Transitioning to Digital Quality Measures in the 2025 Child, Adult, and Health Home Core Sets

Introduction

The Centers for Medicare & Medicaid Services (CMS) quality programs are moving towards use of digital quality measures (dQMs). dQMs are designed to reduce administrative burden and costs, reduce the likelihood of manual data entry and interpretation errors, and provide more timely quality assessments by enabling automated, standardized data analysis directly from electronic data sources.[1] As noted in CMS's Digital Quality Measurement Strategic Roadmap, dQM measures used in CMS quality programs combine data from a variety of electronic sources, including:

- Administrative systems
- Electronically submitted clinical assessment data
- Case management systems
- Electronic Health Records (EHRs)
- Instruments (medical devices and wearable devices)
- Patient portals
- Applications (collection of patient-generated data)
- Health Information Exchanges (HIEs) or registries

The inclusion of electronic clinical data systems (ECDS) reporting specifications in the 2025 Child, Adult, and 1945 Health Home Core Set Resource Manuals is an initial step toward CMS's transition to digital quality measurement.

> **Digital Quality Measure (dQM) Foundations**
>
> *CMS defines dQMs as quality measures organized as self-contained measure specifications and code packages. dQMs use one or more sources of health information that are captured and can be transmitted electronically via interoperable systems.*
>
> *As states transition to using dQMs, their readiness to implement these measures for all Medicaid and CHIP populations depends on the maturity of their data infrastructure. For example, EHRs are a primary source of structured clinical data.[2] To fully support dQMs, EHR data must be easily accessible, standardized, and exchangeable across different systems. Under the National Quality Strategy, CMS introduced Meaningful Measures 2.0.[3] This initiative prioritizes dQMs by promoting the use of widely accepted standards to exchange clinical information through application programming interfaces (APIs).[4] APIs that integrate EHR systems allow providers to more easily exchange clinical quality data. To ensure consistent and accurate data exchange, APIs require use of standardized data, which is a key component of successful digital quality measurement. The 21st Century Cures Act further propelled the shift to dQMs by making standards-based APIs the default method for third-party applications to access and exchange patient electronic health information from EHRs. Certified health IT developers were required to implement these APIs by December 2022.[5]*

This technical assistance (TA) resource introduces new ECDS specifications for 2025 Core Sets reporting, provides a step-by-step example of calculating a Core Set measure using ECDS specifications, shares guidance

---

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

[2] As of 2024, 96 percent of hospitals and 78 percent of office-based clinicians used a certified EHR.

[3] Centers for Medicare & Medicaid Services. "Meaningful Measures 2.0." https://www.cms.gov/medicare/quality/cms-national-quality-strategy/meaningful-measures-20-moving-measure-reduction-modernization.

[4] An API provides a way for two or more computer programs or systems to communicate with each other via a standardized set of rules and protocols, such as Fast Healthcare Interoperability Resources (FHIR).

[5] 21st Century Cures Act, Pub. L. No. 114-255, H.R. 34, 114th Cong. (2016)

on reporting to CMS in the online reporting system, and includes links to more information about dQMs.

ECDS Specifications for Core Set Reporting[6]

Several 2025 Core Set measures based on HEDIS specifications include the ECDS reporting methodology. This reporting methodology leverages electronic data sources containing beneficiaries' personal health information and interactions within the healthcare system to provide a complete picture of the healthcare services the beneficiary received. Data in these systems must use standard layouts and be structured so that automated queries can be consistently and reliably executed. The 2025 Core Set Resource Manuals include a new chapter (Core Set Measures Reported using ECDS) that provides additional guidance on selecting and using ECDS data sources and reporting specifications for each measure with this reporting option. The ECDS specifications are presented in a human readable or "narrative" format, which can be used together with the Value Set Directory to calculate the measures. The ECDS specifications chapter in each 2025 Core Set Resource Manual includes:

- Key definitions for ECDS methodology for Core Sets reporting (see Table 1)
- Description of each measure with ECDS reporting specifications
- Information about identifying the initial population (including required exclusions)
- Information about data collection method(s)
- Instructions for calculating and reporting the measure using ECDS specifications

