

# SFY 2018–19 Encounter Data Validation Study Report

Managed Care Quality and Monitoring Division  
California Department of Health Care Services

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## Commonly Used Abbreviations and Acronyms

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

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



## 1. Executive Summary

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

Since State Fiscal Year (SFY) 2012–13, DHCS has contracted with Health Services Advisory Group, Inc. (HSAG), to conduct an encounter data validation (EDV) study. For SFY 2018–19, the goal of the EDV study was to examine, through a review of medical records, the completeness and accuracy of the professional encounter data submitted to DHCS by MCPs and PSPs.

### Methodology

Medical and clinical records are considered the “gold standard” for documenting access to and quality of health care services. During SFY 2018–19, HSAG evaluated MCMC encounter data completeness and accuracy via a review of medical records for physician services rendered between January 1, 2017, and December 31, 2017. The study answered the following question:

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

HSAG conducted the following actions to answer the study question:

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

### Key Findings from Medical Record Review

Table 1.1 displays the statewide results for each study indicator. Rates shaded in gray and denoted with a cross (+) indicate having met the EDV study standards. The symbol “—” indicates that the study indicator is not applicable for a data element. Of note, for the medical record omission rate and encounter data omission rate, lower values indicate better performance.

**Table 1.1—Statewide Results for Study Indicators**

\*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
<b>EDV Study Standards</b>	<b>Less than 10 percent</b>	<b>Less than 10 percent</b>	<b>More than 90 percent</b>
Date of Service	8.1% <sup>+</sup>	7.1% <sup>+</sup>	—
Diagnosis Code	18.4%	11.8%	98.4% <sup>+</sup>
Procedure Code	25.4%	8.2% <sup>+</sup>	96.2% <sup>+</sup>
Procedure Code Modifier	35.3%	3.7% <sup>+</sup>	99.8% <sup>+</sup>
Rendering Provider Name	8.1% <sup>+</sup>	22.3%	63.5%
All-Element Accuracy	—	—	30.7%
All-Element Accuracy Excluding Rendering Provider Name*	—	—	60.1%

### Encounter Data Completeness

Omissions identified in the medical records (services located in the encounter data but not supported in the medical records) and omissions 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 are relatively complete for the key data elements when compared to the medical records. Below are some significant findings:

- ◆ Among the five data elements assessed for this study, two data elements (i.e., *Date of Service* and *Rendering Provider Name*) had medical record omission rates (services located in the encounter data but not supported in the medical records) of less than 10 percent, which met the EDV study standard. For the remaining three data elements, DHCS encounters were moderately supported by the documentation in the beneficiaries' medical records. As shown in Table 1.1, 18.4 percent of the diagnosis codes, 25.4 percent of the procedure codes, and 35.3 percent of the procedure code modifiers identified in the electronic encounter data were not supported by the corresponding medical records.
- ◆ Three data elements (i.e., *Date of Service*, *Procedure Code*, and *Procedure Code Modifier*) each had an encounter data omission rate (services located in the medical records but not in the encounter data) of less than 10 percent, which met the EDV study standard. The

remaining two data elements had moderate encounter data omission rates (i.e., 11.8 percent of the diagnosis codes and 22.3 percent of the rendering provider names identified in the beneficiaries' medical records were not found in DHCS' data warehouse).

- ◆ Only the *Date of Service* data element 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 (i.e., *Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*) had an accuracy rate greater than 90 percent, which met the EDV study standard. Statewide, 63.5 percent of rendering provider names identified in the electronic encounter data were supported by medical record documentation.
- ◆ Nearly one third (i.e., 30.7 percent) of the dates of service present in both data sources contained matching values for all four key data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Rendering Provider Name*). This number increased to 60.1 percent when the matched values included three data elements—*Diagnosis Code*, *Procedure Code*, and *Procedure Code Modifier*.

When comparing results from the SFY 2017–18 medical record review activity with current results, the status for meeting the EDV standards remained the same for all statewide results.

### **Recommendations**

Based on the study findings, HSAG's recommendations for the 2018–19 EDV study are similar to the recommendations HSAG made for the 2017–18 EDV study. In general, DHCS should continue to work with MCPs and PSPs to determine ways to improve study results that did not meet the EDV study standards.

Note that HSAG submitted the recommendations from the 2017–18 EDV study to DHCS in November 2018; therefore, any subsequent changes that DHCS and/or MCPs/PSPs made likely did not impact the current EDV study results, which relate to physician services rendered between January 1, 2017, and December 31, 2017. HSAG anticipates that DHCS and HSAG will observe the effects from DHCS' improvement efforts in future EDV studies.

## 2. Overview and Methodology

### Overview

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

Since SFY 2012–13, DHCS has contracted with HSAG to conduct an EDV study. For SFY 2018–19, the goal of the EDV study was to examine, through a review of medical records, the completeness and accuracy of the professional encounter data submitted to DHCS by MCPs and PSPs. HSAG assessed the encounter data submitted by DHCS' 23 MCPs and two PSPs.<sup>1</sup>

### Methodology

Medical and clinical records are considered the “gold standard” for documenting access to and quality of health care services. During SFY 2018–19, HSAG evaluated MCMC encounter data completeness and accuracy via a review of medical records for physician services rendered between January 1, 2017, and December 31, 2017. The study answered the following question:

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

#### Table 2.1—Key Data Elements for Medical Record Review

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

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<sup>1</sup> Refer to Appendix A for a list of MCPs and PSPs included in this study. Note that HSAG refers to Kaiser NorCal and Kaiser SoCal as two separate MCPs in this methodology; however, DHCS only holds one contract with Kaiser (KP Cal, LLC).

contracted during the study period. As such, this would render the link between the encounter data and the 274 provider data incomplete, limiting the usefulness of the *Rendering Provider Name* data element.

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

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

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

### Study Population

To be eligible for the medical record review, a beneficiary had to be continuously enrolled in the same MCP or PSP during the study period (i.e., between January 1, 2017, and December 31, 2017), and had to have at least one physician visit during the study period. In addition, HSAG excluded beneficiaries with Medicare or other insurance coverage from the eligible population<sup>2</sup> because DHCS does not have complete encounter data for all services that these beneficiaries received. In this report, HSAG refers to “physician visits” as the services that meet all criteria in Table 2.2.

**Table 2.2—Criteria for Physician Visits Included in the Study**

Data Element	Criteria
Claim Type	Claim Type = “4” (Medical/Physician) in the DHCS data warehouse
Provider Type	Certified nurse midwife
	Certified pediatric nurse practitioner and certified family nurse practitioner
	Clinic—otherwise undesignated
	Community clinics

<sup>2</sup> One exception was that beneficiaries enrolled in SCAN Health Plan with Medicare coverage were included in the eligible population.

Data Element	Criteria
	<p>Group-certified pediatric nurse practitioner and certified family nurse practitioner</p> <p>Multi-specialty clinics</p> <p>Physicians</p> <p>Physicians group</p> <p>Podiatrists</p> <p>Rural Health Clinics and Federally Qualified Health Centers</p> <p>Unknown when billing provider is Kaiser for Kaiser NorCal, Kaiser SoCal, or Kaiser’s plan partners (i.e., AAH, CalOptima, CalViva, CCHP, Gold Coast, HPSJ, HPSM, IEHP, KFHC, L.A. Care, Partnership, SFHP, and SCFHP). Please see Appendix A for full plan names.</p>
Place of Service	<p>Assisted living facility</p> <p>Emergency room (hospital)</p> <p>Federally Qualified Health Center</p> <p>Group home</p> <p>Home</p> <p>Independent clinic</p> <p>Office</p> <p>Public health clinic</p> <p>Rural health clinic</p> <p>Urgent care facility</p> <p>Telehealth</p>
Procedure Code	<p>If all detail lines for a visit had the following procedure codes, the visit was excluded from the study since these procedure codes are for services outside the scope of work for this study (e.g., durable medical equipment [DME], dental, vision, and ancillary providers).</p> <ul style="list-style-type: none"> <li>◆ A procedure code starting with “B”, “E,” “D,” “K”, or “V”</li> <li>◆ Procedure codes between A0021 and A0999 (i.e., codes for transportation services)</li> <li>◆ Procedure codes between A4206 and A9999 (i.e., codes for medical and surgical supplies, miscellaneous, and investigational)</li> <li>◆ Procedure codes between T4521 and T4544 (i.e., codes for incontinence supplies)</li> </ul>

Data Element	Criteria
	<ul style="list-style-type: none"> <li data-bbox="407 302 1409 369">◆ Procedure codes between L0112 and L4631 (i.e., codes for orthotic devices and procedures)</li> <li data-bbox="407 380 1443 447">◆ Procedure codes between L5000 and L9900 (i.e., codes for prosthetic devices and procedures)</li> </ul>

### Sampling Strategy

HSAG used a two-stage sampling technique to select samples based on the beneficiary enrollment and the encounter data extracted from the DHCS data warehouse. HSAG first identified all beneficiaries who met the study population eligibility criteria. HSAG then randomly selected 411 beneficiaries<sup>3</sup> from the eligible population for each of the 25 participating MCPs and PSPs. Then, for each selected sampled beneficiary, HSAG used the SURVEYSELECT procedure in SAS<sup>®4</sup> to randomly select one physician visit<sup>5</sup> that occurred in the study period (i.e., between January 1, 2017, and December 31, 2017). Additionally, to evaluate whether any dates of service were omitted from the DHCS data warehouse, HSAG reviewed a second date of service selected by the same provider’s office as that for the sampled date of service. While handling medical records for the sampled date of service, the providers selected a second date of service closest to the selected date of service from the medical records for each sampled beneficiary. If a sampled beneficiary did not have a second visit with the same provider during the review period, HSAG evaluated only one date of service for that beneficiary.

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

<sup>3</sup> 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. Of note, when there were less than 411 eligible beneficiaries for an MCP or PSP, HSAG selected all eligible beneficiaries.

<sup>4</sup> 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.

<sup>5</sup> To ensure that the medical record review includes all services provided on the same date of service, encounters with the same date of service and same rendering provider were consolidated into one visit for sampling purposes.



## **Medical Record Procurement**

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

HSAG submitted the final sample lists to MCPs and PSPs on January 30, 2019. Upon receiving the final sample lists, MCPs and PSPs began procuring from contracted providers the sampled beneficiaries' medical records for services that occurred during the study period. MCPs and PSPs subsequently submitted the documentation to HSAG. To improve the procurement rate, HSAG conducted another technical assistance call with participating MCPs and PSPs to review the EDV project and the procurement protocols. MCPs and PSPs were instructed to submit medical records electronically via a secure file transfer protocol site to ensure the protection of personal health information. During the procurement process, between February and May of 2019, HSAG worked with MCPs and PSPs to answer questions and monitor the number of medical records submitted. HSAG provided two intermediate submission updates to MCPs and PSPs during the procurement period (e.g., one update on March 20, 2019, and one update on April 17, 2019), and a final submission status update following completion of the procurement period.

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

## **Review of Medical Records**

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

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



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

## Study Indicators

Once HSAG's trained reviewers completed the medical record review, HSAG's analysts exported the information collected from the electronic tool, reviewed the data, and conducted the analysis. HSAG used the following five study indicators to report the medical record review results:

- ◆ *Medical record omission rate*: the percentage of dates of service identified in the electronic encounter data that were not found in the beneficiaries' medical records. HSAG also calculated this rate for the other key data elements in Table 2.1.
- ◆ *Encounter data omission rate*: the percentage of dates of service from beneficiaries' medical records that were not found in the electronic encounter data. HSAG also calculated this rate for the other key data elements in Table 2.1.
- ◆ *Accuracy rate of coding*: the percentage of diagnosis codes, procedure codes, procedure code modifiers, and rendering provider names associated with validated dates of service from the electronic encounter data that were correctly coded based on the beneficiaries' medical records.
- ◆ *Overall accuracy rate*: the percentage of dates of service with all data elements coded correctly among all validated dates of service from the electronic encounter data.
- ◆ *Supplemental overall accuracy rate*: the percentage of dates of service with all data elements excluding the data element *Rendering Provider Name* coded correctly among all the validated dates of service from the electronic encounter data.

HSAG used the standards listed in Table 2.3 to evaluate MCPs' and PSPs' performance. Table 2.3 presents the standards used for each study indicator.

**Table 2.3—Standards for Study Indicators**

Note: HSAG developed the EDV study standards based on the statement from the Quality Measures for Encounter Data (QMED) document for measure DCMT.003: “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.”<sup>6</sup>

Study Indicator	Standards
Medical record procurement rate	More than 90 percent
Medical record omission rate	Less than 10 percent
Encounter data omission rate	Less than 10 percent
Data element accuracy rate	More than 90 percent

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

- ◆ If a denominator falls below 30, this report displays “NA” for the numerator, denominator, and rate—indicating that the denominator was too small to report a valid rate.
- ◆ If the numerator falls below 11, this report displays “S” for the numerator and rate. HSAG suppresses displaying the rate in this report to satisfy the HIPAA Privacy Rule’s de-identification standard.

<sup>6</sup> California Department of Health Care Services, Managed Care Quality and Monitoring Division. *Quality Measures for Encounter Data—Version 1.1*; August 8, 2018.

