

Health Net Encounter Data Improvement Program Phase I Assessment

Summary Report

April 2019





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Phase I Assessment Overview

Health Net established the Community & Infrastructure Investment Program (hereinafter the "CII Program"), pursuant to Undertaking 29, "Community Investments" agreed to by Centene and Health Net as a condition of the Department of Managed Health Care (DMHC) approval of Health Net's change in control, to provide grants to improve health care access and quality of care to low-income, underserved communities and populations in California.

Health Net's CII Program will commit \$50 million over five years to improve encounter data among providers in the Medi-Cal Managed Care program. Encounter data, submitted by providers to their respective Managed Care Organizations, is vital to tracking health care quality, costs, and needed improvements within health care systems. Accurate and timely information also assists with monitoring health trends and outcomes within Medi-Cal Managed Care populations.¹ Currently, however, many challenges exist with the collection, quality, and submission of encounter data across the spectrum of care. This is due in part to lack of standardization of encounter data submissions, outdated and/or lack of technology, multiple data handoffs and process flows, as well as limited staff capacity and proficiency.

Encounter Data Improvement Program

The goal of Health Net's Encounter Data Improvement Program is to mitigate barriers to the timely submission of complete and accurate encounter data. In addition, this program aims to strengthen the data collection and reporting infrastructure of the Medi-Cal Managed Care health care delivery system, particularly for Medi-Cal Managed Care providers contracted with managed care plans. The key objectives of the Encounter Data Improvement Program include:

- Encourage, test, and promote new models of encounter data submission for Medi-Cal Managed Care providers;
- Improve the skills, expertise, and efficiency of providers and staff in collecting and reporting encounter data; and
- Promote technological improvements to increase encounter data submission.

Health Net's CII Program has developed a multi-phase, multi-year investment opportunity for the Encounter Data Improvement Program. This work builds off previous efforts to understand challenges in encounter data quality including the Integrated Healthcare Association Market Research Study² and Health Net's Encounter Data Improvement Pilot Program.

Phase 1 of the Encounter Data Improvement Program, which launched in spring 2018, provided funding to 19 Medi-Cal Managed Care provider organizations to select and hire consulting firms from a pool of designated consultants to conduct assessments of their encounter data submission processes. The goal of the assessments was to identify, document, and recommend steps that will lead to increasing the volume, accuracy, and quality of encounters that identified provider

¹ Health Net's Community and Infrastructure Investment Program

² <https://www.iha.org/resources/challenges-encounter-data-submissions>

groups submit to health plans. This report provides a brief overview of the assessment results across all 19 provider organization assessments, as well as recommended solutions to address identified challenges.

Overview of the Assessment

Through Phase 1 Assessment, 19 provider organizations contracted with a consultant to complete a thorough assessment of their encounter data supply chain. Grantees varied in terms of provider type, number of Medi-Cal Managed Care patients served, and location throughout the state. This variation ensured the assessments could provide a complete view of issues across the encounter data supply chain (Exhibit 1).

The assessment focused on seven key areas including:

- Data collection processes;
- Data handoff processes to contracted entities;
- Technology infrastructure;
- Coding expertise and capabilities;
- Encounter data governance and quality assurance;
- Staff knowledge and skillset in supporting encounter data processes; and
- Reimbursement linked to encounter data.

Consultants compiled all of their findings into a final summary report and action plan for each grantee.

Evaluation Approach

The main goals of the Phase 1 Assessment evaluation were to assess and identify the barriers and challenges experienced by Medi-Cal Managed Care provider organizations, as well as recommend steps to improve the timeliness, accuracy, and volume of encounter data. In order to achieve these goals, Harder+Company Community Research (Harder+Company) worked closely with consultants throughout the 12-week Phase 1 Assessment timeframe to evaluate progress over time and to examine cross-cutting observations. Consultants completed a process diagram, two interim progress reports, a preliminary gap analysis, final summary report, and action plan for each provider organization. Harder+Company also met regularly with consultants to learn about their progress and identify or address challenges. Once the assessments were complete, Harder+Company conducted a thorough analysis of all 19 grantee reports and action plans to identify the themes and recommendations.

Exhibit 1. Phase 1 Assessment Grantees

Category	Number of Grantees (n=19)
Provider Type	
Community/Rural Clinic	1
Federally Qualified Health Center	7
Individual Provider	2
Provider Group	9
Number of Medi-Cal Patients Served as of April 2018	
Less than 30,000	8
30,001-100,000	7
100,001+	4
Geography	
Northern California	6
Central Valley	5
Southern California	8