Table 1. Key Definitions for ECDS Methodology for Core Sets Reporting

Term	Description
Initial Population	The criteria used to identify the population eligible to be included in the measure, including whether the measure is based on individuals or events, beneficiary attribution criteria including required Medicaid or CHIP benefits, continuous enrollment, and allowable gaps as well as any additional criteria.
Measure Item Count	Indicates whether the measure counts individuals or events.
Attribution	Describes the basis for inclusion in the measure. For the 2025 Core Sets, this refers to enrollment in the state Medicaid or CHIP program.
Denominator	The initial population, minus exclusions.
Scoring	For the 2025 Core Sets, all measures based on HEDIS specifications, including ECDS reported measures, use proportion scoring. Proportion scoring results from dividing the numerator (meeting the individual or event criteria) by the denominator (eligible cases in a given timeframe) where the numerator is a subset of the denominator.

Note: Descriptions provided in Table 1 are adapted from HEDIS for the purpose of Core Set reporting.

States may use one or multiple electronic data sources for ECDS reporting (see Table 2) to provide complete information about the services an individual received. For example, eligible data systems for ECDS reporting include, but are not limited to, member eligibility files, EHRs, personal health records, clinical registries, HIEs, administrative claims and encounter data records, electronic laboratory reports, electronic pharmacy systems, immunization information systems, and disease/case management registries. Beneficiary-reported services are acceptable if the information is recorded, dated, and maintained in the beneficiary's legal health record.

---

[6] Although electronic clinical quality measures (eCQMs) meet the definition for dQMs and are included in the 2025 Child, Adult, and

Health Home Core Sets, limitations in data standards, requirements, and technology have limited their interoperability and future use.

Several 2025 Core Set measures are specified only for ECDS reporting, while other measures also include the option of using administrative-only, hybrid, or EHR methodologies (Table 3).[7] However, there is no requirement that states must use all of the allowable ECDS data sources included in the specifications. Therefore, states can report results based solely on administrative data while they evolve their access to additional data sources. For example, some Core Set measures that previously specified administrative-only data collection include only ECDS methodology for 2025 Core Set reporting. Since the ECDS data collection methodology includes the use of administrative data, such as claims and encounters, states that previously reported these measures using the administrative method can continue to rely exclusively on administrative data using the ECDS reporting specifications.

Table 2. Types of Electronic Data Sources for ECDS Reporting

Data Source	Description
Electronic Health Records (EHRs)/ Personal Health Records (PHRs)	Transactional systems that store clinically relevant information collected directly from or managed by a patient. • EHRs contain the medical and treatment histories of patients • PHRs include both the standard clinical data collected in a provider's office or another care setting, in addition to information curated directly in the PHR by the patient though an API, such as current medications and family medical history.
Health Information Exchanges (HIEs)/Clinical registries	Includes state HIEs, immunization information systems (IIS), public health agency systems, regional HIEs (Regional Health Information Organizations), Patient-Centered Data Homes™, and other registries developed for research or to support quality improvement and patient safety initiatives. Health care providers and patients can use HIEs to access and share vital medical information with the goal of creating a complete patient record.[8]
Case Management Systems	Shared databases of information collected through a collaborative process of individual assessment, care planning, care coordination or monitoring of an individual's functional status and care experience. This category includes any system developed to support an organization's case/disease management activities.
Administrative	Includes administrative claims processing systems for all services incurred (paid, suspended, pending, and denied) during the period defined by each measure as well as beneficiary management files, beneficiary eligibility and enrollment files, electronic rosters, and internal audit files.

---

[7] Note, all HEDIS measures will be transitioned to the ECDS methodology over time. As part of this transition, the administrative method will no longer be listed as a separate data collection methodology.

[8] https://www.healthit.gov/topic/health-it-and-health-information-exchange-basics/health-information-exchange.