### 3. Medical Record Review Results

#### Medical Record Procurement Status

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

**Table 3.1—Medical Record Procurement Status**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
AAH	411	330	80.3%
AHF	278	240	86.3%
Anthem	411	382	92.9%+
Blue Shield Promise	411	334	81.3%
CCAH	411	403	98.1%+
CCHP	411	354	86.1%
CHG	411	410	99.8%+
CHW	411	358	87.1%
CalOptima	411	399	97.1%+
CalViva	411	314	76.4%
CenCal	411	403	98.1%+
Gold Coast	411	400	97.3%+
HPSJ	411	397	96.6%+
HPSM	411	396	96.4%+
Health Net	411	307	74.7%
IEHP	411	390	94.9%+
KFHC	411	403	98.1%+
Kaiser NorCal	411	411	100.0%+

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Kaiser SoCal	411	407	99.0% <sup>+</sup>
L.A. Care	411	393	95.6% <sup>+</sup>
Molina	411	376	91.5% <sup>+</sup>
Partnership	411	383	93.2% <sup>+</sup>
SCAN	411	376	91.5% <sup>+</sup>
SCFHP	411	395	96.1% <sup>+</sup>
SFHP	411	409	99.5% <sup>+</sup>
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%<sup>+</sup></b>

Overall, the statewide medical record submission rate was 92.4 percent, with rates ranging from 74.7 percent (Health Net) to 100.0 percent (Kaiser NorCal) among MCPs/PSPs. Of the 25 MCPs/PSPs that submitted medical records, 18 had a submission rate greater than the EDV study standard of 90 percent.

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

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

**Table 3.2—Reasons for Missing Medical Records**

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	362	46.9%
Beneficiary was not a patient of the practice.	166	21.5%
Medical records were not located at the facility.	92	11.9%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	81	10.5%
Closed facility.	31	4.0%
Other.	25	3.2%

Non-Submission Reason	Count	Percent
Provider refused to release medical records.	15	1.9%
<b>Total</b>	<b>772</b>	<b>100.0%</b>

As displayed in Table 3.2, the top reason for missing medical records was the category “Non-responsive provider or provider did not respond in a timely manner.” This category accounted for nearly half (46.9 percent) of the medical records that were not submitted. This could indicate that MCPs/PSPs have incorrect provider information, or that the contacted providers were unaware of the submission requirements or the submission deadline. The second most common non-submission category was “Beneficiary was not a patient of the practice.” 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 beneficiary did not access care.

Table 3.3 displays the number and percent of cases with one additional date of service selected and submitted for the study. Overall, 51.9 percent of procured medical records contained a second date of service. The individual MCP/PSP submission rates ranged from 3.9 percent (CHG) to 83.3 percent (Kaiser SoCal). A 100 percent submission rate is not expected for the second date of service as a beneficiary may not have had a second date of service within the review period. However, the low submission rate (3.9 percent) from CHG indicates potential issues during procurement (e.g., the provider did not follow the instructions to submit the second date of service, or the second date of service submitted was outside the review period).

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

MCP/PSP	Number of Records Submitted	Number of Records with One Additional Date of Service	Percent
AAH	330	199	60.3%
AHF	240	149	62.1%
Anthem	382	245	64.1%
Blue Shield Promise	334	183	54.8%
CCAH	403	260	64.5%
CCHP	354	149	42.1%
CHG	410	16	3.9%
CHW	358	170	47.5%
CalOptima	399	218	54.6%
CalViva	314	188	59.9%

MCP/PSP	Number of Records Submitted	Number of Records with One Additional Date of Service	Percent
CenCal	403	196	48.6%
Gold Coast	400	133	33.3%
HPSJ	397	218	54.9%
HPSM	396	120	30.3%
Health Net	307	162	52.8%
IEHP	390	131	33.6%
KFHC	403	237	58.8%
Kaiser NorCal	411	312	75.9%
Kaiser SoCal	407	339	83.3%
L.A. Care	393	202	51.4%
Molina	376	141	37.5%
Partnership	383	208	54.3%
SCAN	376	219	58.2%
SCFHP	395	231	58.5%
SFHP	409	235	57.5%
<b>Statewide Total</b>	<b>9,370</b>	<b>4,861</b>	<b>51.9%</b>

## Encounter Data Completeness

HSAG evaluated encounter data completeness by identifying differences between the electronic encounter data and the beneficiaries' 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 beneficiary'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 beneficiary's medical record but is not present in the electronic encounter data. Encounter data omissions suggest opportunities for improvement in the submission of claims and encounters or processing procedures among the providers, MCPs and PSPs, and DHCS.

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

**Date of Service Completeness**

Table 3.4 displays the statewide and the MCP/PSP level medical record omission and encounter data omission rates for the *Date of Service* data element. HSAG conducted the analyses at the date of service level.

**Table 3.4—Medical Record Omission and Encounter Data Omission for Date of Service**

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

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

MCP/PSP	Medical Record Omission		Encounter Data Omission	
	Date of Service Identified in Electronic Encounter Data	Rate	Date of Service Identified in Medical Records	Rate
AAH	567	15.9%	520	8.3% <sup>+</sup>
AHF	390	10.8%	385	9.6% <sup>+</sup>
Anthem	613	5.7% <sup>+</sup>	621	6.9% <sup>+</sup>
Blue Shield Promise	500	21.2%	488	19.3%
CCAH	611	2.8% <sup>+</sup>	654	9.2% <sup>+</sup>
CCHP	517	12.4%	496	8.7% <sup>+</sup>
CHG	423	S <sup>+</sup>	420	S <sup>+</sup>
CHW	534	11.0%	522	9.0% <sup>+</sup>
CalOptima	560	3.6% <sup>+</sup>	609	11.3%
CalViva	551	21.2%	482	10.0%
CenCal	594	S <sup>+</sup>	598	2.2% <sup>+</sup>
Gold Coast	525	4.0% <sup>+</sup>	523	3.6% <sup>+</sup>
HPSJ	598	3.3% <sup>+</sup>	609	5.1% <sup>+</sup>
HPSM	514	3.5% <sup>+</sup>	513	3.3% <sup>+</sup>

MCP/PSP	Medical Record Omission		Encounter Data Omission	
	Date of Service Identified in Electronic Encounter Data	Rate	Date of Service Identified in Medical Records	Rate
Health Net	539	22.6%	451	7.5% <sup>+</sup>
IEHP	511	5.5% <sup>+</sup>	514	6.0% <sup>+</sup>
KFHC	642	S <sup>+</sup>	638	S <sup>+</sup>
Kaiser NorCal	677	S <sup>+</sup>	718	6.4% <sup>+</sup>
Kaiser SoCal	416	25.5%	644	51.9%
L.A. Care	555	9.2% <sup>+</sup>	562	10.3%
Molina	545	8.1% <sup>+</sup>	508	S <sup>+</sup>
Partnership	591	7.6% <sup>+</sup>	574	4.9% <sup>+</sup>
SCAN	624	6.3% <sup>+</sup>	591	S <sup>+</sup>
SCFHP	565	3.5% <sup>+</sup>	622	12.4%
SFHP	625	S <sup>+</sup>	636	3.3% <sup>+</sup>
<b>Statewide Total</b>	<b>13,787</b>	<b>8.1%<sup>+</sup></b>	<b>13,898</b>	<b>7.1%<sup>+</sup></b>

Key findings for the medical record omission rates:

- ◆ Statewide, 8.1 percent of the dates of service in the electronic encounter data were not supported by beneficiaries’ medical records (i.e., medical record omission). This rate meets the EDV study standard shown in Table 2.3.
- ◆ The medical record omission rates ranged from 2.8 percent (CCAH) to 25.5 percent (Kaiser SoCal) among non-suppressed rates.
- ◆ Overall, 17 of 25 MCPs and PSPs met the EDV study standard.
- ◆ Of the eight MCPs and PSPs that did not meet the EDV study standard, seven (excluding Kaiser SoCal) had medical record submission rates of less than 90 percent (i.e., did not meet the standard). In general, an MCP or PSP with a relatively low medical record submission rate would have a relatively high medical record omission rate (i.e., poor performance) for each key data element. For Kaiser SoCal, when medical records for the sampled date of service were not available, Kaiser SoCal submitted a second date of service for the same beneficiary. As a result, the medical record omission rate for Kaiser SoCal was 25.5 percent while its medical record submission rate was 99.0 percent, as shown in Table 3.1. This observation is most likely related to the issue noted in the Study Limitation section of the report for Kaiser SoCal.



Key findings for the encounter data omission rates:

- ◆ Statewide, 7.1 percent of the dates of service in the medical records were not found in the electronic encounter data (i.e., encounter data omission).
- ◆ The encounter data omission rates ranged from 2.2 percent (CenCal) to 51.9 percent (Kaiser SoCal) among non-suppressed rates.
- ◆ Overall, 19 of 25 MCPs and PSPs met the EDV study standard.
- ◆ The denominator for the encounter data omission rate is the number of dates of service identified in the medical records, and the numerator is the number of dates of service with no evidence of submission in the electronic encounter data. If no second date of service was available in the medical records for validation, then no date of service would have contributed to the numerator. Table 3.3 shows that CHG had a low submission rate (i.e., 3.9 percent) for the second date of service, which led to only 16 second dates of service available to evaluate the encounter data omission rate. Therefore, all CHG encounter data omission rates in the report should be interpreted with caution.

### Diagnosis Code Completeness

Table 3.5 displays the statewide and the MCP/PSP level medical record omission and encounter data omission rates for the *Diagnosis Code* data element. HSAG conducted the analyses at the diagnosis code level.

**Table 3.5—Medical Record Omission and Encounter Data Omission for Diagnosis Code**

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.

MCP/PSP	Medical Record Omission		Encounter Data Omission	
	Diagnosis Code Identified in Electronic Encounter Data	Rate	Diagnosis Code Identified in Medical Records	Rate
AAH	926	24.9%	808	14.0%
AHF	660	19.8%	703	24.8%
Anthem	1,012	13.6%	986	11.4%
Blue Shield Promise	822	29.4%	786	26.2%
CCAH	898	9.4% <sup>+</sup>	954	14.7%
CCHP	818	21.5%	742	13.5%
CHG	683	14.1%	623	5.8% <sup>+</sup>
CHW	858	20.4%	788	13.3%
CalOptima	895	16.6%	899	17.0%

MCP/PSP	Medical Record Omission		Encounter Data Omission	
	Diagnosis Code Identified in Electronic Encounter Data	Rate	Diagnosis Code Identified in Medical Records	Rate
CalViva	886	31.8%	704	14.2%
CenCal	903	7.9% <sup>+</sup>	888	6.3% <sup>+</sup>
Gold Coast	797	9.3% <sup>+</sup>	791	8.6% <sup>+</sup>
HPSJ	966	13.8%	923	9.8% <sup>+</sup>
HPSM	815	14.2%	752	7.0% <sup>+</sup>
Health Net	916	32.8%	697	11.6%
IEHP	816	14.7%	773	10.0%
KFHC	950	9.5% <sup>+</sup>	951	9.6% <sup>+</sup>
Kaiser NorCal	1,152	13.4%	1,093	8.7% <sup>+</sup>
Kaiser SoCal	650	35.4%	1,021	58.9%
L.A. Care	942	23.0%	846	14.3%
Molina	903	17.6%	810	8.1% <sup>+</sup>
Partnership	929	16.7%	851	9.0% <sup>+</sup>
SCAN	1,125	18.4%	997	7.9% <sup>+</sup>
SCFHP	881	10.6%	937	15.9%
SFHP	1,024	10.0%	1,004	8.2% <sup>+</sup>
<b>Statewide Total</b>	<b>22,227</b>	<b>18.4%</b>	<b>21,327</b>	<b>11.8%</b>

Key findings for the medical record omission rates:

- ◆ Statewide, 18.4 percent of the diagnosis codes in the electronic encounter data had no supporting documentation in the beneficiaries’ medical records (i.e., medical record omission). Approximately 43.2 percent of the diagnosis codes omitted from the medical records were from the dates of service 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. For the remaining omitted diagnosis codes, 55.6 percent began with a “Z.”
- ◆ The medical record omission rates ranged from 7.9 percent (CenCal) to 35.4 percent (Kaiser SoCal).
- ◆ Four MCPs met the EDV study standard.

Key findings for the encounter data omission rates:

- ◆ Statewide, 11.8 percent of the diagnosis codes identified in the medical records were not found in the electronic encounter data (i.e., encounter data omission).
- ◆ The encounter data omission rates ranged from 5.8 percent (CHG) to 58.9 percent (Kaiser SoCal).
- ◆ Eleven MCPs/PSPs met the EDV study standard.
- ◆ The statewide encounter data omission rate for *Diagnosis Code* (11.8 percent) exceeded the statewide encounter data omission rate for *Date of Service* (7.1 percent) by 4.7 percentage points, indicating that the omission of dates of service from the encounter data was only one factor contributing to the *Diagnosis Code* encounter data omissions. Other contributing factors included the following:
  - DHCS’ data warehouse only stores up to two diagnosis codes per encounter record although MCPs and PSPs may submit more than two diagnosis codes in the 837 professional files.
  - Coding errors from provider billing offices occurred.
  - Deficiencies existed in MCPs’ and PSPs’ data submission processes.

### Procedure Code Completeness

Table 3.6 displays the statewide and the MCP/PSP level medical record omission and encounter data omission rates for the *Procedure Code* data element. HSAG conducted the analyses at the procedure code level. Additionally, procedure codes with an “F” in the fifth position were removed from the study at the direction of DHCS because it is optional to submit these procedure codes to DHCS.

**Table 3.6—Medical Record Omission and Encounter Data Omission for Procedure Code**

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.

