HEDIS®[1] Public Comment Overview

HEDIS Overview

HEDIS is a set of standardized performance measures designed to help ensure that purchasers and consumers can reliably compare health plan performance. HEDIS also serves as a model for emerging systems of performance measurement in other areas of health care delivery.

HEDIS is maintained by NCQA, a not-for-profit organization committed to evaluating and publicly reporting on the quality of physicians, health plans, accountable care organizations and other organizations. As of Measurement Year 2026, the HEDIS measurement set contains 93 measures across 6 domains of care.

Items available for public comment are being considered for the HEDIS Measurement Year 2027 publication (released August 2026).

Measure Development Process

NCQA's consensus development process involves rigorous review of published guidelines and scientific evidence, as well as feedback from multi-stakeholder advisory panels. The NCQA Committee on Performance Measurement, a panel of independent scientists and representatives from health plans, consumers, federal policymakers, purchasers and clinicians, oversees the evolution of each measurement set. Numerous measurement advisory panels provide clinical and technical knowledge required to develop the measures. Additional expert panels and the Technical Measurement Advisory Panel provide invaluable assistance by identifying methodological issues and giving input on new and existing measures.

Synopsis

NCQA seeks public feedback on proposed new measures and changes to existing measures. NCQA acknowledges that the health care policy environment is rapidly evolving at this time and will take into account all comments received and the evolving environment as final versions of these measures are prepared.

Reviewers are asked to submit comments to NCQA in writing via the Public Comment website by **5:00 p.m. (ET), Friday, March 13.**

Submitting Comments

Submit all comments via NCQA's Public Comment website at https://my.ncqa.org/

Note: *NCQA does not accept comments via mail, email or fax.*

How to Submit a Comment

1. Go to https://my.ncqa.org/.
2. Once logged in, click to select **Public Comments**.

[1]HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

3. Click **Add Comment**.
4. Select the name of the organization you are submitting comments for.
5. In the box labeled **HEDIS Measurement Year 2027 Public Comment**, click the **Instructions** link to view public comment materials, including instructions and proposed measure specifications.
6. Click **Take Survey**.
7. Review the survey description and instructions, then click the **Begin** button.
8. Answer the questions you would like to provide feedback on. You are not required to comment on every item; required questions will be marked with a red asterisk.
    a. For support type questions, select your support option (i.e., Support, Do Not Support, Support with Modifications).
    Note: *If you chose* **Do Not Support,** *include the reason in the text box. If you chose* **Support with Modifications,** *enter the suggested modifications in the text box.*
    b. Answer any additional questions in the section and enter relevant comments in the associated text boxes.
    Note: *Text boxes allow up to 50,000 characters.*
9. Click **Next** at the bottom of the page. Repeat **step 8** for each page.
Note: *Use the* ***Back*** *button if you would like to change any of your responses.*
10. On the final page, click **Submit**.

All comments are due Friday, March 13, by 5:00 p.m. ET.

NCQA Review of Public Comments

NCQA appreciates the time and effort required to submit comments, and reviews all feedback submitted within the public comment period. Due to the high volume of comments received, NCQA cannot respond to individual comments, but NCQA advisory panels and the Committee on Performance Measurement will consider comments and advise NCQA staff.

Items for Public Comment

Refer to the NCQA Public Comment page for detailed documentation (memos, specifications, workups, performance data) on the items listed below. The information in these materials should not be used for any purpose other than HEDIS Public Comment.

Proposed New HEDIS Measures

- Continuous Glucose Monitoring for Patients With Diabetes
- Follow-Up After Positive Colorectal Cancer Non-Invasive Screening Test
- Intimate Partner Violence Screening and Follow-Up
- Person-Centered Outcome Measures (3)
    - Person-Centered Outcome – Goal Identification
    - Person-Centered Outcome – Goal Follow-Up
    - Person-Centered Outcome – Goal Achievement
- Prenatal Syphilis Screening and Follow-Up

Proposed Changes to Existing HEDIS Measures

- Adult Immunization Status
- Emergency Department Utilization
- Pharmacotherapy Management of COPD Exacerbation

Contact NCQA Customer Support at 888-275-7585, Monday–Friday, 8:30 a.m.–5:00 p.m. (ET).

Proposed New Measure for HEDIS®[1] MY 2027: Continuous Glucose Monitoring Utilization for Patients With Diabetes (CGD-E)

NCQA seeks comments on the proposed new HEDIS *Continuous Glucose Monitoring Utilization for Patients With Diabetes* measure (CGD-E) for MY 2027.

Continuous glucose monitoring (CGM) supports diabetes management and helps prevent hypoglycemic and hyperglycemic events and other life-threatening complications.[2] The American Diabetes Association strongly recommends CGM use at diabetes onset and throughout treatment for children, adolescents and adults using insulin therapy. Despite these recommendations, CGM use remains low among recommended populations and inconsistent across sub-populations and payers, highlighting the need for transparency in utilization. CGD-E is a utilization measure (not performance) that provides visibility into CGM use patterns.

The proposed CGD-E measure assesses the percentage of persons 18–75 years of age with diabetes with evidence of CGM utilization during the measurement period. Evidence of CGM use includes CGM-generated data, a CGM summary report, documentation of CGM devices or supplies, CGM-related procedures or a dispensed CGM prescription. NCQA proposes a total rate and the following stratifications:

- Age.
    - 18–64 years.
    - 65–75 years.
- Diabetes Type.
    - Type 1: At least one diagnosis of type 1 diabetes.
    - Not Type 1: No diagnosis of type 1 diabetes and at least one instance of insulin use (includes type 2 and other specified diabetes; excludes transient or temporary forms of diabetes, such as gestational or steroid-induced).
- Race and Ethnicity.

NCQA conducted a digital feasibility assessment and Medicaid database testing to evaluate the feasibility of the new measure concept. Findings indicate the data elements are feasible to capture and report. Average utilization was 45.7% for adults with type 1 diabetes and 20.6% for adults without type 1 diabetes but using insulin. Additional database testing (commercial, Medicare) and field testing with health plans (commercial, Medicare, Medicaid) will further assess feasibility with real-world data and plan-level accessibility.

Advisory panels provided guidance throughout development and expressed support for the measure. NCQA will share public comment feedback and field testing results with advisory panels and the Committee on Performance Measurement in Spring 2026.

NCQA seeks general feedback on the measure, and specific feedback on the following:

1. Do you support the proposed age stratification (18–64; 65**–**75)? Is it meaningful given the proposed diabetes type stratification?

2. What data sources does your organization use to identify CGM (medical claims/DME, pharmacy claims, EHR fields, vendor feeds), and can these be mapped to the value sets as specified?

Supporting documents include the draft measure specification and evidence workup.

NCQA acknowledges the contributions of the Diabetes Advisory Panel.

[1]HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).
[2]American Diabetes Association. (2026). *Continuous Glucose Monitors.* https://diabetes.org/advocacy/cgm-continuous-glucose-monitors

Continuous Glucose Monitoring Utilization for Patients With Diabetes (CGD-E)

Measure title	Continuous Glucose Monitoring Utilization for Patients With Diabetes	**Measure ID**	CGD-E
Description	The percentage of persons 18–75 years of age with diabetes with evidence of continuous glucose monitoring (CGM) utilization during the measurement period.		
Measurement period	January 1–December 31.		
Copyright and disclaimer notice	Refer to the complete copyright and disclaimer information at the front of this publication. NCQA website: www.ncqa.org. Submit policy clarification support questions via My NCQA (https://my.ncqa.org).		
Clinical recommendation statement/ rationale	American Diabetes Association (**2026**): Use of CGM is recommended at diabetes onset and anytime thereafter for children, adolescents, and adults with diabetes who are on insulin therapy, **A** on noninsulin therapies that can cause hypoglycemia, **C** and on any diabetes treatment where CGM helps in management. **C** The specific CGM device and method for use should be made based on the individual's circumstances, preferences, and needs. **E** In people with diabetes on insulin therapy, CGM devise should be used as close to daily as possible for maximal benefit. **A** People with diabetes should have uninterrupted access to their supplies to minimize gaps in CGM. **A** American Diabetes Association (**2025**): Initiation of continuous glucose monitoring (CGM) should be offered to people with type 1 diabetes early in the disease, even at time of diagnosis. **A** Recommend real-time CGM (rtCGM) **A** or intermittently scanned CGM (isCGM) for diabetes management to youth **C** and adults **B** with diabetes on any type of insulin therapy. The choice of CGM device should be made based on the individual's circumstances, preferences, and needs. Consider using rtCGM and isCGM in adults with type 2 diabetes treated with glucose-lowering medications other than insulin to achieve and maintain individualized glycemic goals. The choice of device should be made based on the individual's circumstances, preferences, and needs. **B** American Diabetes Association (**2024**): Initiation of continuous glucose monitoring (CGM) should be offered to people with type 1 diabetes early in the disease, even at time of diagnosis. **A** Real-time CGM (rtCGM) **A** or intermittently scanned CGM (isCGM) **B** should be offered for diabetes management in adults with diabetes on multiple daily injections (MDI) or CSII who are capable of using the devices safely (either by themselves or with a caregiver). The choice of device should be made based on the individual's circumstances, preferences, and needs.		

	rtCGM **A** or isCGM **B** should be offered for diabetes management in adults with diabetes on basal insulin who are capable of using the devices safely (either by themselves or with a caregiver). The choice of device should be made based on the individual's circumstances, preferences, and needs. **Note:** Both professional and personal CGM devices count for CGM utilization in this measure.
Citations	American Diabetes Association Professional Practice Committee for Diabetes*; 7. Diabetes Technology: Standards of Care in Diabetes—2026. *Diabetes Care* 1 January 2026; 49 (Supplement_1): S150–S165. https://doi.org/10.2337/dc26-S007 American Diabetes Association Professional Practice Committee. 7. Diabetes technology: Standards of Care in Diabetes—2024. Diabetes Care 2024;47(Suppl. 1):S126–S144. https://doi.org/10.2337/dc24-S007 American Diabetes Association Professional Practice Committee. 7. Diabetes technology: Standards of Care in Diabetes—2025. Diabetes Care 2025;48(Suppl. 1):S146–S166. https://doi.org/10.2337/dc25-S007
Characteristics	
Scoring	Proportion.
Type	Process.
Product lines	• Commercial. • Medicaid. • Medicare.
Stratifications	Age as of the last day of the measurement period. • 18 – 64 years. • 65 – 75 years. Diabetes Type. • Type 1: Persons with at least one diagnosis of type 1 diabetes (Type 1 Diabetes Value Set*) in the measurement period or the year prior to the measurement period. • Not Type 1: Persons who did not meet the criteria for the stratification above (i.e., did not have at least one diagnosis of type 1 diabetes in the measurement period or the year prior to the measurement period) **but** had at least one instance of insulin use (Insulin Medications List, Insulin Infusion Value Set, Presence of Insulin Pump Value Set) during the measurement period or the year prior to the measurement period. Race. (Refer to *General Guideline: Race and Ethnicity Stratification.*) • American Indian or Alaska Native. • Asian. • Black or African American.

	• Middle Eastern or North African. • Native Hawaiian or Pacific Islander. • White. • Some Other Race. • Two or More Races. • Asked But No Answer. • Unknown. Ethnicity. (Refer to *General Guideline: Race and Ethnicity Stratification.*) • Hispanic or Latino. • Not Hispanic or Latino. • Asked But No Answer. Unknown.
Risk adjustment	None.
Guidance	**Data collection methodology:** ECDS. Refer to *General Guideline: Data Collection Methods* for additional information. **Date specificity:** Dates must be specific enough to determine the event occurred in the period being measured. **Which services count?** When using claims, include all paid, suspended, pending and denied claims. **Improvement notation:** This measure is designed to capture the utilization of continuous glucose monitors for individuals with diabetes. Organizations should use this information for internal evaluation only. NCQA does not view higher or lower service counts as indicating better or worse performance.
Initial population	*Measure item count:* Person. *Attribution basis:* Enrollment. • *Benefits:* Medical. • *Continuous enrollment:* The measurement period. • *Allowable gaps:* No more than one gap of ≤45 days during the measurement period. No gaps on the last day of the measurement period. *Ages:* 18–75 years of age as of the last day of the measurement period. *Event:* **Identify persons with a diagnosis of diabetes who use insulin.** **Step 1.** Identify persons who have diabetes: • *Claim/encounter.* At least two diagnoses of diabetes (Diabetes Value Set*) on different dates of service during the measurement period or the year prior to the measurement period. • *Claim/encounter and medication.* At least one diagnosis of diabetes (Diabetes Value Set*) ***and*** at least one diabetes medication dispensing event of insulin

	or a hypoglycemic/antihyperglycemic medication (Diabetes Medications List) during the measurement period or the year prior to the measurement period. **Step 2.** For persons identified in step 1, remove persons who did not meet either of the following: • At least one diagnosis of type 1 diabetes (Type 1 Diabetes Value Set*) in the measurement period or the year prior to the measurement period. • At least one instance of insulin use (Insulin Medications List, Insulin Infusion Value Set, Presence of Insulin Pump Value Set) during the measurement period or the year prior to the measurement period. **Coding Guidance** *Do not include laboratory claims (claims with POS code 81).

Denominator exclusions	**Persons with a date of death.**
	Death in the measurement period, identified using data sources determined by the organization. Method and data sources are subject to review during the HEDIS audit.
	