Centers for Medicare & Medicaid Services
Medicaid & CHIP
Health Care Quality Measures

Table 3. Overview of ECDS Measures and Electronic Clinical Quality Measures (eCQM) on the 2025 Child, Adult, and Health Home Core Sets

CMIT #	Measure Steward	Measure Name	ECDS Specification	EHR Specification [a]	Other Specifications
2025 Child Core Set Measures					
672	CMS	Screening for Depression and Follow-Up Plan: Ages 12 to 17 (CDF-CH) (Mandatory)		✓	Administrative
760	NCQA	Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents (WCC-CH) (Mandatory)		✓	Administrative, Hybrid
128	NCQA	Chlamydia Screening in Women Ages 16 to 20 (CHL-CH) (Mandatory)		✓	Administrative
271	NCQA	Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication (ADD-CH) (Mandatory)	✓	✓	
448	NCQA	Metabolic Monitoring for Children and Adolescents on Antipsychotics (APM-CH) (Mandatory)	✓		
124	NCQA	Childhood Immunization Status (CIS-CH) (Mandatory)	✓	✓	Administrative, Hybrid
363	NCQA	Immunizations for Adolescents (IMA-CH) (Mandatory)	✓		Administrative, Hybrid
1781	NCQA	Postpartum Depression Screening and Follow-Up: Under Age 21 (PDS-CH)	✓		
1782	NCQA	Prenatal Immunization Status: Under Age 21 (PRS-CH)	✓		
2025 Adult Core Set Measures					
394	NCQA	Initiation and Engagement of Substance Use Disorder Treatment (IET-AD) (Mandatory)		✓	Administrative
63	NCQA	Antidepressant Medication Management (AMM-AD) (Mandatory)		✓	Administrative
672	CMS	Screening for Depression and Follow-Up Plan: Age 18 and Older (CDF-AD) (Mandatory)		✓	Administrative
128	NCQA	Chlamydia Screening in Women Ages 21 to 24 (CHL-AD)		✓	Administrative
167	NCQA	Controlling High Blood Pressure (CBP-AD)		✓	Administrative, Hybrid
325	HRSA	HIV Viral Load Suppression (HVL-AD)		✓	Administrative
118	NCQA	Cervical Cancer Screening (CCS-AD)	✓	✓	Administrative, Hybrid
139	NCQA	Colorectal Cancer Screening (COL-AD)	✓	✓	
93	NCQA	Breast Cancer Screening (BCS-AD)	✓	✓	
26	NCQA	Adult Immunization Status (AIS-AD)	✓		
1782	NCQA	Prenatal Immunization Status: Age 21 and Older (PRS-AD)	✓		
1781	NCQA	Postpartum Depression Screening and Follow-Up: Age 21 and Older (PDS-AD)	✓		

Centers for Medicare & Medicaid Services
Medicaid & CHIP
Health Care Quality Measures

CMIT #	Measure Steward	Measure Name	ECDS Specification	EHR Specification [a]	Other Specifications
2025 1945 Health Home Core Set Measures					
139	NCQA	Colorectal Cancer Screening (COL-HH) (Mandatory)	✓	✓	
394	NCQA	Initiation and Engagement of Substance Use Disorder Treatment (IET-HH) (Mandatory)		✓	Administrative
167	NCQA	Controlling High Blood Pressure (CBP-HH) (Mandatory)		✓	Administrative, Hybrid
672	CMS	Screening for Depression and Follow-Up Plan (CDF-HH) (Mandatory)		✓	Administrative
2025 1945A Health Home Core Set Measures [b]					
124	NCQA	Childhood Immunization Status (CIS-HHA) (Mandatory)		✓	Administrative, Hybrid

Note: Section 50102(b) of the Bipartisan Budget Act of 2018 made state reporting of some Child Core Set measures mandatory starting with the 2024 Core Set. Section 5001 of the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act (SUPPORT for Patients and Communities Act) of 2018 made state reporting of the Behavioral Health measures in the Adult Core Set mandatory starting with the 2024 Core Set. Reporting of the Health Home Core Set measures became mandatory in 2024 based on Section 50102 of the Bipartisan Budget Act of 2018. CMS' August 2023 final rule outlines the requirements for annual mandatory reporting of Core Set measures.

[a] States can use EHR data to calculate these measures; however, the Core Set Resource Manuals only reference the eCQM specifications. The eCQM measure specifications can be found on the Electronic Clinical Quality Improvement (eCQI) Resource Center website.

