

ECDS PRIMER

ECDS measures require categorization of the source system of record (SSoR). The four source systems of record categories for reporting are:

- EHR
- HIE/Clinical Registry
- Case Management Registry
- Administrative

In IDSS, the ECDS measures, when reported, look like the below along with a corresponding field for each age or reporting group. Notice that each SSoR is reported separately for each data element within the white IDSS cells and that IDSS calculates the summary rows presented in yellow:

DMS age band 12-17 presented below:

Data Element	12-17 Years
Measurement year	
Data collection methodology (ECDS)	
Initial Population EHR	dms_initialpopbyehrratephqtotp11217
Initial Population HIE/Clinical Registry	dms_initialpopbyhieregistryratephqtotp11217
Initial Population Case Management Registry	dms_initialpopbycasemanagementratephqtotp11217
Initial Population Administrative	dms_initialpopbyadminratephqtotp11217
Initial Population Total	
Exclusion EHR	dms_exclusionsbyehrratephqtotp11217
Exclusion HIE/Clinical Registry	dms_exclusionsbyhieregistryratephqtotp11217
Exclusion Case Management Registry	dms_exclusionsbycasemanagementratephqtotp11217
Exclusion Administrative	dms_exclusionsbyadminratephqtotp11217
Exclusion Total	
Denominator EHR	dms_denominatorbyehrratephqtotp11217
Denominator HIE/Clinical Registry	dms_denominatorbyhieregistryratephqtotp11217
Denominator Case Management Registry	dms_denominatorbycasemanagementratephqtotp11217
Denominator Administrative	dms_denominatorbyadminratephqtotp11217
Denominator Total	
Numerator EHR	dms_numeratorbyehrratephqtotp11217
Numerator HIE/Clinical Registry	dms_numeratorbyhieregistryratephqtotp11217
Numerator Case Management Registry	dms_numeratorbycasemanagementratephqtotp11217
Numerator Administrative	dms_numeratorbyadminratephqtotp11217
Numerator Total	
Reported Rate – Total	

All data will be categorized into the administrative buckets unless data with other SSoRs are identified and recognized during measure processing. When other SSoRs are reported, the administrative counts will decrease by that much.

Digital and ECDS Measures:

Breast Cancer Screening – Digital (BCS-E)

- Should match BCS summary reporting data without any additional work (except I-SNP and LTI exclusions for Medicare)
- Can bring in additional data but not required
- Additional data could improve scores and would be good for practicing ECDS measure reporting
- For Medicare plans, SES stratifications are not included in the measure calculation logic and would need to be programmed manually.

Colorectal Cancer Screening – Digital (COL-E)

- Should match COL summary reporting data on the entire eligible population without any additional work (except I-SNP and LTI exclusions for Medicare)
- ECDS measures do not have hybrid samples of 411, so it will not match your COL hybrid rate
- Can bring in additional data but not required
- Additional data could improve scores and would be good for practicing ECDS measure reporting
- For Medicare plans, SES stratifications are not included in the measure calculation logic and would need to be programmed manually.

Follow-Up Care for Children Prescribed ADHD Medication (ADD-E)

- Should match ADD without any additional work
- Can bring in additional data but not required
- Additional data could improve scores and would be good for practicing ECDS measure reporting

Depression Screening and Follow-Up for Adolescents and Adults (DSF)

- Administrative data alone can define the Initial Population and Population Exclusions
- Numerator 1 (Depression Screening) relies on PHQ-9 data and other depression screening tools
- Numerator 2 (Follow-Up on Positive Screen) includes administrative claims data as well as PHQ-9 data and other depression screening tools

Utilization of PHQ-9 to Monitor Depression Symptoms for Adolescents and Adults (DMS)

- Administrative data alone can define the Initial Population and Population Exclusions (three separate time periods are reported on)
- PHQ-9 data is needed for the numerator

Depression Remission or Response in Adolescents and Adults (DRR)

- Both PHQ-9 data and administrative data are needed for Initial Population identification. (Until you load PHQ-9 data, the measure population will be zero.)