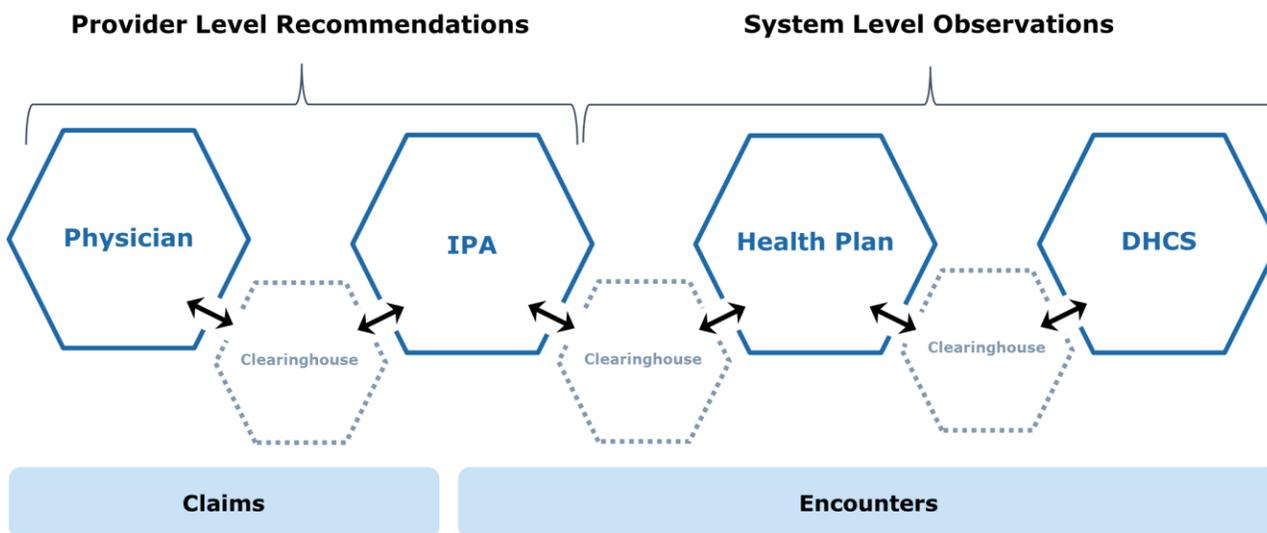
Evaluation Goals

- Assess and identify barriers and challenges experienced by Medi-Cal Provider Organizations
- Recommend steps to improve the quality and volume of encounter data
- Identify funding opportunities to improve encounter data across the supply chain

Provider Level Recommendations

The encounter data supply chain includes multiple partners including individual physicians' offices, Independent Physician Associations (IPA), clearinghouses, health plans, and the California Department of Healthcare Services (DHCS). The assessments provide insights into challenges, barriers, and proposed solutions at every step in the encounter data supply chain. This report is organized into two key sections. First, provider level recommendations focus on steps earlier in the supply chain, from point of data entry until submission of encounter data to contracted health plans. Next, System Level Observations highlight issues that impact encounter data quality at the health plan or state level. *Exhibit 2* provides a high-level overview of the supply chain.

Exhibit 2. Recommendations and Observations Across the Supply Chain



Overview of Provider Level Recommendations

Harder+Company's analysis of summary reports and action plans examined current structures and processes that facilitate encounter documentation, encounter data storage and processing, and data quality improvement across provider types. The analysis revealed that there is no one-size-fits-all solution to increasing the quality of encounters across the supply chain. However, examination of the assessment results revealed eight high-impact provider level recommendations that are distinct and pervasive issues that impact encounter data quality from the point of data entry through submission of encounter data to contracted health plans (*Exhibit 3*).

Each recommendation was also rated for feasibility and scalability. Feasibility refers to the likelihood that the recommendations can be addressed at the provider level. Scalability is defined as the likelihood that the CII Program can address this issue across multiple providers and impact overall encounter data quality. *Exhibit 3* provides an overview of the provider recommendations. The following section addresses each recommendation and provides key observations for each recommendation, examples based on assessments from various provider

There is no one-size-fits-all solution to improve encounter data quality.

- Key issues are found across Provider Organizations of various types and sizes; how those issues impact individual Provider Organizations can vary.
- Solutions require customization to individual provider needs.

organizations, as well as potential funding opportunities to address each recommendation independently. The provider level recommendations appear in descending order of how often they appeared in action plans, ranging from 16 to 4 instances.

Recommendation	Frequency	Feasibility	Scalability
 Upgrade technology and electronic health record (EHR) systems	16	Medium	Low
 Provide standardized trainings	14	Medium	High
 Update/create more robust policies and procedures	13	High	High
 Automate processes	11	High	Medium
 Improve internal workflow and communication	9	Low	Low
 Employ certified coders	9	Medium	Medium
 Improve data analytics	8	High	Medium
 Conduct regular audits	4	High	Medium

Feasibility: likelihood a recommendation can be addressed at the provider level. The following is a definition of the ratings:

- High: Return on Investment (ROI) is high, provider organization readiness to implement is high and barriers are low.
- Medium: ROI is medium, provider organizations will need additional support to implement and will experience some barriers.
- Low: ROI varies; provider organizations require supplemental training and will face a myriad of barriers to implementation.

Scalability: likelihood the CII Program can address this issue across multiple providers and impact overall encounter data quality. The following is a definition of the ratings:

- High: Replicability with the CII Program is easy; ability to leverage common elements across provider type.
- Medium: Only a few elements can be replicated with the CII Program; some leveraging of resources though adaptation for individual providers may be needed.
- Low: Replicability with the CII Program is limited; solutions require tailoring.

Exhibit 3. High-Impact Provider Level Recommendations



Upgrade technology and electronic health record (EHR) systems

The issue frequently identified across grantees was the need to upgrade technology and Electronic Health Record (EHR) systems.

Outdated systems negatively impact encounter data quality

Many of the provider organizations have outdated systems, which can negatively impact accuracy and timeliness of encounter data across the supply chain. For example, outdated systems do not have access to features or tools that facilitate accurate coding of information, while newer EHRs have features that can perform data cleaning functions that identify errors to be fixed before a claim is sent to the clearinghouse. Updates like this can help providers identify missing or inaccurate encounters and resolve such issues in a timely manner. In addition, upgraded systems include efficiencies such as in pre-populated templates for common visit types and updated lists of HEDIS (Healthcare Effectiveness Data and Information Set) measures codes. These newer features reduce the need for manual data entry and increase the accuracy of coding.

Despite the benefits of system upgrades, providers do not upgrade their EHR systems for several reasons including cost, lack of awareness of the benefits of the upgrades, or concern that bugs or glitches can cause process interruptions. At least one provider organization has not upgraded to a new version of the EHR system due to having a negative past experience integrating the updated system smoothly into their practice.

