QUALITY MEASURES FOR ENCOUNTER DATA

California Department of Health Care Services

Health Information Management Division

March 2026

Version 2.0

DHCS
CALIFORNIA DEPARTMENT OF
HEALTH CARE SERVICES

Revision History

Document Version	Publication Date	Brief Description of Document Changes
2.0	March 2026	QMED 2.0 Report

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1) INTRODUCTION

1.1 ENCOUNTER DATA AND ITS IMPORTANCE TO DHCS

Encounter Data are records of services rendered to Medi-Cal members covered under a model in which a Plan[1] pays for Medi-Cal member services and in return receives Per-Member-Per-Month (capitated) payments from the Department of Health Care Services (DHCS). As an example, Medi-Cal managed care plans (MCPs) are contractually required to provide DHCS with high quality Encounter Data.[2] DHCS relies on this data to support program and population health oversight and to fulfill federal reporting requirements.

DHCS uses Encounter Data for a wide variety of functions, including but not limited to:

- Capitated rate calculation
- Quality measure calculation
- Audits and investigations
- Reporting to the Centers for Medicare and Medicaid Services (CMS)
- Population Health Management
- Incentive Payment Program[3]
- Public dashboards

DHCS requires high quality data to perform these functions, and expects Plans' Encounter Data submissions to align with three high priority areas, including:

- Contract Requirements: Contractual obligations outline legally binding Plan requirements including Encounter Data submission and quality standards, such as the timely submission of Encounter Data.[2]
- Transformed Medicaid Statistical Information Systems (T-MSIS) Requirements: DHCS is required to submit high-quality Encounter Data to CMS using T-MSIS files. States must meet data quality targets for (1) critical priority, (2) high

[1] Plans include MCPs, specialty plans like Program of All-Inclusive Care for the Elderly Plans (PACE), Dental Plans, and Behavioral Health Plans.
[2] For example, see the MCP Boilerplate Contract here: https://www.dhcs.ca.gov/provgovpart/Documents/2024-Managed-Care-Boilerplate-Contract.pdf
[3] https://www.dhcs.ca.gov/Pages/IncentivePaymentProgram.aspx

priority, and (3) expenditures, in order to be assessed as meeting data quality expectations under the Outcomes-Based Accountability methodology.[4]

- DHCS Business Needs: Encounter Data must support DHCS business needs such as those listed above.

1.2 Purpose of Quality Measures for Encounter Data (QMED)

Measuring data quality is a prerequisite to improving it. High quality data enables DHCS to conduct efficient analyses, inform policy and program design and manage oversight functions.

This QMED Methodology Report specifies how DHCS will measure the quality of Encounter Data submitted by Plans to DHCS. This report captures updates to DHCS' existing QMED measure set[5] to reflect new program and operational priorities, as well as describes accountability processes. This report will be updated on a regular basis in the future to reflect revisions to the QMED measure set and the application of QMED to other components of the delivery system.

This report, including the measures defined within it, is expected to evolve over time as Encounter Data quality improves and DHCS' program and business needs change.

There are multiple intended audiences for this document, including:

- The Data Quality Reporting Unit within the Data Quality Branch of the Health Information Management Division at DHCS. This document can be used to define and communicate to any interested internal or external party how DHCS measures the quality of Encounter Data.
- MCPs and other parts of the delivery system that submit Encounter Data to DHCS can use this document to understand DHCS' expectations for the quality of submitted Encounter Data and how those expectations will be enforced.

This document does not address other categories of data, such as Medi-Cal Fee-for-Service claims, Electronic Health Records, or reference files. This report also does not address measures used to assess the quality of health care services provided to Medi-Cal members, although it does address the quality of the underlying data used to construct those measures.

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[4] See T-MSIS requirements here: https://www.medicaid.gov/medicaid/data-systems/macbis/transformed-medicaid-statistical-information-system-t-msis.
[5] QMED 1.1 measures are outlined here: https://www.dhcs.ca.gov/dataandstats/data/Pages/MMCDClmsEncDataRpt.aspx.

2) ABOUT QMED 2.0

This QMED 2.0 Methodology Report documents DHCS' Encounter Data quality priorities, measures and grading.