MCP/PSP	Medical Record Omission		Encounter Data Omission	
	Procedure Code Identified in Electronic Encounter Data	Rate	Procedure Code Identified in Medical Records	Rate
AAH	925	26.9%	743	9.0% <sup>+</sup>
AHF	758	22.8%	680	14.0%
Anthem	1,201	20.1%	1,028	6.7% <sup>+</sup>
Blue Shield Promise	1,114	42.0%	790	18.2%
CCAH	877	8.3% <sup>+</sup>	897	10.4%

MCP/PSP	Medical Record Omission		Encounter Data Omission	
	Procedure Code Identified in Electronic Encounter Data	Rate	Procedure Code Identified in Medical Records	Rate
CCHP	996	28.5%	776	8.2% <sup>+</sup>
CHG	870	26.6%	670	4.6% <sup>+</sup>
CHW	916	20.6%	814	10.7%
CalOptima	1,117	31.3%	908	15.5%
CalViva	1,091	35.0%	790	10.3%
CenCal	1,264	22.3%	1,002	2.0% <sup>+</sup>
Gold Coast	840	12.7%	785	6.6% <sup>+</sup>
HPSJ	1,155	28.2%	875	5.3% <sup>+</sup>
HPSM	804	18.3%	704	6.7% <sup>+</sup>
Health Net	1,137	36.0%	791	8.0% <sup>+</sup>
IEHP	894	20.6%	768	7.6% <sup>+</sup>
KFHC	1,313	21.4%	1,054	2.1% <sup>+</sup>
Kaiser NorCal	1,136	6.3% <sup>+</sup>	1,128	5.7% <sup>+</sup>
Kaiser SoCal	657	36.4%	1,045	60.0%
L.A. Care	1,296	30.3%	989	8.7% <sup>+</sup>
Molina	1,094	23.3%	888	5.5% <sup>+</sup>
Partnership	1,019	24.2%	840	8.1% <sup>+</sup>
SCAN	1,017	20.9%	840	4.3% <sup>+</sup>
SCFHP	1,114	19.4%	1,021	12.0%
SFHP	1,069	17.7%	933	5.7% <sup>+</sup>
<b>Statewide Total</b>	<b>25,674</b>	<b>25.4%</b>	<b>21,759</b>	<b>8.2%<sup>+</sup></b>

Key findings for the medical record omission rates:

- ◆ Statewide, 25.4 percent of the procedure codes in the electronic encounter data were not supported by the beneficiaries' medical records (i.e., medical record omission).
- ◆ The medical record omission rates ranged from 6.3 percent (Kaiser NorCal) to 42.0 percent (Blue Shield Promise).
- ◆ Two MCPs (CCAH and Kaiser NorCal) 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 31.0 percent of the procedure codes omitted from the medical records.
- ◆ For the remaining procedure codes omitted from the medical records, 44.1 percent were due to hearing/vision screening services and anticipatory guidance services that occurred during well visits. For these cases, the medical records usually contained certain information regarding these services. However, these services should have been considered as part of the well visit because they did not contain the necessary documentation to support the procedure codes listed in DHCS' encounter data.
- ◆ Other potential contributors for the *Procedure Code* medical record omissions are listed below:
  - The provider did not document the services performed in the medical record, despite submitting the procedure code to the MCP or the PSP.
  - The provider did not perform the service that was submitted to DHCS.
  - Due to possible inclusion of the adjudication history, DHCS' encounter data contained additional procedure codes which should not have been included for comparison with the medical records.

Key findings for the encounter data omission rates:

- ◆ Statewide, 8.2 percent of the procedure codes 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 2.0 percent (CenCal) to 60.0 percent (Kaiser SoCal).
- ◆ Overall, 17 of 25 MCPs/PSPs met the EDV study standard.
- ◆ Approximately 75 percent of the procedure codes that were omitted from the electronic encounter data were because the associated dates of service were omitted from the electronic encounter data.
- ◆ The other potential contributors for the *Procedure Code* encounter data omissions were as follows:
  - The provider made a coding error or did not submit the procedure code despite performing the service.
  - Deficiencies existed from MCPs' and PSPs' resubmissions of denied or rejected encounters to DHCS. For example, if DHCS rejected certain encounters or lines and the MCP or PSP did not resubmit them, procedure codes associated with these encounters or lines would have contributed to the *Procedure Code* encounter data omissions.
  - A lag occurred between the provider's performance of the service and the submission of the encounter to the MCP or PSP and/or DHCS.

**Procedure Code Modifier Completeness**

Table 3.7 displays the statewide and the MCP/PSP level medical record omission and encounter data omission rates for the *Procedure Code Modifier* data element. HSAG conducted the analyses at the modifier level.

**Table 3.7—Medical Record Omission and Encounter Data Omission for Procedure Code Modifier**

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

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

MCP/PSP	Medical Record Omission		Encounter Data Omission	
	Procedure Code Modifier Identified in Electronic Encounter Data	Rate	Procedure Code Modifier Identified in Medical Records	Rate
AAH	258	49.2%	136	S+
AHF	157	54.1%	85	15.3%
Anthem	387	28.9%	281	S+
Blue Shield Promise	191	50.3%	103	S+
CCAH	397	27.5%	294	S+
CCHP	324	43.5%	187	S+
CHG	154	39.0%	94	S+
CHW	442	28.3%	322	S+
CalOptima	160	38.1%	107	S+
CalViva	287	41.8%	175	S+
CenCal	304	29.3%	217	S+
Gold Coast	478	27.8%	354	S+
HPSJ	352	46.3%	199	S+
HPSM	237	22.8%	192	S+
Health Net	235	44.3%	137	S+
IEHP	243	24.3%	188	S+
KFHC	597	26.1%	447	S+

MCP/PSP	Medical Record Omission		Encounter Data Omission	
	Procedure Code Modifier Identified in Electronic Encounter Data	Rate	Procedure Code Modifier Identified in Medical Records	Rate
Kaiser NorCal	140	23.6%	107	S <sup>+</sup>
Kaiser SoCal	392	45.7%	225	5.3% <sup>+</sup>
L.A. Care	213	43.2%	129	S <sup>+</sup>
Molina	307	29.3%	220	S <sup>+</sup>
Partnership	290	33.4%	200	S <sup>+</sup>
SCAN	183	36.1%	119	S <sup>+</sup>
SCFHP	386	23.1%	311	4.5% <sup>+</sup>
SFHP	225	36.9%	145	S <sup>+</sup>
<b>Statewide Total</b>	<b>7,339</b>	<b>35.3%</b>	<b>4,974</b>	<b>3.7%<sup>+</sup></b>

Key findings for the medical record omission rates:

- ◆ Statewide, 35.3 percent of the procedure code modifiers in the electronic encounter data were not supported by the beneficiaries’ medical records (i.e., medical record omission).
- ◆ The medical record omission rates ranged from 22.8 percent (HPSM) to 54.1 percent (AHF) among non-suppressed rates.
- ◆ No MCPs or PSPs met the EDV study standard.
- ◆ In the analysis, when no medical records were submitted for a sampled date of service, all procedure code modifiers associated with that date of service were treated as medical record omissions. Non-submitted medical records accounted for 31.4 percent of the procedure code modifiers omitted from the medical records.
- ◆ Other potential contributors to *Procedure Code Modifier* medical record omissions included the following:
  - Procedure codes associated with modifiers were omitted from the medical records.
  - Providers did not document the evidence related to the modifiers in the medical records despite submitting the modifiers to MCPs and PSPs.
  - Due to the possible inclusion of the adjudication history, DHCS’ encounter data contained additional procedure codes and associated modifiers which should not have been included for comparison with the medical records.

Key findings for the encounter data omission rates follow.

- ◆ Statewide, 3.7 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 4.5 percent (SCFHP) to 15.3 percent (AHF) among non-suppressed rates.
- ◆ Overall, 24 of 25 MCPs and PSPs met the EDV study standard.
- ◆ The procedure code modifier most frequently found in beneficiaries' medical records but omitted from the electronic encounter data was "25" (significant, separately identifiable evaluation and management service by the same provider on the day of a procedure), which accounted for 71.5 percent of the omissions.
- ◆ Potential contributors for 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**

Table 3.8 displays the statewide and the MCP/PSP level medical record omission and encounter data omission rates for the *Rendering Provider Name* data element. *Rendering Provider Name* was not a data element in the DHCS encounter data; therefore, HSAG joined the DHCS encounter data, which contained the rendering provider identification numbers, with the DHCS provider data to identify the rendering provider name(s) associated with each sampled case. For certain dates of service, the rendering provider number may have been linked to multiple rendering provider names based on the provider data from DHCS. However, a single date of service contributes to only one name when calculating the number of rendering provider names identified in DHCS' data in Table 3.8.

#### **Table 3.8—Medical Record Omission and Encounter Data Omission for Rendering Provider Name**

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

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



MCP/PSP	Medical Record Omission		Encounter Data Omission	
	Rendering Provider Name Identified in DHCS Data Warehouse	Rate	Rendering Provider Name Identified in Medical Records	Rate
AAH	426	9.2%+	518	25.3%
AHF	201	5.5%+	385	50.6%
Anthem	505	5.3%+	617	22.5%
Blue Shield Promise	477	22.0%	483	23.0%
CCAH	535	3.4%+	648	20.2%
CCHP	369	12.2%	492	34.1%
CHG	374	S+	416	12.3%
CHW	448	10.0%	517	22.1%
CalOptima	560	4.3%+	603	11.1%
CalViva	393	17.8%	478	32.4%
CenCal	566	S+	590	5.8%+
Gold Coast	501	4.0%+	522	7.9%+
HPSJ	440	4.3%+	597	29.5%
HPSM	343	4.4%+	509	35.6%
Health Net	381	20.2%	441	31.1%
IEHP	404	5.7%+	505	24.6%
KFHC	591	7.8%+	600	9.2%+
Kaiser NorCal	654	S+	713	9.3%+
Kaiser SoCal	30	S	635	96.7%
L.A. Care	476	9.5%+	557	22.6%
Molina	415	8.2%+	500	23.8%
Partnership	518	10.0%	563	17.2%
SCAN	121	9.9%+	575	81.0%
SCFHP	457	3.3%+	620	28.7%
SFHP	498	S+	634	23.0%
<b>Statewide Total</b>	<b>10,683</b>	<b>8.1%+</b>	<b>13,718</b>	<b>22.3%</b>

Key findings for the medical record omission rates:

- ◆ Statewide, 8.1 percent of the rendering provider names associated with the electronic encounter data were not found in the beneficiaries' medical records (i.e., medical record omissions). The primary reason for the omission of rendering provider names from the medical records was that the medical records could not be located. In the analysis, when a medical record was not submitted for a sampled date of service, the rendering provider name associated with that date of service was treated as a single medical record omission.
- ◆ The medical record omission rates ranged from 3.3 percent (SCFHP) to 22.0 percent (Blue Shield Promise) among non-suppressed rates.
- ◆ Overall, 18 of 25 MCPs/PSPs met the EDV study standard.

Key findings for the encounter data omission rates:

- ◆ Statewide, 22.3 percent of the rendering provider names in the medical records were not found in the DHCS data warehouse (i.e., encounter data omission), with individual MCP/PSP rates ranging from 5.8 percent (CenCal) to 96.7 percent (Kaiser SoCal).
- ◆ Four MCPs (CenCal, Gold Coast, KFHC, and Kaiser NorCal) met the EDV study standard.
- ◆ Potential contributors for the *Rendering Provider Name* encounter data omissions included the following:
  - Dates of service were omitted from the encounter data; therefore, all rendering provider names associated with those dates of service were treated as encounter data omissions.
  - MCPs and PSPs did not populate the rendering provider identification number field or populated the field with an invalid rendering provider identification number when submitting data to DHCS; therefore, the rendering provider names were not identifiable in the DHCS data warehouse.
  - The provider files submitted to DHCS by MCPs and PSPs were incomplete or inaccurate; therefore, the rendering provider names were not identifiable in the DHCS data warehouse although the rendering provider identification numbers in the encounter data were valid. For example, the relatively high encounter data omission rate for SCAN (i.e., 81.0 percent) occurred primarily because, at the time of the study, DHCS did not require SCAN to submit provider data to DHCS. Without SCAN's provider data, HSAG could not locate the rendering provider name in the DHCS data warehouse unless the billing provider name was located in the encounter data and the billing provider name listed was the same as the rendering provider name. Kaiser SoCal's relatively high encounter data omission rate was likely due to all of Kaiser SoCal's samples originating from its external/affiliated providers as noted in the Study Limitations section.

## 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.

### Diagnosis Code Accuracy

Table 3.9 displays the statewide and the MCP/PSP level accuracy rates for the data element *Diagnosis Code*. In addition, errors found in the diagnosis coding were separated into two categories: specificity errors and inaccurate codes. Specificity errors occur when the documentation supports a more specific code than was listed in the DHCS encounter data (i.e., unspecified abdominal pain [R10.9] when the provider noted during the exam that the abdominal pain was in the right lower quadrant [R10.31]). Specificity errors also include diagnosis codes that do not have the required fourth or fifth digit. An inaccurate code occurs when the diagnosis code submitted by the provider should have been selected from a different family of codes based on the documentation in the medical record (i.e., R51 [headache] versus the documentation supporting G43 [migraine]). Inaccurate diagnosis codes and diagnosis codes with specificity errors were the denominators for the error rate columns in Table 3.9.

**Table 3.9—Accuracy Results and Error Types for Diagnosis Code**

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.

HSAG displayed “NA” when the denominator for the rate was too small (i.e., less than 30) to report a valid rate.