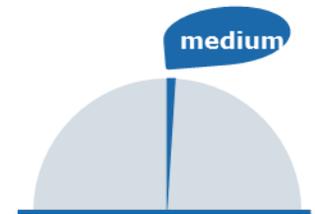
Smaller providers still rely on paper-based data entry

Although the majority of provider organizations use some type of EHR system, smaller provider organizations may still rely on paper-based data entry or note visit information on paper and later transcribe information into an EHR system. The paper to EHR system creates another step where data could be lost or incorrectly entered. Physicians (or their medical assistants) may not have time during the day to transfer information into the EHR, impacting encounter data accuracy, timeliness, and completeness. The blended use of paper-based data entry and EHR can also cause delays when provider organizations, the EHR, billing, and practice management systems are not interoperable with contracted entities use.

Practice management systems are not always interoperable with contracted entities

Many individual providers do not have the compatible technology to be able to read files sent from health plans or DHCS. Individual providers do not always have access to a clearinghouse or other partner to translate files prior to sending them to provider organizations. Additionally, some EHR systems are unable to consume files such as 277 or 837s, which are common file formats for Medi-Cal Managed Care encounter data processing. This becomes a systemic issue due to a lack of system wide standardized information and processes across the supply chain.

Feasibility Rating



Scalability Rating



Provider Organization Examples



Examples from two different providers highlight how outdated technology

can impact encounter data quality.

Case Study 1: A small provider organization has limited time and capacity to integrate available EHR system upgrades. For example, if they could expand their catalog of templates to capture a wider range of visit types and update some of the existing templates they use, it would improve usability of their system and speed data entry.

Case Study 2: Within a very large IPA, there is a lot of variation in terms of which systems individual provider organizations might use and how data get to the IPA across their 1,500 contracted physicians. Some providers use paper-based practices, which increase the potential for errors to occur. Though providers within the IPA have EHRs with a wide range of capabilities, many of those capabilities are unused or unpurchased due to a perceived lack of cost/benefit. Additionally, many EHR systems may not be able to exchange data effectively with the IPA due to the expense of building interfaces.

Investment Opportunities

Funding can address this issue by ensuring that health IT systems are interoperable and support the timely and accurate exchange of data. This includes funding for providers to upgrade their EHR system to the latest version, add tools such as templates, or to build out reporting structures so their system can support the level of documentation sent from health plans. Funding could also include IT support to ensure that they can use the upgraded system effectively.



Provide Standardized Trainings

Many provider organizations do not have standardized trainings for encounter data entry, processing, or submission. Most of the trainings are on-the-job training by other staff employed at the provider organization. Insufficient training on claims processing software can negatively impact the completeness, accuracy, reasonability, and timeliness (CART) of encounter data. Standardized, formal training would strengthen coding, improve eligibility verification, and create a culture of learning and continuous quality improvement, which can further impact other elements of the encounter data supply chain.

There is a lack of knowledge of encounter data across the supply chain

Most of the time, encounter submission and reporting are siloed among the different entities involved in the end-to-end submission process with little standardized exchange of information. Across the supply chain, lack of knowledge negatively impacts encounter data quality. Staff have mixed levels of preparedness. For example, some nurses have not received training to enter codes for complex cases.

Smaller point-of-care providers may not have dedicated billing or coding staff

Smaller organizations often do not have dedicated staff who are focused on coding and billing. Staff members wear multiple hats and information is passed down between staff so best practices may not be used.



Provider Organization Examples

Examples from two different providers highlight how limited workforce

training can impact encounter data quality.

Case Study 1: At one provider organization, the lead biller received training directly from their EHR vendor when it was first implemented six years ago. The lead biller then shared knowledge with the other billers at the clinic. The staff are not certified coders or billers. One of the three billers may occasionally attend training webinars provided by the EHR vendor, but there is minimal documentation of billing/coding procedures. Better documentation would help with new staff training, as well as provide resources for staff to refer to when they need procedural clarification or help addressing unusual billing circumstances.

Case Study 2: Another provider, a small provider group, does not currently have formal training documentation. The processors receive on-the-job training from other staff but they don't necessarily have sufficient training on the claims processing software, which can negatively impact the completeness, accuracy, reasonability, and timeliness of encounter data.

Investment Opportunity

To address this issue, funding could be used to hire a system subject matter expert who has a broad understanding of encounter data, EHR systems, Medicaid/Medi-Cal Managed Care to work with providers and end-users to ensure that all parties have an understanding of the importance of encounter data and the role their daily work plays in the supply chain. An additional strategy could be to develop a standard encounter data-training guide that can easily be adapted for different types of provider organizations.



Update/Create More Robust Policies and Procedures

Ensuring that providers have robust policies and procedures around encounter data will improve organizational capacity. The majority of provider organizations do not have formal encounter data policies and procedures. Some providers view encounter submission as administratively burdensome and not always linked to their system of care. Integration of encounter data management and clinical quality assurance allows providers to use encounter data to not only drive claims, but also efforts to improve patient care.

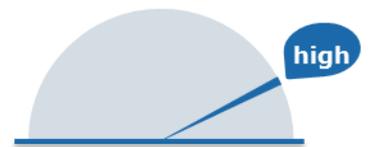
Most provider organizations do not have formal Electronic Data Interchange (EDI) governance in place

Many provider organizations do not have a formal EDI in place. An EDI allows encounter data to be submitted in a standardized format to other entities. Without an EDI in place, similar to relying on paper-based submissions, data can be lost or entered incorrectly. In addition, inconsistent EDIs can lead to providers not being able to track the status of submitted claims. Strengthening governance for encounter data transfer can improve data timeliness and accuracy.

