



Fact Sheet: Digital Quality Measures and Core Sets Reporting

The Centers for Medicare & Medicaid Services’ (CMS’) quality programs increasingly incorporate digital quality measures (dQMs).¹ Historically, the quality measures in the CMS Child, Adult, and Health Homes Core Sets relied on experience of care surveys, administrative data, or the hybrid methodology (administrative data combined with medical records for a sample of beneficiaries). However, as clinical data sources have expanded and become more widely available, Core Set measure stewards are transitioning toward digital quality measurement. Digital specifications standardize how data are accessed and how measures are computed to help improve consistency and accuracy in quality reporting.

Starting with 2025 Core Sets reporting, the Child, Adult, and 1945 Health Home Core Set Resource Manuals include human-readable Electronic Clinical Data Systems (ECDS) reporting specifications for applicable measures to support states’ transition to digital reporting.

This fact sheet provides information about digital quality measurement for the Core Sets.

Table of Contents

General Overview: What are digital quality measures?.....	2
Defining Digital Quality Measures (dQMs).....	2
dQM Data Sources	2
Transition to dQMs and the Core Sets	2
ECDS Reporting Methodology	2
How dQMs Differ from Traditional Quality Measures, ECDS, and eQMs	3
Reporting Methods: What do states need to know about reporting ECDS and eQMs for the Core Sets?	3
Reporting eQMs and ECDS Measures in the Quality Measure Reporting (QMR) System.....	4
dQMs and Core Sets Reporting: What can states do to make progress toward dQM reporting?	4
Considerations for dQM Readiness.....	4
Provisional Core Set Measures with ECDS Specifications.....	5
State Readiness to Include ECDS Digital Data Sources in Core Sets Reporting.....	5
Additional Guidance and CMS TA	5
dQM Resources	5

¹ Centers for Medicare & Medicaid Services. 2022. “Digital Quality Measurement Strategic Roadmap.” https://ecqi.healthit.gov/sites/default/files/CMSdQMStrategicRoadmap_032822.pdf

General Overview: What are digital quality measures?

Defining Digital Quality Measures (dQMs)

CMS defines dQMs as quality measures that use self-contained measure specifications and code packages. dQMs use one or more sources of health information that are captured and can be transmitted electronically through interoperable systems. dQMs enable querying the data needed from standards-based application programming interfaces (APIs) (such as Fast Healthcare Interoperability Resources² [FHIR®] APIs), calculating the measure score, and generating outputs necessary for quality reporting, that also support quality improvement efforts.³ They are expected to:

- Reduce administrative burden and calculation costs
- Minimize manual data entry and interpretation errors
- Enable more timely quality assessments through automated, standardized analysis of electronic data sources.

dQM Data Sources

dQMs use one or more electronic data sources, including:

- Administrative systems data (e.g., enrollment records, claims and encounter data, vital records)
- Clinical data (electronic health records [EHRs], personal health records [PHRs], health information exchanges [HIEs])
- Clinical registry data (immunization and disease registries)
- Instruments (medical devices, wearable devices)
- Patient portal data
- Applications that collect patient-generated data
- Social needs assessment data submitted electronically
- Case management systems data

Transition to dQMs and the Core Sets

As states transition to using dQMs, their readiness to implement these measures for all Medicaid and CHIP populations depends on the maturity (meaning the functionality and connections to data sources in their systems) of their data infrastructure. The inclusion of human-readable Electronic Clinical Data Systems (ECDS) reporting specifications starting in the 2025 Child, Adult, and 1945 Health Home Core Set Resource Manuals is an initial step toward CMS' transition to digital quality measurement. At this time, CMS does not require states to calculate and report ECDS-specified Core Set measures using the digitally automated format because CMS has not yet developed an application programming interface (API) to receive machine-to-machine communication.