	Persons in hospice or using hospice services.
	Persons who use hospice services (Hospice Encounter Value Set; Hospice Intervention Value Set) or elect to use a hospice benefit any time during the measurement period. Organizations that use the Monthly Membership Detail Data File to identify these persons must use only the run date of the file.
	
	Persons receiving palliative care.
	Persons receiving palliative care (Palliative Care Assessment Value Set; Palliative Care Encounter Value Set; Palliative Care Intervention Value Set) or who had an encounter for palliative care (ICD-10-CM code Z51.5)* any time during the measurement period.
	
	Medicare enrollees, 66 years of age and older by the last day of the measurement period in an institutional SNP (I-SNP) or living long-term in an institution (LTI).
	
	• Enrolled in an Institutional SNP (I-SNP) any time during the measurement period.
	• Living long-term in an institution any time during the measurement period as identified by the LTI flag in the Monthly Membership Detail Data File. Use the run date of the file to determine if a member had an LTI flag during the measurement period.
	
	Persons 66 years of age or older by the last day of the measurement period, with both frailty and advanced illness.
	
	1. **Frailty.** At least two indications of frailty (Frailty Device Value Set; Frailty Diagnosis Value Set*; Frailty Encounter Value Set; Frailty Symptom Value Set*) with different dates of service during the measurement period.
	2. **Advanced illness.** Either of the following during the measurement period or the year prior to the measurement period:
	  – Advanced illness (Advanced Illness Value Set*) on at least two different dates of service.
	  – Dispensed dementia medication (Dementia Medications List).
	
	Coding Guidance
	
	*Do not include laboratory claims (claims with POS code 81).

<table>
<tr><td>Denominator</td><td>The initial population minus exclusions.</td></tr>
<tr><td>Numerator</td><td>Evidence of CGM utilization during the measurement period.
Utilization: At least one instance of CGM use within the measurement period that meets any of the following criteria:
A CGM-derived calculation or metric (Continuous Glucose Monitoring Observations Value Set), or
A CGM summary report document (LOINC Code 107930-0), or
A CGM device, component, system or supply (Continuous Glucose Monitoring Devices Value Set), or
A CGM procedure for device operation or data review (Continuous Glucose Monitoring Procedures Value Set), or
A dispensed CGM prescription (CGM Sensor Prescription).</td></tr>
<tr><td>Summary of changes</td><td>This is a first-year measure.</td></tr>
<tr><td>Data element tables</td><td>Organizations that submit HEDIS data to NCQA must provide the following data elements.
Table CGD-E-A-1/2/3: Data Elements for Continuous Glucose Monitoring Utilization for Patients With Diabetes
<table>
<tr><th>Metric</th><th>Diabetes Type</th><th>Age</th><th>Data Element</th><th>Reporting Instructions</th></tr>
<tr><td rowspan="5">CGMUtilization</td><td rowspan="2">Type1</td><td>18-64</td><td>InitialPopulation</td><td>For each Stratification</td></tr>
<tr><td rowspan="2">NotType1</td><td>65-75</td><td>Exclusions</td><td>For each Stratification</td></tr>
<tr><td rowspan="3">Total</td><td>Denominator</td><td>For each Stratification</td></tr>
<tr><td>Numerator</td><td>For each Stratification</td></tr>
<tr><td>Rate</td><td>(Percent)</td></tr>
</table>
Table CGD-E-B--1/2/3: Data Elements for Continuous Glucose Monitoring Utilization for Patients With Diabetes: Stratifications by Race
<table>
<tr><th>Metric</th><th>Race</th><th>Data Element</th><th>Reporting Instructions</th></tr>
<tr><td rowspan="9">CGMUtilization</td><td>AmericanIndianOrAlaskaNative</td><td>InitialPopulation</td><td>For each Stratification</td></tr>
<tr><td>Asian</td><td>Exclusions</td><td>For each Stratification</td></tr>
<tr><td>BlackOrAfricanAmerican</td><td>Denominator</td><td>For each Stratification</td></tr>
<tr><td>MiddleEasternOrNorthAfrican</td><td>Numerator</td><td>For each Stratification</td></tr>
<tr><td>NativeHawaiianOrPacificIslander</td><td>Rate</td><td>(Percent)</td></tr>
<tr><td>White</td><td></td><td></td></tr>
<tr><td>SomeOtherRace</td><td></td><td></td></tr>
<tr><td>TwoOrMoreRaces</td><td></td><td></td></tr>
<tr><td>AskedButNoAnswer</td><td></td><td></td></tr>
<tr><td>Unknown</td><td></td><td></td></tr>
</table></td></tr>
</table>

Table CGD-E-C-1/2/3: Data Elements for Continuous Glucose Monitoring Utilization for Patients With Diabetes: Stratifications by Ethnicity

Metric	Ethnicity	Data Element	Reporting Instructions
CGMUtilization	HispanicOrLatino	InitialPopulation	For each Stratification
	NotHispanicOrLatino	Exclusions	For each Stratification
	AskedButNoAnswer	Denominator	For each Stratification
	Unknown	Numerator	For each Stratification
		Rate	(Percent)

Continuous Glucose Monitoring Utilization for Patients With Diabetes (CGD-E*)*

Measure Workup

Topic Overview

Overview

Diabetes is a major public health issue in the United States (US), affecting over 38 million adults yet 8.7 million adults meeting lab criteria for diabetes were still unaware of their diagnosis. Diabetes prevalence increases with age, with the rate more than six times higher in adults aged 65 years and older (29.2%) compared to those aged 18-44 years (4.8%), and almost two times higher than those aged 45-64 years (18.9%) (CDC, 2024c).

Diabetes is a chronic condition that affects insulin production in the body, disturbing the regulation of blood sugar. Type 1 diabetes prevents the body from producing insulin naturally and commonly occurs in children, teens and young adults. Type 2 diabetes inhibits the body's ability to regulate blood sugar at a normal level. Insulin may be produced but it is not used effectively. The majority of individuals with diabetes have type 2 (90-95%) and are typically diagnosed during adulthood (CDC, 2024b).

Management of blood sugar levels in people with type 1 or type 2 diabetes is vital to prevent serious health problems including heart disease, vision loss and kidney disease (CDC, 2024a). Traditionally, individuals with type 1 or type 2 diabetes have relied on blood glucose meters (glucometers) for fingerstick testing. Glucometers measure the amount of sugar in a sample of blood. The sample of blood is then placed on a test strip and read by the glucometer. However, glucometers can only measure blood sugar levels at a single moment in time (CDC, 2024a). Therefore, glucometers can miss fluctuations and trends that are critical for optimal management.

Continuous Glucose Monitoring (CGM) offers a more advanced and comprehensive approach. CGM systems track glucose levels continuously using a wearable sensor inserted under the skin. The sensors measure glucose in the interstitial fluid (closely reflecting blood glucose levels) and wirelessly transmit real time data to a receiver or smartphone app. This allows users to view real-time glucose readings, receive alerts for high or low levels, and analyze trends over time (Farnsworth, 2024).

There are two categories of CGM devices: professional CGM which are owned and applied by a health care provider for a discrete period (typically 7-14 days) and personal devices which are owned by the user for frequent or continuous use. A typical CGM system includes: 1) a sensor that is inserted under the skin to measure interstitial glucose, 2) a transmitter attached to the sensor that sends glucose data wirelessly to a receiver, and 3) a receiver or display device that shows readings and alerts (often via smartphone app, insulin pump or dedicated device). Devices measure glucose levels continuously but can either present real-time data or are intermittently scanned (American Diabetes Association Professional Practice Committee, 2023b). This depends on the type of CGM, which could be real-time CGM (rtCGM) that continuously sends data and alerts, intermittently scanned CGM (isCGM) which requires the user to scan the sensor to get readings, or implantable CGM which are placed under the skin for longer durations.

The benefits of CGM include real-time monitoring of glucose levels, trend analysis over hours or days, alerts for hypoglycemia or hyperglycemia, improved insulin dosing and diabetes management, and reduced need for fingerstick tests. Reporting real-time glucose levels allows users to monitor glucose levels 24/7 and react immediately, if needed (Medpace & Fierce Biotech, 2022). CGMs often report levels with up and down arrows, or "trend arrows" to indicate if levels are trending upward or trending downward (i.e., blood glucose is rising or falling) and helps the user anticipate changes in glucose levels (Ziegler et al., 2019). Users are then able to take corrective action or to continue monitoring the trends. CGM devices also store historical data to be used for retrospective analysis to identify patterns. The patterns identified allow individuals with

type 1 or type 2 diabetes to build management plans and adjust lifestyle behaviors with their provider to prevent glycemic events and better manage their diabetes.

CGM devices also produce an Ambulatory Glucose Profile (AGP), which is a standardized, single page report that summarizes glucose data over a defined period. The AGP includes graphical information such as time in glycemic ranges, glucose variability and glycemic exposure (Johnson et al., 2019). Metrics outlined in the AGP include glucose management indicator (GMI), glycemic variability, Time in range (TIR) and Time below range (TBR). These metrics provide patients and providers real time retrospective data to help better manage patient's diabetes care. These data metrics can be used to inform treatment adjustments or prevent glycemic events such as hypoglycemia. TIR reports the amount of time an individual spends within the target blood glucose range, typically 70 to 180 mg/dL. The AGP also reports the amount of time an individual's blood glucose is below the target range (TBR) (American Diabetes Association, n.d.) While A1C provides an average blood glucose for the previous three months, it does not report additional data metrics like the AGP report does across the three months.

Importance and Prevalence

Health importance

Type 1 diabetes risk factors include family history and age. Type 2 diabetes risk factors may include weight, family history, physical activity level, smoking and high blood pressure. Race and ethnicity also play a role in diabetes, where some minority groups, such as American Indian or Alaska Native and non-Hispanic Black individuals, are more likely to have type 1 or type 2 diabetes compared to non-Hispanic White individuals (American Diabetes Association, 2025a). Diabetes (type 1 and type 2) can lead to more severe health conditions like heart disease, vision loss, nerve and foot damage and kidney disease when not properly managed (CDC, 2024b). In the US, type 1 and type 2 diabetes is the number one cause of kidney failure, lower-limb amputations and adult-blindness (South Carolina Department of Public Health, 2025). Type 1 and type 2 diabetes is also associated with increased risk of psychosocial conditions such as anxiety, depression and diabetes distress, which can undermine patients' self-management efforts (American Diabetes Association Professional Practice Committee, 2023a). It is imperative that individuals effectively manage their diabetes to prevent more serious chronic conditions and to achieve better health outcomes.

There is evidence that CGM can improve glycemic outcomes for both type 1 diabetes (T1D) and type 2 diabetes (T2D). A majority of CGM research provides evidence of its use for T1D. Few studies have focused on the impacts of CGM and T2D, but the evidence base is growing. The American Diabetes Association (ADA) standards of care are continuously evolving to address appropriate CGM use among individuals with type 1 or type 2 diabetes. Table 1 outlines the 2024, 2025 and 2026 guidelines addressed by this measure. See Appendix 1 for other relevant guidelines related to CGM devices. Assessing the number of patients who utilized a CGM device will provide additional insight into what populations are using CGMs and how frequently providers offer CGMs to their patients.

Evidence suggests that CGM use for patients with T1D is low but increasing. Data from 2016 to 2018 shows that 30% of people with T1D were using CGM devices and 27% of adults with longstanding T1D used personal CGMs (Tanenbaum & Commissariat, 2022). The TID Exchange Quality Improvement Collaborative (TIDX-QI) demonstrated improved rates of CGM use for patients with T1D from 66 to 71% through patient education, device troubleshooting and data downloads. Technological improvements and decreasing cost have encouraged the uptake of CGM for glycemic management in primary care (Martens, 2022). The known facilitators that promote sustained CGM use include consistent insurance coverage, support for providers in clinics, thorough education and tech support and CGM user access to support (Tanenbaum & Commissariat, 2022).

Table 1. American Diabetes Association (ADA) Clinical Practice Guidelines*

<table>
<tr><th colspan="3">Recommendation</th></tr>
<tr><th>2024</th><th>2025</th><th>2026</th></tr>
<tr><td colspan="2">Initiation of CGM should be offered to people with type 1 diabetes. (A)</td><td>Diabetes devices should be offered to people with diabetes (A)</td></tr>
<tr><td rowspan="2">CGM should be offered to adults with diabetes on multiple daily injections (MDI), continuous insulin infusion (CSII) or basal insulin. (A [real-time]–B [intermittently scanned])</td><td>Recommend CGM for diabetes management to adults with diabetes on any type of insulin therapy. (A [real-time]–B [intermittently scanned])</td><td rowspan="2">Use of CGM is recommended at diabetes onset and anytime thereafter for adults with diabetes who are on insulin therapy, (A) on noninsulin therapies that can cause hypoglycemia, (C) and on any diabetes treatment where CGM helps in management. (C)</td></tr>
<tr><td>Consider using CGM in adults with type 2 diabetes treated with glucose lowering medications other than insulin. (B)</td></tr>
</table>

Financial importance and cost-effectiveness

The estimated total cost of diagnosed diabetes in 2022 was $412.9 billion including $306.6 billion in direct medical costs and $106.3 billion in indirect costs (lost productivity at work, unemployment from chronic disability, and premature mortality). Medical costs for individuals living with type 1 or type 2 diabetes have increased by 35% over the last 10 years. Individuals with type 1 or type 2 diabetes, on average, have 2.6 times higher medical expenditures than those without (Parker et al., 2023).