MCP/PSP	Accuracy Results		Error Rate	
	Number of Diagnoses Present in Both Sources	Accuracy Rate	Percent from Inaccurate Code	Percent from Specificity Error
AAH	695	99.3% <sup>+</sup>	NA	NA
AHF	529	98.5% <sup>+</sup>	NA	NA
Anthem	874	98.9% <sup>+</sup>	NA	NA
Blue Shield Promise	580	98.3% <sup>+</sup>	NA	NA
CAAH	814	97.9% <sup>+</sup>	NA	NA
CCHP	642	98.9% <sup>+</sup>	NA	NA
CHG	587	98.1% <sup>+</sup>	NA	NA

MCP/PSP	Accuracy Results		Error Rate	
	Number of Diagnoses Present in Both Sources	Accuracy Rate	Percent from Inaccurate Code	Percent from Specificity Error
CHW	683	98.7% <sup>+</sup>	NA	NA
CalOptima	746	96.8% <sup>+</sup>	NA	NA
CalViva	604	98.0% <sup>+</sup>	NA	NA
CenCal	832	97.5% <sup>+</sup>	NA	NA
Gold Coast	723	97.1% <sup>+</sup>	NA	NA
HPSJ	833	98.8% <sup>+</sup>	NA	NA
HPSM	699	99.3% <sup>+</sup>	NA	NA
Health Net	616	97.9% <sup>+</sup>	NA	NA
IEHP	696	97.6% <sup>+</sup>	NA	NA
KFHC	860	98.7% <sup>+</sup>	NA	NA
Kaiser NorCal	998	99.1% <sup>+</sup>	NA	NA
Kaiser SoCal	420	97.6% <sup>+</sup>	NA	NA
L.A. Care	725	99.7% <sup>+</sup>	NA	NA
Molina	744	98.4% <sup>+</sup>	NA	NA
Partnership	774	99.0% <sup>+</sup>	NA	NA
SCAN	918	98.8% <sup>+</sup>	NA	NA
SCFHP	788	98.1% <sup>+</sup>	NA	NA
SFHP	922	99.5% <sup>+</sup>	NA	NA
<b>Statewide Total</b>	<b>18,302</b>	<b>98.4%<sup>+</sup></b>	<b>49.9%</b>	<b>50.1%</b>

Key findings for the accuracy rates:

- ◆ Statewide, 98.4 percent of the diagnosis codes were accurate when the diagnosis codes were present in both the electronic encounter data and the medical records, with MCP and PSP rates varying slightly, from 96.8 percent (CalOptima) to 99.7 percent (L.A. Care).
- ◆ All 25 MCPs and PSPs met the EDV study standard.
- ◆ For diagnosis coding accuracy at the statewide level, the errors were almost evenly divided between specificity errors and discrepancies between submitted codes and the National Correct Coding Initiative (NCCI) coding standards. At the MCP/PSP level, all error rates were “NA,” indicating that denominators were too small to report valid rates.

## Procedure Code Accuracy

Table 3.10 displays the statewide and the MCP/PSP level accuracy rates for the data element *Procedure Code*. In addition, errors found in the procedure coding were separated into three categories: inaccurate codes, higher level of services found in medical records, and lower level of services found in medical records.

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

Inaccurate procedure codes and procedure codes with higher or lower levels of service in the medical records were collectively considered as the denominator for the error type rates in Table 3.10.

### Table 3.10—Accuracy Results and Error Types for Procedure Code

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.

HSAG displayed "NA" when the denominator for the rate was too small (i.e., less than 30) to report a valid rate.

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

MCP/PSP	Accuracy Results		Error Rate		
	Number of Procedures Present in Both Sources	Accuracy Rate	Percent from Inaccurate Code	Percent from Higher Level of Services in Medical Records	Percent From Lower Level of Services in Medical Records
AAH	676	96.6% <sup>+</sup>	NA	NA	NA
AHF	585	98.1% <sup>+</sup>	NA	NA	NA
Anthem	959	97.3% <sup>+</sup>	NA	NA	NA
Blue Shield Promise	646	97.2% <sup>+</sup>	NA	NA	NA
CCAH	804	96.5% <sup>+</sup>	NA	NA	NA
CCHP	712	98.0% <sup>+</sup>	NA	NA	NA
CHG	639	98.3% <sup>+</sup>	NA	NA	NA
CHW	727	97.8% <sup>+</sup>	NA	NA	NA
CalOptima	767	86.4%	76.9%	S	23.1%
CalViva	709	98.0% <sup>+</sup>	NA	NA	NA
CenCal	982	97.7% <sup>+</sup>	NA	NA	NA
Gold Coast	733	98.8% <sup>+</sup>	NA	NA	NA
HPSJ	829	97.0% <sup>+</sup>	NA	NA	NA
HPSM	657	97.7% <sup>+</sup>	NA	NA	NA
Health Net	728	97.1% <sup>+</sup>	NA	NA	NA
IEHP	710	97.0% <sup>+</sup>	NA	NA	NA
KFHC	1,032	97.8% <sup>+</sup>	NA	NA	NA
Kaiser NorCal	1,064	96.9% <sup>+</sup>	93.9%	S	S
Kaiser SoCal	418	99.5% <sup>+</sup>	NA	NA	NA
L.A. Care	903	96.6% <sup>+</sup>	45.2%	S	54.8%
Molina	839	96.7% <sup>+</sup>	NA	NA	NA
Partnership	772	96.9% <sup>+</sup>	NA	NA	NA
SCAN	804	97.6% <sup>+</sup>	NA	NA	NA
SCFHP	898	96.5% <sup>+</sup>	71.0%	S	S
SFHP	880	98.5% <sup>+</sup>	NA	NA	NA
<b>Statewide Total</b>	<b>19,473</b>	<b>96.2%<sup>+</sup></b>	<b>54.9%</b>	<b>S</b>	<b>43.9%</b>

Key findings for the accuracy rates:

- ◆ Statewide, 96.2 percent of procedure codes were accurate when present in both the electronic encounter data and the medical record, with MCP and PSP rates varying from 86.4 percent (CalOptima) to 99.5 percent (Kaiser SoCal).
- ◆ Overall, 24 of 25 MCPs and PSPs met the EDV study standard.
- ◆ For procedure coding accuracy, 54.9 percent of the identified errors were associated with the use of inaccurate codes, wherein the reported codes were not supported by the DHCS Medi-Cal provider manuals and NCCI coding standards. Secondly, 43.9 percent of errors were associated with providers submitting codes for a higher level of service than was documented in the beneficiary’s medical record (i.e., the procedure code was considered an error due to a lower-level procedure code having been documented in the medical record). Lastly, less than 11 errors were associated with providers submitting codes for a lower level of service than was documented in the beneficiary’s medical record (i.e., the procedure code was considered an error due to a higher-level procedure code having been documented in the medical record); therefore, the statewide rate is displayed as “S.”

### Procedure Code Modifier Accuracy

Table 3.11 displays the statewide and the MCP/PSP level accuracy rates for the data element *Procedure Code Modifier*. The errors for this data element could not be separated into subcategories and therefore are not presented in Table 3.11.

**Table 3.11—Accuracy Results and Error Types for Procedure Code Modifier**

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.

MCP/PSP	Accuracy Results	
	Number of Modifiers Present in Both Sources	Accuracy Rate
AAH	131	100.0%+
AHF	72	98.6%+
Anthem	275	100.0%+
Blue Shield Promise	95	100.0%+
CCAH	288	100.0%+
CCHP	183	100.0%+
CHG	94	100.0%+
CHW	317	100.0%+

MCP/PSP	Accuracy Results	
	Number of Modifiers Present in Both Sources	Accuracy Rate
CalOptima	99	99.0% <sup>+</sup>
CalViva	167	100.0% <sup>+</sup>
CenCal	215	99.1% <sup>+</sup>
Gold Coast	345	99.7% <sup>+</sup>
HPSJ	189	100.0% <sup>+</sup>
HPSM	183	100.0% <sup>+</sup>
Health Net	131	100.0% <sup>+</sup>
IEHP	184	99.5% <sup>+</sup>
KFHC	441	100.0% <sup>+</sup>
Kaiser NorCal	107	100.0% <sup>+</sup>
Kaiser SoCal	213	99.5% <sup>+</sup>
L.A. Care	121	100.0% <sup>+</sup>
Molina	217	99.5% <sup>+</sup>
Partnership	193	99.5% <sup>+</sup>
SCAN	117	100.0% <sup>+</sup>
SCFHP	297	100.0% <sup>+</sup>
SFHP	142	100.0% <sup>+</sup>
<b>Statewide Total</b>	<b>4,816</b>	<b>99.8%<sup>+</sup></b>

Key findings for the accuracy rates:

- ◆ Statewide, 99.8 percent of the procedure code modifiers were accurate when the procedure code modifiers were present in both the electronic encounter data and the medical record.
- ◆ All 25 MCPs and PSPs met the EDV study standard.



### Rendering Provider Name Accuracy

Table 3.12 displays the statewide and the MCP/PSP level accuracy rates for the data element *Rendering Provider Name*. For certain dates of service, the rendering provider number in the DHCS encounter data may have been linked to multiple rendering provider names in the provider data supplied by DHCS. If one rendering provider name from the DHCS data approximately matched the name in the medical record (e.g., a typographical error or “Rob Smith” versus “Robert Smith”), HSAG considered the names from both sources a match.

Errors found in the rendering provider names were separated into two categories: incorrect names and illegible names. Cases with incorrect or illegible names were collectively considered as the denominators for the error type rates in Table 3.12.

**Table 3.12—Accuracy Results and Error Types for Rendering Provider Name**

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.

HSAG displayed “NA” when the denominator for the rate was too small (i.e., less than 30) to report a valid rate.

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

MCP/PSP	Accuracy Results		Error Rate	
	Number of Names Present in Both Sources	Accuracy Rate	Percent from Incorrect Names	Percent from Illegible Names in Medical Records
AAH	387	91.0% <sup>+</sup>	85.7%	S
AHF	190	84.2%	100.0%	S
Anthem	478	63.0%	88.1%	11.9%
Blue Shield Promise	372	46.8%	99.0%	S
CCAH	517	65.2%	90.0%	10.0%
CCHP	324	85.8%	78.3%	S
CHG	365	76.7%	95.3%	S
CHW	403	64.8%	96.5%	S
CalOptima	536	37.3%	95.5%	4.5%
CalViva	323	65.6%	80.2%	19.8%
CenCal	556	83.6%	82.4%	17.6%
Gold Coast	481	82.7%	79.5%	20.5%

MCP/PSP	Accuracy Results		Error Rate	
	Number of Names Present in Both Sources	Accuracy Rate	Percent from Incorrect Names	Percent from Illegible Names in Medical Records
HPSJ	421	66.0%	86.7%	13.3%
HPSM	328	77.7%	90.4%	S
Health Net	304	69.7%	83.7%	16.3%
IEHP	381	61.9%	81.4%	18.6%
KFHC	545	34.7%	94.9%	5.1%
Kaiser NorCal	647	89.2%	100.0%	S
Kaiser SoCal	NA	NA	NA	NA
L.A. Care	431	65.2%	80.0%	20.0%
Molina	381	64.8%	90.3%	9.7%
Partnership	466	42.7%	98.9%	S
SCAN	109	56.9%	95.7%	S
SCFHP	442	83.3%	91.9%	S
SFHP	488	91.8%+	100.0%	S
<b>Statewide Total</b>	<b>9,896</b>	<b>63.5%</b>	<b>87.4%</b>	<b>12.6%</b>

Key findings for the accuracy rates:

- ◆ Statewide, 63.5 percent of rendering provider names were accurate when the rendering provider names were present in both the DHCS data warehouse and the medical record.
- ◆ The MCP and PSP rates ranged from 34.7 percent (KFHC) to 91.8 percent (SFHP).
- ◆ Two MCPs (AAH and SFHP) met the EDV study standard.
- ◆ Most errors (87.4 percent) were associated with discrepancies between the name in the medical record and the name in the DHCS data warehouse. The remaining errors (12.6 percent) were due to illegible names in the medical records.

### All-Element Accuracy

Table 3.13 displays the statewide and the MCP/PSP level all-element accuracy rates, calculated with and without the *Rendering Provider Name* data element included in the calculation, which describe the percentage of dates of service present in both the DHCS data warehouse and in the medical records with exactly the same values for key data elements listed in Table 2.1. The denominator is the total number of dates of service that matched in both data sources. The numerator is the total number of dates of service with the same values for all key data elements with and without the *Rendering Provider Name* data element. Higher all-element accuracy rates indicate that the values populated in the DHCS data warehouse are more complete and accurate for all key data elements when compared to the medical records.

**Table 3.13—All-Element Accuracy Results**

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

MCP/PSP	Accuracy Results		
	Number of Dates of Service Present in Both Sources	All-Element Accuracy Rate	All-Element Accuracy Rate Excluding Rendering Provider Name*
AAH	477	43.6%	61.6%
AHF	348	21.6%	52.6%
Anthem	578	30.6%	64.2%
Blue Shield Promise	394	24.4%	57.6%
CCAH	594	41.2%	68.9%
CCHP	453	39.3%	66.9%
CHG	416	41.3%	59.9%
CHW	475	36.4%	68.0%
CalOptima	540	21.7%	51.5%
CalViva	434	29.0%	56.5%
CenCal	585	52.3%	63.4%
Gold Coast	504	55.6%	67.3%
HPSJ	578	28.4%	59.3%
HPSM	496	34.5%	68.3%
Health Net	417	27.3%	57.6%

MCP/PSP	Accuracy Results		
	Number of Dates of Service Present in Both Sources	All-Element Accuracy Rate	All-Element Accuracy Rate Excluding Rendering Provider Name*
IEHP	483	30.2%	64.2%
KFHC	632	17.1%	60.4%
Kaiser NorCal	672	59.4%	66.8%
Kaiser SoCal	310	6.1%	65.8%
L.A. Care	504	26.0%	53.8%
Molina	501	31.1%	60.9%
Partnership	546	22.3%	61.5%
SCAN	585	8.4%	57.9%
SCFHP	545	44.0%	65.3%
SFHP	615	53.0%	69.4%
<b>Statewide Total</b>	<b>12,682</b>	<b>30.7%</b>	<b>60.1%</b>

Key findings for the all-element accuracy rates:

- ◆ Statewide, 30.7 percent of the dates of service present in both data sources contained accurate values for all four key data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Rendering Provider Name*). The low statewide all-element accuracy rates were caused by the medical record omission, encounter data omission, and element inaccuracy from all four key data elements, with *Rendering Provider Name* contributing the most and *Procedure Code Modifier* contributing the least to the all-element inaccuracy.
- ◆ Of the 25 MCPs and PSPs, none met the EDV study standard of 90 percent.
- ◆ The rates among the 25 MCPs and PSPs ranged from 6.1 percent (Kaiser SoCal) to 59.4 percent (Kaiser NorCal).

With the *Rendering Provider Name* data element excluded from the calculation of the all-element accuracy rate, the statewide rate improved to 60.1 percent and the variation among the 25 MCPs and PSPs became smaller (i.e., ranged from 51.5 percent [CalOptima] to 69.4 percent [SFHP]).