Unhealthy Alcohol Use Screening and Follow-Up (ASF)

- Administrative data alone can define the Initial Population and Population Exclusions
- Numerator 1 (Alcohol Use Screening) relies on alcohol use screening tools
- Numerator 2 (Counseling or Follow-Up Care) can be met with administrative claims

Adult Immunization Status (AIS)

- Administrative data alone can define the Initial Population and Population Exclusions
- Numerators could include both claims immunization data or immunization registry data

Prenatal Immunization Status (PRS)

- Administrative data alone can define the Initial Population and Population Exclusions
- Numerators could include both claims immunization data or immunization registry data

Prenatal Depression Screening and Follow-Up (PND)

- Administrative data alone can define the Initial Population and Population Exclusions for Rate 1: Depression Screening.
- Numerator 1 (Depression Screening) relies on PHQ-9 data and other depression screening tools
- Numerator 2 (Follow-Up on Positive Screen) includes administrative claims data as well as PHQ-9 data and other depression screening tools

Postpartum Depression Screening and Follow-Up (PDS)

- Administrative data alone can define the Initial Population and Population Exclusions for Rate 1: Depression Screening.
- Numerator 1 (Depression Screening) relies on PHQ-9 data and other depression screening tools
- Numerator 2 (Follow-Up on Positive Screen) includes administrative claims data as well as PHQ-9 data and other depression screening tools

ECDS Measure Data Steps:

Step 1: Identify each data source system according to the SSoR the data is extracted from in the field specified in the vendor layout to capture this information.

Step 2: Mark each record according to the vendor ECDS file layout requirements based on the data source system.

Step 3: Create extract logic from each data source for clinical data, or work with an EMR vendor, to get an electronic file of the data necessary for a given measure. Mapping will be necessary as part of the translation between the EMR/HIE vendors or Case Management Systems into the HEDIS vendor layout.

Step 4: Create standardized, repeatable processes and workflows for the extracts, mapping and documenting following NCQA's Volume 5 Audit Guidelines.

Step 5: Test receiving, loading, and auditing the data to prevent surprises at HEDIS production time.

EHR data:

- Ensure every record has data source mapped to EHR data source type according to HEDIS vendor ECDS layout requirements.
- Work with EHR vendor to identify discrete fields needed for data extract.
 - If discrete fields are text fields rather than codes, the available options will require mapping to a code in the measure value sets. This mapping will require auditor approval.
 - If discrete or coded fields are not available, map to value set codes as defined for each measure. Perform a review of the EHR, reviewing all available values. For example, if colonoscopy is the desired data, search records for all available values that include “colonoscopy” and determine how the language is used within the system. Then, evaluate and determine the extract logic necessary to create a file that meets requirements.
- Evaluate data source to determine reporting elements available; only extract the data elements that meet the specification requirements –
 - BCS-E example:
 - Diagnosis codes for history of mastectomies
 - Procedures for mammogram
 - Procedures for other encounters
 - Medication information for Advanced Frailty exclusions
 - Modifier information where appropriate – these may require mapping based on how left and right breast indicators are recorded in the EHR
 - Clinical language text field that can be mapped to codes in a measure value set

HIEs/Clinical Registry data:

- Since data is provided to multiple parties for multiple uses, the data may not be readily available in formats necessary for electronic file feeds. Plans can try to work with these system data providers in an attempt to get a data feed.
- An Excel file using the vendor layout may be the best option to capture this data.

Case Management data:

- Evaluate each case management database to determine reporting elements available; only extract the data elements that meet the specification requirements.
- Similar to EHR data, depending upon how the data is captured in the case management system, mapping is probably needed.

ECDS Measures Summary – summarized from the Volume 2 Technical Specifications

ECDS Measure Goals:

1. Create a member-centric communication pathway
2. Foster a team-based approach to member healthcare quality and outcomes
3. Create better communication across multiple healthcare service providers

Challenges with existing reporting methodologies:

1. Claims data does not include clinical data results or outcomes
2. Claims data does not include quality outcomes and management information
3. Manual medical record review is resource and budget intensive

Benefits of ECDS domain measures:

1. Provides a more complete picture of a member's total healthcare history and status
2. Utilization of existing EMR and other clinical data systems and electronic information to more efficiently produce a total picture of a member's healthcare status
3. More accurate and efficient transfer of data between healthcare service providers and payer systems