The use of CGMs leads to a reduction of the number of non-severe hypoglycemic events and can thus lead to cost saving. CGM devices have been shown to be as cost-effective as $100,000 per quality-adjusted life years due to a decrease in experiencing diabetes distress and decreased fear of hypoglycemia, reduction of finger stick tests, and improved changes in A1c (Howe & Chavis, 2022). CGM devices also help to reduce the cost associated with short- and long-term complications such as hospitalizations, emergency department visits, and procedures for individuals with T1D (Howe & Chavis, 2022).

Coverage for CGM devices varies by product line and even by plan. Medicare coverage is the most consistent across plans. Medicare may cover a prescribed CGM device for an individual with type 1 or type 2 diabetes who also takes insulin or has a history of hypoglycemia and has sufficient training on the use of CGM (U.S. Centers for Medicare and Medicaid Services, n.d.). Each state can determine their own criteria for CGM coverage through Medicaid, meaning coverage varies from state to state (Center for Health Care Strategies, 2023). Similarly, Commercial coverage is at the discretion of each individual plan. Industry best practice recommends aligning commercial coverage with current evidence and expert guidelines, particularly among underserved populations such as older adults (Pangrace et al., 2024).

Health care disparities

The ADA conducted a study focused on barriers to accessing CGMs. The study found that Medicaid beneficiaries who take insulin are two to five times less likely to use CGMs than individuals with commercial health insurance (American

* (American Diabetes Association Professional Practice Committee, 2023b), (American Diabetes Association Professional Practice Committee, 2024), (American Diabetes Association Professional Practice Committee for Diabetes*, 2025)

Diabetes Association, 2021). When accounting for race, states with higher rates of White Medicaid beneficiaries had a higher use of CGMs than states with higher rates of Black Medicaid beneficiaries. Hispanic beneficiaries were also less likely to have CGMs when covered by Medicaid than commercial health insurance (American Diabetes Association, 2021). The study also found children younger than 18 who are insulin-dependent are more likely to get CGM devices than individuals between the ages of 45-64. Individuals 18 or younger with commercial health insurance were significantly more likely to get a CGM device compared to all age groups regardless of commercial or Medicaid benefits.

Relationship to outcomes

The real time data reported from CGMs helps to treat and prevent serious, short- and long-term diabetes complications, adjust lifestyle changes to address glycemic patterns, and provide more data to an individual's care team to adjust treatment plans more precisely (American Diabetes Association, 2025b). Research has also shown a number of positive glycemic outcomes in both Type 1 and Type 2 diabetes, including increased time in target range, reduction in time spent in hypoglycemia, prevention of severe hypoglycemic events, and reduction in mean HbA1c. Increased patient satisfaction, reduction of diabetes-related distress, and improvement in quality of life have also been reported.

Opportunities for Improvement

Analysis of the data reported from CGMs helps to guide therapeutic decision-making and enhance patient understanding in order to adjust behaviors and lifestyles. This leads to an increase in discussions between patients and their providers on how to effectively manage their diabetes (Johnson et al., 2019). In older adults, apart from glucose control, CGMs can benefit these individuals by allowing them to continuously share glucose readings with family members or care givers and increases awareness of hypoglycemia in those with reduced or impaired awareness (Huang et al., 2023). CGMs also help relieve the burden of multiple finger sticks a day by continuously measuring blood glucose levels in the interstitial fluid (Kravarusic & Aleppo, 2020).

Digital Considerations

As part of NCQA's strategic transition to a fully digital quality measurement portfolio, we conducted a feasibility assessment to inform eventual digital measure implementation. The assessment evaluates the measure's intent and associated clinical concepts within a digital framework.

Preliminary, post testing analysis suggests general feasibility based on frequency counts for the numerator and denominator found through both administrative and clinical data. However, additional testing is necessary to further validate the feasibility and reliability of this measure to illuminate where relevant clinical concepts, such as insulin infusion devices and CGM devices, may be missing, incomplete, or unstructured in real-world data. Refer to Appendix B for details.

References

American Diabetes Association. (n.d.). *CGM & Time in Range*. Retrieved November 6, 2025, from https://diabetes.org/about-diabetes/devices-technology/cgm-time-in-range

American Diabetes Association. (2021). *Health Equity and Diabetes Technology: A Study of Access to Continuous Glucose Monitors by Payer, Geography and Race Executive Summary*. https://diabetes.org/newsroom/american-diabetes-association-releases-study-access-barriers-to-continuous-glucose-monitors-at-cost-care-summit

American Diabetes Association. (2025a). *Statistics About Diabetes*. https://diabetes.org/about-diabetes/statistics/about-diabetes

American Diabetes Association. (2025b). *Why are CGMs Beneficial?* Continuous Glucose Monitors. https://diabetes.org/advocacy/cgm-continuous-glucose-monitors

American Diabetes Association Professional Practice Committee. (2023a). 6. Glycemic Goals and Hypoglycemia: Standards of Care in Diabetes—2024. *Diabetes Care*, *47*(Supplement_1), S111–S125. https://doi.org/10.2337/dc24-S006

American Diabetes Association Professional Practice Committee. (2023b). 7. Diabetes Technology: Standards of Care in Diabetes—2024. *Diabetes Care*, *47*(Supplement_1), S126–S144. https://doi.org/10.2337/dc24-S007

American Diabetes Association Professional Practice Committee. (2024). 7. Diabetes Technology: Standards of Care in Diabetes—2025. *Diabetes Care*, *48*(Supplement_1), S146–S166. https://doi.org/10.2337/dc25-S007

American Diabetes Association Professional Practice Committee for Diabetes*. (2025). 7. Diabetes Technology: Standards of Care in Diabetes—2026. *Diabetes Care*, *49*(Supplement_1), S150–S165. https://doi.org/10.2337/dc26-S007

CDC. (2024a, June 5). *Manage Blood Sugar*. Diabetes. https://www.cdc.gov/diabetes/treatment/index.html

CDC. (2024b, July 19). *Diabetes Basics*. Diabetes. https://www.cdc.gov/diabetes/about/index.html

CDC. (2024c, July 23). *National Diabetes Statistics Report*. Diabetes. https://www.cdc.gov/diabetes/php/data-research/index.html

Center for Health Care Strategies. (2023). Continuous Glucose Monitor Access for Medicaid Beneficiaries Living with Diabetes: State-By-State Coverage. *Center for Health Care Strategies*. https://www.chcs.org/resource/continuous-glucose-monitor-access-for-medicaid-beneficiaries-living-with-diabetes-state-by-state-coverage/

Farnsworth, C. (2024, April 25). *Continuous glucose monitoring: What is it, and how does it work?* https://www.medicalnewstoday.com/articles/continuous-glucose-monitoring

Howe, G., & Chavis, J. (2022). *Expanding Medicaid Access to Continuous Glucose Monitors*. https://www.chcs.org/media/Expanding-Medicaid-Access-to-Continuous-Glucose-Monitors_011222.pdf

Huang, E. S., Sinclair, A., Conlin, P. R., Cukierman-Yaffe, T., Hirsch, I. B., Huisingh-Scheetz, M., Kahkoska, A. R., Laffel, L., Lee, A. K., Lee, S., Lipska, K., Meneilly, G., Pandya, N., Peek, M. E., Peters, A., Pratley, R. E., Sherifali, D., Toschi, E., Umpierrez, G., … Munshi, M. (2023). The Growing Role of Technology in the Care of Older Adults With Diabetes. *Diabetes Care*, *46*(8), 1455–1463. https://doi.org/10.2337/dci23-0021

Johnson, M. L., Martens, T. W., Criego, A. B., Carlson, A. L., Simonson, G. D., & Bergenstal, R. M. (2019). Utilizing the Ambulatory Glucose Profile to Standardize and Implement Continuous Glucose Monitoring in Clinical Practice. *Diabetes Technology & Therapeutics*, *21*(S2), S2-17. https://doi.org/10.1089/dia.2019.0034

Kravarusic, J., & Aleppo, G. (2020). Diabetes Technology Use in Adults with Type 1 and Type 2 Diabetes. *Endocrinology and Metabolism Clinics of North America*, *49*(1), 37–55. https://doi.org/10.1016/j.ecl.2019.10.006

Martens, T. W. (2022). Continuous glucose monitoring in primary care – are we there? *Current Opinion in Endocrinology, Diabetes and Obesity*, *29*(1), 10. https://doi.org/10.1097/MED.0000000000000689

Medpace & Fierce Biotech. (2022). *Benefits and Challenges of Continuous Glucose Monitoring (CGM) in Clinical Development* [White Paper]. https://www.medpace.com/wp-content/uploads/2023/03/Whitepaper-Benefits-and-Challenges-of-Continuous-Glucose-Monitoring-in-Clinical-Trials.pdf

Pangrace, M., Dolan, S., Grace, T., Greene, E., Long, E., McClelland, S., Moore, J., Morgan, D. E., Mullins, H., & Wescott, S. (2024). AMCP Market Insights Health Plan Best Practice: Implementing continuous glucose monitoring to improve patient outcomes in diabetes. *Journal of Managed Care & Specialty Pharmacy*, *30*(1-a Suppl), S1–S15. https://doi.org/10.18553/jmcp.2024.30.1-a.s1

Parker, E. D., Lin, J., Mahoney, T., Ume, N., Yang, G., Gabbay, R. A., ElSayed, N. A., & Bannuru, R. R. (2023). Economic Costs of Diabetes in the U.S. in 2022. *Diabetes Care*, *47*(1), 26–43. https://doi.org/10.2337/dci23-0085

South Carolina Department of Public Health. (2025). *Diabetes*. https://dph.sc.gov/diseases-conditions/conditions/diabetes

Tanenbaum, M. L., & Commissariat, P. V. (2022). Barriers and Facilitators to Diabetes Device Adoption for People with Type 1 Diabetes. *Current Diabetes Reports*, *22*(7), 291–299. https://doi.org/10.1007/s11892-022-01469-w

U.S. Centers for Medicare and Medicaid Services. (n.d.). *Continuous glucose monitors*. Retrieved November 5, 2025, from https://www.medicare.gov/coverage/therapeutic-continuous-glucose-monitors

Ziegler, R., von Sengbusch, S., Kröger, J., Schubert, O., Werkmeister, P., Deiss, D., & Siegmund, T. (2019). Therapy Adjustments Based on Trend Arrows Using Continuous Glucose Monitoring Systems. *Journal of Diabetes Science and Technology*, *13*(4), 763–773. https://doi.org/10.1177/1932296818822539

Appendix A. Specific Guideline Recommendations

Table 2. Clinical Guidelines for Continuous Glucose Monitoring for Patients with Diabetes

Organization, Year	Target Population	Recommendation	Grade
American Diabetes Association, 2026	Patients with Diabetes	Use of CGM is recommended at diabetes onset and anytime thereafter for adults with diabetes who are on insulin therapy, on noninsulin therapies that can cause hypoglycemia, and on any diabetes treatment where CGM helps in management. The specific CGM device and method for use should be made based on the individual's circumstances, preferences, and needs. E	A – on insulin C – on noninsulin therapies C – diabetes treatment where CGM helps management
		In circumstances when consistent use of CGM is not feasible, consider periodic use of personal or professional CGM to adjust medication and/or lifestyle.	C
American Diabetes Association, 2025	Patients with Type 1, Type 2, or Other Forms of Diabetes	Initiation of continuous glucose monitoring (CGM) should be offered to people with type 1 diabetes early in the disease, even at time of diagnosis.	A
		Recommend real-time CGM (rtCGM) or intermittently scanned CGM (isCGM) for diabetes management to adults with diabetes on any type of insulin therapy. The choice of CGM device should be made based on the individual's circumstances, preferences, and needs.	A – real-time B – adults; intermittently
		Consider using rtCGM and isCGM in adults with type 2 diabetes treated with glucose-lowering medications other than insulin to achieve and maintain individualized glycemic goals. The choice of device should be made based on the individual's circumstances, preferences, and needs.	B
		CGM can help achieve glycemic goals (e.g., time in range and time above range) and A1C goal in type 1 diabetes and pregnancy and may be beneficial for other types of diabetes in pregnancy.	A – glycemic goals B – A1C goals E – pregnancy
American Diabetes Association, 2024	Patients with Type 1 and Type 2 Diabetes	Real-time continuous glucose monitoring or intermittently scanned continuous glucose monitoring should be offered for diabetes management in adults with diabetes on multiple daily injections or continuous subcutaneous insulin infusion who are capable of using the devices safely (either by themselves or with a caregiver). The choice of device should be made based on the individual's circumstances, preferences, and needs.	A – real-time B – intermittently
		Real-time continuous glucose monitoring or intermittently scanned continuous glucose monitoring should be offered for diabetes management in adults with diabetes on basal insulin who are capable of using the devices safely (either by themselves or with a caregiver). The choice of device should be made based on the individual's circumstances, preferences, and needs.	A – real-time B – intermittently
		Use of CGM is beneficial and recommended for individuals at high risk for hypoglycemia	A
American Association of Clinical Endocrinology Clinical Practice Guideline, 2021	Persons with diabetes mellitus	CGM is strongly recommended for all persons with diabetes treated with intensive insulin therapy, defined as 3 or more injections of insulin per day or the use of an insulin pump.	A
		CGM is recommended for all individuals with problematic hypoglycemia (frequent/sever hypoglycemia, nocturnal hypoglycemia, hypoglycemia unawareness).	A