## Conclusions

### Encounter Data Completeness

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

**Table 4.1—Encounter Data Completeness Summary**

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

Key Data Elements	Medical Record Omission		Encounter Data Omission	
	Statewide Rate	MCP/PSP Range	Statewide Rate	MCP/PSP Range
Date of Service	8.1% <sup>+</sup>	2.8%–25.5%	7.1% <sup>+</sup>	2.2%–51.9%
Diagnosis Code	18.4%	7.9%–35.4%	11.8%	5.8%–58.9%
Procedure Code	25.4%	6.3%–42.0%	8.2% <sup>+</sup>	2.0%–60.0%
Procedure Code Modifier	35.3%	22.8%–54.1%	3.7% <sup>+</sup>	4.5%–15.3%
Rendering Provider Name	8.1% <sup>+</sup>	3.3%–22.0%	22.3%	5.8%–96.7%

Based on the cases sampled for medical record review, HSAG found that the documentation in the beneficiaries’ medical records supported the key data elements in the electronic encounter data at different rates. For example, the *Date of Service* and *Rendering Provider Name* data elements within the electronic encounter data were well supported by the medical records as evidenced by the 8.1 percent medical record omission rate observed for both data elements. However, the medical record omission rates for *Diagnosis Code* (18.4 percent), *Procedure Code* (25.4 percent), and *Procedure Code Modifier* (35.3 percent) did not meet the EDV study standard, which indicates that these three data elements were moderately supported by the medical records.

The MCP and PSP variations were moderate for the medical record omission rates. The two data elements with the largest difference between the lowest rate and highest rate were *Procedure Code* (35.7 percentage points) and *Procedure Code Modifier* (31.3 percentage points). The range of medical record omission rates among the remaining three data elements were 27.5 percentage points (*Diagnosis Code*), 22.7 percentage points (*Date of Service*), and 18.7 percentage points (*Rendering Provider Name*).

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

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

The encounter data omission rates reveal that three key data elements (i.e., *Date of Service*, *Procedure Code*, and *Procedure Code Modifier*), when found in the medical records, were well supported by the electronic encounter data extracted from DHCS' data warehouse. As displayed in Table 4.1, all three data elements had encounter data omission rates of less than 10 percent and met the EDV study standards. For instance, 7.1 percent of the dates of service documented in the beneficiaries' medical records were absent from the electronic encounter data. The two remaining data elements (i.e., *Diagnosis Code* and *Rendering Provider Name*) documented in the medical records were moderately supported by the electronic encounter data. For instance, 11.8 percent of the diagnosis codes and 22.3 percent of the rendering provider names documented in the medical records were absent from DHCS' data warehouse.

The variations among MCP and PSP encounter data omission rates depended on the data element. For example, the encounter data omission rates among MCPs/PSPs varied widely for the *Rendering Provider Name* data element (i.e., a difference of 90.9 percentage points) while the range was much narrower for the *Procedure Code Modifier* data element (i.e., a difference of 10.8 percentage points).

The potential reasons for encounter data omissions included the following:

- ◆ MCPs and PSPs did not populate the rendering provider identification number field or populated it with an invalid rendering provider identification number when submitting data to DHCS, or the provider files submitted by MCPs or PSPs to DHCS were incomplete or inaccurate.
- ◆ DHCS' data warehouse only stores up to two diagnosis codes per encounter record although MCPs and PSPs may submit more than two diagnosis codes in the 837 professional files.
- ◆ The provider's billing office made a coding error or did not submit the procedure codes or modifiers despite performing the specific services.
- ◆ Deficiencies existed in MCPs' or PSPs' encounter data submission processes or a deficiency existed in the resubmission of denied or rejected encounters to DHCS.
- ◆ A lag occurred between the provider's performance of the service and submission of the encounter to the MCP or PSP and/or DHCS.

When compared with results from the SFY 2017–18 medical record review activity, one statewide medical record omission rate and four statewide encounter data omission rates improved for the current year. For rates that did not improve, the change was less than 5

percentage points and did not change the Met/Not Met status regarding the EDV study standards.

## Encounter Data Accuracy

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

**Table 4.2—Encounter Data Accuracy Summary**

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

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

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

Key Data Elements	Statewide	MCP Range	Main Error Type
Diagnosis Code	98.4%+	96.8%–99.7%	Specificity error (50.1%); Inaccurate code (49.9%)
Procedure Code	96.2%+	86.4%–99.5%	Inaccurate code (54.9%); Lower level of services in medical records (43.9%)
Procedure Code Modifier	99.8%+	98.6%–100.0%	—
Rendering Provider Name	63.5%	34.7%–91.8%	Incorrect name (87.4%); Illegible name in medical records (12.6%)
All-Element Accuracy	30.7%	6.1%–59.4%	—
All-Element Accuracy Excluding Rendering Provider Name*	60.1%	51.5%–69.4%	—

In general, when the key data elements were present in both the DHCS electronic encounter data and the medical records, and were evaluated independently, the data elements were found to be accurate. As displayed in Table 4.2, 98.4 percent of diagnosis codes, 96.2 percent of procedure codes, and 99.8 percent of procedure code modifiers were accurate when found in both sources. In contrast, the statewide accuracy rate for the data element *Rendering Provider Name* was much lower (63.5 percent).



The accuracy rate for the five key data elements can be affected by different types of errors. The errors affecting the *Diagnosis Code* data element were almost evenly distributed between two categories: specificity error and inaccurate code error. For the *Procedure Code* data element, 54.9 percent of the identified errors were associated with the use of inaccurate codes not supported by the DHCS Medi-Cal provider manuals and NCCI coding standards, and 43.9 percent involved providers submitting a higher-level service code than that supported in beneficiaries' medical records. Finally, the majority of rendering provider name errors (i.e., 87.4 percent) were associated with rendering provider name discrepancies between the medical records and the DHCS data warehouse rather than with illegible names in medical records.

Almost one-third of the dates of service (i.e., 30.7 percent) present in both data sources accurately represented all four data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Rendering Provider Name*) when compared to the beneficiaries' medical records. At the MCP/PSP level, the all-element accuracy rate ranged from 6.1 percent (Kaiser SoCal) to 59.4 percent (Kaiser NorCal). While all key data elements contributed to the low statewide all-element accuracy rate, the *Rendering Provider Name* data element contributed most to the inaccuracy. This effect can be seen when the all-element accuracy is calculated excluding the *Rendering Provider Name* data element. As shown in Table 4.2, the accuracy rate increased from 30.7 percent (*All-Element Accuracy*) to 60.1 percent (*All-Element Accuracy Excluding Rendering Provider Name*) when the data element *Rendering Provider Name* was excluded from the calculation.

When comparing statewide results from the SFY 2017–18 medical record review activity, the accuracy rate for the *Diagnosis Code* was 0.3 percentage points lower and the remaining accuracy rates from the current study had all improved, indicating that DHCS' encounter data for the current study period were similar or more accurate for key data elements.

## Recommendations

While some improvements were made in the completeness and accuracy of DHCS' encounter data when compared to the 2017–18 EDV medical record review study, results from the 2018–19 study show continued opportunities for improvement. Results suggest that the *Date of Service* data element was well supported by the beneficiaries' medical records; however, as with the previous year's medical record review, HSAG identified opportunities for improvement for the remaining data elements (i.e., *Diagnosis Code*, *Procedure Code*, *Procedure Code Modifier*, and *Rendering Provider Name*), which were moderately supported by the beneficiaries' medical records. Based on the study findings, HSAG's recommendations are similar to the recommendations HSAG made for the 2017–18 EDV study. In general, DHCS should continue to work with MCPs and PSPs to determine ways to improve those study indicators listed in Table 4.3 that are marked with an "X." Note that HSAG submitted the recommendations from the 2017–18 EDV study to DHCS in November 2018; therefore, any subsequent changes that DHCS and/or MCPs/PSPs made likely did not impact the current EDV study results, which relate to physician services rendered between January 1, 2017, and December 31, 2017. HSAG anticipates that DHCS and HSAG will observe the effects from DHCS' improvement efforts in future EDV studies.



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

MRO = Medical record omission rate

EDO = Encounter data omission rate

ACU = Data element accuracy rate

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

MCP/PSP	Date of Service		Diagnosis Code		Procedure Code			Procedure Code Modifier		Rendering Provider Name		
	MRO	EDO	MRO	EDO	MRO	EDO	ACU	MRO	EDO	MRO	EDO	ACU
SCFHP		X	X	X	X	X		X			X	X
SFHP			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 beneficiaries' 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 beneficiary's medical record. As such, HSAG would have counted it as a negative finding. This study was unable to distinguish cases in which a service was not performed versus those in which a service was performed but not documented in the medical record.
- ◆ The findings for the data element *Rendering Provider Name* should be reviewed with caution because rendering provider names are not generally included or legible in beneficiaries' medical records.
- ◆ Certain limitations in the DHCS data warehouse also affected the results. For example, the DHCS data warehouse only stores two data fields for the diagnosis codes, while the medical records may indicate more than two codes.
- ◆ The findings from this study are associated with encounters from January 1, 2017, to December 31, 2017; as such, the results may not reflect the current quality of DHCS' encounter data.
- ◆ The eligible population for Kaiser SoCal was very low (i.e., less than 3,000) while the monthly enrollment counts for Kaiser SoCal were around 50,000. After further research, DHCS determined that the reason for the smaller eligible population was that approximately 80 percent of encounter records for Kaiser SoCal had a value of "009" (Clinical Laboratories) for the data element *FI\_PROV\_TYPE\_CD*, which was not a provider type included in the study. Kaiser SoCal also noted that all SFY 2018–19 EDV samples were from its external/affiliated providers while approximately 20 percent of Kaiser SoCal's encounters were from its external/affiliated providers. Therefore, please use caution when interpreting Kaiser SoCal results.
- ◆ The findings from this study are associated with physician visits and may not be applicable to other claim types.

## Appendix A. MCPs and PSPs Included in the Study

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

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

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

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

APPENDIX A. MCPs AND PSPs INCLUDED IN THE STUDY

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

APPENDIX A. MCPs AND PSPs INCLUDED IN THE STUDY

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

## Appendix B. Findings for AIDS Healthcare Foundation

### Medical Record Procurement Status

Table B.1 shows the medical record procurement status 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.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
AHF	278	240	86.3%
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

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

**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.	21	55.3%
Medical records were not located at the facility.	13	34.2%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	2	5.3%
Beneficiary was not a patient of the practice.	2	5.3%
<b>AHF Total</b>	<b>38</b>	<b>100.0%</b>

## Encounter Data Completeness

Table B.3 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 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—Encounter Data Completeness Summary for AHF**

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	AHF Rate	Statewide Rate	Denominator	AHF Rate	Statewide Rate
Date of Service	390	10.8%	8.1% <sup>+</sup>	385	9.6% <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	660	19.8%	18.4%	703	24.8%	11.8%
Procedure Code	758	22.8%	25.4%	680	14.0%	8.2% <sup>+</sup>
Procedure Code Modifier	157	54.1%	35.3%	85	15.3%	3.7% <sup>+</sup>
Rendering Provider Name	201	5.5% <sup>+</sup>	8.1% <sup>+</sup>	385	50.6%	22.3%

## Encounter Data Accuracy

Table B.4 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 beneficiaries' 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 beneficiaries' 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.4—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.

— 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.

<sup>1</sup>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	529	98.5% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	585	98.1% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	72	98.6% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	190	84.2%	<b>63.5%</b>	Incorrect name (100.0%)



Key Data Element	Denominator	AHF Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	348	21.6%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	348	52.6%	<b>60.1%</b>	—

## Appendix C. Findings for Alameda Alliance for Health

### Medical Record Procurement Status

Table C.1 shows the medical record procurement status 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.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
AAH	411	330	80.3%
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

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

**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.	55	67.9%
Beneficiary was not a patient of the practice.	10	12.3%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	6	7.4%
Other.	5	6.2%
Medical records were not located at the facility.	4	4.9%
Provider refused to release medical records.	1	1.2%
<b>AAH Total</b>	<b>81</b>	<b>100.0%</b>

## Encounter Data Completeness

Table C.3 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 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—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 less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule's de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	AAH Rate	Statewide Rate	Denominator	AAH Rate	Statewide Rate
Date of Service	567	15.9%	8.1% <sup>+</sup>	520	8.3% <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	926	24.9%	18.4%	808	14.0%	11.8%
Procedure Code	925	26.9%	25.4%	743	9.0% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	258	49.2%	35.3%	136	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	426	9.2% <sup>+</sup>	8.1% <sup>+</sup>	518	25.3%	22.3%

## Encounter Data Accuracy

Table C.4 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 beneficiaries' 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 beneficiaries' 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.4—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.

— 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.

<sup>1</sup>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	695	99.3% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	676	96.6% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	131	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	387	91.0% <sup>+</sup>	<b>63.5%</b>	Incorrect name (85.7%)

Key Data Element	Denominator	AAH Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	477	43.6%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	477	61.6%	<b>60.1%</b>	—

## Appendix D. Findings for Anthem Blue Cross Partnership Plan

### Medical Record Procurement Status

Table D.1 shows the medical record procurement status for Anthem.

**Table D.1—Medical Record Procurement Status for Anthem**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Anthem	411	382	92.9%+
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

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

**Table D.2—Reasons for Missing Medical Records for Anthem**

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.	22	75.9%
Closed facility.	3	10.3%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	2	6.9%
Beneficiary was not a patient of the practice.	1	3.4%
Medical records were not located at the facility.	1	3.4%
<b>Anthem Total</b>	<b>29</b>	<b>100.0%</b>

## Encounter Data Completeness

Table D.3 displays the medical record omission and encounter data omission rates for Anthem. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—Encounter Data Completeness Summary for Anthem**

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

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Anthem Rate	Statewide Rate	Denominator	Anthem Rate	Statewide Rate
Date of Service	613	5.7% <sup>+</sup>	8.1% <sup>+</sup>	621	6.9% <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	1,012	13.6%	18.4%	986	11.4%	11.8%
Procedure Code	1,201	20.1%	25.4%	1,028	6.7% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	387	28.9%	35.3%	281	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	505	5.3% <sup>+</sup>	8.1% <sup>+</sup>	617	22.5%	22.3%

## Encounter Data Accuracy

Table D.4 displays the element accuracy rates for each key data element and the all-element accuracy rate for Anthem. 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 beneficiaries' 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 beneficiaries' 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.4—Encounter Data Accuracy Summary for Anthem**

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.