2.1 Data Quality Priorities

DHCS has five data quality priority areas.[6]

Name	Description
Uniqueness	The absence of duplicate records within the dataset. When records are not unique, the accuracy of analyses can be compromised.
Completeness	The extent to which all events are represented in the data and the required data elements are present. When data is incomplete, it reduces the confidence that can be placed in analysis and reporting based on that data.
Accuracy	The degree to which the data represent the actual services rendered. Inaccurate data is of limited value for analysis and reporting, since analytic results will not represent reality.
Reasonability	Data is reasonable when the individual data are valid, and the data set as a whole is plausible. When data lacks reasonability, it is untrustworthy and difficult to use for analysis and reporting. Unreasonable data may include errors or incorrect information.
Timeliness	The applicability of data in relation to the timeframe it covers or the context in which decisions are made. If the interval between service provision and data submission is excessive, it becomes difficult to use the data for timely analysis and reporting.

2.2 Data Reviewed

QMED currently only considers data submitted in one of the following formats:

a) X12 837I, version 5010 – Institutional Encounters

b) X12 837P, version 5010 – Professional Encounters

The measures in this document are only applicable to post-adjudicated Encounter records submitted to DHCS via X12 transaction requirements in 837 Institutional ("837I")

[6] Uniqueness was not a core dimension in QMED 1.0.

and 837 Professional ("837P") files. Future phases of QMED 2.0 will incorporate other Medi-Cal Plans including PACE and 837 Dental Medi-Cal Encounter Data.

2.3 Plans Subject to QMED 2.0

DHCS will roll out QMED 2.0 Report Cards for the MCPs who currently received QMED 1.1 Report Cards. Starting in 2026, QMED 1.1 will be retired and these MCPs will receive QMED 2.0 Report Cards with QMED 2.0 measures and will be subject to enforcement of Encounter Data quality standards. This Methodology Report describes in detail the Encounter Data quality measures used by DHCS as referred to in the attached All Plan Letter (APL)- 26-003.

MCPs that operate in more than one county in California will receive a QMED 2.0 score for each unique three-digit Health Care Plan ("HCP") code. QMED 2.0 measures are calculated separately for each HCP. Each county in which an MCP maintains a network of Providers is considered a unique HCP, and each HCP has a unique HCP code that is specified by the MCP and approved by DHCS.[7] For example, if an MCP operates in three counties, that MCP will have QMED 2.0 measures calculated separately for its three unique HCPs.

2.4 Future Plans to be Subject to QMED 2.0

DHCS will review how and when to phase in other delivery systems at a future date. Other Plan types under consideration include, but are not limited to:

- PACE Organizations
- Senior Care Action Network (SCAN) Plan
- Dental Plans
- County Behavioral Health Plans

More information about how these other parts of the delivery system will be phased into QMED 2.0 (e.g., order, timing) and how Encounter Data quality standards will be enforced is forthcoming.

2.5 Measures

QMED 2.0 uses numerical thresholds to classify data as "Pass" or "Fail" based on whether values meet the defined cutoff criteria (or "Threshold"). QMED 2.0 data quality measures each have a Threshold to compare the MCP's (and corresponding HCP) submitted

[7] See MMC-274-Provider-Network-Data-PACES-Companion-Guide v2.2.pdf

Encounter Data. If an HCP's performance for a measure does not meet the defined Threshold, the HCP will have failed the measure and receive a "FAIL" score. QMED 2.0 measure scores are either FAIL or PASS. Thresholds were developed by DHCS to drive improvements in data quality and align with contractual and federal reporting requirements.[8] Measures will only be calculated for HCPs that have submitted Encounters to DHCS for at least 12 months. HCPs with fewer than 12 months of submitted Encounter Data will not receive a score or impact the overall QMED 2.0 MCP grading.

Current QMED 2.0 measures are listed in the Appendix. Depending on DHCS' business needs or federal reporting requirements, QMED 2.0 measures and/or Thresholds are expected to evolve over time.

When denoted, measures are computed separately for 837I and 837P transactions.