Grading System Key

American Diabetes Association

Evidence-Grading System for Standards of Care in Diabetes

Level of Evidence	Description
A	Clear evidence from well-conducted, generalizable randomized controlled trials that are adequately powered, including • Evidence from a well-conducted multicenter trial • Evidence from a meta-analysis that incorporated quality ratings in the analysis Compelling nonexperimental evidence • i.e., "all or none" rule developed by the Centre for Evidence-Based Medicine at the University of Oxford Supportive evidence from well-conducted randomized controlled trials that are adequately powered, including • Evidence from a well-conducted trial at one or more institutions • Evidence from a meta-analysis that incorporated quality ratings in the analysis
B	Supportive evidence from well-conducted cohort studies • Evidence from a well-conducted prospective cohort study or registry • Evidence from a well-conducted meta-analysis of cohort studies Supportive evidence from a well-conducted case-control study
C	Supportive evidence from poorly controlled or uncontrolled studies • Evidence from randomized clinical trials with one or more major or three or more minor methodological flaws that could invalidate the results • Evidence from observational studies with high potential for bias (such as case series with comparison with historical controls) • Evidence from case series or case reports Conflicting evidence with the weight of evidence supporting the recommendation
E	Expert consensus or clinical experience

American Association of Clinical Endocrinology

Evidence Grade

Grade	Definition
A	Very Strong
B	Strong
C	Not Strong
D	Primarily based on expert opinion

Appendix B. Digital Feasibility

As part of NCQA's strategic transition to a fully digital quality measurement portfolio, we conduct a feasibility assessment to evaluate the measure's intent and associated clinical concepts within a digital framework. The primary objectives were to determine whether the clinical concepts could be represented using standardized data models and nationally recognized terminologies, and to assess the availability of discrete, structured data necessary to support accurate and reliable digital measurement.

Data and Terminology Standards

NCQA's digital quality measures are built on the Fast Healthcare Interoperability Resources (FHIR®) standard, developed by HL7®, to support interoperable exchange of electronic health data. In the U.S., FHIR US Core profiles provide detailed implementation guidance aligned with the United States Core Data for Interoperability (USCDI), a federal standard maintained by ASTP (formerly ONC). USCDI defines essential data classes and elements, while FHIR US Core specifies how to represent and exchange them. Additionally, NCQA uses nationally recognized clinical terminologies (e.g., ICD-10, CPT, LOINC) to define value sets, ensuring standardized interpretation and representation of clinical data in quality measures.

Digital Feasibility Assessment

The digital feasibility assessment is conducted at two stages during the measure development process, pre-testing phase and post-testing phase, summarized below. This assessment examines each measure concept across three high-level categories:

- **Data Standards & Terminology**. Evaluates the alignment with national standards (FHIR, USCDI) and recognized terminology standards (i.e., LOINC, ICD).
- **Clinical Workflow & Data Accuracy**. Evaluates whether the concept aligns with standard clinical practice and the likelihood that the data will be accurate, complete and reliable.
- **Data Availability & Structure**. Assesses if the data is likely to be present, in structured fields, and accessible to health plans.

The digital feasibility assessment (shown in Figure A) rates each concept from high to low. High = Feasible with no concerns, Medium = Feasible with some concerns (with a potential mitigation strategy); Low = Low feasibility with concerns (with little to no mitigation strategy for the current development cycle).

Preliminary Post-Testing Feasibility Findings

Preliminary post-testing analysis (following database testing but pending field testing) indicates high feasibility with clinical concepts found through both administrative and clinical data, but field testing is necessary to further validate the feasibility and reliability of this measure, especially around clinical data. Field testing will help illuminate where relevant clinical concepts, such as insulin infusion devices and CGM devices, may be missing, incomplete, or unstructured in real-world data. Thus, the assessment from pre-testing is still relevant, and a more comprehensive update will be provided following field testing.

Figure A-2. Preliminary Post-Testing Digital Concept Feasibility Assessment

Score key: H-high, M-medium, L-low						
	Data Standards & Terminology		**Clinical Workflow & Data Accuracy**		**Data Availability & Structure**	
Clinical Concept	**Data Standards**	**Terminology Standards**	**Clinical Workflow**	**Data Accuracy**	**Data Availability**	**Data Accessibility**
Diabetes Diagnosis: Claim Encounter	H	H	H	H	H	H
Diabetes Medication: Claim Medication Dispensed	H	H	H	H	H	H
Diabetes Diagnosis: Clinical Encounter	H	H	H	H	H	M

Diabetes, Basal Insulin, Insulin, Non-insulin Glucose Lowering Medication: Active Medication List	H	H	H	M	H	M
Diabetes, Basal Insulin, Insulin, Non-insulin Glucose Lowering Medication: Discharge Medication List	H	H	H	H	H	M
Diabetes, Basal Insulin, Insulin, Non-insulin Glucose Lowering Medication: Medication Prescribed	H	H	H	H	H	M
Diabetes, Basal Insulin, Insulin, Non-insulin Glucose Lowering Medication: Claim Medication Dispensed	H	H	H	H	H	H
Insulin Infusion: Device	H	H	M	M	L	L
Insulin Infusion: Device Use	H	H	M	M	L	L
CGM: Device	H	H	M	M	L	L
CGM: Device Use	H	H	M	M	L	L
CGM: Device Request	H	H	H	H	H	M
CGM: Dispensed Claim	H	H	H	H	H	H
CGM Observations or assessments	M	M	M	H	L	L
CGM: Procedure	H	H	H	H	H	H

Pre-Testing Feasibility Findings

Overall, a digital version of this measure as currently specified is feasible. Through the digital assessment, three issues were identified. First, dispensed CGM prescription is not currently found in Version 1 or Version 3 of the United States Core Data for Interoperability (USCDI) but can be found in the list of USCDI+ quality data elements. Second, there is uncertainty around the availability and accessibility of CGM metrics, as a standardized approach for collecting and storing CGM metrics does not currently exist. Finally, the CGM report, when available, will most readily be stored in a PDF format, as opposed to structured, discrete fields. However, none of these issues are significant barriers to the overall feasibility of this measure, as the needed data elements fall under measure concepts which can be identified/represented in structured and accessible data.

Data Standards & Terminology. As shown in Figure A-1, all clinical concepts, except for CGM observations or assessments, can be modeled in the FHIR data standard, supporting strong alignment with national interoperability requirements. There currently aren't national standards for many CGM metrics (which metrics to collect as well as how to collect and document them), though a standardized set of CGM metrics is being developed by a project called iCoDE (Integration of Continuous Glucose Monitoring Data into the Electronic Health Record Project).

Clinical Workflow & Data Accuracy. Most of the clinical concepts are part of routine clinical workflow and are documented by the clinician, except for information about insulin infusion and CGM devices and their use. Information about the physical devices, such as their manufacturer or serial ID, is not often documented in EHRs. Statements about device use originate from patients and are not documented in a standardized way across practices. Observations and metrics from a CGM are generated as a viewable PDF or stored in the proprietary clouds of manufacturers and are generally difficult to access for a provider.

Data Availability & Structure. Data from this measure may come from both clinical systems (EHRs) and billing/claims data. All clinical data-based concepts were marked "M" at best for accessibility, due to the potentially limited access that health plans have to that data. Information about insulin and CGM devices and their use are scored as "L" for availability and accessibility as they are rarely stored in structured data, making access to this data even more difficult for health plans. Additionally, because observations and assessments from CGMs are almost always viewed as a PDF and housed in proprietary cloud storage, this data rarely enters the EHR, let alone as structured data.

Figure A-1. Pre-Testing Digital Concept Feasibility Assessment

Score key: H-high, M-medium, L-low						
	Data Standards & Terminology		**Clinical Workflow & Data Accuracy**		**Data Availability & Structure**	
Clinical Concept	**Data Standards**	**Terminology Standards**	**Clinical Workflow**	**Data Accuracy**	**Data Availability**	**Data Accessibility**
Diabetes Diagnosis: Claim Encounter	H	H	H	H	H	H
Diabetes Medication: Claim Medication Dispensed	H	H	H	H	H	H
Diabetes Diagnosis: Clinical Encounter	H	H	H	H	H	M
Diabetes, Basal Insulin, Insulin, Non-insulin Glucose Lowering Medication: Active Medication List	H	H	H	M	H	M
Diabetes, Basal Insulin, Insulin, Non-insulin Glucose Lowering Medication: Discharge Medication List	H	H	H	H	H	M
Diabetes, Basal Insulin, Insulin, Non-insulin Glucose Lowering Medication: Medication Prescribed	H	H	H	H	H	M
Diabetes, Basal Insulin, Insulin, Non-insulin Glucose Lowering Medication: Claim Medication Dispensed	H	H	H	H	H	H
Insulin Infusion: Device	H	H	M	M	L	L
Insulin Infusion: Device Use	H	H	M	M	L	L
CGM: Device	H	H	M	M	L	L
CGM: Device Use	H	H	M	M	L	L
CGM: Device Request	H	H	H	H	H	M
CGM: Dispensed Claim	H	H	H	H	H	H
CGM Observations or assessments	M	M	M	H	L	L
CGM: Procedure	H	H	H	H	H	H

Proposed New Measure for HEDIS®[1] MY 2027: Follow-Up After Positive Colorectal Cancer Non-Invasive Screening Test (COF-E)

NCQA seeks comments on a proposed new measure for inclusion in HEDIS Measurement Year (MY) 2027.

Follow-Up After Positive Colorectal Cancer Non-Invasive Screening Test (COF-E): Assesses the percentage of persons 45-85 years of age who received a colonoscopy for a positive colorectal cancer non-invasive screening test within 180 days of a positive stool-based test. See measure specification for more information.

The measure is specified for reporting by commercial, Medicaid and Medicare plans, and uses the HEDIS Electronic Clinical Data Systems (ECDS) reporting standard, which uses structured information from claims, electronic health records (EHR), health information exchanges (HIEs)/registries and case management systems. The measure would be separately stratified for ages 45-75 and 76-85.

The United States Preventive Services Task Forces (USPSTF) recommends that adults aged 45 to 75 be screened for colorectal cancer through stool-based or visual-structural tests.[2] The USPSTF recommends that clinicians selectively offer screening for colorectal cancer in adults aged 76 to 85 years. If the test result of a non-invasive colorectal cancer screening test is positive, a colonoscopy test is needed to complete the screening process. Successful cancer detection relies on timely follow-up of abnormal screening results. Delays in follow-up can diminish the value of screening and postpone treatment, increasing both cancer risk and mortality. Evidence indicates that individuals who have a positive FIT stool-based test result but do not complete a follow-up colonoscopy have twice the risk of death compared to those who do.[3]

Throughout 2025, NCQA conducted a literature review, reviewed clinical guidelines, conducted field testing with three partners (one health plan and two health systems) and sought feedback from advisory panels. During field testing, partners reported that the measure specifications are feasible to report on, though one health system had difficulty accessing colonoscopy data; their system documented colonoscopies only as referrals. All partners were able to report on the Medicare and commercial product line. One partner was able to report on the Medicaid product line; however, the reported denominator results were limited in size.

Overall, partners were able to report on completed stool-based lab tests and noted that the data was easy to find, clean and navigate. Partners had slightly more difficulty reporting on stool-based test results—particularly the clinical SNOMED codes. Despite this difficulty, partners were generally able to identify events that occurred in the same record and match lab test results. The two partners that reported on numerator data noted that colonoscopies were feasible to report on. While some challenges were identified related to the current use of standardized codes, all partners were able to map their results to codes in our value sets for their eligible population. Manual abstraction also further validated that the data is stored in the patient health record.

NCQA evaluated multiple follow-up intervals during field testing, including 90, 180, 270 and 365 days. Performance rates showed the greatest improvement between 90 and 180 days. Additionally, evidence indicates increased odds of developing colorectal cancer after 180 days.[4] NCQA proposed a 180-day follow-

[1]HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).
[2] US Preventive Services Task Force, Davidson, K. W., Barry, M. J., Mangione, C. M., Cabana, M., Caughey, A. B., Davis, E. M., Donahue, K. E., Doubeni, C. A., Krist, A. H., Kubik, M., Li, L., Ogedegbe, G., Owens, D. K., Pbert, L., Silverstein, M., Stevermer, J., Tseng, C.-W., & Wong, J. B. (2021). Screening for Colorectal Cancer: US Preventive Services Task Force
[3] Zorzi, M., Battagello, J., Selby, K., Capodaglio, G., Baracco, S., Rizzato, S., Chinellato, E., Guzzinati, S., & Rugge, M. (2022). Non-compliance with colonoscopy after a positive faecal immunochemical test doubles the risk of dying from colorectal cancer. *Gut*, *71*(3), 561–567. https://doi.org/10.1136/gutjnl-2020-322192.
[4] Lee, Y. C., Fann, J. C., Chiang, T. H., Chuang, S. L., Chen, S. L., Chiu, H. M., Yen, A. M., Chiu, S. Y., Hsu, C. Y., Hsu, W. F., Wu, M. S., & Chen, H. H. (2019). Time to Colonoscopy and Risk of Colorectal Cancer in Patients With Positive Results From Fecal Immunochemical Tests. *Clinical gastroenterology and hepatology: the official clinical practice journal of the American Gastroenterological Association*, *17*(7), 1332–1340.e3. https://doi.org/10.1016/j.cgh.2018.10.041

up timeframe for the measure, which was supported by the various Measurement Advisory Panels. Performance rates ranged from 21.7% to 37.5% and varied by product line and age group for the 180-day follow-up timeframe. Overall, performance results suggest room for improvement.