— 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.

<sup>1</sup>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 Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	874	98.9% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	959	97.3% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	275	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	478	63.0%	<b>63.5%</b>	Incorrect name (88.1%); Illegible name in medical records (11.9%)



Key Data Element	Denominator	Anthem Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	578	30.6%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	578	64.2%	<b>60.1%</b>	—

## Appendix E. Findings for Blue Shield of California Promise Health Plan

### Medical Record Procurement Status

Table E.1 shows the medical record procurement status 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.

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Blue Shield Promise	411	334	81.3%
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

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

**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
Non-responsive provider or provider did not respond in a timely manner.	47	61.0%
Beneficiary was not a patient of the practice.	25	32.5%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	3	3.9%
Medical records were not located at the facility.	2	2.6%
<b>Blue Shield Promise Total</b>	<b>77</b>	<b>100.0%</b>

## Encounter Data Completeness

Table E.3 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 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—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.

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Blue Shield Promise Rate	Statewide Rate	Denominator	Blue Shield Promise Rate	Statewide Rate
Date of Service	500	21.2%	8.1% <sup>+</sup>	488	19.3%	7.1% <sup>+</sup>
Diagnosis Code	822	29.4%	18.4%	786	26.2%	11.8%
Procedure Code	1,114	42.0%	25.4%	790	18.2%	8.2% <sup>+</sup>
Procedure Code Modifier	191	50.3%	35.3%	103	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	477	22.0%	8.1% <sup>+</sup>	483	23.0%	22.3%

## Encounter Data Accuracy

Table E.4 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 beneficiaries' 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 beneficiaries' 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.4—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.

— 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.

<sup>1</sup>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	580	98.3% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	646	97.2% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	95	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—

Key Data Element	Denominator	Blue Shield Promise Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Rendering Provider Name	372	46.8%	<b>63.5%</b>	Incorrect name (99.0%)
All-Element Accuracy	394	24.4%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	394	57.6%	<b>60.1%</b>	—

## Appendix F. Findings for California Health & Wellness Plan

### Medical Record Procurement Status

Table F.1 shows the medical record procurement status for CHW.

**Table F.1—Medical Record Procurement Status for CHW**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CHW	411	358	87.1%
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

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

**Table F.2—Reasons for Missing Medical Records for CHW**

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

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	31	58.5%
Beneficiary was not a patient of the practice.	8	15.1%
Medical records were not located at the facility.	5	9.4%
Other.	4	7.5%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	3	5.7%
Provider refused to release medical records.	2	3.8%
<b>CHW Total</b>	<b>53</b>	<b>100.0%</b>

## Encounter Data Completeness

Table F.3 displays the medical record omission and encounter data omission rates for CHW. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—Encounter Data Completeness Summary for CHW**

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

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CHW Rate	Statewide Rate	Denominator	CHW Rate	Statewide Rate
Date of Service	534	11.0%	8.1% <sup>+</sup>	522	9.0% <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	858	20.4%	18.4%	788	13.3%	11.8%
Procedure Code	916	20.6%	25.4%	814	10.7%	8.2% <sup>+</sup>
Procedure Code Modifier	442	28.3%	35.3%	322	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	448	10.0%	8.1% <sup>+</sup>	517	22.1%	22.3%

## Encounter Data Accuracy

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

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the beneficiaries' 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 beneficiaries' 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.4—Encounter Data Accuracy Summary for CHW**

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

— 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.

<sup>1</sup>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	CHW Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	683	98.7% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	727	97.8% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	317	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	403	64.8%	<b>63.5%</b>	Incorrect name (96.5%)



Key Data Element	Denominator	CHW Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	475	36.4%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	475	68.0%	<b>60.1%</b>	—

## Appendix G. Findings for CalOptima

### Medical Record Procurement Status

Table G.1 shows the medical record procurement status for CalOptima.

**Table G.1—Medical Record Procurement Status for CalOptima**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CalOptima	411	399	97.1%+
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

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

**Table G.2—Reasons for Missing Medical Records for CalOptima**

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

Non-Submission Reason	Count	Percent
Medical records were not located at the facility.	5	41.7%
Closed facility.	2	16.7%
Non-responsive provider or provider did not respond in a timely manner.	2	16.7%
Other.	2	16.7%
Provider refused to release medical records.	1	8.3%
<b>CalOptima Total</b>	<b>12</b>	<b>100.0%</b>

## Encounter Data Completeness

Table G.3 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 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—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.

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CalOptima Rate	Statewide Rate	Denominator	CalOptima Rate	Statewide Rate
Date of Service	560	3.6% <sup>+</sup>	8.1% <sup>+</sup>	609	11.3%	7.1% <sup>+</sup>
Diagnosis Code	895	16.6%	18.4%	899	17.0%	11.8%
Procedure Code	1,117	31.3%	25.4%	908	15.5%	8.2% <sup>+</sup>
Procedure Code Modifier	160	38.1%	35.3%	107	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	560	4.3% <sup>+</sup>	8.1% <sup>+</sup>	603	11.1%	22.3%

## Encounter Data Accuracy

Table G.4 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 beneficiaries' 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 beneficiaries' 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.4—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.

— 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.

<sup>1</sup>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	746	96.8% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	767	86.4%	<b>96.2%<sup>+</sup></b>	Inaccurate code (76.9%); Lower level of services in medical records (23.1%)
Procedure Code Modifier	99	99.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—

Key Data Element	Denominator	CalOptima Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Rendering Provider Name	536	37.3%	<b>63.5%</b>	Incorrect name (95.5%); Illegible name in medical records (4.5%)
All-Element Accuracy	540	21.7%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	540	51.5%	<b>60.1%</b>	—

## Appendix H. Findings for CalViva Health

### Medical Record Procurement Status

Table H.1 shows the medical record procurement status for CalViva.

**Table H.1—Medical Record Procurement Status for CalViva**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CalViva	411	314	76.4%
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

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

**Table H.2—Reasons for Missing Medical Records for CalViva**

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

Non-Submission Reason	Count	Percent
Beneficiary was not a patient of the practice.	50	51.5%
Non-responsive provider or provider did not respond in a timely manner.	22	22.7%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	10	10.3%
Medical records were not located at the facility.	5	5.2%
Other.	4	4.1%
Closed facility.	3	3.1%
Provider refused to release medical records.	3	3.1%
<b>CalViva Total</b>	<b>97</b>	<b>100.0%</b>

## Encounter Data Completeness

Table H.3 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 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—Encounter Data Completeness Summary for CalViva**

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

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CalViva Rate	Statewide Rate	Denominator	CalViva Rate	Statewide Rate
Date of Service	551	21.2%	8.1% <sup>+</sup>	482	10.0%	7.1% <sup>+</sup>
Diagnosis Code	886	31.8%	18.4%	704	14.2%	11.8%
Procedure Code	1,091	35.0%	25.4%	790	10.3%	8.2% <sup>+</sup>
Procedure Code Modifier	287	41.8%	35.3%	175	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	393	17.8%	8.1% <sup>+</sup>	478	32.4%	22.3%

## Encounter Data Accuracy

Table H.4 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 beneficiaries' 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 beneficiaries' 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.4—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.

— 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.

<sup>1</sup>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	604	98.0% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	709	98.0% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	167	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	323	65.6%	<b>63.5%</b>	Incorrect name (80.2%); Illegible name in medical records (19.8%)



Key Data Element	Denominator	CalViva Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	434	29.0%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	434	56.5%	<b>60.1%</b>	—

## Appendix I. Findings for CenCal Health

### Medical Record Procurement Status

Table I.1 shows the medical record procurement status for CenCal.

**Table I.1—Medical Record Procurement Status for CenCal**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CenCal	411	403	98.1% <sup>+</sup>
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%<sup>+</sup></b>

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

**Table I.2—Reasons for Missing Medical Records for CenCal**

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

Non-Submission Reason	Count	Percent
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	4	50.0%
Medical records were not located at the facility.	2	25.0%
Non-responsive provider or provider did not respond in a timely manner.	2	25.0%
<b>CenCal Total</b>	<b>8</b>	<b>100.0%</b>

### Encounter Data Completeness

Table I.3 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 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 beneficiaries’ 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 beneficiaries’ medical records, and the numerator is the number of dates of service from the beneficiaries’ 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.3—Encounter Data Completeness Summary for CenCal**

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

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CenCal Rate	Statewide Rate	Denominator	CenCal Rate	Statewide Rate
Date of Service	594	S <sup>+</sup>	8.1% <sup>+</sup>	598	2.2% <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	903	7.9% <sup>+</sup>	18.4%	888	6.3% <sup>+</sup>	11.8%
Procedure Code	1,264	22.3%	25.4%	1,002	2.0% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	304	29.3%	35.3%	217	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	566	S <sup>+</sup>	8.1% <sup>+</sup>	590	5.8% <sup>+</sup>	22.3%

## Encounter Data Accuracy

Table I.4 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 beneficiaries' 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 beneficiaries' 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.4—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.

— 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.

<sup>1</sup>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	832	97.5% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	982	97.7% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	215	99.1% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	556	83.6%	<b>63.5%</b>	Incorrect name (82.4%); Illegible name in medical records (17.6%)
All-Element Accuracy	585	52.3%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	585	63.4%	<b>60.1%</b>	—

## Appendix J. Findings for Central California Alliance for Health

### Medical Record Procurement Status

Table J.1 shows the medical record procurement status for CCAH.

**Table J.1—Medical Record Procurement Status for CCAH**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CCAHA	411	403	98.1%+
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

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

**Table J.2—Reasons for Missing Medical Records for CCAH**

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

Non-Submission Reason	Count	Percent
Closed facility.	3	37.5%
Medical records were not located at the facility.	3	37.5%
Non-responsive provider or provider did not respond in a timely manner.	1	12.5%
Other.	1	12.5%
<b>CCAHA Total</b>	<b>8</b>	<b>100.0%</b>

### Encounter Data Completeness

Table J.3 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 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 beneficiaries’ 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 beneficiaries’ medical records, and the numerator is the number of dates of service from the beneficiaries’ 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.3—Encounter Data Completeness Summary for CCAH**

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

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CCAHA Rate	Statewide Rate	Denominator	CCAHA Rate	Statewide Rate
Date of Service	611	2.8% <sup>+</sup>	8.1% <sup>+</sup>	654	9.2% <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	898	9.4% <sup>+</sup>	18.4%	954	14.7%	11.8%
Procedure Code	877	8.3% <sup>+</sup>	25.4%	897	10.4%	8.2% <sup>+</sup>
Procedure Code Modifier	397	27.5%	35.3%	294	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	535	3.4% <sup>+</sup>	8.1% <sup>+</sup>	648	20.2%	22.3%

## Encounter Data Accuracy

Table J.4 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 beneficiaries’ 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 beneficiaries’ 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.4—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.

— 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.

<sup>1</sup>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	CCAHA Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	814	97.9% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	804	96.5% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	288	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	517	65.2%	<b>63.5%</b>	Incorrect name (90.0%); Illegible name in medical records (10.0%)
All-Element Accuracy	594	41.2%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	594	68.9%	<b>60.1%</b>	—

## Appendix K. Findings for Community Health Group Partnership Plan

### Medical Record Procurement Status

Table K.1 shows the medical record procurement status for CHG.

**Table K.1—Medical Record Procurement Status for CHG**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CHG	411	410	99.8%+
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

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

**Table K.2—Reasons for Missing Medical Records for CHG**

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

Non-Submission Reason	Count	Percent
Medical records were not located at the facility.	1	100.0%
<b>CHG Total</b>	<b>1</b>	<b>100.0%</b>

### Encounter Data Completeness

Table K.3 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 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 beneficiaries’ 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 beneficiaries’ medical records, and the numerator is the number of dates of service from the beneficiaries’ 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.3—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.

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CHG Rate	Statewide Rate	Denominator	CHG Rate	Statewide Rate
Date of Service	423	S <sup>+</sup>	8.1% <sup>+</sup>	420	S <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	683	14.1%	18.4%	623	5.8% <sup>+</sup>	11.8%
Procedure Code	870	26.6%	25.4%	670	4.6% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	154	39.0%	35.3%	94	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	374	S <sup>+</sup>	8.1% <sup>+</sup>	416	12.3%	22.3%

## Encounter Data Accuracy

Table K.4 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 beneficiaries' 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 beneficiaries' 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.4—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.

— 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.

<sup>1</sup>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	587	98.1% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	639	98.3% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	94	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	365	76.7%	<b>63.5%</b>	Incorrect name (95.3%)
All-Element Accuracy	416	41.3%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	416	59.9%	<b>60.1%</b>	—

## Appendix L. Findings for Contra Costa Health Plan

### Medical Record Procurement Status

Table L.1 shows the medical record procurement status for CCHP.

**Table L.1—Medical Record Procurement Status for CCHP**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
CCHP	411	354	86.1%
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

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

**Table L.2—Reasons for Missing Medical Records for CCHP**

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

Non-Submission Reason	Count	Percent
Non-responsive provider or provider did not respond in a timely manner.	42	73.7%
Medical records were not located at the facility.	12	21.1%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	2	3.5%
Beneficiary was not a patient of the practice.	1	1.8%
<b>CCHP Total</b>	<b>57</b>	<b>100.0%</b>

## Encounter Data Completeness

Table L.3 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 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—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.