ECDS Reporting Methodology

ECDS is a National Committee for Quality Assurance (NCQA) reporting methodology that expands the electronic data sources that can be used for quality measurement. Several Core Set measures based on HEDIS specifications include the

² <https://ecqi.healthit.gov/glossary/fhir>

³ <https://ecqi.healthit.gov/dqm/about-dqms>

ECDS reporting methodology. For Core Sets reporting, the ECDS specifications are presented in a human-readable or “narrative” format and should be used in conjunction with the Value Set Directory to calculate the measures.

How dQMs Differ from Traditional Quality Measures, ECDS, and eQMs

Traditional quality measures often rely on administrative data, manual chart review, or a hybrid methodology (i.e., use of administrative data and medical records review for a sample of beneficiaries). By comparison, dQMs use standardized, structured data drawn from one or more electronic systems.⁴ This supports automated, consistent calculation and reporting across care settings.

Although ECDS expands the types of electronic data sources that may be used for quality measurement, human-readable ECDS specifications still require manual review and interpretation of the measure narrative. In contrast, dQMs use standardized FHIR-based data and machine-readable specifications to support automated calculation using standardized language and protocols). While ECDS represent progress toward digital measurement, it does not constitute a fully digital approach.⁵

Electronic clinical quality measures⁶ (eQMs) are a subset of dQMs that have historically relied on structured clinical data from EHRs. Although both eQMs and dQMs use electronic data, dQMs have a broader scope. These measures are designed to align with FHIR-based standards and incorporate multiple digital data sources beyond EHRs.⁷

Reporting Methods: What do states need to know about reporting ECDS and eQMs for the Core Sets?

Using Administrative Data for Core Set Measures that Transitioned to ECDS

There is no requirement that states use all of the data sources listed in the ECDS specifications. States may continue to report Core Set measures that use the ECDS methodology based on administrative data while they expand access to additional data sources. The Core Sets technical specifications continue to include value set directories and medication list directories, that states should use along with the measure specifications to calculate measures. However, the quality and completeness of results will depend on whether the services being assessed by the measure are reliably documented in claims and encounter data. For example, for measures requiring lab-based values such as HbA1c levels, states should assess whether available claims and encounter data can reliably capture the actual lab result, for instance via a Logical Observation Identifiers, Names and Codes (LOINC) code, rather than a claim that will only indicate that the test was performed.

Key Definitions in ECDS Specifications for Core Sets Reporting

The human-readable ECDS specifications in the Core Sets Resource Manuals include methodology-specific terminology. The “Guidelines for Measures Reported Using Electronic Clinical Data Systems (ECDS)” section in each manual defines these terms and provides additional guidance for using this methodology.

Key ECDS definitions include:

- **Initial Population:** Criteria used to identify the population eligible for the measure (e.g., age, enrollment criteria, continuous enrollment, allowable gaps).
- **Measure Item Count:** Indicates whether the measure counts individuals or events.

⁴ <https://ecqi.healthit.gov/dqm/about-dqms>

⁵ <https://www.ncqa.org/resources/hedis-electronic-clinical-data-systems-ecds-reporting/>

⁶ <https://ecqi.healthit.gov/ecqms/about-ecqms>

⁷ <https://www.ncqa.org/resources/digital-quality-measures-overview/>

- **Attribution:** Describes the basis for inclusion in the measure. For the 2026 Core Sets, this refers to enrollment in the state Medicaid or CHIP program.
- **Denominator:** The initial population minus any required exclusions.
- **Scoring:** ECDS measures in the Core Sets use proportion scoring (i.e., Numerator divided by Denominator).

Using the Core Sets HEDIS Value Set Directory for ECDS Measures

The HEDIS Value Set Directory includes standardized codes and value sets that states can use to calculate measures. The directory supports consistent application of the ECDS specifications and helps ensure that data queries are reliably executed across different systems. States should use the Value Set Directory in conjunction with the human-readable ECDS specifications for each measure.

States are encouraged to review the [dQM TA resource](#) and/or contact CMS (MACQualityTA@cms.hhs.gov) for additional assistance with reporting Core Set measures.