NCQA seeks feedback on the following questions:

1. **Age Stratification.** Should NCQA include the 76-85 age stratification in the measure?
2. **Screening Tests.** Does the *Colorectal Cancer Screening Lab Test Value Set* appropriately capture stool-based tests used for screening only?
3. **Data Capture.** Do you anticipate feasibility in reporting the *Colorectal Cancer Screening Lab Test Value Set* and *Positive Colorectal Cancer Screening Lab Test Result or Finding Value Set*?
4. **Follow-Up Time Frame**. Do you support the proposed 180-day follow-up timeframe?
5. **Measure Support.** Do you support the inclusion of the measure in HEDIS MY 2027?

Supporting documents include the draft measure specification and the evidence workup.

NCQA acknowledges the contributions of the Cancer, Geriatric and Technical Measurement Advisory Panels.

Follow-Up After Positive Colorectal Cancer Non-Invasive Screening Test (COF-E)*

Measure title	Follow-Up After Positive Colorectal Cancer Non-Invasive Screening Test	**Measure ID**	COF-E
Description	The percentage of persons 45–85 years of age who received a colonoscopy for a positive colorectal cancer non-invasive screening test.		
Measurement period	January 1–December 31.		
Copyright and disclaimer notice	**This measure was supported by the Centers for Disease Control and Prevention of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award to the Council of Medical Specialty Societies (CMSS) totaling $1,563,853 with 100 percent funded by CDC/HHS. The contents are those of the authors and do not necessarily represent the official views of nor endorsement, by CDC/HHS or the U.S. Government.* Refer to the complete copyright and disclaimer information at the front of this publication. NCQA website: www.ncqa.org. Submit policy clarification support questions via My NCQA (https://my.ncqa.org).		
Clinical recommendation statement/ rationale	The U.S. Preventive Services Task Force "recommends screening for colorectal cancer in all adults aged 50 to 75 years (A recommendation), all adults aged 45 to 49 years (B recommendation)." The taskforce also recommends that "clinicians selectively offer screening... in adults aged 76 to 85 years (C recommendation)." Potential screening methods include an annual guaiac-based fecal occult blood test (gFOBT), annual fecal immunochemical test (FIT) and multitargeted stool DNA with FIT test (sDNA FIT) every 3 years.		
Citations	U.S. Preventive Services Task Force. 2021. "Screening for Colorectal Cancer: U.S. Preventive Services Task Force Recommendation Statement." *JAMA* 325(19):1965–1977. doi:10.1001/jama.2021.6238		
Characteristics			
Scoring	Proportion.		
Type	Process.		
Product lines	• Commercial. • Medicaid. • Medicare.		
Stratifications	Age as of the index episode start date. • 45–75 years. • 76-85 years.		
Risk adjustment	None.		
Improvement notation	Increased score indicates improvement.		

Guidance	**Data collection methodology:** ECDS. Refer to *General Guideline: Data Collection Methods* for additional information. **Date specificity:** Dates must be specific enough to determine the event occurred in the period being measured. **Which services count?** When using claims, include all paid, suspended, pending and denied claims.
Definitions	
IESD **Intake Period**	Index episode start date. The earliest date during the intake period when a person has a positive stool-based test result. July 1 of the year prior to the measurement period to June 30 of the measurement period.
Initial Population	*Measure item count:* Person. *Attribution basis:* Enrollment. • *Benefits:* Medical. • *Continuous enrollment:* Date of the IESD through 180 days after the IESD. *Allowable gap:* No more than one gap of ≤45 days during the continuous enrollment period. No gaps on the IESD. • *Ages:* 45–85 years of age as of the IESD. *Event:* **Positive stool-based colorectal cancer screening test.** **Step 1.** Identify persons who had a fecal occult blood test or stool DNA with FIT test (Colorectal Cancer Screening Lab Test Value Set) with a positive result (Positive Colorectal Cancer Screening Lab Test Result or Finding Value Set) during the intake period. **Step 2.** Identify the IESD. For each person in step 1, determine the earliest positive stool-based test result. If the person had more than one positive test , include only the first test.
Denominator exclusions	**Persons with a date of death.** Death in the measurement period, identified using data sources determined by the organization. Method and data sources are subject to review during the HEDIS audit. **Persons in hospice or using hospice services.** Persons who use hospice services (Hospice Encounter Value Set; Hospice Intervention Value Set) or elect to use a hospice benefit any time during the measurement period. Organizations that use the Monthly Membership Detail Data File to identify these persons must use only the run date of the file. **Persons receiving palliative care.** Persons receiving palliative care (Palliative Care Assessment Value Set; Palliative Care Encounter Value Set; Palliative Care Intervention Value Set) or who had an encounter for palliative care (ICD-10-CM code Z51.5*) any time during the intake period through the last day of the measurement period.

	Persons who are 66 years of age and older by the last day of the measurement period, with Medicare benefits, enrolled in an institutional SNP (I-SNP) or living long-term in an institution (LTI). • Enrolled in an Institutional SNP (I-SNP) any time during the intake period through the last day of the measurement period. • Living long-term in an institution any time during the intake period through the last day of the measurement period, as identified by the LTI flag in the Monthly Membership Detail Data File. Use the run date of the file to determine if a member had an LTI flag during the intake period through the last day of the measurement period. **Persons 66 years of age or older by the last day of the measurement period, with both frailty and advanced illness.** 1. **Frailty.** At least two indications of frailty (Frailty Device Value Set*; Frailty Diagnosis Value Set*; Frailty Encounter Value Set*; Frailty Symptom Value Set*) with different dates of service during the intake period through the last day of the measurement period. 2. **Advanced illness.** Either of the following during the measurement period or the year prior to the measurement period: • Advanced illness (Advanced Illness Value Set*) on at least two different dates of service. • Dispensed dementia medication (Dementia Medications List). **History of colorectal cancer and/or total colectomy.** Colorectal cancer (Colorectal Cancer and History of Colorectal Cancer Value Set*) or a total colectomy (Total Colectomy Value Set; SNOMEDCT code 119771000119101) any time during the person's history through the day prior to the IESD. **Coding Guidance** *Do not include laboratory claims (claims with POS code 81).
Denominator	The initial population minus denominator exclusions.
Numerator	**Follow-up colonoscopy.** Identify persons who received a follow-up colonoscopy (Colonoscopy Value Set) on the IESD or in the 180-day period after the IESD.
Summary of changes	• This is a first-year measure.

Data element tables

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table COF-E-A-1/2/3: Metadata Elements for Follow-Up After Positive Colorectal Cancer Stool-Based Test

Metric	Age	Data Element	Reporting Instructions
ColonoscopyAfterScreening	45-75	InitialPopulation	For each Stratification
	76-85	Exclusions	For each Stratification
	Total	Denominator	For each Stratification
		Numerator	For each Stratification
		Rate	(Percent)

Follow-Up After Positive Colorectal Cancer Non-Invasive Screening Test (COF-E)

Measure Workup

Topic Overview

Importance and Prevalence

Colorectal cancer (CRC) represents approximately 8% of all new cancer cases; it is the third most commonly diagnosed cancer in the United States and the leading cause of cancer deaths in men under 50 (CDC, 2024). The American Cancer Society estimates over 154,000 new cases of CRC in 2025 (*Colorectal Cancer Facts & Figures 2023-2025*, 2023). CRC is most frequently diagnosed among people 65–74 years of age; however, it is estimated that 10.5% of new CRC cases occur in adults younger than 50 (*Colorectal Cancer Statistics | How Common Is Colorectal Cancer?*, 2025). While CRC rates in older adults have dropped slightly over the past decade, rates have increased by 2.4% per year from 2012 to 2021 in adults younger than 50 (*Colorectal Cancer Statistics | How Common Is Colorectal Cancer?*, 2025).

Routine screening for CRC is an effective method for finding precancerous lesions (polyps) that could later become malignant, and for detecting early cancers that can be more easily and effectively treated. Colonoscopy and stool-based testing such as the fecal immunochemical test (FIT) and multitarget stool DNA test (sDNA) are the most commonly used CRC screening tests in the United States (Seum et al., 2025; Shaukat et al., 2021).

Precancerous polyps can be slow growing and can take up to 10–15 years to develop into CRC; most types of polyps can be identified and removed before developing into a later stage of cancer. Polyps can be removed during the screening colonoscopy or during a colonoscopy performed as follow-up to a positive screening test. For individuals diagnosed with early-stage, or localized, colon cancer between 2014 and 2020, the 5-year relative survival rate was 91% (American Cancer Society, 2026).

Health care disparities	Adherence to screening and timely follow-up has historically been identified as a major driver of racial disparities in CRC incidence and mortality. Inequitable access and persistent systemic barriers to screening, follow-up, and treatment of CRC for Black adults may contribute to the higher rate of CRC incidence and mortality in that population (Carethers, 2021). Follow-up colonoscopy rates remain substantially lower for Black adults compared to White adults (Alagoz et al., 2024). Further, positive stool-based results often do not result in a colonoscopy being ordered unless providers indicate an “urgent” request. How “urgency” for each patient is defined is unknown. Moreover, colonoscopies may be difficult for patients to access. Barriers to colonoscopy may include psychological fears such as pain, discomfort, and worry about outcomes; lack of social support; financial challenges related to insurance or cost; logistical issues like transportation and time; and gaps in provider recommendation or perceived need (Kerrison et al., 2022; Muthukrishnan et al., 2019).
Financial importance and cost-effectiveness	CRC can produce a significant financial burden on patients. Medical spending on CRC in 2020 in the United States was $24.3 billion, including medical services and prescription drugs (CDC, 2025). Primarily, the increasing price of and limited access to cancer treatment drugs have contributed to the overall costs (Leighl et al., 2021). Increased CRC screening and subsequent appropriate follow-up offer an opportunity to reduce costs (Ebner et al., 2023). Preventing later-stage CRC, through screening and timely follow-up, eliminates direct costs associated with treatment, including drugs, doctor visits and hospital stays, as well as indirect costs such as lost productivity from time away from work.

Guidelines for Colorectal Cancer Screening and Follow-Up

CRC screening is recommended by the US Preventive Services Task Force (USPSTF) for individuals 50 – 75 in the general population (US Preventive Services Task Force et al., 2021). This is an A recommendation, which means that the USPSTF found with high certainty that the net benefit is substantial. The USPSTF also recommends screening for CRC in adults 45–49. This is a B recommendation; the USPSTF found with moderate certainty that the net benefit of screening adults in this age range is moderate (US Preventive Services Task Force et al., 2021). Other national guideline organizations such as the Multi-Society Task Force on Colorectal Cancer which is a collaborative group representing the American College of Gastroenterology (ACG), the American Gastroenterological Association (AGA) and the American Society for Gastrointestinal Endoscopy (ASGE), the Centers for Disease Control and Prevention (CDC), National Comprehensive Cancer Network (NCCN) and other national organizations also recommend CRC screening in a general population.

There are several screening methods for CRC, including stool-based tests (i.e. FIT, sRNA, sDNA, sDNA FIT), blood-based biomarker tests, and visual structural tests (i.e. colonoscopy, CT colonography, flexible sigmoidoscopy); the risks and benefits of different screening methods vary. The USPSTF evaluated screening tests and their effectiveness in reducing the incidence of and mortality from CRC, or all-cause mortality, harms associated with each test, and their ability to detect adenomatous polyps, advanced adenomas and CRC. The USPSTF recommends the use of FIT, sDNA and sDNA FIT stool-based tests and visual-structural tests for screening (US Preventive Services Task Force et al., 2021). See Table 1. The USPSTF recommends that maximizing the total number of persons screened will have the greatest effect on reducing CRC deaths. Allowing various methods for early-stage screening and offering choice in screening strategies may further this goal. While individuals who have a family history of colon cancer are typically referred to a colonoscopy, rather than a stool-based screener, the type of stool-based screener ordered for average risk populations is not generally differentiated.

While the NCCN guidelines include both sRNA stool-based and blood-based tests as an option for average-risk individuals (Ness, et al., 2025) , the USPSTF and other guideline agencies, have not yet endorsed these tests in official recommendations. NCCN included these methods noting that the best screening is the one that gets completed by the patient, despite lower evidence and being less cost-effective for the patient (Ness, et al., 2025).

Table 1 summarizes recommendations from the USPSTF, outlining the screening methods that may be offered to individuals, recommended screening intervals and follow-up guidance. Notably, while most organizations agree a follow-up colonoscopy should be performed for screenings yielding a positive test result, there are no formal recommendations for time to follow-up completion. A list of CRC screening and follow-up guidelines from national organizations guidelines can be found in Appendix A.

