.0%	**17.3%**	1,255	3.7%[+]	**8.3%[+]**
Procedure Code Modifier	522	18.6%	**23.5%**	437	2.7%[+]	**4.1%[+]**
Rendering Provider Name	598	7.0%[+]	**9.6%[+]**	561	S[+]	**3.4%[+]**

Encounter Data Accuracy

Table T.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 T.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.

[1]This 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	1,610	99.9%[+]	**99.7%**[+]	—
Procedure Code	1,209	97.4%[+]	**98.6%**[+]	Inaccurate code (100.0%)
Procedure Code Modifier	425	100.0%[+]	**99.9%**[+]	—
Rendering Provider Name	556	62.4%	**64.2%**	Incorrect name (94.3%); Illegible name in medical records (5.7%)
All-Element Accuracy	559	44.9%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	559	74.2%	**70.5%**	—

APPENDIX U. FINDINGS FOR PARTNERSHIP HEALTHPLAN OF CALIFORNIA (PARTNERSHIP)

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 Partnership.

Table U.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Partnership	411	397	96.6%[+]
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table U.2 lists the reasons for missing medical records for Partnership, as well as the count and percent for each reason.

Table U.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.	5	35.7%
Other.	4	28.6%
Non-responsive provider or provider did not respond in a timely manner.	3	21.4%
Member was not a patient of the practice.	1	7.1%
Closed facility.	1	7.1%
Partnership Total	**14**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
Partnership	397	179	45.1%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table U.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 U.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.

"S" indicates that the numerator for this indicator was between one and 10; therefore,

this report suppresses the rate to satisfy the DHCS Data De-Identification Guidelines V2.2 de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Partnership Rate	Statewide Rate	Denominator	Partnership Rate	Statewide Rate
Date of Service	570	3.5%[+]	**8.2%[+]**	560	S[+]	**3.3%[+]**
Diagnosis Code	1,451	7.6%[+]	**10.7%**	1,355	1.0%[+]	**1.8%[+]**
Procedure Code	942	10.7%	**17.3%**	992	15.2%	**8.3%[+]**
Procedure Code Modifier	392	10.7%	**23.5%**	367	4.6%[+]	**4.1%[+]**
Rendering Provider Name	570	4.6%[+]	**9.6%[+]**	554	S[+]	**3.4%[+]**

Encounter Data Accuracy

Table U.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 U.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.

[1]This 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	1,341	99.4%[+]	**99.7%[+]**	—
Procedure Code	841	99.5%[+]	**98.6%[+]**	—
Procedure Code Modifier	350	100.0%[+]	**99.9%[+]**	—
Rendering Provider Name	544	69.9%	**64.2%**	Incorrect name (98.2%)
All-Element Accuracy	550	50.9%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	550	70.4%	**70.5%**	—

APPENDIX V. FINDINGS FOR SAN FRANCISCO HEALTH PLAN (SFHP)

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 SFHP.

Table V.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
SFHP	411	350	85.2%
Statewide Total	**9,374**	**8,491**	**90.6%[+]**

Table V.2 lists the reasons for missing medical records for SFHP, as well as the count and percent for each reason.

Table V.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.	46	75.4%
Member was not a patient of the practice.	8	13.1%
Medical records were not located at the facility.	3	4.9%
Provider refused to release medical records.	2	3.3%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	1	1.6%
Other.	1	1.6%
SFHP Total	**61**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
SFHP	350	213	60.9%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table V.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 V.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.

"S" indicates that the numerator for this indicator was between one and 10; therefore,

this report suppresses the rate to satisfy the DHCS Data De-Identification Guidelines V2.2 de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	SFHP Rate	Statewide Rate	Denominator	SFHP Rate	Statewide Rate
Date of Service	541	16.1%	**8.2%[+]**	472	3.8%[+]	**3.3%[+]**
Diagnosis Code	1,465	14.9%	**10.7%**	1,275	2.2%[+]	**1.8%[+]**
Procedure Code	1,148	31.0%	**17.3%**	855	7.4%[+]	**8.3%[+]**
Procedure Code Modifier	508	44.7%	**23.5%**	287	S[+]	**4.1%[+]**
Rendering Provider Name	541	16.6%	**9.6%[+]**	468	3.6%[+]	**3.4%[+]**

Encounter Data Accuracy

Table V.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 V.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.