For IPAs and large provider organizations, there is a lack of consistent expectations for point-of-care providers

Providers within IPAs and large provider organizations do not always fully understand encounter reports on encounter trends or quality supplied by clearinghouses or health plans. In addition, they do not always understand the value of encounter submission for their organization. This leads to providers remaining unaware of the importance of CART encounter submissions along with inconsistent practices. Formal policies and procedures provide staff with clear expectations. Improved communication can lead to focused discussions on how to improve data quality metrics along with support to

Feasibility Rating



Scalability Rating



improve the encounter submission.

Integration of encounter data management and clinical quality assurance is needed

There are inconsistent and insufficient quality controls within provider organizations. The extent that quality assurance is in place varies across provider organizations from conducting regular audits to periodic audits to no audits at all. One provider organization has a Quality Assurance Process Improvement committee, where the team meets monthly to prioritize quality improvement outcomes. For other provider organizations, quality assurance is done remotely or only done as needed. Overall, there is a lack of formal encounter data quality assurance procedures. When there are no procedures connecting quality assurance with data management in place, it is difficult to achieve consistent quality measures or to maximize annual incentive payments.



Provider Organization Examples

Examples from two different providers highlight how having limited or informal policies and procedures can impact encounter data quality.

Case Study 1: At one FQHC, there is inconsistency in medical record quality and processes across the 16 clinic sites, which has a direct, detrimental effect on claim quality and timeliness, as well as clinic efficiency. Establishing standard procedures for elements such as patient registration, scheduling, eligibility checks, authorizations, and referrals would reduce the need for back end cleanup. In addition, these procedures would reduce data submission delays.

Case Study 2: At a larger provider group, most providers do not have formal documented, encounter-based policies and procedures in place. This can be problematic because it may lead to inconsistent practices and therefore reduce data quality, especially if there is staff turnover. Additionally providers do not fully understand how to use supplied encounter reports to examine encounter trends or facilitate quality improvement efforts.

Investment Opportunity

Funding could be used to support provider organizations to strengthen policies and procedures for encounter data submission and management. This might include the creation, documentation, and implementation of data governance plans that would address Risk Management, Document Scanning, Data Quality Performance Monitoring, and adherence to training procedures.



Automate Processes

A common recommendation was to maximize automation of processes to improve data quality and accuracy. To facilitate accuracy of data entry, there are automated processes for eligibility verification that should ideally start prior to each patient visit, as well as automation of code selection and data entry during a visit in order to expedite data entry and eliminate the need to update the EHR after the visit by reviewing the physician's notes. Automation would also improve reporting on reminder calls, errors in coding, and reduce duplication.

Automated eligibility verification facilitates accurate data entry

Most providers verify patient eligibility manually by searching various sources

Feasibility Rating



Scalability Rating



including Medi-Cal or health plan websites or through their clearinghouse. These sources often have outdated eligibility information, making eligibility issues the leading cause for encounter rejections. Many of these rejections are resolved once the State updates their eligibility files because providers are then able to correct and resubmit encounters, often the same day. A process that automates eligibility verification would validate accuracy and improve timeliness of encounter submissions.

Automation of code selection can expedite encounter data entry and remove the need for manual/paper-based data collection

For some providers, physicians use paper-pencil documentation, which causes delays in electronic data entry. This is exacerbated if there are any errors because staff need to follow the paper trail to make appropriate corrections. Other provider organizations have EHR systems but they have yet to integrate templates or drop-down menus that would automate coding and data entry. A shortage of integrated templates, minimal automation, too many free text options within the EHR system, and lack of training all present challenges to encounter data collection and submission. Eliminating manual documentation will likely improve data quality and operational efficiency.

Automated processes can also reduce coding errors and duplication

In addition to automating coding and data entry, there are automated alerts that are not currently incorporated into provider organizations' EHR systems. By not using these alerts, provider organizations miss opportunities to monitor and address data quality in real time. Configuring EHR systems to include alerts can help identify potential duplicates. By fully optimizing existing systems and automating as many processes as possible, many processes related to encounter data quality and accuracy can be improved.



Provider Organization Examples

Examples from two different providers highlight how a lack of automation can impact encounter data quality.

Case Study 1: At a community clinic that currently has separate EHR and billing software, data from their practice management and billing system can automatically transfer to a clearinghouse to submit claims to participating payers. However, the provider has to first manually process claims by entering information from health records into the billing system. Eliminating manual claim documentation will likely improve data quality and operational efficiency.

Case Study 2: Another provider, a medium-sized FQHC, has an EHR system but they have yet to integrate templates or drop-down menus that would automate coding, or automated alerts that would identify potential duplicates.

Investment Opportunity

To address this recommendation, funding could be used to fully optimize existing systems and automate as many processes as possible. Potential projects overlap with those that were mentioned related to upgrading EHR systems. By improving EHR functionality, many processes related to encounter data quality and accuracy can be automated. This takes the extra burden off staff and optimizes existing systems. Initial IT support and staff training on how to implement automation would also be needed, but ultimately these changes can improve data quality, accuracy, and timeliness.



Improve Internal Workflow and Communication

Improved workflow and communication allows provider organizations to eliminate existing inefficient processes, which are time consuming and increase the potential for data entry errors. Provider organizations struggle to balance patient care with other data needs including encounter data quality and accuracy. Improvements in this area would require providers to have an overall commitment to encounter data quality and have the right structures in place to make sure they can access the data they have and use it effectively. This recommendation was rated low in terms of feasibility and scalability because these issues intersect with many other recommendations such as technology upgrades, training, and data governance so it would be challenging to simply address this recommendation independently without ensuring other issues are also addressed.