Table 1. Summary of USPSTF Included Screening Methods and Follow-Up Guideline Recommendations

Screening Type	Screening Method	Screening Recommendation	Results	Recommended Process for Follow-Up
Stool Based Tests	Fecal occult blood test (FOBT)[1]	Annually	Negative, no blood detected	No follow up needed
			Positive, blood detected	Follow-up Colonoscopy
	Stool DNA (sDNA) with FIT test[1]	1 to 3 years	Negative, no DNA/blood detected	No follow up needed
			Positive, DNA/blood detected	Follow-up Colonoscopy
Visual-Structural Exams	Flexible sigmoidoscopy[1]	Every 5 years	Negative, no abnormalities	No follow up needed
			Positive, polyps or abnormal tissue found	Follow-up Colonoscopy
	CT Colonography[1]	Every 5 years	Negative	No follow up needed
			Positive	Follow-up Colonoscopy

	Colonoscopy[1]	Every 10 years	Negative, no polyps found	No follow-up needed
			Positive, polyps found	Follow-up Colonoscopy

[1] US Preventive Services Task Force. (2021). Screening for Colorectal Cancer: US Preventive Services Task Force Recommendation Statement. *JAMA*, *325*(19), 1965–1977. https://doi.org/10.1001/jama.2021.6238

Opportunities for Improvement and Other Considerations

Despite evidence that CRC screening can reduce both disease incidence and mortality, screening rates remain suboptimal. HEDIS measurement year 2023 performance rates indicate that 60% of commercial, 38% of Medicaid, and 70% of Medicare plan members received an appropriate screening for CRC, indicating room for improvement.

Likewise, while timely follow-up care is critical for life-saving intervention, follow-up colonoscopy completion rates have varied from 24% to 75% (Subramanian et al., 2024). Interventions targeted at increasing screening uptake should focus on timely follow-up care as well. Research demonstrates individuals who had a positive FIT result but did not have a follow-up colonoscopy were twice as likely to die as those who did have a follow-up colonoscopy (Zorzi et al., 2022).

Related measures

A review of the landscape showed two existing follow-up measures for CRC screening. One measure was developed by the American Medical Group Association and assesses the rates of adults aged 46 to 75 years who received a colonoscopy within 6 months of receiving an abnormal result from an initial stool-based CRC screening test (Ciemens et al., 2024). The other existing measure was developed by Brigham & Women's Hospital assesses the percentage of patients aged 45 to 75 years with at least one positive stool-based colorectal cancer screening test who completed a colonoscopy within 180 days (Partnership for Quality Measurement, 2025). While these measures were developed for the health system level, the use of both claims and clinical data provides a suitable comparison for a plan-level quality measure.

Measure concept risks & challenges

Despite clear guidance on routine screening for CRC and completing a colonoscopy as follow-up to a positive screening test, no guidelines indicate an appropriate time frame for follow up. Given the consequences of failure to follow up, assessing the quality of follow-up care relies on specifying a time frame. While there is limited guidance on what is considered timely follow-up care, several studies have demonstrated that odds for later developing CRC increase for follow-up colonoscopies completed at 6 – 12 months (Beshara et al., 2020; Forbes et al., 2021; Lee et al., 2019).

Digital Considerations

As part of NCQA's strategic transition to a fully digital quality measurement portfolio, we conducted a feasibility assessment to inform eventual digital measure implementation. The assessment evaluates the measure's intent and associated clinical concepts within a digital framework.

Overall, the measure's preliminary post-testing clinical concepts show medium digital feasibility. The main challenge remains utilization of available terminology standards and ensuring data availability and accessibility for stool-based test results and colonoscopies. While test sites could provide results, they had to manually map local codes to standardized codes for stool-based results. Existing standards lack full alignment for capturing stool-based test results in coded, discrete fields, highlighting an industry-wide need for standardization. Test partners aggregated stool-based results from multiple sources, encountering data issues that may affect accuracy and availability. Clinical workflows for capturing stool-based tests and colonoscopies were generally feasible but lacked integration for stool-based results. Refer to Appendix B for details.

References

Alagoz, O., May, F. P., Doubeni, C. A., Fendrick, A. M., Vahdat, V., Estes, C., Ellis, T., Limburg, P. J., & Brooks, D. (2024). Impact of racial disparities in follow-up and quality of colonoscopy on colorectal cancer outcomes. *JNCI: Journal of the National Cancer Institute*, *116*(11), 1807–1816. https://doi.org/10.1093/jnci/djae140

American Cancer Society. (2026). *Survival Rates for Colorectal Cancer*. American Cancer Society. https://www.cancer.org/cancer/types/colon-rectal-cancer/detection-diagnosis-staging/survival-rates.html

Beshara, A., Ahoroni, M., Comanester, D., Vilkin, A., Boltin, D., Dotan, I., Niv, Y., Cohen, A. D., & Levi, Z. (2020). Association between time to colonoscopy after a positive guaiac fecal test result and risk of colorectal cancer and advanced stage disease at diagnosis. *International Journal of Cancer*, *146*(6), 1532–1540. https://doi.org/10.1002/ijc.32497

Carethers, J. M. (2021). Racial and ethnic disparities in colorectal cancer incidence and mortality. In *Advances in Cancer Research* (Vol. 151, pp. 197–229). Elsevier. https://doi.org/10.1016/bs.acr.2021.02.007

CDC. (2024, October 17). *Screening for Colorectal Cancer*. Colorectal Cancer. https://www.cdc.gov/colorectal-cancer/screening/index.html

CDC. (2025, August 18). *Health and Economic Benefits of Colorectal Cancer Interventions*. National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). https://www.cdc.gov/nccdphp/priorities/colorectal-cancer.html

Ciemens et al., E. (2024). Development of a Follow-Up Measure to Ensure Complete Screening for Colorectal Cancer. *JAMA*, *7*(3). https://pmc.ncbi.nlm.nih.gov/articles/PMC10964113/

Colorectal Cancer Facts & Figures 2023-2025. (2023). https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/colorectal-cancer-facts-and-figures/colorectal-cancer-facts-and-figures-2023.pdf

Colorectal Cancer Statistics | How Common Is Colorectal Cancer? (2025, April 28). https://www.cancer.org/cancer/types/colon-rectal-cancer/about/key-statistics.html

Ebner et al., D. (2023). *The cost-effectiveness of non-invasive stool-based colorectal cancer screening offerings from age 45 for a commercial and medicare population*. https://pubmed.ncbi.nlm.nih.gov/37752872/

Forbes, N., Hilsden, R. J., Martel, M., Ruan, Y., Dube, C., Rostom, A., Shorr, R., Menard, C., Brenner, D. R., Barkun, A. N., & Heitman, S. J. (2021). Association Between Time to Colonoscopy After Positive Fecal Testing and Colorectal Cancer Outcomes: A Systematic Review. *Clinical Gastroenterology and Hepatology: The Official Clinical Practice Journal of the American Gastroenterological Association*, *19*(7), 1344-1354.e8. https://doi.org/10.1016/j.cgh.2020.09.048

Gupta, S., Lieberman, D., Anderson, J. C., Burke, C. A., Dominitz, J. A., Kaltenbach, T., Robertson, D. J., Shaukat, A., Syngal, S., & Rex, D. K. (2020). Recommendations for Follow-Up After Colonoscopy and Polypectomy: A Consensus Update by the US Multi-Society Task Force on Colorectal Cancer. *American Journal of Gastroenterology*, *115*(3), 415–434. https://doi.org/10.14309/ajg.0000000000000544

Kerrison, R. S., Travis, E., Dobson, C., Whitaker, K. L., Rees, C. J., Duffy, S. W., & von Wagner, C. (2022). Barriers and facilitators to colonoscopy following fecal immunochemical test screening for colorectal cancer: A key informant interview study. *Patient Education and Counseling*, *105*(6), 1652–1662. https://doi.org/10.1016/j.pec.2021.09.022

Lee, Y.-C., Fann, J. C.-Y., Chiang, T.-H., Chuang, S.-L., Chen, S. L.-S., Chiu, H.-M., Yen, A. M.-F., Chiu, S. Y.-H., Hsu, C.-Y., Hsu, W.-F., Wu, M.-S., & Chen, H.-H. (2019). Time to Colonoscopy and Risk of Colorectal Cancer in Patients With Positive Results From Fecal Immunochemical Tests. *Clinical Gastroenterology and Hepatology: The Official Clinical Practice Journal of the American Gastroenterological Association*, *17*(7), 1332-1340.e3. https://doi.org/10.1016/j.cgh.2018.10.041

Leighl, N. B., Nirmalakumar, S., Ezeife, D. A., & Gyawali, B. (2021). An Arm and a Leg: The Rising Cost of Cancer Drugs and Impact on Access. *American Society of Clinical Oncology Educational Book*, (41), e1–e12. https://doi.org/10.1200/EDBK_100028

Muthukrishnan, M., Arnold, L. D., & James, A. S. (2019). Patients' self-reported barriers to colon cancer screening in federally qualified health center settings. *Preventive Medicine Reports*, *15*, 100896. https://doi.org/10.1016/j.pmedr.2019.100896

Ness, et al. (2025, June). *NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines ®) Colorectal Cancer Screening*. National Comprehensive Cancer Network.

Partnership for Quality Measurement. (2025, March 14). *Rate of Timely Follow-up on Positive Stool-based Tests for Colorectal Cancer Detection*. Batelle. https://www.p4qm.org/measures/4705e

Patel, S. G., May, F. P., Anderson, J. C., Burke, C. A., Dominitz, J. A., Gross, S. A., Jacobson, B. C., Shaukat, A., & Robertson, D. J. (2021). Updates on Age to Start and Stop Colorectal Cancer Screening: Recommendations From the U.S. Multi-Society Task Force on Colorectal Cancer. *The American Journal of GASTROENTEROLOGY*, *117*.

Rex, D. K., Boland, R. C., Dominitz, J. A., Giardiello, F. M., Johnson, D. A., Kaltenbach, T., Levin, T. R., Lieberman, D., & Robertson, D. J. (2017). Colorectal Cancer Screening: Recommendations for Physicians and Patients from the U.S. Multi-Society Task Force on Colorectal Cancer. *American Journal of Gastroenterology*, *112*(7), 1016–1030. https://doi.org/10.1038/ajg.2017.174

Seum, T., Niedermaier, T., Heisser, T., Hoffmeister, M., & Brenner, H. (2025). Next-Generation Multitarget Stool DNA vs Fecal Immunochemical Test in Colorectal Cancer Screening. *JAMA Internal Medicine*, *185*(1), 110. https://doi.org/10.1001/jamainternmed.2024.6149

Shaukat, A., Kahi, C. J., Burke, C. A., Rabeneck, L., Sauer, B. G., & Rex, D. K. (2021). ACG Clinical Guidelines: Colorectal Cancer Screening 2021. *American Journal of Gastroenterology*, *116*(3), 458–479. https://doi.org/10.14309/ajg.0000000000001122

Subramanian, S., Tangka, F. K. L., Hoover, S., Mathews, A., Redwood, D., Smayda, L., Ruiz, E., Silva, R., Brenton, V., McElroy, J. A., Lusk, B., & Eason, S. (2024). Optimizing tracking and completion of follow-up colonoscopy after abnormal stool tests at health systems participating in the Centers for Disease Control and Prevention's Colorectal Cancer Control Program. *Cancer Causes & Control*, *35*(11), 1467–1476. https://doi.org/10.1007/s10552-024-01898-w

US Preventive Services Task Force, Davidson, K. W., Barry, M. J., Mangione, C. M., Cabana, M., Caughey, A. B., Davis, E. M., Donahue, K. E., Doubeni, C. A., Krist, A. H., Kubik, M., Li, L., Ogedegbe, G., Owens, D. K., Pbert, L., Silverstein, M., Stevermer, J., Tseng, C.-W., & Wong, J. B. (2021). Screening for Colorectal Cancer: US Preventive Services Task Force Recommendation Statement. *JAMA*, *325*(19), 1965. https://doi.org/10.1001/jama.2021.6238

Wolf, A. M. D., Fontham, E. T. H., Church, T. R., Flowers, C. R., Guerra, C. E., LaMonte, S. J., Etzioni, R., McKenna, M. T., Oeffinger, K. C., Shih, Y. T., Walter, L. C., Andrews, K. S., Brawley, O. W., Brooks, D., Fedewa, S. A., Manassaram-Baptiste, D., Siegel, R. L., Wender, R. C., & Smith, R. A. (2018). Colorectal cancer screening for average-risk adults: 2018 guideline update from the American Cancer Society. *CA: A Cancer Journal for Clinicians*, *68*(4), 250–281. https://doi.org/10.3322/caac.21457

Zorzi, M., Battagello, J., Selby, K., Capodaglio, G., Baracco, S., Rizzato, S., Chinellato, E., Guzzinati, S., & Rugge, M. (2022). Non-compliance with colonoscopy after a positive faecal immunochemical test doubles the risk of dying from colorectal cancer. *Gut*, *71*(3), 561–567. https://doi.org/10.1136/gutjnl-2020-322192

Appendix A: Specific Guideline Recommendations

Table 1. Clinical Practice Guidelines for Colorectal Cancer Screening and Follow Up by Screening Method and Organization