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	CCHP Rate	Statewide Rate	Denominator	CCHP Rate	Statewide Rate
Date of Service	517	12.4%	8.1% <sup>+</sup>	496	8.7% <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	818	21.5%	18.4%	742	13.5%	11.8%
Procedure Code	996	28.5%	25.4%	776	8.2% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	324	43.5%	35.3%	187	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	369	12.2%	8.1% <sup>+</sup>	492	34.1%	22.3%

## Encounter Data Accuracy

Table L.4 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 beneficiaries' 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 beneficiaries' 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.4—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.

— 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.

<sup>1</sup>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	642	98.9% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	712	98.0% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	183	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	324	85.8%	<b>63.5%</b>	Incorrect name (78.3%)

Key Data Element	Denominator	CCHP Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	453	39.3%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	453	66.9%	<b>60.1%</b>	—

## Appendix M. Findings for Gold Coast Health Plan

### Medical Record Procurement Status

Table M.1 shows the medical record procurement status for Gold Coast.

**Table M.1—Medical Record Procurement Status for Gold Coast**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Gold Coast	411	400	97.3% <sup>+</sup>
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%<sup>+</sup></b>

Table M.2 lists the reasons for missing medical records for Gold Coast.

**Table M.2—Reasons for Missing Medical Records for Gold Coast**

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

Non-Submission Reason	Count	Percent
Beneficiary was not a patient of the practice.	5	45.5%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	3	27.3%
Closed facility.	1	9.1%
Non-responsive provider or provider did not respond in a timely manner.	1	9.1%
Provider refused to release medical records.	1	9.1%
<b>Gold Coast Total</b>	<b>11</b>	<b>100.0%</b>

## Encounter Data Completeness

Table M.3 displays the medical record omission and encounter data omission rates for Gold Coast. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—Encounter Data Completeness Summary for Gold Coast**

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

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Gold Coast Rate	Statewide Rate	Denominator	Gold Coast Rate	Statewide Rate
Date of Service	525	4.0% <sup>+</sup>	8.1% <sup>+</sup>	523	3.6% <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	797	9.3% <sup>+</sup>	18.4%	791	8.6% <sup>+</sup>	11.8%
Procedure Code	840	12.7%	25.4%	785	6.6% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	478	27.8%	35.3%	354	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	501	4.0% <sup>+</sup>	8.1% <sup>+</sup>	522	7.9% <sup>+</sup>	22.3%



## Encounter Data Accuracy

Table M.4 displays the element accuracy rates for each key data element and the all-element accuracy rate for Gold Coast. 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 beneficiaries' 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 beneficiaries' 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.4—Encounter Data Accuracy Summary for Gold Coast**

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.

— 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.

<sup>1</sup>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	Gold Coast Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	723	97.1% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	733	98.8% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	345	99.7% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	481	82.7%	<b>63.5%</b>	Incorrect name (79.5%); Illegible name in medical records (20.5%)

Key Data Element	Denominator	Gold Coast Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	504	55.6%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	504	67.3%	<b>60.1%</b>	—

**Appendix N. Findings for Health Net Community Solutions, Inc.**

**Medical Record Procurement Status**

Table N.1 shows the medical record procurement status for Health Net.

**Table N.1—Medical Record Procurement Status for Health Net**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Health Net	411	307	74.7%
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

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

**Table N.2—Reasons for Missing Medical Records for Health Net**

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

Non-Submission Reason	Count	Percent
Beneficiary was not a patient of the practice.	46	44.2%
Non-responsive provider or provider did not respond in a timely manner.	38	36.5%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	7	6.7%
Other.	5	4.8%
Provider refused to release medical records.	5	4.8%
Medical records were not located at the facility.	3	2.9%
<b>Health Net Total</b>	<b>104</b>	<b>100.0%</b>

## Encounter Data Completeness

Table N.3 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 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—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 less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule's de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Health Net Rate	Statewide Rate	Denominator	Health Net Rate	Statewide Rate
Date of Service	539	22.6%	8.1% <sup>+</sup>	451	7.5% <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	916	32.8%	18.4%	697	11.6%	11.8%
Procedure Code	1,137	36.0%	25.4%	791	8.0% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	235	44.3%	35.3%	137	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	381	20.2%	8.1% <sup>+</sup>	441	31.1%	22.3%

## Encounter Data Accuracy

Table N.4 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 beneficiaries' 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 beneficiaries' 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.4—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.

— 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.

<sup>1</sup>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	616	97.9% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	728	97.1% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	131	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	304	69.7%	<b>63.5%</b>	Incorrect name (83.7%); Illegible name in medical records (16.3%)

Key Data Element	Denominator	Health Net Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	417	27.3%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	417	57.6%	<b>60.1%</b>	—

## Appendix O. Findings for Health Plan of San Joaquin

### Medical Record Procurement Status

Table O.1 shows the medical record procurement status for HPSJ.

**Table O.1—Medical Record Procurement Status for HPSJ**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
HPSJ	411	397	96.6%+
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

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

**Table O.2—Reasons for Missing Medical Records for HPSJ**

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

Non-Submission Reason	Count	Percent
Medical records were not located at the facility.	5	35.7%
Closed facility.	4	28.6%
Beneficiary was not a patient of the practice.	3	21.4%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	2	14.3%
<b>HPSJ Total</b>	<b>14</b>	<b>100.0%</b>

## Encounter Data Completeness

Table O.3 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 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—Encounter Data Completeness Summary for HPSJ**

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

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	HPSJ Rate	Statewide Rate	Denominator	HPSJ Rate	Statewide Rate
Date of Service	598	3.3% <sup>+</sup>	8.1% <sup>+</sup>	609	5.1% <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	966	13.8%	18.4%	923	9.8% <sup>+</sup>	11.8%
Procedure Code	1,155	28.2%	25.4%	875	5.3% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	352	46.3%	35.3%	199	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	440	4.3% <sup>+</sup>	8.1% <sup>+</sup>	597	29.5%	22.3%



## Encounter Data Accuracy

Table O.4 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 beneficiaries' 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 beneficiaries' 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.4—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.

— 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.

<sup>1</sup>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	833	98.8% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	829	97.0% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	189	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	421	66.0%	<b>63.5%</b>	Incorrect name (86.7%); Illegible name in medical records (13.3%)

Key Data Element	Denominator	HPSJ Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	578	28.4%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	578	59.3%	<b>60.1%</b>	—

## Appendix P. Findings for Health Plan of San Mateo

### Medical Record Procurement Status

Table P.1 shows the medical record procurement status for HPSM.

**Table P.1—Medical Record Procurement Status for HPSM**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
HPSM	411	396	96.4% <sup>+</sup>
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%<sup>+</sup></b>

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

**Table P.2—Reasons for Missing Medical Records for HPSM**

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

Non-Submission Reason	Count	Percent
Closed facility.	4	26.7%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	3	20.0%
Medical records were not located at the facility.	3	20.0%
Beneficiary was not a patient of the practice.	2	13.3%
Non-responsive provider or provider did not respond in a timely manner.	2	13.3%
Provider refused to release medical records.	1	6.7%
<b>HPSM Total</b>	<b>15</b>	<b>100.0%</b>

## Encounter Data Completeness

Table P.3 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 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—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 less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule's de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	HPSM Rate	Statewide Rate	Denominator	HPSM Rate	Statewide Rate
Date of Service	514	3.5% <sup>+</sup>	8.1% <sup>+</sup>	513	3.3% <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	815	14.2%	18.4%	752	7.0% <sup>+</sup>	11.8%
Procedure Code	804	18.3%	25.4%	704	6.7% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	237	22.8%	35.3%	192	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	343	4.4% <sup>+</sup>	8.1% <sup>+</sup>	509	35.6%	22.3%

## Encounter Data Accuracy

Table P.4 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 beneficiaries' 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 beneficiaries' 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.4—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.

— 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.

<sup>1</sup>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	699	99.3% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	657	97.7% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	183	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	328	77.7%	<b>63.5%</b>	Incorrect name (90.4%)

Key Data Element	Denominator	HPSM Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	496	34.5%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	496	68.3%	<b>60.1%</b>	—

## Appendix Q. Findings for Inland Empire Health Plan

### Medical Record Procurement Status

Table Q.1 shows the medical record procurement status for IEHP.

**Table Q.1—Medical Record Procurement Status for IEHP**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
IEHP	411	390	94.9% <sup>+</sup>
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%<sup>+</sup></b>

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

**Table Q.2—Reasons for Missing Medical Records for IEHP**

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.	16	76.2%
Closed facility.	2	9.5%
Other.	2	9.5%
Beneficiary was not a patient of the practice.	1	4.8%
<b>IEHP Total</b>	<b>21</b>	<b>100.0%</b>

### Encounter Data Completeness

Table Q.3 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 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 beneficiaries’ 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 beneficiaries’ medical records, and the numerator is the number of dates of service from the beneficiaries’ 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.3—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.

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	IEHP Rate	Statewide Rate	Denominator	IEHP Rate	Statewide Rate
Date of Service	511	5.5% <sup>+</sup>	8.1% <sup>+</sup>	514	6.0% <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	816	14.7%	18.4%	773	10.0%	11.8%
Procedure Code	894	20.6%	25.4%	768	7.6% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	243	24.3%	35.3%	188	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	404	5.7% <sup>+</sup>	8.1% <sup>+</sup>	505	24.6%	22.3%

## Encounter Data Accuracy

Table Q.4 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 beneficiaries’ 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 beneficiaries’ 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.4—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.

— 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.

<sup>1</sup>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	696	97.6% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	710	97.0% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	184	99.5% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	381	61.9%	<b>63.5%</b>	Incorrect name (81.4%); Illegible name in medical records (18.6%)
All-Element Accuracy	483	30.2%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	483	64.2%	<b>60.1%</b>	—

## Appendix R. Findings for KP Cal, LLC (Kaiser NorCal)

### Medical Record Procurement Status

Table R.1 shows the medical record procurement status for Kaiser NorCal.

**Table R.1—Medical Record Procurement Status for Kaiser NorCal**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Kaiser NorCal	411	411	100.0% <sup>+</sup>
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%<sup>+</sup></b>

### Encounter Data Completeness

Table R.2 displays the medical record omission and encounter data omission rates for Kaiser NorCal. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and 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 beneficiaries’ 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 beneficiaries’ medical records, and the numerator is the number of dates of service from the beneficiaries’ 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.2—Encounter Data Completeness Summary for Kaiser NorCal**

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

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Kaiser NorCal Rate	Statewide Rate	Denominator	Kaiser NorCal Rate	Statewide Rate
Date of Service	677	S <sup>+</sup>	8.1% <sup>+</sup>	718	6.4% <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	1,152	13.4%	18.4%	1,093	8.7% <sup>+</sup>	11.8%
Procedure Code	1,136	6.3% <sup>+</sup>	25.4%	1,128	5.7% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	140	23.6%	35.3%	107	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	654	S <sup>+</sup>	8.1% <sup>+</sup>	713	9.3% <sup>+</sup>	22.3%

## Encounter Data Accuracy

Table R.3 displays the element accuracy rates for each key data element and the all-element accuracy rate for Kaiser NorCal. Encounter data accuracy was evaluated for dates of service that existed in both DHCS' electronic encounter data and the medical records and had values present in both data sources for the evaluated data element. Using the data element *Diagnosis Code* as an example, the list below shows the specifications for the denominator and the numerator:

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the beneficiaries' 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 beneficiaries' 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.3—Encounter Data Accuracy Summary for Kaiser NorCal**

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

— 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.

<sup>1</sup>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 NorCal Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	998	99.1% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	1,064	96.9% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	Inaccurate code (93.9%)
Procedure Code Modifier	107	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	647	89.2%	<b>63.5%</b>	Incorrect name (100.0%)
All-Element Accuracy	672	59.4%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	672	66.8%	<b>60.1%</b>	—

## Appendix S. Findings for KP Cal, LLC (Kaiser SoCal)

### Medical Record Procurement Status

Table S.1 shows the medical record procurement status for Kaiser SoCal.

**Table S.1—Medical Record Procurement Status for Kaiser SoCal**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Kaiser SoCal	411	407	99.0% <sup>+</sup>
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%<sup>+</sup></b>

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

**Table S.2—Reasons for Missing Medical Records for Kaiser SoCal**

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

Non-Submission Reason	Count	Percent
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	4	100.0%
<b>Kaiser SoCal Total</b>	<b>4</b>	<b>100.0%</b>

### Encounter Data Completeness

Table S.3 displays the medical record omission and encounter data omission rates for Kaiser SoCal. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and 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 beneficiaries’ 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 beneficiaries’ medical records, and the numerator is the number of dates of service from the beneficiaries’ medical records that were not found in DHCS’ electronic encounter data.

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

**Table S.3—Encounter Data Completeness Summary for Kaiser SoCal**

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

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Kaiser SoCal Rate	Statewide Rate	Denominator	Kaiser SoCal Rate	Statewide Rate
Date of Service	416	25.5%	8.1% <sup>+</sup>	644	51.9%	7.1% <sup>+</sup>
Diagnosis Code	650	35.4%	18.4%	1,021	58.9%	11.8%
Procedure Code	657	36.4%	25.4%	1,045	60.0%	8.2% <sup>+</sup>
Procedure Code Modifier	392	45.7%	35.3%	225	5.3% <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	30	S	8.1% <sup>+</sup>	635	96.7%	22.3%

## Encounter Data Accuracy

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

- ◆ Denominator: The denominator for the accuracy rate is the number of diagnosis codes associated with dates of service that existed in both DHCS' electronic encounter data and the beneficiaries' 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 beneficiaries’ medical records submitted for the study.

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

**Table S.4—Encounter Data Accuracy Summary for Kaiser SoCal**

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

HSAG displayed “NA” when the denominator for the rate was too small (i.e., less than 30) to report a valid rate.

— 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.

<sup>1</sup>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 SoCal Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	420	97.6% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	418	99.5% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	213	99.5% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	NA	NA	<b>63.5%</b>	—
All-Element Accuracy	310	6.1%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	310	65.8%	<b>60.1%</b>	—

## Appendix T. Findings for Kern Family Health Care

### Medical Record Procurement Status

Table T.1 shows the medical record procurement status for KFHC.