Reporting eCQM and ECDS Measures in the Quality Measure Reporting (QMR) System

For eCQM Reporting:

States reporting a Core Set measure using eCQM specifications should:

1. Select “Electronic Health Records” in the Data Source section of the QMR system.
2. Use the optional text field to describe the data source.
3. Enter the Numerator and Denominator in the Performance Measure section.
4. Verify that the system-calculated rate matches the rate that the state calculated independently.

For ECDS Reporting:

States using the ECDS methodology (including those relying on administrative data for an ECDS measure) should:

1. Select “Electronic Clinical Data Systems” in the Data Source section of the QMR system.
2. Choose all applicable ECDS data sources (e.g., Administrative, Electronic Health Record (EHR)/Personal Health Record (PHR), etc.).
3. Enter the full measure-eligible population in the Denominator field (not a sample) and the Numerator in the Performance Measure section.
4. Verify that the system-calculated rate matches the rate that the state calculated independently.

dQMs and Core Sets Reporting: What can states do to make progress toward dQM reporting?

Considerations for dQM Readiness

Key factors influencing a state’s readiness to report dQMs include:

- Functionality of the state’s data infrastructure, including connections to necessary data sources
- Access to standardized, interoperable data sources (e.g., EHRs, HIEs)
- Availability of technical state staff or vendor support to extract and map data

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- Familiarity with ECDS specifications and value sets

States working to improve readiness to report dQMs should:

- Assess current data infrastructure and identify gaps
- Develop a roadmap for integrating additional data sources (e.g., EHRs, HIEs)
- Collaborate with providers and health systems to improve data interoperability
- Use CMS technical assistance resources to address identified barriers

Provisional Core Set Measures with ECDS Specifications

CMS has designated several measures as “provisional” while they determine whether these measures would yield valid, reliable state-level performance results. For provisional measures with ECDS specifications (e.g., Postpartum Depression Screening and Follow-up: Under Age 21 [PDS-CH]), states should assess whether the services being assessed are captured in available data sources. For example, states that rely on administrative data should: (1) review the measure specifications carefully; (2) confirm whether required services are documented in their administrative data systems; and (3) document known data limitations in the “Additional Notes/ Comments on Measure” field in the QMR system, if applicable. If required services are not captured, states may need to work toward integrating EHR, HIE, and/or registry data. While provisional measures are voluntary, states are encouraged to work toward reporting them by integrating the necessary data sources into their systems.

State Readiness to Include ECDS Digital Data Sources in Core Sets Reporting

CMS recognizes that states are at different stages of readiness for digital quality measurement. States may report ECDS measures using currently available data sources, including administrative data, and are not required to incorporate all possible electronic data sources immediately.

States may notify CMS of barriers that limit their ability to report Core Set measures, including challenges accessing digital data sources, and request additional technical assistance (TA), by emailing MACQualityTA@cms.hhs.gov.

Additional Guidance and CMS TA

States can refer to the [Child](#), [Adult](#), and [Health Home](#) Core Set Resource Manuals for detailed ECDS specifications, including instructions for selecting appropriate data sources, identifying the initial population, and calculating each measure. States can also refer to the accompanying [dQM TA resource](#), which introduces the ECDS specifications for Core Sets reporting and provides step-by-step guidance for calculating the APM-CH measure using ECDS specifications.

Additionally, states may request information from CMS about the dQM Readiness Resource, which is a tool CMS developed to support state self-assessment and planning for digital reporting. CMS plans to offer future dQM TA including small group learning sessions, webinars, and will continue to be available for one-on-one TA calls.

dQM Resources

The [CMS Digital Quality Measurement Strategic Roadmap](#) and the [Meaningful Measures 2.0 initiative](#) also offer additional background and context. Additionally, the NCQA website has a page devoted to [ECDS resources](#) that states may find helpful.

If you have questions or ideas for additional TA opportunities please contact: MACQualityTA@cms.hhs.gov.