Internal workflow and encounter data roles and responsibilities need to be defined

Documentation of workflow and communication improvements may require provider organizations to update existing operations models, manuals, and trainings; conduct a workflow analysis; and redesign the workflow to increase efficiency. Addressing internal workflow within provider organizations can ensure that encounter data roles and responsibilities are clearly defined, ensuring a commitment to encounter data quality and completeness. Additionally, clearly defined encounter data roles and responsibilities at the provider level can help frontline staff understand how their efforts contribute to the data supply chain so they are able to be as effective as possible in their roles.

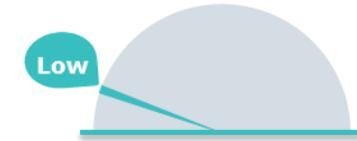
Data analytics support data-driven decisions and reduce costs through the optimization of operational efficiencies

Data use drives data quality. Providers collect and submit a great amount of data but don't always have the infrastructure or supports to actually use that data to identify inefficiencies or other challenges that impact data quality. Many providers do not perform data analytics to understand where errors or challenges occur, creating multiple threats to quality. Additionally, improving data analytics allows non-technical staff to examine trends related to encounter data collection and submission, enables providers to analyze the collected data to make data-driven decisions, and reduces costs through the optimization of operational efficiencies.

Feasibility Rating



Scalability Rating



Provider Organization Examples

Examples from two different providers highlight how challenges with internal communication or inefficient workflow can impact encounter data quality.

Case Study 1: At a small FQHC, multiple bottlenecks occur. Front office staff often have to stop what they are doing to assist patients checking in and out for their appointments. At the beginning of each month, the front office staff checks patient eligibility for all appointments scheduled during that month. Most of the staff were not aware that they could run eligibility checks for multiple patients at one time and have instead been checking eligibility for individual patients, one by one. These same staff also assist patients who have changes to their primary care provider, which may

take up to 30 minutes to resolve. These various interruptions cause delays in the everyday work of the front office staff and limits efficiency.

Case Study 2: For another provider, a small provider group, the issue is that encounters are only submitted at month-end, which creates a rush at the end of the month to enter data, reducing time for quality assurance. Increasing frequency would reduce month end rush and allow for ongoing quality assurance checks and processes.

Investment Opportunity

Funding can help provider organizations improve their internal workflow and overall office operations. This may include updating their operations model, conducting a workflow analysis, and redesigning to increase efficiency, as well as updating manuals and trainings so that staff are as effective as possible in their roles. The implementation and use of a Business Intelligence (BI) model may be an effective way to improve workflow and communication. Business Intelligence is the combination of business processes and technologies that allow organizations to collect, structure, analyze, and visualize data; thereby transforming that data into actionable information. A BI model allows medical organizations to analyze collected data to make data-driven decisions, and reduce costs through the optimization of operational efficiencies. A BI program also allows non-technical staff to easily access information on individual encounters, encounter submissions, and overall trends.



Employ Certified Coders

A common recommendation involved the employment of certified coders, either within individual provider offices or within provider groups. Over half of the grantees do not utilize certified coders.

Certified coders ensure CART encounter data

Certified coders ensure encounter data is complete, accurate, reasonable, and timely across the supply chain. Improved coding accuracy also results in maximizing incentives. Billing departments with certified coders tend to do a lot of clean up after providers enter initial information. There are industry wide accepted general and specific coding certifications through the American Academy of Professional Coders and the American Health Information Management Association. While the assessments did not track staff turnover specifically, there was some anecdotal evidence that it is difficult for provider organizations to retain certified coders as they often go to work for hospitals or other settings that offer higher pay.

Certified coders might add more specific codes or clean up errors to improve encounter data prior to submission

Certified coders are able to add appropriate codes to more complex cases, add more specific codes after providers code, or clean up errors to improve encounter data prior to submission. Some consultants recommended that at a minimum, the best practice is to ensure that the lead coder be certified.

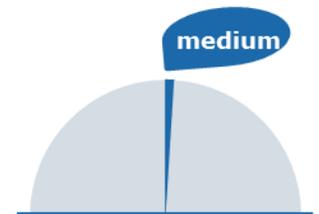


Provider Organization Examples

Examples from two different providers highlight how having non-certified coders can impact encounter data quality.

Case Study 1: One small FQHC does not have any credentialed coding personnel

Feasibility Rating



Scalability Rating



skilled in health record documentation requirements, which reduces encounter data quality and accuracy. These staff can be invaluable in assisting providers to provide correct and complete documentation to ensure accurate and complete data collection and facilitate timely billing.

Case Study 2: Within some of the large IPAs, some providers have certified coders on staff, while others have staff who have learned coding on the job. It is clear from looking at variations in encounter data quality by provider that providers with a certified coder have better consistency in CART. Additionally, dedicated coders can improve encounter data submission efficiency.

Investment Opportunity

A key way to address this recommendation is to provide funding for provider organizations to ensure they have at least one certified lead coder on staff in their billing department.



Improve Data Analytics

Many providers are not using their EHR systems and associated templates, dashboards, and reports to monitor encounter data quality.

Provider organizations need support to purchase and/or learn how to use data reports

Providers are not using data analytics for several reasons including lack of funding to purchase needed EHR templates or modules, limited staff and time to run data analytics and review, and a need for formal training around how to best use data analytics to improve encounter data quality. Many provider organizations expressed interest in learning how to use data analytics effectively, but did not currently have the capacity to do so.

Improvement in data analytics can support provider organizations in multiple ways

Improvements in data analytics can positively impact encounter data quality and accuracy. Regular use of data analytics allows organizations to monitor and correct encounter data quality issues, can improve the process to identify and close gaps in care in a timely fashion, and can provide regular feedback on performance on pay-for-performance metrics.