**Table T.1—Medical Record Procurement Status for KFHC**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
KFHC	411	403	98.1%+
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

Table T.2 lists the reasons for missing medical records for KFHC.

**Table T.2—Reasons for Missing Medical Records for KFHC**

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.	3	37.5%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	2	25.0%
Closed facility.	1	12.5%
Medical records were not located at the facility.	1	12.5%
Provider refused to release medical records.	1	12.5%
<b>KFHC Total</b>	<b>8</b>	<b>100.0%</b>



## Encounter Data Completeness

Table T.3 displays the medical record omission and encounter data omission rates for KFHC. Using the data element *Date of Service* as an example, the list below shows the specifications for the denominator and 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—Encounter Data Completeness Summary for KFHC**

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

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	KFHC Rate	Statewide Rate	Denominator	KFHC Rate	Statewide Rate
Date of Service	642	S <sup>+</sup>	8.1% <sup>+</sup>	638	S <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	950	9.5% <sup>+</sup>	18.4%	951	9.6% <sup>+</sup>	11.8%
Procedure Code	1,313	21.4%	25.4%	1,054	2.1% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	597	26.1%	35.3%	447	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	591	7.8% <sup>+</sup>	8.1% <sup>+</sup>	600	9.2% <sup>+</sup>	22.3%

## Encounter Data Accuracy

Table T.4 displays the element accuracy rates for each key data element and the all-element accuracy rate for KFHC. 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 beneficiaries' 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 beneficiaries' 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.4—Encounter Data Accuracy Summary for KFHC**

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.

— 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.

<sup>1</sup>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	KFHC Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Diagnosis Code	860	98.7% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	1,032	97.8% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	441	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	545	34.7%	<b>63.5%</b>	Incorrect name (94.9%); Illegible name in medical records (5.1%)

Key Data Element	Denominator	KFHC Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	632	17.1%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	632	60.4%	<b>60.1%</b>	—

## Appendix U. Findings for L. A. Care Health Plan

### Medical Record Procurement Status

Table U.1 shows the medical record procurement status for L.A. Care.

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

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
L.A. Care	411	393	95.6% <sup>+</sup>
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%<sup>+</sup></b>

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

**Table U.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.	13	72.2%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	2	11.1%
Beneficiary was not a patient of the practice.	1	5.6%
Closed facility.	1	5.6%
Other.	1	5.6%
<b>L.A. Care Total</b>	<b>18</b>	<b>100.0%</b>

## Encounter Data Completeness

Table U.3 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 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—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.

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	L.A. Care Rate	Statewide Rate	Denominator	L.A. Care Rate	Statewide Rate
Date of Service	555	9.2% <sup>+</sup>	8.1% <sup>+</sup>	562	10.3%	7.1% <sup>+</sup>
Diagnosis Code	942	23.0%	18.4%	846	14.3%	11.8%
Procedure Code	1,296	30.3%	25.4%	989	8.7% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	213	43.2%	35.3%	129	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	476	9.5% <sup>+</sup>	8.1% <sup>+</sup>	557	22.6%	22.3%

## Encounter Data Accuracy

Table U.4 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 beneficiaries' 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 beneficiaries' 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.4—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.

— 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.

<sup>1</sup>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	725	99.7% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	903	96.6% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	Lower level of services in medical records (54.8%); Inaccurate code (45.2%)
Procedure Code Modifier	121	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—

Key Data Element	Denominator	L.A. Care Accuracy Rate	Statewide Accuracy Rate	Main Error Type
Rendering Provider Name	431	65.2%	<b>63.5%</b>	Incorrect name (80.0%); Illegible name in medical records (20.0%)
All-Element Accuracy	504	26.0%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	504	53.8%	<b>60.1%</b>	—

## Appendix V. Findings for Molina Healthcare of California Partner Plan, Inc.

### Medical Record Procurement Status

Table V.1 shows the medical record procurement status for Molina.

**Table V.1—Medical Record Procurement Status for Molina**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Molina	411	376	91.5%+
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

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

**Table V.2—Reasons for Missing Medical Records for Molina**

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

Non-Submission Reason	Count	Percent
Medical records were not located at the facility.	23	65.7%
Non-responsive provider or provider did not respond in a timely manner.	11	31.4%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	1	2.9%
<b>Molina Total</b>	<b>35</b>	<b>100.0%</b>



## Encounter Data Completeness

Table V.3 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 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—Encounter Data Completeness Summary for Molina**

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

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Molina Rate	Statewide Rate	Denominator	Molina Rate	Statewide Rate
Date of Service	545	8.1% <sup>+</sup>	8.1% <sup>+</sup>	508	S <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	903	17.6%	18.4%	810	8.1% <sup>+</sup>	11.8%
Procedure Code	1,094	23.3%	25.4%	888	5.5% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	307	29.3%	35.3%	220	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	415	8.2% <sup>+</sup>	8.1% <sup>+</sup>	500	23.8%	22.3%

## Encounter Data Accuracy

Table V.4 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 beneficiaries' 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 beneficiaries' 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.4—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.

— 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.

<sup>1</sup>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	744	98.4% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	839	96.7% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	217	99.5% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	381	64.8%	<b>63.5%</b>	Incorrect name (90.3%); Illegible name in medical records (9.7%)

Key Data Element	Denominator	Molina Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	501	31.1%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	501	60.9%	<b>60.1%</b>	—

## Appendix W. Findings for Partnership HealthPlan of California

### Medical Record Procurement Status

Table W.1 shows the medical record procurement status for Partnership.

**Table W.1—Medical Record Procurement Status for Partnership**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
Partnership	411	383	93.2% <sup>+</sup>
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%<sup>+</sup></b>

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

**Table W.2—Reasons for Missing Medical Records for Partnership**

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

Non-Submission Reason	Count	Percent
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	14	50.0%
Closed facility.	7	25.0%
Beneficiary was not a patient of the practice.	4	14.3%
Non-responsive provider or provider did not respond in a timely manner.	2	7.1%
Other.	1	3.6%
<b>Partnership Total</b>	<b>28</b>	<b>100.0%</b>

## Encounter Data Completeness

Table W.3 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 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' 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.3—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 less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule's de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	Partnership Rate	Statewide Rate	Denominator	Partnership Rate	Statewide Rate
Date of Service	591	7.6% <sup>+</sup>	8.1% <sup>+</sup>	574	4.9% <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	929	16.7%	18.4%	851	9.0% <sup>+</sup>	11.8%
Procedure Code	1,019	24.2%	25.4%	840	8.1% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	290	33.4%	35.3%	200	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	518	10.0%	8.1% <sup>+</sup>	563	17.2%	22.3%

## Encounter Data Accuracy

Table W.4 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 beneficiaries' 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 beneficiaries' 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.4—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.

— 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.

<sup>1</sup>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	774	99.0% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	772	96.9% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	193	99.5% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	466	42.7%	<b>63.5%</b>	Incorrect name (98.9%)

Key Data Element	Denominator	Partnership Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	546	22.3%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	546	61.5%	<b>60.1%</b>	—

## Appendix X. Findings for San Francisco Health Plan

### Medical Record Procurement Status

Table X.1 shows the medical record procurement status for SFHP.

**Table X.1—Medical Record Procurement Status for SFHP**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
SFHP	411	409	99.5%+
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

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

**Table X.2—Reasons for Missing Medical Records for SFHP**

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

Non-Submission Reason	Count	Percent
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	1	50.0%
Medical records were not located at the facility.	1	50.0%
<b>SFHP Total</b>	<b>2</b>	<b>100.0%</b>

### Encounter Data Completeness

Table X.3 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 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 beneficiaries’ 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 beneficiaries’ medical records, and the numerator is the number of dates of service from the beneficiaries’ 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.3—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 less than 11; therefore, this report suppresses the rate to satisfy the HIPAA Privacy Rule’s de-identification standard.

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	SFHP Rate	Statewide Rate	Denominator	SFHP Rate	Statewide Rate
Date of Service	625	S <sup>+</sup>	8.1% <sup>+</sup>	636	3.3% <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	1,024	10.0%	18.4%	1,004	8.2% <sup>+</sup>	11.8%
Procedure Code	1,069	17.7%	25.4%	933	5.7% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	225	36.9%	35.3%	145	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	498	S <sup>+</sup>	8.1% <sup>+</sup>	634	23.0%	22.3%

## Encounter Data Accuracy

Table X.4 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 beneficiaries’ 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 beneficiaries’ 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.4—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.

— 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.

<sup>1</sup>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	922	99.5%+	<b>98.4%+</b>	—
Procedure Code	880	98.5%+	<b>96.2%+</b>	—
Procedure Code Modifier	142	100.0%+	<b>99.8%+</b>	—
Rendering Provider Name	488	91.8%+	<b>63.5%</b>	Incorrect name (100.0%)
All-Element Accuracy	615	53.0%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	615	69.4%	<b>60.1%</b>	—

## Appendix Y. Findings for Santa Clara Family Health Plan

### Medical Record Procurement Status

Table Y.1 shows the medical record procurement status for SCFHP.

**Table Y.1—Medical Record Procurement Status for SCFHP**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
SCFHP	411	395	96.1% <sup>+</sup>
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%<sup>+</sup></b>

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

**Table Y.2—Reasons for Missing Medical Records for SCFHP**

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

Non-Submission Reason	Count	Percent
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	9	56.3%
Beneficiary was not a patient of the practice.	4	25.0%
Medical records were not located at the facility.	2	12.5%
Non-responsive provider or provider did not respond in a timely manner.	1	6.3%
<b>SCFHP Total</b>	<b>16</b>	<b>100.0%</b>

### Encounter Data Completeness

Table Y.3 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 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 beneficiaries’ 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 beneficiaries’ medical records, and the numerator is the number of dates of service from the beneficiaries’ medical records that were not found in DHCS’ electronic encounter data.

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

**Table Y.3—Encounter Data Completeness Summary for SCFHP**

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	SCFHP Rate	Statewide Rate	Denominator	SCFHP Rate	Statewide Rate
Date of Service	565	3.5% <sup>+</sup>	8.1% <sup>+</sup>	622	12.4%	7.1% <sup>+</sup>
Diagnosis Code	881	10.6%	18.4%	937	15.9%	11.8%
Procedure Code	1,114	19.4%	25.4%	1,021	12.0%	8.2% <sup>+</sup>
Procedure Code Modifier	386	23.1%	35.3%	311	4.5% <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	457	3.3% <sup>+</sup>	8.1% <sup>+</sup>	620	28.7%	22.3%

## Encounter Data Accuracy

Table Y.4 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 beneficiaries’ 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 beneficiaries’ medical records submitted for the study.

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

**Table Y.4—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.

— 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.

<sup>1</sup>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	788	98.1% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	898	96.5% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	Inaccurate code (71.0%)
Procedure Code Modifier	297	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	442	83.3%	<b>63.5%</b>	Incorrect name (91.9%)
All-Element Accuracy	545	44.0%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	545	65.3%	<b>60.1%</b>	—

## Appendix Z. Findings for SCAN Health Plan

### Medical Record Procurement Status

Table Z.1 shows the medical record procurement status for SCAN.

**Table Z.1—Medical Record Procurement Status for SCAN**

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

MCP/PSP	Initial Sample Size	Number of Records Submitted	Percentage of Records Submitted
SCAN	411	376	91.5%+
<b>Statewide Total</b>	<b>10,142</b>	<b>9,370</b>	<b>92.4%+</b>

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

**Table Z.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.	30	85.7%
Beneficiary was not a patient of the practice.	3	8.6%
Beneficiary was a patient of the practice; however, no documentation was available for requested dates of service.	1	2.9%
Medical records were not located at the facility.	1	2.9%
<b>SCAN Total</b>	<b>35</b>	<b>100.0%</b>

## Encounter Data Completeness

Table Z.3 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 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 beneficiaries' 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 beneficiaries' medical records, and the numerator is the number of dates of service from the beneficiaries' medical records that were not found in DHCS' electronic encounter data.

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

**Table Z.3—Encounter Data Completeness Summary for SCAN**

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

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

Key Data Elements	Medical Record Omission			Encounter Data Omission		
	Denominator	SCAN Rate	Statewide Rate	Denominator	SCAN Rate	Statewide Rate
Date of Service	624	6.3% <sup>+</sup>	8.1% <sup>+</sup>	591	S <sup>+</sup>	7.1% <sup>+</sup>
Diagnosis Code	1,125	18.4%	18.4%	997	7.9% <sup>+</sup>	11.8%
Procedure Code	1,017	20.9%	25.4%	840	4.3% <sup>+</sup>	8.2% <sup>+</sup>
Procedure Code Modifier	183	36.1%	35.3%	119	S <sup>+</sup>	3.7% <sup>+</sup>
Rendering Provider Name	121	9.9% <sup>+</sup>	8.1% <sup>+</sup>	575	81.0%	22.3%

## Encounter Data Accuracy

Table Z.4 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 beneficiaries' 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 beneficiaries' medical records submitted for the study.

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

**Table Z.4—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.

— 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.

<sup>1</sup>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	918	98.8% <sup>+</sup>	<b>98.4%<sup>+</sup></b>	—
Procedure Code	804	97.6% <sup>+</sup>	<b>96.2%<sup>+</sup></b>	—
Procedure Code Modifier	117	100.0% <sup>+</sup>	<b>99.8%<sup>+</sup></b>	—
Rendering Provider Name	109	56.9%	<b>63.5%</b>	Incorrect name (95.7%)



Key Data Element	Denominator	SCAN Accuracy Rate	Statewide Accuracy Rate	Main Error Type
All-Element Accuracy	585	8.4%	<b>30.7%</b>	—
All-Element Accuracy Excluding Rendering Provider Name <sup>1</sup>	585	57.9%	<b>60.1%</b>	—