3) REPORT CARDS

Report Cards will be generated and issued to MCPs on a quarterly basis. The report cards will provide a quarterly snapshot of data quality across measures at both the MCP and HCP level. DHCS will send QMED 2.0 Report Cards to MCPs mentioned in Section 2.4. At a future date, DHCS will share a public website where QMED 2.0 Report Cards will be posted for public access.

3.1 Grading

QMED 2.0 grading is intended to provide information about both the magnitude and persistence of Encounter Data quality issues using a simple, transparent, and actionable methodology.

MCPs, which are the entities accountable to DHCS for the quality of submitted Encounter Data, are graded based on the performance of their HCPs. MCP grades reflect whether any of their HCPs failed any Threshold measures in the current quarter.

3.2 Quality Improvement Procedures

QMED measures are calculated for each MCP's HCP. An MCP will fail their QMED Report Card if any one of their individual HCPs has failed at least one Threshold measure. DHCS

[8] State Health Official (SHO) #25-002 Data Reporting Compliance for the Transformed-Medicaid Statistical Information System (T-MSIS) https://www.medicaid.gov/federal-policy-guidance/downloads/sho25002.pdf

will not hold MCPs accountable for encounter data quality measure performance issues due to DHCS systems issues.

Enforcement activities will begin July, 1 2027, and will occur on an annual basis. Enforcement will be based on persistent encounter data quality failures over time as measured by quarterly report cards and in alignment with APL 25-007. DHCS will provide details on the enforcement process in advance of initiating enforcement activities.

APPENDIX

APPENDIX A. MEASURE SPECIFICATIONS, THRESHOLDS, AND CHANGE LOG

A.1 Uniqueness

Uniqueness 1 (U.1). Duplicate Encounters

Definition: This measure provides information on the percentage of Encounters submitted to DHCS that are a duplicate of a previously submitted Encounter. This measure compares Encounters submitted in the quarter to all previously submitted and accepted Encounters. This Uniqueness 1 measure identifies duplicates between Encounters whereas the Uniqueness 2 measure (see below) identifies duplicates within Encounters.

$$Percent\ of\ Encounters\ that\ are\ duplicates = \left(\frac{Number\ of\ Encounters\ in\ the\ quarter\ that\ are\ duplicates\ of\ a\ previously\ accepted\ Encounter}{Total\ number\ of\ Encounters\ submitted\ in\ the\ quarter} \right) * 100$$

The methodology for identifying duplicate Encounters is outlined in DHCS' Companion Guides for X12 837I and 837P transactions. DHCS also maintains and makes available exception rules in the Companion Guides for circumstances in which duplicates are acceptable. For example, a void or replacement of an existing accepted Encounter is not considered a duplicate. Companion Guides are available in DHCS' Documentation Center.[9]

DHCS has set the FAIL threshold as follows:

Grade	Percent of encounters that are duplicate Encounters
Fail	>0.5%

[9] Link to DHCS Documentation Center: https://teams.microsoft.com/l/team/19%3AMTndJi9gII7WQS1AhqVyLh3AeBMf8syywgxG8KQ1Loo1%40thread.tacv2/conversations?groupId=3862053f-5e17-47be-9fd8-5bbe497e593a&tenantId=265c2dcd-2a6e-43aa-b2e8-26421a8c8526.

Uniqueness (U.2 and U.3) - Duplicate Service Lines

Definition: This measure provides information on the percentage of Encounter Service Lines that are a duplicate of another Service Line on the same Encounter. Duplicate Service Lines pertain to Services Lines reported within the same 837I or 837P Encounter. Duplicate Service Lines are evaluated for Encounters submitted in the quarter. As noted above, this Uniqueness 2 measure identifies duplicates within Encounters whereas the Uniqueness 1 measure (see above) identifies duplicates between Encounters. This measure is calculated separately for 837I and 837P Encounters. As such, the measure is estimated and reported separately by Transaction Type. Measure U.2 – Duplicate Service Lines – Institutional is estimated and reported for 837I Transactions. Measure U.3 – Duplicate Service Lines – Professional is estimated and reported for 837P Transactions.