Organization or Society	Recommended Age for Screening	Screening Method	Screening Recommendation	Results	Follow Up Recommendations for Each Test Result
United States Preventive Task Force (US Preventive Services Task Force et al., 2021)	45-85	FOBT	1 year	Negative	Testing every 1-3 years
				Inconclusive	-
				Positive	Follow-up colonoscopy
		sDNA w/FIT	1-3 year	Negative	Testing every 1-3 years
				Inconclusive	-
				Positive	Follow-up colonoscopy
		Flex Sigmoidoscopy	5 year	Negative	Follow-up colonoscopy in 10 years + FIT every year
				Inconclusive	-
				Positive	Follow-Up Colonoscopy
		CT Colonography	5 year	Negative	Follow-Up in 5 years
				Inconclusive	-
				Positive	Follow-Up Colonoscopy
		Colonoscopy	5 year	Negative	Follow-Up in 10 years
				Inconclusive	-
				Positive	Follow-Up Colonoscopy
Multi-Society Task Force (Gupta et al., 2020; Patel et al., 2021; Rex et al., 2017)	45-75	FOBT	1 year	Negative	Follow-up in 1 years
				Inconclusive	-
				Positive	-
		sDNA w/FIT	1 year sDNA w/FIT, sDNA alone is every 3 years	Negative	Follow-up in 1 years
				Inconclusive	-
				Positive	-

		Flex Sigmoidoscopy	5 year	Negative	Follow-up in 5 years or every 10 years with FIT every 1 year
				Inconclusive	-
				Positive	-
		CT Colonography	5 year	Negative	Follow-up in 5 years
				Inconclusive	-
				Positive	-
		Colonoscopy	10 years	Negative	Follow-up In 10 years
				Inconclusive	-
				Positive	-
American College of Gastroenterology (Shaukat et al., 2021)	45-75	FOBT	1 year	Negative	Follow-up in 1 years
				Inconclusive	-
				Positive	-
		sDNA w/FIT	1 year	Negative	Follow-up in 1 years
				Inconclusive	-
				Positive	-
		Flex Sigmoidoscopy	5 year	Negative	Follow-up in 5 years or every 10 years with FIT every 1 year
				Inconclusive	-
				Positive	-
		CT Colonography	5 year	Negative	Follow-up in 5 years
				Inconclusive	-
				Positive	-
		Colonoscopy	10 years	Negative	Follow-up In 10 years
				Inconclusive	-
				Positive	-
Centers for Disease Control (CDC, 2024)	45-75	FOBT	1 year	Negative	Follow-up in 1 years
				Inconclusive	-
				Positive	-
		sDNA w/FIT	1 year, sDNA alone is every 1-3 years	Negative	Follow-up in 1 years
				Inconclusive	-

				Positive	-
		Flex Sigmoidoscopy	5 year	Negative	Follow-up in 5 years or every 10 years with FIT every 1 year
				Inconclusive	-
				Positive	-
		CT Colonography	5 year	Negative	Follow-up in 5 years
				Inconclusive	-
				Positive	-
		Colonoscopy	10 years	Negative	Follow-up In 10 years
				Inconclusive	-
				Positive	-
American Cancer Society (Wolf et al., 2018)	45-75	FOBT	1 year	Negative	Testing every 1-3 years
				Inconclusive	-
				Positive	Follow-up colonoscopy
		sDNA w/FIT	1-3 year	Negative	Testing every 1-3 years
				Inconclusive	-
				Positive	Follow-up colonoscopy
		Flex Sigmoidoscopy	5 year	Negative	Follow-up colonoscopy in 10 years + FIT every year
				Inconclusive	-
				Positive	Physician Follow-Up
		CT Colonography	5 year	Negative	Follow-Up in 5 years
				Inconclusive	-
				Positive	Physician Follow-Up
		Colonoscopy	5 year	Negative	Follow-Up in 10 years
				Inconclusive	-
				Positive	Physician Follow-Up
National Comprehensive Cancer Network (NCCN, 2025)	45-75	FOBT or FIT	1 year	Negative	Follow-up in 1 year
				Inconclusive	-
				Positive	Follow-up colonoscopy within 9 months

		sDNA w/FIT	3 years	Negative	Follow-up in 3 years
				Inconclusive	-
				Positive	Follow-up colonoscopy within 9 months
		sRNA	3 years	Positive	Follow-up colonoscopy within 9 months
				Inconclusive	-
				Negative	Follow-up in 3 years
		Flex Sigmoidoscopy	5 years	Negative	Follow-up in 5 years
				Inconclusive	-
				Positive	Follow-up colonoscopy within 9 months
		CT Colonography	5 years	Negative	Follow-up in 5 years
				Inconclusive	-
				Positive	Follow-up colonoscopy within 9 months
		Colonoscopy	10 years	Negative	Follow-up in 10 years
				Inconclusive	-
				Positive	Physician follow-up
		Blood-Based	3 years	Positive	Follow-up colonoscopy within 9 months
				Inconclusive	-
				Negative	Follow-up in 3 years

Appendix B: Digital Feasibility

As part of NCQA's strategic transition to a fully digital quality measurement portfolio, we conducted a feasibility assessment prior to field testing to evaluate the measure's intent and associated clinical concepts within a digital framework. The primary objectives were to determine whether the clinical concepts could be represented using standardized data models and nationally recognized terminologies, and to assess the availability of discrete, structured data necessary to support accurate and reliable digital measurement.

Data and Terminology Standards

NCQA's digital quality measures are built on the Fast Healthcare Interoperability Resources (FHIR®) standard, developed by HL7®, to support interoperable exchange of electronic health data. In the U.S., FHIR US Core profiles provide detailed implementation guidance aligned with the United States Core Data for Interoperability (USCDI), a federal standard maintained by ASTP (formerly ONC). USCDI defines essential data classes and elements, while FHIR US Core specifies how to represent and exchange them. Additionally, NCQA uses nationally recognized clinical terminologies (e.g., ICD-10, CPT, LOINC) to define value sets, ensuring standardized interpretation and representation of clinical data in quality measures.

Digital Feasibility Assessment

The digital feasibility assessment is conducted at two stages during the measure development process, pre-testing and post-testing, summarized below. This assessment examines each measure concept across three high-level categories:

- **Data Standards & Terminology**. Evaluates the alignment with national standards (FHIR, USCDI) and recognized terminology standards (i.e., LOINC, ICD).
- **Clinical Workflow & Data Accuracy**. Evaluates whether the concept aligns with standard clinical practice and the likelihood that the data will be accurate, complete and reliable.
- **Data Availability & Structure**. Assesses if the data is likely to be present, in structured fields, and accessible to health plans.

The digital feasibility assessment (shown in Figure A-1 and A-2) rate each concept from high to low. High = Feasible with no concerns, Medium = Feasible with some concerns (with a potential mitigation strategy); Low = Low feasibility with concerns (with little to no mitigation strategy for the current development cycle).

Post-Testing Feasibility Findings.

> **Summary:** Overall, the measure's preliminary post-testing clinical concepts show medium digital feasibility. The main challenge remains utilization of available terminology standards and ensuring data availability and accessibility for stool-based test results and colonoscopies. While test sites could provide results, they had to manually map local codes to standardized codes for stool-based results. Existing standards lack full alignment for capturing stool-based test results in coded, discrete fields, highlighting an industry-wide need for standardization. Test partners aggregated stool-based results from multiple sources, encountering data issues that may affect accuracy and availability. Clinical workflows for capturing stool-based tests and colonoscopies were generally feasible but lacked integration for stool-based results.

Data Standards & Terminology. All the clinical concepts used in the measure can be modeled in the FHIR data standard. Clinical concepts can be represented using nationally recognized terminologies including Logical Observation Identifiers Name and Codes (LOINC), Current Procedural Terminology (CPT), International Statistical Classification of Disease and Related health

Problems, 10th Revision (ICD-10), and Systematized Medical Nomenclature for Medicine (SNOMED). However, SNOMED codes for screening results are not consistently utilized.

Clinical Workflow & Data Accuracy. There are some workflow feasibility challenges related to capturing stool-based results in discrete data fields but generally results were available and required manual mapping for reporting which could impact the accuracy of the data.

Data Availability & Structure. There are challenges related to availability of data in structured fields for stool-based screening results to identify positive findings. Screening results data will all be found in clinical systems but health plans may not currently have access to all the data.

Figure A-2: Post-Testing Digital Concept Feasibility Assessment

Score key: H = High, M = Medium, L = Low						
	Data Standards & Terminology		**Clinical Workflow & Data Accuracy**		**Data Availability & Structure**	
Clinical Concept	**Data Standards**	**Terminology Standards**	**Workflow**	**Data Accuracy**	**Data Availability**	**Data Accessibility**
Stool-Based Test	H	H	H	H	H	H
Stool-Based Test Result	H	H	H	M	M	M
Colonoscopy	H	H	H	H	H	H
History of Colorectal Cancer	H	H	H	H	H	H
History of Total Colectomy	H	H	H	H	H	H

Pre-Testing Feasibility Findings.

> **Summary:** Overall, the clinical concepts used in the measure demonstrate medium feasibility. Stool-based tests show high feasibility, but implementation may be limited by inconsistent structured data and reliance on unstructured formats necessary to report stool-based test results. The feasibility assessment for the stool-based test concepts will be updated after current field testing.

Data Standards & Terminology. The measure demonstrates high feasibility for stool-based screening tests—such as gFOBT, FIT, and sDNA—thanks to strong alignment with existing data standards like FHIR, US Core, and HEDIS profiles. These tests and their results are well-supported by standardized terminology, including LOINC and SNOMED codes. Implementation is particularly challenging because of the absence of standard clinical terminologies needed in this measure (i.e. LOINC code and SNOMED codes), which limits interoperability and automated reporting. Overall, while most clinical concepts in the measure can be modeled using FHIR, variability in documentation and coding practices across providers and health plans continues to hinder consistent implementation and data exchange.

Clinical Workflow & Data Accuracy. Stool-based screening tests generally align well with standard clinical workflows, and when documented in structured formats, the data tends to be accurate and reliable. A significant challenge for stool-based test types is the frequent reliance on unstructured formats—such as PDFs and narrative text—which limits the reliability and usability of the data. Additionally, variability in stool-based test results (i.e.SNOMED) coding practices across systems introduces further inconsistencies, making it difficult to ensure uniform data quality and integration.

Data Availability & Structure. Stool-based screening tests generally exhibit high data availability in structured fields, making them accessible to health plans when properly coded. At the system level,

implementation feasibility is considered medium due to inconsistent use of structured data fields, needed for test results, across providers and systems. However, there are clear opportunities to enhance data structure and availability by developing and adopting standardized codes that support consistent documentation and interoperability.

Figure A-1: Pre-Testing Digital Concept Feasibility Assessment

Score key: H = High, M = Medium, L = Low						
	Data Standards & Terminology		**Clinical Workflow & Data Accuracy**		**Data Availability & Structure**	
Clinical Concept	**Data Standards**	**Terminology Standards**	**Workflow**	**Data Accuracy**	**Data Availability**	**Data Accessibility**
Stool-Based Test	H	H	H	H	H	H
Stool-Based Test Result	H	H	M	M	M	M
Colonoscopy	H	H	H	H	H	H
History of Colorectal Cancer	H	H	H	H	H	H
History of Total Colectomy	H	H	H	H	H	H

Proposed New Measure for HEDIS®[1] MY 2027: Intimate Partner Violence Screening and Follow-Up (PVS-E)

NCQA seeks comments on the proposed new HEDIS *Intimate Partner Violence Screening and Follow-Up* (PVS-E) measure for MY 2027.

Intimate partner violence is a prevalent public health issue affecting every demographic group, with approximately 1 in 4 women and 1 in 7 men experiencing intimate partner violence in their lifetime in the US.[2] Screening and follow-up for intimate partner violence provide a standardized way for health care teams to identify safety concerns and determine when additional assessment, support or referrals are needed. Screening and follow-up for intimate partner violence are supported by US clinical guidelines, including the United States Preventive Services Task Force and The Women's Preventive Services Initiative.

The proposed PVS-E measure assesses persons 12–64 years of age who met the following criteria:

1. *Intimate Partner Violence Screening:* The percentage of persons screened for intimate partner violence using a standardized instrument.
2. *Follow-Up on Positive Screen:* The percentage of persons receiving follow-up care within 7 days of a positive intimate partner violence screen finding.

Field testing and NCQA's Digital Feasibility Assessment demonstrated that the measure is feasible to implement. Advisory panelists and subject matter experts contributed guidance throughout development and expressed support for the measure.

NCQA seeks feedback on the following questions:

1. What is the best approach to integrating the CUES framework (which includes confidentiality, universal education and support) in the quality measure?
2. What follow-up time window should be specified (7 or 30 days) at the health plan level?
3. Should we consider including people with a date of death to help identify missed opportunities for intimate partner violence screening and follow-up?
4. Testing showed very small sample sizes for the Medicare population. Should we consider expanding the current measure to individuals aged 12-64 within the Medicare product line?
5. Are there unintended consequences we should consider, particularly related to the disclosure of patient sensitive information and the subsequent documentation in the clinical record?

Supporting documents include the draft measure specification and evidence workup.

NCQA acknowledges the contributions of the Health Equity Expert Workgroup, the Technical Measurement Advisory Panel and Intimate Partner Violence subject matter experts.