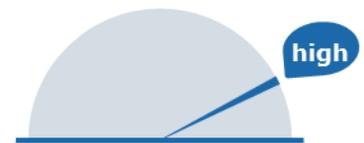


Provider Organization Examples

Examples from two different providers highlight how utilizing data analytics can improve encounter data quality.

Case Study 1: An FQHC and medium IPA generate a tremendous amount of useful data, but do not have a robust way to leverage that data for data analytics and reporting. Both organizations are very interested in data analytics but do not have the tools and IT support to integrate data analytics effectively into their encounter submission process. The FQHC recently purchased Tableau to develop data dashboards but have yet to complete implementation of this tool. By continually reviewing data and utilizing data dashboards, these provider organizations would be able to better identify encounter data quality issues prior to submission to a clearinghouse or health plan, identify training needs, and track improvements over time.

Feasibility Rating



Scalability Rating



Investment Opportunity

Provider organizations need support to integrate data analytics into their business processes. This may include working with an internal expert to develop reporting metrics such as:

- Volume of encounters per provider—this can help identify when data is missing;
- Comparison of claims received to encounters sent—this will allow provider organizations to ensure that all claims received are sent out as encounters; and
- Received Lag Time (length of time measured in days between date of service and date of submission of the encounter) by provider—this can help pinpoint providers that tend to be slow to submit claims, allowing provider organizations to precisely target technical assistance.



Conduct Regular Audits

Many provider organizations do not have a system in place to regularly review and audit encounter data. In order to ensure quality data, a sufficient number of charts should be audited per month to ensure a clear picture of errors taking place. Integrating this process into encounter data management processes can improve data quality and accuracy.

Auditing procedures can be implemented at both the individual provider level and also at the provider group level. This helps identify errors early on to understand where they are happening. At the provider group level, regular audits can help to identify individual provider organizations that have encounter data quality issues.



Provider Organization Examples

Examples from two different providers highlight how limited use of audits impact encounter data quality.

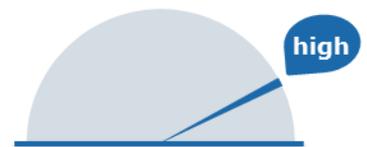
Case Study 1: At a smaller provider group, only around 1 percent of charts are checked at random which provides billing supervisors with a limited picture of errors that are taking place. If they could increase the portion of charts that get reviewed, then they can catch and address errors.

Case Study 2: At an FQHC, in addition to a lack of robust EHR and coding training, there is not a system in place to monitor compliance to changes in policies and procedures in a systematic way. In addition to developing these policies and procedures for encounter data and compliance, this provider organization would benefit from a systematic audit process to identify and address errors.

Investment Opportunity

Funding can help ensure that updates to policies and procedures also include regular audits. It is important to note that this recommendation should occur alongside other supports such as workforce training and integration of data analytics. A project of this scope may include training and support to integrate regular audits into organizational culture, support to increase the ratio of charts included in audit process, and processes to correct identified errors systematically.

Feasibility Rating



Scalability Rating

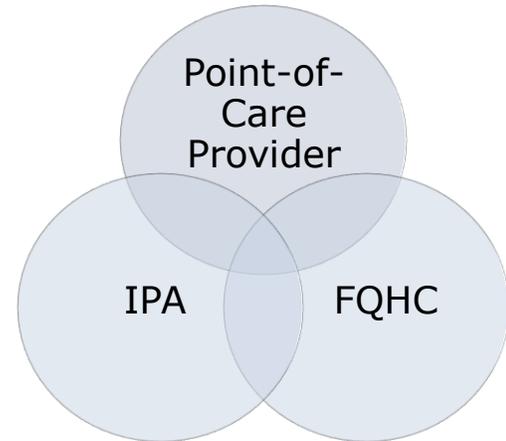


Comprehensive Provider Level Solutions

Common issues require tailored solutions

The recommendations and the potential projects associated with each recommendation provide a snapshot of the key issues identified through the assessment and ways to address those issues through the CII Program. Although there is no one-size-fits-all solution, there are several comprehensive provider level solutions that have the potential to address multiple recommendations. These types of projects would be the most efficient use of potential investments to improve encounter data quality.

The following three projects have the potential to address multiple provider recommendations.³ A project-based approach to addressing encounter data quality is an efficient option given the interrelated nature of provider level recommendations. The three projects are not an exhaustive list of comprehensive options but they address multiple issues with sufficient flexibility to address individual provider needs. Some of these projects become more cost effective the more they are replicated as there are common elements that can be used to support multiple provider organizations.



Business Intelligence Implementation Project

The first comprehensive solution is a Business Intelligence (BI) implementation project, which can be applied to a variety of provider settings such as individual providers, FQHCs, or provider groups. A project like this is focused on leveraging data to drive data quality improvement through increased use of data. Using BI for encounter data allows an organization to track all four dimensions of encounter data quality, thereby allowing organizations to measure the impact of multiple improvement efforts. Additionally, Business Intelligence is useful across all areas of an organization. Implementing a BI program for encounter data creates a framework that can be easily expanded to include other kinds of data, allowing the organization to become more data-driven across a variety of different business processes. BI can support provider organizations by:

- Combining business processes and technologies to transform data into actionable information;
- Allowing providers to leverage data to drive improvement in encounter data quality;
- Developing mechanisms for provider groups to collaborate with incoming trading partner to address identified gaps; and
- Providing an infrastructure for coverage determination, cross references, and electronic coding books.