The definition of a Duplicate Service Line is not currently included in the Companion Guides. Duplicate Service Lines must be:

- Accepted Encounters in accepted files
- Identical in terms of Client Identification Number (CIN), File ID, HCP Number, Encounter ID, Parent Encounter ID, Service Date To/From, Rendering Provider ID, Procedure Codes, Procedure Code Modifiers 1-4, and Drug Code

Duplicate Service Lines cannot:

- Be Replacement or Void Encounters from Duplicate Service Lines for the original Parent Encounter ID
- Contain Procedure Modifiers 59, 76, 77, XS and 25, XE, XP, XU as specified in the Companion Guides

Measure U.2 - Duplicate Service Lines – Institutional

$$Percent\ of\ 837I\ Service\ Lines\ that\ are\ Duplicate\ Service\ Lines$$
$$= \left(\frac{Number\ of\ Duplicate\ 837I\ Service\ Lines\ in\ the\ reporting\ quarter}{Number\ of\ 837I\ \ Service\ Lines\ submitted\ in\ the\ reporting\ quarter}\right) * 100$$

DHCS has set the FAIL threshold as follows:

Grade	Percent of 837I Encounter Service Lines that are Duplicate Service Lines
Fail	>5%

Measure U.3 - Duplicate Service Lines – Professional

$$Percent\ of\ 837P\ Encounter\ Service\ Lines\ that\ are\ Duplicate\ Service\ Lines = \left(\frac{Number\ of\ 837P\ Duplicate\ Service\ Lines\ in\ the\ quarter}{Number\ of\ 837P\ Encounter\ Service\ Lines\ submitted\ in\ the\ quarter}\right) * 100$$

DHCS has set the FAIL threshold as follows:

Grade	Percent of 837P Encounter Service Lines that are Duplicate Service Lines
Fail	>0.5%

A.2 Completeness

Completeness 1 (C.1) - Type 1 Rendering NPI

Definition: This measure provides information on the submission of Type 1 National Provider Identifier (NPI) for Rendering Provider in the quarter. DHCS differentiates whether the Rendering Provider NPI listed on the Encounter is Type 1 (Individual) or Type 2 (Organizational) by comparing the NPI to the National Plan and Provider Enumeration System (NPPES). If rendering provider is not present, DHCS will check for operating or attending provider on 837I encounters and for billing provider on 837P encounters.

$$Percentage\ of\ Encounter\ Service\ Lines\ with\ Type\ 1\ Rendering\ Provider = \left(\frac{Number\ of\ Encounter\ Service\ Lines\ in\ the\ quarter\ with\ Type\ 1\ NPI\ for\ Rendering\ Provider}{Number\ of\ Encounter\ Service\ Lines\ submitted\ in\ the\ quarter}\right) * 100$$

DHCS has set the FAIL threshold as follows:

Grade	Percentage of Encounter Service Lines with Type 1 Rendering Provider
Fail	<90%

A.3 Accuracy

Accuracy 1 (A.1) - Denials Corrected

Definition: This measure provides information about the percentage of Denied Encounters that are corrected. Denied encounters are defined as encounters that have

been rejected by DHCS' Post Adjudicated Claims and Encounters System (PACES). A Denied Encounter contains one or more fields with errors and is considered invalid. As a result, the Encounter is not accepted by DHCS at the time of file submission.

$$Percent\ of\ denied\ Encounters\ corrected\ =$$

$$\left(\frac{Number\ of\ correctable\ denied\ Encounters\ submitted\ in\ the\ reporting\ quarter\ that\ were\ corrected}{Number\ of\ Encounters\ submitted\ in\ the\ reporting\ quarter\ that\ were\ denied\ and\ correctable}\right) * 100$$

All Encounters that are denied by PACES can be corrected unless they fall into one of these categories:

- Denied replacement Encounters
- Denied void Encounters
- Encounter denied for invalid frequency type

DHCS has set the FAIL threshold as follows:

Grade	Percent of Denied Encounters that are corrected
Fail	<99.5%

A.4 Reasonability

Reasonability (R.1) - Denied Encounters

Definition: This measure provides information on the percentage of Encounters submitted in the quarter that are denied. Denied encounters are defined as encounters that have been rejected by DHCS' Post Adjudicated Claims and Encounters System (PACES).