[b] The CIS-HHA and IMA-HHA measures are also specified for ECDS reporting; however, ECDS specifications are not currently available for 1945A Health Home Core Set reporting.

Centers for Medicare & Medicaid Services
Medicaid & CHIP
Health Care Quality Measures

Step-by-Step Guide to Calculating a Core Set Measure (APM-CH) using ECDS Reporting Specifications

This section provides a step-by-step example of how to calculate the Metabolic Monitoring for Children and Adolescents on Antipsychotics (APM-CH) measure using ECDS specifications for Core Set reporting. The APM-CH measure transitioned from the administrative only method to ECDS reporting for the 2025 Child Core Set. The example identifies the potential data sources for ECDS reporting, including the administrative data sources that were used in previous administrative specifications. The description for each step describes how the ECDS methodology differs from the administrative methodology.

Step 1: Identify Initial Population

The initial population includes beneficiaries ages 1 to 17 with at least two antipsychotic medication dispensing events during the measurement period. For the purpose of Child Core Set reporting, states should calculate and report this measure for two age groups and a total rate: ages 1 to 11, ages 12 to 17, and total (ages 1 to 17).

States should use the APM Antipsychotic Medications List and the data sources and code systems in Table 4 to identify the initial population. ECDS reporting allows states to use both clinical data sources and administrative claims data to identify the Initial Population whereas administrative reporting did not allow for use of clinical data. States that do not have access to clinical data sources can calculate this step using administrative data only.

Table 4. Data Sources and Code Systems for Initial Population

	Administrative Claims	Clinical Data Source (i.e., EHR; HIE/Registry)	
	NDC	NDC	RxNORM
APM Antipsychotic Medications List	✓	✓	✓

NDC = National Drug Codes; RxNORM provides standard names for clinical drugs (active ingredient + strength + dose form) and for dose forms as administered to a patient

Step 2: Identify Exclusions (Hospice, Death)

ECDS reporting uses the same processes for identifying exclusions as administrative reporting but also allows use of clinical data sources if available. States should use the value sets, data sources, and code systems in Table 5 to identify exclusions. Note, states may develop their own methods to identify deceased members (i.e., using enrollment data, claims/encounter data, etc.) as HEDIS does not include value sets with codes to identify deceased members.

Table 5. Data Sources and Code Systems for Exclusions

	Administrative Claims			Clinical Data Source (i.e., EHR; HIE/Registry)
	CPT	HCPCS	UBREV	SNOMED
Hospice Encounter Value Set		✓	✓	✓
Hospice Intervention Value Set	✓	✓		

CPT = Current Procedural Terminology; HCPCS = Healthcare Common Procedure Coding System; UBREV = Uniform Billing Revenue Code; SNOMED = Systematized Nomenclature of Medicine

Step 3: Identify Denominator

States should identify the denominator as the initial population minus exclusions.

Step 4: Identify Numerator(s)

States should use the value sets, data sources, and code systems in Tables 6 and 7 to identify each numerator. States that do not have access to clinical data sources can calculate this step using administrative data only.

Centers for Medicare & Medicaid Services
Medicaid & CHIP
Health Care Quality Measures

Numerator 1: At least one test for blood glucose or hemoglobin A1C (HbA1c) during the measurement period.

Table 6. Data Sources and Code Systems for Numerator 1

	Administrative Claims		Clinical Data Source (i.e., EHR; HIE/Registry)	
	CPT	CPT-CAT-II	LOINC	SNOMED CT
Glucose Lab Test Value Set	✓		✓	✓
Glucose Test Result or Finding Value Set		✓		✓
Hba1c Lab Test Value Set	✓		✓	✓
Hba1c Test Result or Finding Value Set		✓		✓

CPT-CAT-II = Current Procedural Terminology Category II codes; LOINC = Logical Observation Identifiers, Names, and Codes; SNOMEDCT = Systematized Nomenclature of Medicine – Clinical Terms

Numerator 2: At least one test for low-density lipoprotein-cholesterol (LDL-C) or cholesterol during the measurement period.