Encounter Data Enterprise Architecture Project

Another comprehensive solution is an Enterprise Architecture (EA) approach, which is focused on integrating encounter data into overall processes, implementing changes

³ While all of the consultants offered similar solutions to the challenges they observed, one consultant grouped recommendations into comprehensive projects, which were the inspiration for these comprehensive provider level solutions.

across the organization, to ensure industry best practice processes are followed. This approach was recommended specifically for provider groups. Consultants observed that several provider groups have developed business, information, and technical processes to submit complete and accurate encounter data to health plans in a timely manner. Furthermore, these are stand-alone processes that have not been integrated into the overall enterprise architecture (EA) of the organization.

This project uses a comprehensive approach, including industry best practice standards to analyze the current "as-is" state of business processes, information architecture, and technical systems at the IPA. It then identifies all areas that should be updated to accommodate the quality requirements for encounter data, design a "to-be" state, and develop a roadmap showing how to achieve that state. An EA project will include the following components:

- The creation, updating, or elimination of business processes;
- New policies and procedures governing encounter data;
- Updated documentation;
- Training programs;
- Technological infrastructure updates; and
- New staff or new role assignments to existing staff.

Billing and Coding Improvement Project

The final comprehensive project is a comprehensive billing and coding improvement project that would address several recommendations including: EHR system upgrades, automation, policies and procedures updates, certified coders, and audits, particularly for individual point-of-care providers either in a small provider group or FQHC setting.

Even smaller providers may have several experienced staff members dedicated to preparing bills for medical services, which should be adequate for managing the billing needs for the practice. However, there is a lack of documentation and no formal auditing program. In addition, billers and coders lack certifications and key software to ensure that coding is correct and up to date.

A Billing and Coding Improvement project would therefore include:

- A suite of well-developed, easily accessed documents that describe provider organization-specific billing procedures in a standardized format;
- Establishment of an in-depth training program;
- Industry certifications for billing staff to become certified professional billers and for at least one staff to become a certified professional coder;
- Business process changes that require a certified coder to review every code before bills are sent to the managed care plan;
- Establishment or outsourcing of a regularly scheduled, formal audit program; and
- Acquisition and implementation of coding software that reviews national correct coding initiative edits, local coverage determination, national coverage determination, cross references, and electronic coding books.

System Level Observations

The majority of the assessment findings focused on challenges that individual provider organizations face related to encounter data submission, and potential solutions to address these challenges and improve encounter data quantity and quality. However, nearly all consultants also identified issues that occur later on in the supply chain, typically at the health plan or once data are submitted to DHCS. These are a broader set of complex issues that cannot necessarily be addressed with limited funds or an individual solution, as they require a deeper level of engagement among multiple stakeholders in the supply chain and the state. Improvements in these areas are essential in order to optimize encounter data quality. Exhibit 4 provides an overview of these observations in descending order regarding how often they appeared in assessment report action plans. Each observation is ranked in priority order in terms of their impact on encounter data submissions and potential to make a measurable impact in data quality across California.

Exhibit 4. System Observations

Observation	Entities Involved	Priority
There is not adequate communication between trading partners to discuss and disseminate data quality information across the supply chain.	DHCS, Health Plans, IPAs	High
There is no centralized source for current, accurate, and accessible member eligibility, enrollment, and provider assignment information.	DHCS, Health Plans	High
File formats and processes for communicating claim status vary across health plans.	Health Plans	High
Incentives are often insufficient and not directly linked to encounter data quality standards.	DHCS, Health Plans, IPAs	High
Individual provider organizations would benefit from direct knowledge sharing and support regarding data quality issues.	DHCS, Health Plans, IPAs	Medium
Providers need better documentation that outlines the differences between fee-for-service and encounter data formats.	DHCS	Medium
Requiring industry standard data edits earlier on in the supply chain would reduce errors.	DHCS, Health Plans	Medium

System Observation Details

The following section summarizes the system level observations that consultants highlighted throughout their assessments.

There is not adequate communication between trading partners to discuss and disseminate data quality information across the supply chain.

The Centers for Medicaid and Medicare Services (CMS) and DHCS have published requirements for health care data quality and the information is available to the public through their respective websites. However, this level of communication is not sufficient to maximize quality. Additional communication, collaboration, and

awareness of operational implementation barriers and facilitators across the entire supply chain would be beneficial to those that set policy, those that establish incentives, and those that provide care. Three consultants recommend that DHCS and health plans establish and actively support an open forum to partners at all supply links, including providers and provider organizations, to discuss and disseminate data quality information related to barriers, facilitators, policy, incentives, and care. Informing all health care entities on how to use data, and what to expect from data, would alleviate confusion around data quality.

There is no centralized source for current, accurate, and accessible member eligibility, enrollment, and provider assignment information.

DHCS provides eligibility (enrollment) data on a monthly and daily basis when needed to every managed care plan. Additionally, health plans may provide eligibility information via their clearinghouse less often, which can lead to discrepancies in eligibility information potentially on a daily basis. Most point-of-care providers rely on Medi-Cal's Eligibility web page to validate member eligibility, plan enrollment, and provider assignment the day before a scheduled encounter as well as at initial encounter scheduling. Too many encounters are deemed invalid the day of the encounter or later during billing/encounter reconciliation with little remedy available for both patients and providers.

At least one consultant recommends that health plans and clearinghouses ensure that member eligibility, enrollment, and provider information is refreshed every time there are changes to that information and make the information readily available (systematically) to all trading partners and their trading partners in the supply chain. Additionally, until technology and policy allow for timely and trusted data to point-of-care providers, health plans and DHCS might consider some policy relief to enable care and payment for patients with last minute or post-encounter eligibility, enrollment, and provider changes.

File formats and processes for communicating claim status vary across health plans.