$$Percent\ of\ Denied\ Encounters\ =$$

$$\left(\frac{Number\ of\ Encounters\ Denied\ in\ the\ reporting\ quarter}{Number\ of\ Encounters\ submitted\ in\ the\ reporting\ quarter}\right) * 100$$

DHCS has set the FAIL threshold as follows:

Grade	Percent of Encounters denied
Fail	>2%

A.5 Timeliness

Timeliness (T.1 and T.2) - Denied Encounters Turnaround Time

Definition: This measure provides information on how quickly Denied Encounters are corrected and resubmitted in the quarter. Specifically, the percentage of Encounters that were denied by DHCS in the quarter and have been corrected or resubmitted within 15 calendar days. This is a contractual requirement for all MCPs. The time between when an MCP was informed of a denial and the correction and resubmission of the data is the turnaround time. This measure is calculated separately for 837I and 837P Encounters. As such, the measure is estimated and reported separately by Transaction Type.

"Date Denied" (based on Processed Date and Time as defined in the Companion Guides) is the date that a response file was made available indicating Encounter denial.

"Date Corrected" (based on Submission Date and Time as defined in the Companion Guides) is the date the file containing the corrected and accepted Encounter was received by DHCS.

T.1 – Denied Encounters Turnaround Time - Institutional

$$Percent\ of\ 837I\ Denied\ Encounters\ corrected\ within\ 15\ days = \left(\frac{Number\ of\ 837I\ Encounters\ denied\ in\ the\ reporting\ quarter\ BUT\ corrected\ within\ 0\ to\ 15\ days\ \ of\ PACES\ Response\ File}{Number\ of\ 837I\ Encounters\ denied\ in\ the\ reporting\ quarter\ that\ are\ \boldsymbol{correctable}}\right) * 100$$

T.2 – Denied Encounters Turnaround Time - Professional

$$Percent\ of\ 837P\ Denied\ Encounters\ corrected\ within\ 15\ days = \left(\frac{Number\ of\ 837P\ Encounters\ denied\ in\ the\ reporting\ quarter\ BUT\ corrected\ within\ 0\ to\ 15\ days\ \ of\ PACES\ Response\ File}{Number\ of\ 837P\ Encounters\ denied\ in\ the\ reporting\ quarter\ that\ are\ \boldsymbol{correctable}}\right) * 100$$

All Encounters that are denied by PACES can be corrected unless they fall into one of these categories: :

- Denied replacement Encounters
- Denied void Encounters
- Encounters denied for invalid frequency type

DHCS has set the FAIL Threshold for BOTH 837I and 837P transaction types as follows:

Grade	Percentage of Denied Encounters that are corrected within 15 days*
Fail	< 97.5%

* While MCPs should correct all correctable Encounters that are denied, DHCS has set the Threshold just under 100% - at 97.5% to allow for minor challenges.

Timeliness (T.3 and T.4) - Encounter Submission Lagtime

Definition: This measure provides information on the Lagtime for submitting Encounter Data. Lagtime is the time, in calendar days, between the Date of Service ("DOS") for a Member for services received and the date the MCP submits the post-adjudicated Encounter record to DHCS PACES (the "Submission Date")[10]. A single Encounter can include individual services provided, which are designated by the Service Line claim level. While it is reasonable for some Encounters to have longer Submission Lagtime, the expectation is that most Encounters have relatively short Lagtime. This measure is calculated separately for 837I and 837P Encounters. As such, the measure is estimated and reported separately by Transaction Type. This measure includes accepted original Encounters.

"Lagtime" is measured as the length of time between DOS and Submission Date to DHCS for original Encounters submitted and accepted during the quarter.

"DOS" refers to the Encounter Service Line claim level "Last Date of Service"; if null, DHCS uses the claim level "First Date of Service".

"Submission Date" (based on Submission Date and Time as defined in the Companion Guides) refers to the date on which DHCS received the Encounter record from the MCP.

T.3 – Encounter Submission Lagtime - Institutional

$$Percent\ of\ 837I\ original\ accepted\ Encounters\ with\ Lagtime \leq 120\ days = \left(\frac{Number\ of\ 837I\ original\ accepted\ Encounters\ submitted\ in\ the\ quarter\ with\ (Submission\ Date - Date\ of\ Service) \leq\ 120\ days)}{Number\ of\ 837I\ original\ accepted\ Encounters\ submitted\ in\ the\ quarter} \right) * 100$$

[10] Encounter submission timeliness is critical for MCPs to have the data necessary to calculate Managed Care Accountability Set quality metrics.