Table 7. Data Sources and Code Systems for Numerator 2

	Administrative Claims		Clinical Data Source (i.e. EHR; HIE/Registry)	
	CPT	CPT-CAT-II	LOINC	SNOMED CT
Cholesterol Lab Test Value Set	✓		✓	✓
Cholesterol Test Result or Finding Value Set		✓		✓
LDL-C Lab Test Value Set	✓		✓	✓
LDL-C Test Result or Finding Value Set		✓		✓

CPT-CAT-II = Current Procedural Terminology Category II codes; LOINC = Logical Observation Identifiers, Names, and Codes; SNOMEDCT = Systematized Nomenclature of Medicine – Clinical Terms

Numerator 3: Compliant for both the blood glucose (Numerator 1) and cholesterol (Numerator 2) indicators.

Step 5: Calculate Rates

States should calculate the three measure rates using the instructions below for the two mandatory age groups and total rate.

Rate 1: Percentage of children and adolescents on antipsychotics who received blood glucose testing

Rate 1 = (Numerator 1/Denominator) * 100

Rate 2: Percentage of children and adolescents on antipsychotics who received cholesterol testing

Rate 2 = (Numerator 2/Denominator) * 100

Rate 3: Percentage of children and adolescents on antipsychotics who received both blood glucose and cholesterol testing

Rate 3 = (Numerator 3/Denominator) * 100

Centers for Medicare & Medicaid Services
Medicaid & CHIP
Health Care Quality Measures

Reporting ECDS and eCQMs in the Quality Measure Reporting (QMR) System

This section provides guidelines for reporting ECDS and eCQMs in the QMR system for Core Set reporting.

Data Source

- States that use electronic clinical quality measures (eCQM) specifications should indicate this by selecting "Electronic Health Records" in the Data Source section of the QMR system. An optional free text field will appear where the state can provide any additional information about the data source.

- States that use the ECDS methodology should select "Electronic Clinical Data Systems" in the Data Source section of the QMR system. States will be prompted to select from a list of the allowable data sources that they used to calculate the measure. States can select all that apply:
  - Electronic health record (EHR)/ personal health registry (PHR)
  - Health information exchange (HIE)/ clinical registry
  - Case management system
  - Administrative

An optional free text field will appear where the state can provide any additional information about their data sources.

Performance Measure

For measures reported using ECDS methodology, states will report the Numerator and Denominator in the Performance Measure section of the QMR system. States should report the full measure-eligible population for the Denominator field (rather than a sample of the population), similar to administrative reporting. The QMR system will automatically calculate the rates using the formula (Numerator / Denominator) * 100. States should compare the rates that the QMR system calculates to the rates that they calculated.

Technical Assistance Resources for Transitioning to Digital Quality Measurement

Additional resources on ECDS and the path to reporting dQMs are available at the following links:

- ECDS Frequently Asked Questions: https://www.ncqa.org/hedis/the-future-of-hedis/ecds-frequently-asked-questions/.
- NCQA Digital Quality Transition Resource Directory: https://www.ncqa.org/digital-quality-transition/resource-directory/.
- Visit www.ncqa.org/ecds for more information about ECDS reporting.
- CMS dQM Strategic Roadmap:
- https://ecqi.healthit.gov/dqm?qt-tabs_dqm=dqm-strategic-roadmap.

Information about the Child, Adult, and Health Home Core Sets, including the technical specifications and resource manuals, is available on Medicaid.gov:

- **Child Core Set:** https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/child-core-set/index.html
- **Adult Core Set:** https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-core-set/index.html
- **1945 Health Home Core Set:** https://www.medicaid.gov/resources-for-states/medicaid-state-technical-assistance/health-home-information-resource-center/health-home-quality-reporting
- **1945A Health Home Core Set:** https://www.medicaid.gov/resources-for-states/medicaid-state-technical-assistance/health-home-information-resource-center/1945a-health-home-resources

For More Information

For technical assistance related to calculating and reporting Child, Adult, and Health Home Core Sets measures, please contact the TA mailbox at **MACQualityTA@cms.hhs.gov**.