Elements necessary to qualify for HEDIS® Reporting:

Data must:

- √ Use standard layouts
- √ Meet measure technical specification requirements
- √ Be accessible to the care team on request – might include providing the requested information via phone, secure email, fax, provider portal, etc.
- √ Be frozen by the supplemental data collection date deadline (except for administrative data)

Data Source must have:

- √ Standard layout requirements
- √ Policies and procedures for establishing and maintaining database management systems
- √ Automated processes for incremental loading of all data elements
- √ Structured quality data elements to meet the measure technical specifications

Organization must have:

- √ A data management process that includes
 - Policies and procedures for measure data governance
 - Ability and processes to verify data integrity across multiple systems used to ensure consistent identification and classification of Quality Data Elements (QDEs)
 - Data reconciliation procedures

- √ Documented processes for tracking requests that can be reviewed as part of the HEDIS audit

Types of Data: Multiple types of data may be included in a single source. The Master Data Management plan will define how these data are mapped, managed, extracted, used, etc.

Structured Data –

- Data resides in discrete, static fields
- Data uses internationally recognized vocabulary standards
- Can be electronically extracted from electronic data warehouse consistently and reliably

Semi-Structured Data –

- Each QDE (quality data element) follows a uniform semantic structure
- Each QDE follows a prescribed hierarchy according to the logical definitions and attributes in each digital measure specification

Member-Reported Data –

- Member responses to standardized assessment
- Contained within the legal health record
- Delivered in structure form through Application Programming Interface (API)
- Each QDE must contain adequate metadata specificity (e.g. date, medication type, modality, etc.)

Sources of Data examples, in order of Source Priority (e.g. hierarchy application):

Electronic Health Records (EHRs) or Point of Service – transactional systems that store clinical data collected directly from a patient

Includes:

- Biometric information
- Clinical samples
- Clinical findings from samples (e.g. pathology or lab reports)

Health Information Exchange (HIE)/Clinical Registry

State HIEs & Regional HIEs (RHIOs)

Clinical Registries

Immunization Information Systems (IIS)

Public Health Agency Systems

Patient-Centered Data Homes™

Other registries developed for research or to support quality improvement initiatives or patient safety initiatives

Case Management Systems – shared database of member information gathered through process of care planning, member assessment or care coordination and monitoring of a member’s functional status

Administrative – data from administrative and claims processing systems for all services incurred during a member’s participation, including member management files

Reporting of ECDS Measures:

Source System of Record (SSoR)

- √ Members are assigned to only one SSoR category for each measure element based on the hierarchy of the four data sources
 - Initial population, numerator, exclusions, denominator
- √ Hierarchy is applied only when member data is in multiple locations
- √ For any given measure, there can be a single source for all elements or a different source for each measure element or a combination in between

Data Utilization and Mapping:

Vendor file layout and processing needs:

- File layout contains a data source type (SSoR identifier) field for each type of record (e.g. claim, member enrollment, pharmacy claim, etc.) and every record would have this field populated
- For every type of data file, assign each record a data source type based on the SSoR from which the data originated. For example, all claims might have data source type 4 for administrative, any records from a case management system might be marked as a data source type 3 or however the vendor defines the data source type values. This will ensure that for ECDS measure calculations, there will be results for all measure elements.
- If records that are not administrative data source are not marked with a data source type, you will not yield any ECDS results other than administrative.

How results are calculated:

Initial Population – can be determined from multiple data sources; all sources are summed according to hierarchy

Denominator – all sources are summed according to the hierarchy

Numerator – the source hierarchy would be applied and reported using the highest hierarchical SSoR

Exclusions – reported by data source using the highest hierarchical SSoR

Best Practices for Consideration:

1. Assign an internal ECDS “expert”
2. Discuss contracting and data needs with certified software vendor
3. Evaluate current data sources against SSoR descriptions
4. Enlist HEDIS Auditor to support source categorization as needed
5. Map ECDS data to vendor file layout early and test early
6. Prepare master data management process
7. Prepare to freeze data by March 1st
8. Analyze gaps to determine additional data collection/mapping opportunities
9. Identify early which ECDS measures will be reported and inform auditor and vendor
10. Work with vendor to be able to submit a test file for a test run early in the HEDIS season