T.4 – Encounter Submission Lagtime - Professional

$$Percent\ of\ 837P\ original\ accepted\ Encounters\ with\ Lagtime \leq 120\ days = \left(\frac{Number\ of\ 837P\ original\ accepted\ Encounters\ in\ the\ quarter\ with\ (Submission\ Date - Date\ of\ Service) \leq\ 120\ days}{Number\ of\ \ 837P\ original\ acceptedEncounters\ submitted\ in\ the\ quarter} \right) * 100$$

DHCS has set the FAIL threshold for <u>BOTH 837I and 837P Transaction Types</u> as follows:

Grade	Percentage of Encounters with Lagtime Within 120 days
Fail	<90%

QMED 2.0 Measure Specifications Change Log:

Document Version	Measure	Measure Version	Effective Date	Description of Changes

APPENDIX B. DOCUMENT CONTROL POLICY

QMED 2.0 was updated in 2026 by the Data Quality Reporting Unit of the Data Quality Branch within the Health Information Management Division of DHCS. DHCS will review all measures on at least an annual basis and implement updates, including new measures and revised Thresholds, at its sole discretion to support improved Encounter Data submissions. When existing measures or Thresholds are changed, or new measures are added, new versions of this report will be implemented. When a measure is added, changed, or deleted, it will be noted in this document's Revision History, and the details of the change will be noted in the change log for that measure and shall include the effective date for the change.

APPENDIX C. DOCUMENT REVISION HISTORY

Every time a new version of this document is published, it shall include a new entry in the Revision History table. The version number will be in the following format: MAJOR UPDATE NUMBER.MINOR UPDATE NUMBER. For example, version 2.0 is Major Update Number 2 No Minor Update.

Document Revision History Log:

Document Version	Effective Date	Description of Changes
2.0	March 2026	New measures and grading

APPENDIX D. GLOSSARY

CMS – Centers for Medicare and Medicaid Services

Date of Service – the date on which an encounter service occurred to the Member

Denial – an Encounter that has been identified by the PACES System as having an error(s) and requires a correcting submission, either a void or replacement

DHCS – California Department of Health Care Services

DOS – Date of Service

Duplicate – an Encounter that contains a set of data elements that is identical to an existing accepted Encounter and is not identified as a void or replacement

EHR – Electronic Health Records

Encounter Data – for the purposes of reporting 837I and 837P Transaction Types, these are the post-adjudicated Encounter records submitted to DHCS PACES by MCPs. Encounter Data includes the administrative information that describes health care interactions between Members and Providers

FFS – Fee for Service

HCP – Health Care Plan code specifies the unique three-digit number selected by the MCP and approved by DHCS to represent a Provider Network in which the MCP has enrolled and operate in each county.

Lagtime – the length, expressed in days, between the Member's DOS and the date the MCP submits the original and accepted post-adjudicated Encounter record to DHCS PACES (see Submission Date).

MCP – Medi-Cal Managed Care Plan

NPI – National Provider Identifier

PACE – Program of All-Inclusive Care for the Elderly Plans

Plans – Include MCPs, specialty plans like PACE, Dental Plans, and Behavioral Health Plans. As noted in Section 2.3 QMED 2.0 is currently being rolled out to MCPs. DHCS will review how and when to phase in other delivery systems at a future date.

Replacement – an Encounter that is submitted to replace an existing Encounter

SCAN – Senior Care Action Network Plans

Submission Date – the date on which DHCS PACES receives a post-adjudicated Encounter record in the form of a 837I or 837P Transaction Type from an MCP

T-MSIS – Transformed Medicaid Statistical Information System

Turnaround time – the length of time between the date an Encounter is denied by PACES and the Submission Date of its accepted Void or Replacement

QMED – Quality Measures for Encounter Data

X12 837I, version 5010 – a national standard for reporting Institutional claims and Encounters

X12 837P, version 5010 – a national standard for reporting professional claims and Encounters