

Digital Quality Measures

Anatomy of a Digital HEDIS® Measure

HEDIS, the Healthcare Effectiveness Data and Information Set, is a tool developed by NCQA that helps organizations identify and measure essential interventions for disease prevention and management. It is one of the most widely used sets of health care performance measures in the United States.

HEDIS measures include detailed specifications on how to evaluate specific aspects of health care quality.

HEDIS has a broad impact on clinical outcomes and drives value in the health care ecosystem by helping organizations to:



Measure



Analyze



Improve

MEASURE SPECIFICATIONS

The technical specifications for HEDIS quality measures, including instructions for data collection and guidelines for calculations and sampling, are published annually in *Volume 2: Technical Specifications for Health Plans*. Some of the inclusions in the measure specifications are:

- ▶ **Measure Descriptions:** Narrative descriptions of each measure, including overview of the population being measured and the numerator definition.
- ▶ **Measurement Period:** The period for which the measure applies.
- ▶ **Numerator:** Describes the target process, event or outcome expected for the population being measured.
- ▶ **Denominator:** Describes the populations for which numerator criteria are assessed (the population being measured). For some measures, this is the same as the eligible population; for others, it is a sample. For ECDS measures, this is the initial population minus exclusions.
- ▶ **Calculations:** Information that describes how the data are used to calculate the measure. Sometimes the information is presented in the form of algorithms or steps.
- ▶ **Data Elements for Reporting:** Instructions for how the results should be reported, including data elements, format and frequency.

These specification components help ensure a measure is standardized and can be consistently implemented and evaluated across health care settings.

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CALCULATING MEASURE RATES

Measure calculations happen in several ways depending on the type of scoring structure used by the HEDIS measure. In addition, some measures are calculated at the member (or person) level, while others are calculated at the event level. There are five standard ways to score HEDIS measures, but proportion scoring structures are the most common. The resulting rates help patients, policymakers, and payers to make apples-to-apples comparisons among plans or other health care entities.

This is a simplified example of how a proportion measure is calculated.

- ▶ The **numerator** contains the count of the desired event (processes, thresholds, outcomes).
- ▶ The **denominator** represents the count of all members of an eligible population (often based on age, diagnoses, exclusions).
- ▶ The **rate** is the quotient resulting from dividing the numerator by the denominator. In some instances, a higher rate (or score) means better performance. Other measures use inverse scoring where a lower score means better performance.

COMPARING HEDIS VOLUME 2 MEASURES TO DIGITAL MEASURES

The digital HEDIS measures express the same measure intent and calculation methodology utilized by traditional measures in Volume 2, but express that content in a computer-readable way. Often, the traditional Volume 2 narrative specifications and the digital specifications are used together to understand the measure. For example, clinical staff may review the traditional Volume 2 specification while IT staff may review and use the digital measure.

Below is an example of the Breast Cancer Screening measure (commonly referred to as BCS-E), comparing the Volume 2 specifications to the digital specifications.

Traditional Volume 2 ECDS Measure (BCS-E)*

Definitions	
Participation	The identifiers and descriptors for each organization's coverage used to define members' eligibility for measure reporting. Allocation for reporting is based on eligibility during the participation period.
Participation period	October 1 two years prior to the measurement period through the end of the measurement period.
Initial population	Members 52–74 years of age by the end of the measurement period who were recommended for routine breast cancer screening and also meet the criteria for participation. Include members recommended for routine breast cancer screening with any of the following criteria:

The measure specifications described in Volume 2 contain descriptions of the measure, the measure population of interest and other characteristics such as scoring and type.

If an organization wants to calculate this measure digitally, it is responsible for interpreting the specifications and validating the logic.

This snapshot of the BCS-E measure outlines guidance related to enrollment and the initial population. Here the PDF indicates that the initial population is composed of members ages 52 to 74 years.

Digital HEDIS Measure (BCS-E)*

```
define "Initial population":  
    "Age at end of measurement period" in "Initial  
population age range in years"  
-----  
parameter "Initial population age range in years"  
Interval<System.Integer> default Interval[52, 74]
```

This is a snapshot of the same BCS-E with measure rendered digitally in FHIR® Clinical Quality Language (CQL) for digital HEDIS measures. The CQL is human-readable logic structured in a standardized way for processing digital quality measures.

Despite being coded for computerized calculations, the logic is easily readable by humans. The top snippet defines the initial population age range. The bottom parameter indicates its composed of members ages 52 to 74 years of age by the end of the measurement period.

Let's revisit the Breast Cancer Screening measure (BCS-E) example.

Traditional Volume 2 Measures (BCS-E)*

Adjusted HEDIS measures may not be used for HEDIS health plan reporting.

Rules for Allowable Adjustments of Breast Cancer Screening—ECDS

NONCLINICAL COMPONENTS		
Eligible Population	Adjustments Allowed (Yes/No)	Notes
Product lines	Yes	Organizations are not required to use product line criteria; product lines may be combined and all (or no) product line criteria may be used.
Ages	Yes, with limits	Age determination dates may be changed (e.g., select, "age as of June 30"). The denominator age range may be expanded to 40–74 years.
Allocation	Yes	Organizations are not required to use enrollment criteria; adjustments are allowed.
Benefit	Yes	Organizations are not required to use a benefit; adjustments are allowed.
Other	Yes	Organizations may use additional eligible population criteria to focus on a population of interest such as gender, race and ethnicity, socioeconomic, sociodemographic characteristic or geographic region.
CLINICAL COMPONENTS		
Initial Population	Adjustments Allowed (Yes/No)	Notes
Event/diagnosis	NA	There is no event/diagnosis for this measure.
Exclusions	Adjustments Allowed (Yes/No)	Notes

Digital HEDIS Measures (BCS-E)*

Initial population age range in years (1 measure)

☒ Use Global Value

52 → 74

Initial population must be continuously enrolled (1 measure)

☒ Use Global Value

Mammography duration in months (1 measure)

☒ Use Global Value

Value: 27 Unit: month

The measure specifications in Volume 2 include rules for allowable adjustments.

This BCS-E measure snapshot shows allowable adjustments, including product line adjustments, age range adjustments and not applying specific exclusions such as hospice or palliative care.

Digital HEDIS measures can be configured. Parameters that align to Volume 2 allowable adjustments are included, such as enrollment criteria and age range adjustments. Other parameters beyond allowable adjustments are also included, such as adjusting the period when the measure looks for a mammogram.

The ability to execute configurable digital HEDIS measures not only reduces the burden on development teams, but also enables greater applicability for using measures to gauge health care quality across the organization, and can help close gaps in care.

ADJUSTING MEASURE PARAMETERS

NCQA has an online tool that enables you to preview which parameters are configurable for which measures in digital HEDIS measures. Visit our Measure Parameters Reference Guide at ncqa.org/measure-parameters to learn more.



To learn more about digital HEDIS measures, visit ncqa.org/digitalhedis. Questions about digital measures and technical support can be submitted to My NCQA: my.ncqa.org

* Disclaimer: The screenshots included in this document are representative images for illustrative purposes only. They should not be considered official technical specifications.