[1]This 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	1,247	100.0%[+]	**99.7%[+]**	—
Procedure Code	792	99.6%[+]	**98.6%[+]**	—
Procedure Code Modifier	281	99.3%[+]	**99.9%[+]**	—
Rendering Provider Name	451	81.8%	**64.2%**	Incorrect name (95.1%)
All-Element Accuracy	454	59.7%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	454	70.9%	**70.5%**	—

APPENDIX W. FINDINGS FOR SANTA CLARA FAMILY HEALTH PLAN (SCFHP)

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 SCFHP.

Table W.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
SCFHP	411	378	92.0%+
Statewide Total	**9,374**	**8,491**	**90.6%+**

Table W.2 lists the reasons for missing medical records for SCFHP, as well as the count and percent for each reason.

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

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.	30	90.9%
Member was a patient of the practice; however, no documentation was available for requested dates of service.	2	6.1%
Other.	1	3.0%
SCFHP Total	**33**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
SCFHP	378	178	47.1%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table W.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 W.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.

"S" indicates that the numerator for this indicator was between one and 10; therefore,

this report suppresses the rate to satisfy the DHCS Data De-Identification Guidelines V2.2 de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	SCFHP Rate	Statewide Rate	Denominator	SCFHP Rate	Statewide Rate
Date of Service	554	6.7%[+]	**8.2%[+]**	538	3.9%[+]	**3.3%[+]**
Diagnosis Code	1,417	9.1%[+]	**10.7%**	1,317	2.2%[+]	**1.8%[+]**
Procedure Code	1,076	15.9%	**17.3%**	1,045	13.4%	**8.3%[+]**
Procedure Code Modifier	573	28.4%	**23.5%**	414	S[+]	**4.1%[+]**
Rendering Provider Name	554	7.2%[+]	**9.6%[+]**	535	3.9%[+]	**3.4%[+]**

Encounter Data Accuracy

Table W.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 W.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.

[1]This 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	1,288	99.8%[+]	**99.7%[+]**	—
Procedure Code	905	99.7%[+]	**98.6%[+]**	—
Procedure Code Modifier	410	100.0%[+]	**99.9%[+]**	—
Rendering Provider Name	514	76.7%	**64.2%**	Incorrect name (96.7%)

Key Data Element	Denominator	SCFHP Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	517	53.4%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	517	69.6%	**70.5%**	—

APPENDIX X. FINDINGS FOR SCAN HEALTH PLAN (SCAN)

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 SCAN.

Table X.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.

Plan	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
SCAN	411	321	78.1%
Statewide Total	**9,374**	**8,491**	**90.6%**[+]

Table X.2 lists the reasons for missing medical records for SCAN, as well as the count and percent for each reason.

Table X.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.	90	100.0%
SCAN Total	**90**	**100.0%**

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

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

Plan	Number of Records Submitted	Number of Records Submitted with Second Date of Service	Percent
SCAN	321	147	45.8%
Statewide Total	**8,491**	**4,856**	**57.2%**

Encounter Data Completeness

Table X.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 X.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 between one and 10; therefore,

this report suppresses the rate to satisfy the DHCS Data De-Identification Guidelines V2.2 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	552	23.2%	**8.2%+**	434	S+	**3.3%+**
Diagnosis Code	2,139	23.1%	**10.7%**	1,659	0.8%+	**1.8%+**
Procedure Code	1,001	36.9%	**17.3%**	649	2.6%+	**8.3%+**
Procedure Code Modifier	352	60.8%	**23.5%**	141	S+	**4.1%+**
Rendering Provider Name	552	23.9%	**9.6%+**	430	S+	**3.4%+**

Encounter Data Accuracy

Table X.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 X.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.

[1]This 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	1,645	99.9%[+]	**99.7%[+]**	—
Procedure Code	632	99.8%[+]	**98.6%[+]**	—
Procedure Code Modifier	138	99.3%[+]	**99.9%[+]**	—
Rendering Provider Name	420	79.5%	**64.2%**	Incorrect name (95.3%)
All-Element Accuracy	424	62.3%	**45.5%**	—
All-Element Accuracy Excluding Rendering Provider Name[1]	424	74.3%	**70.5%**	—