Individual provider organizations and provider groups must map data for each plan and update these maps if health plans submit file format changes. Additionally, consultants noted that health plans do not regularly notify provider organizations of file format changes. When this occurs, data submissions will "error out" or reject and the provider organization must then contact the health plan to revise mapping. In addition, health plans do not always supply an updated point of contact to resolve issues when errors such as this occur. These challenges impact encounter data completeness, accuracy, reasonability, and timeliness and any penalties experienced by a provider group are likely passed down to individual providers. Consultants note that health plans can play a key role in standardizing processes across health plans and strengthening communication when changes occur.

Additionally, there appears to be some inconsistency regarding how often Medi-Cal Managed Care plans send the standard file receipt, claim status, and payment reports (X12 999, X12 277, and X12 835 EDI) and transactions back to provider organizations. Therefore, providers are currently unable to track the status of submitted claims. Furthermore, within provider groups, there is not a centralized way for individual providers to track a claim submitted via the IPA or MSO, which limits the ability to process claims in a timely fashion.

Incentives are often insufficient and not directly linked to encounter data quality standards.

Many provider organizations either do not participate in incentives or do not understand the benefits of these programs. For some provider organizations, existing incentive programs are too costly to implement successfully. One consultant shared an example of a pediatric clinic who tried to participate in vaccination incentive programs from two different health plans. One incentive program pays a \$150 bonus for completion of a set of ten shots by the age of two; the bonus is paid to the provider that administers the tenth shot. However, it is often difficult to document appropriately all vaccines as clients may go to multiple clinics for vaccines. Although this incentive is higher paying, it is much more cumbersome and less aligned with the reality of the practice than that of the other lesser paying incentive, which provides a \$2 bonus for each individual vaccination.

Additionally, provider organizations have no idea what they are being paid for when they receive HEDIS (Healthcare Effectiveness Data and Information Set) incentive checks. Provider organizations would benefit from reports that indicate how many encounters qualified for which incentive measures so they have a sense of what, specifically, they were receiving incentives for and where they may be having issues.

Individual provider organizations would benefit from direct knowledge sharing and support regarding data quality issues.

DHCS has published what it requires for reporting encounters to the department, and has made the publication ([Quality Measures for Encounter Data](#)) available to the public and all Medi-Cal Managed Care plans. Additionally, DHCS meets directly with managed care plans to review data quality items. Individual provider organizations would benefit from this level of knowledge sharing and support. This might include broadening department meetings to include entities in the data supply chain or encouraging the managed care plans to conduct similar data quality meetings or working groups with their trading partners.

Providers need better documentation that outlines the differences between Medi-Cal Fee-for-Service and Medi-Cal Managed Care data formats.

Depending on Medi-Cal program or provider type, the transactions and formats can vary for reporting encounter data or submitting FFS claims. The dissimilarities of the transactions can be confusing to trading partners, especially those that are required to supply encounter data and submit FFS claims directly to Medi-Cal. The differences in the formats can lead to incorrect reporting or claiming. Sharing documentation that outlines the differences between all of the FFS and encounter data formats can help provide clarity. For example, provider organizations would benefit from information about the differences between the 837 transactions for physical health, behavioral health, and capitated services.

Requiring industry standard data edits earlier on in the supply chain would reduce errors.

Although SNIP Validation (Levels 1-7)⁴ capabilities exist, only the most basic SNIP

⁴ Strategic National Implementation Process (SNIP) levels include seven checklist items that systems should test to ensure that EDI files comply with Health Insurance Portability and Accountability Act (HIPAA). Additional information on each type of edit can be found at <https://ibm.co/2C911Bv>.

edits level 1 (EDI Standards Integrity Testing) and level 2 (Implementation Guide Requirement Testing) are currently enforced across the supply chain. This means that the bulk of CART quality and other useful validations (e.g., Medi-Cal Duplicate rules, National Medical Codes) do not occur from point-of-care EMR/Billing systems up through the entire chain until DHCS enforces them. Enforcement of additional SNIP edits level 5 (External HIPAA Code Set Testing) and level 7 (Trading Partner Specific Testing) to enforce use of National Medical Codes and Medi-Cal duplicate validation logic would significantly reduce encounter errors much earlier in the supply chain where they could be addressed in a more timely manner. This includes supporting clearinghouse partners, as well as point-of-care providers, to align business practices with SNIP validations.

Conclusion

The Phase 1 Assessment focused on identifying major issues and challenges in the Medi-Cal Managed Care encounter data supply chain across various provider types and sizes. The evaluation of the Phase 1 Assessment included a thorough review of the reports developed by consultants for each provider organization and identified key themes and recommendations to address encounter data quality issues at the provider level. Though there is no one-size-fits-all solution to improving encounter data quality across all provider organizations, the assessment identified several distinct and pervasive issues that impact encounter data quality, as well as recommendations to address them.

Many of these issues may be well-known to provider organizations and others in the health field. Providers are interested in improving their data quality and are making every effort to do so while balancing patient care. The assessment recommendations focus on projects and resources that can reduce existing barriers. Improvement of encounter data quality across the entire encounter data supply chain requires coordination of provider and system level efforts to maximize the improvements undertaken at the provider level.

Medi-Cal providers currently dedicate multiple resources to encounter data while also maintaining focus on quality care for high-need patients. The barriers to quality encounter data that occur are often due to lack of training or tools needed to optimize those efforts. The recommendations in this report focus on the tools and resources that can reduce existing barriers and create opportunities for increased quality improvement efforts at the provider level. Additionally, coordination of these provider level efforts alongside system level improvements will maximize the potential to see real encounter data quality improvement in the future.

Coordination of both provider and system level efforts is required for sustained industry-wide improvements.

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