[1]HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).
[2] Stylianou, M.A. *Economic Abuse Within Intimate Partner Violence: A Review of the Literature.* Violence and Victims. January 2018. https://connect.springerpub.com/content/sgrvv/33/1/3.full.pdf

Intimate Partner Violence Screening and Follow-Up (PVS-E)

Measure title	Intimate Partner Violence Screening and Follow-Up	**Measure ID**	PVS-E
Description	The percentage of persons 12 - 64 years of age who met the following criteria: • *Intimate Partner Violence Screening*: The percentage of persons who were screened for intimate partner violence using a standardized instrument. • *Follow-Up on Positive Screen:* The percentage of persons who received follow-up care within 7 days of a positive intimate partner violence screen finding.		
Measurement period	January 1–December 31.		
Copyright and disclaimer notice	**Developed with financial support from the Blue Shield of California Foundation.* Refer to the complete copyright and disclaimer information at the front of this publication. NCQA website: www.ncqa.org. Submit policy clarification support questions via My NCQA (https://my.ncqa.org).		
Clinical recommendation statement/ rationale	The U.S. Preventive Services Task Force (USPSTF) recommends screening for intimate partner violence among adolescents 12–18 years and the general adult population, including pregnant and postpartum women. (B recommendation) The USPSTF also recommends that screening be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment and appropriate follow-up. (B recommendation) Futures Without Violence, a leading anti-violence advocacy organization that developed the CUES (Confidentiality, Universal Education, Empowerment, and Support) approach, recommends the CUES framework as a best-practice model for screening and responding to intimate partner violence (IPV) in clinical settings. CUES promotes universal education, ensuring that all patients receive brief, supportive messages about healthy relationships and IPV. This approach incorporates safe, confidential conversations and provides patients with referral resources. CUES has been shown to improve patient engagement, reduce stigma, and support early intervention for IPV. The Women's Preventive Services Initiative, a federally supported collaborative program led by The American College of Obstetricians and Gynecologists (ACOG), advises conducting yearly screenings for interpersonal and domestic violence among adolescents and women; and referring to initial intervention services when needed (intervention services include, but are not limited to, education, harm reduction strategies, referral to support services, and counseling). The National Academies of Sciences, in collaboration with the US Health and Human Services Department, Essential Health Care Services for Intimate Partner Violence Recommendation 1: The committee recommends that the Health Resources and Services Administration and all U.S. health care systems classify the following as essential health care services related to intimate partner violence (IPV): Universal IPV screening and inquiry, Universal IPV education, Safety planning, etc.		

Citations	US Preventive Services Task Force et al. "Screening for Intimate Partner Violence, Elder Abuse, and Abuse of Vulnerable Adults: US Preventive Services Task Force Final Recommendation Statement." *JAMA* 329,16 (2018):167–87. Futures Without Violence. Educate Health Providers on How to Respond to Intimate Partner Violence. National Health Resource Center on Domestic Violence. (2023). https://ipvhealth.org/wp-content/uploads/2024/04/Evidence-behind-CUES_2024.pdf Women's Preventive Services Initiative (WPSI) "Interpersonal and domestic violence recommendations." ACOG Foundation. (2024). https://www.womenspreventivehealth.org/recommendations/interpersonal-and-domestic-violence/ National Academies of Sciences, Engineering, and Medicine (NASEM). "Essential Health Care Services Addressing Intimate Partner Violence." Washington, DC: The National Academies Press. (2024): Chapter 5, 124-129. https://doi.org/10.17226/27425.
Characteristics	
Scoring	Proportion.
Type	Process.
Product lines	• Commercial. • Medicaid.
Stratifications	Age as of the start of the measurement period. • 12–17 years. • 18–44 years. • 45-64 years. Administrative Gender. • Administrative Gender of Female (AdministrativeGender code female). • Administrative Gender of Male (AdministrativeGender code male). • Other. • Unknown.
Risk adjustment	None.
Improvement notation	Increased score indicates improvement.
Guidance	**Data collection methodology:** ECDS. Refer to the *General Guideline: Data Collection Methods* for additional information. **Date specificity:** Dates must be specific enough to determine that the event occurred in the period being measured. **Which services count?** When using claims, include all paid, suspended, pending and denied claims.

Definitions

Intimate partner violence screening instrument

A standard assessment instrument normalized and validated for the appropriate patient population. Eligible screening instruments and eligible screening questions with thresholds for positive findings are outlined in the Table 1 and Table 2 below. Screening for IPV using the HITS (Hurt, Insult, Threat, Scream) or Accountable health communities (AHC) health-related social needs screening (HRSN) tools must be administered in entirety and have a Total Safety Score. Answers to any one or more of the IPV screening questions in Table 2 can be counted for IPV screening.

Table 1: Intimate Partner Violence Complete Screening Instruments

Screening Tool	Total Safety Score LOINC Code	Positive Score
HITS (Hurt, Insult, Threat, Scream)	95614-4	≥10

Table 2: Intimate Partner Violence Screening Questions

Instruments	Questions	Question LOINC Codes	Positive Finding
HARK (Humiliation, Afraid, Rape, Kick)	Within the last year, have you been humiliated or emotionally abused in other ways by your partner or ex-partner?	76500-8	Yes LA33-6
HARK (Humiliation, Afraid, Rape, Kick)	Within the last year, have you been afraid of your partner or ex- partner?	76501-6	Yes LA33-6
HARK (Humiliation, Afraid, Rape, Kick)	Within the last year, have you been raped or forced to have any kind of sexual activity by your partner or ex-partner?	76502-4	Yes LA33-6
HARK (Humiliation, Afraid, Rape, Kick)	Within the last year have you been kicked, hit, slapped, or otherwise physically hurt by your partner or ex-partner?	76503-2	Yes LA33-6
Intimate Partner Violence 4 (IPV-4)	In the past year, did a current or former partner make you feel cut off from others, trapped, or controlled in a way you did not like?	106924-4	Yes LA33-6
Intimate Partner Violence 4 (IPV-4)	In the past year, did a current or former partner make you feel afraid that they might try to hurt you in some way?	106923-6	Yes LA33-6
Intimate Partner Violence 4 (IPV-4)	In the past year, did a current or former partner pressure or force you to do something sexual that you didn't want to do?	106926-9	LA33-6
Intimate Partner Violence 4 (IPV-4)	In the past year, did a current or former partner hit, kick, punch, slap, shove, or otherwise physically hurt you?	106927-7	Yes LA33-6

Initial population	*Measure item count:* Person. *Attribution:* Enrollment. • *Benefit:* Medical. • *Continuous enrollment:* The measurement period. • *Allowable gap:* No more than one gap of ≤45 days during the measurement period. *Ages:* 12 - 64 years of age and older at the start of the measurement period. *Event:* None.
Denominator Exclusions	**Persons with a date of death.** Death in the measurement period, identified using data sources determined by the organization. Method and data sources are subject to review during the HEDIS audit. **Persons in hospice or using hospice services.** Persons who use hospice services (Hospice Encounter Value Set; Hospice Intervention Value Set) or elect to use a hospice benefit any time during the measurement period. Organizations that use the Monthly Membership Detail Data File to identify these persons must use only the run date of the file.
Denominator	**Denominator 1:** The initial population minus denominator exclusions. **Denominator 2:** Persons from numerator 1 with a positive finding or intimate partner violence between January 1 and December 24 of the measurement period.
Numerator	**Numerator 1—Intimate partner violence screening.** Persons in denominator 1 with a documented result for intimate partner violence screening performed between January 1 and December 24 of the measurement period. **Numerator 2—Follow-up on positive screen.** Persons in denominator 2 who received follow-up care (Intimate Partner Violence Procedures Value Set) on or up to 7 days after the date of the first positive finding. ***Note**: Follow-up care may include assistance, counseling, coordination, education, evaluation of eligibility, provision or referral.*
Summary of changes	• This is a first-year measure.

Data element tables

Organizations that submit data to NCQA must provide the following data elements in a specified file.

Table PVS-E-1/2/3: Data Elements for Intimate Partner Violence Screening and Follow-Up

Metric	Age	Administrative Gender	Data Element	Reporting Instructions
Screening	12-17	Male	InitialPopulation	For each stratification, repeat per metric
FollowUp	18-44	Female	Exclusions	For each stratification, repeat per metric
	45-64	Other	Denominator	For each Metric and Stratification
	Total	Unknown	Numerator	For each Metric and Stratification
		Total	Rate	(Percent)

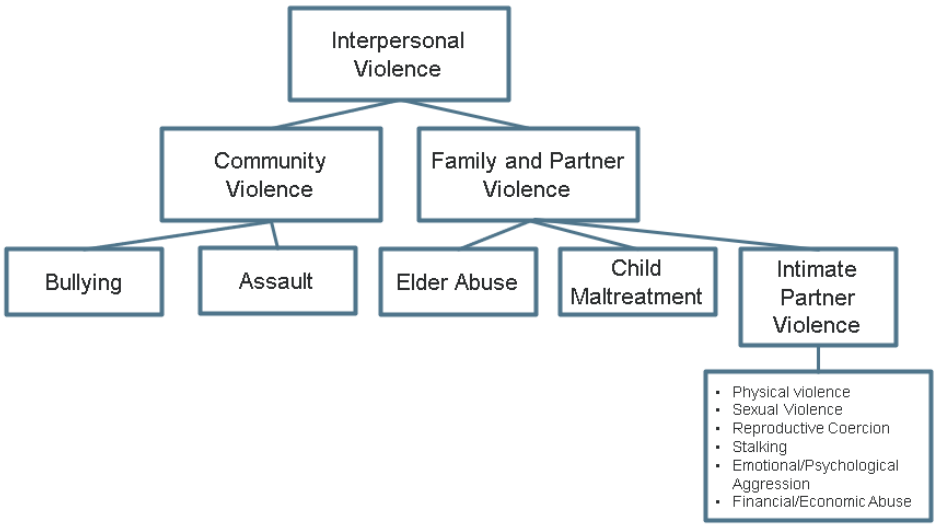
Intimate Partner Violence Screening and Follow-Up (PVS-E)
Measure Workup

Topic Overview

Intimate partner violence (IPV) is a subset of interpersonal violence. Interpersonal violence involves the use of physical force or power, and may be physical, sexual or psychological (Mercy et al., 2017). It includes family or partner violence and community violence, and Figure 1 demonstrates the various domains of interpersonal violence. Community violence occurs among non-familial individuals and typically occurs in institutional settings such as schools or workplaces. Family violence includes child maltreatment, elder maltreatment, dating violence and intimate partner violence (IPV always refers to intimate partner violence throughout this document) (Mercy et al., 2017). Experiencing one form of violence, such as exposure to childhood abuse, increases likelihood of experiences of other forms of violence, such as IPV in adulthood (Cueva, 2021). Thus, experiencing any form of violence predisposes individuals to other forms of violence—creating compounded vulnerabilities to the negative impacts of violence.

This literature review and measure focus on IPV because it has the strongest evidence base and clinical actions for screening and providing interventions are supported by US clinical guidelines; however, other forms of family and partner violence are prevalent and need addressing. For example, elder maltreatment has an estimated prevalence of 25.2 percent, and child maltreatment has an estimated prevalence of 13.8 percent (Dong et al., 2019). The measure does not exclude children and older adults but aligns with the strongest evidence base and clinical guidelines.

Figure 1. IPV Hierarchy Definition and Domains



Intimate Partner Violence Definitions

The Centers for Disease Control and Prevention (CDC) defines intimate partner violence (IPV) as “physical violence, sexual violence, stalking, and psychological aggression by a current or former intimate partner” (CDC, 2016). The nuances of each act of violence recognized as IPV are detailed below, but it is important to note that all these forms of IPV can intersect.

Physical Violence: Physical violence may include pushing, shoving, grabbing, throwing objects, beating, slapping, kicking, strangling or using a weapon (Khanna et al., 2018). Physical violence is a common form of IPV and is associated with higher rates of depression, post-traumatic stress disorder (PTSD) symptoms, and somatic anxiety (Karr et al., 2024). In primary care and emergency department (ED) settings, 37 to 50 percent of women reported physical violence within their lifetimes, with 10 to 18 percent reporting physical violence in the past year (Beydoun et al., 2017).

Sexual Violence: Sexual violence involves sexual acts that are non-consensual (either the person did not give consent or was unable to) (University of California Sexual Violence Prevention & Response, n.d.). This form of IPV also includes sexual assault, which includes physical force, threat, intimidation, or taking advantage of the intoxicated state of a person, as well as sexual harassment, which involves unwelcomed sexual advances, requests for sexual favors, or conduct of a sexual nature (University of California Sexual Violence Prevention & Response, n.d.). Nearly 1 in 5 women (18.3%) and 1.4 percent of men experience forced penetration, attempted forced penetration, or substance facilitated forced penetration (Black et al., 2011). More than half of these female survivors reported being raped by an intimate partner. Sexual violence has profound physical, emotional, and psychological impacts on individuals and their communities.

Reproductive Coercion: Reproductive coercion is a specific form of IPV which intersects violence and reproductive health and involves explicit attempts to impregnate a partner against their will, coercion to have unprotected sex, or interfering with contraception to promote pregnancy (Anderson et al., 2018). Data from the 2010 National Intimate Partner and Sexual Violence Survey (NISVS) revealed that 8.6 percent of women and 10.4 percent of men experienced reproductive coercion within their lifetime (Basile et al., 2021).

Stalking: Stalking in terms of IPV refers to harassing or threatening behavior that an individual engages in repeatedly and is an obsessive behavior that is aimed at controlling, intimidating, or instilling fear in their partner or former partner (Tjaden et al., 1998). According to data from the NISVS, the lifetime prevalence of stalking was 9.2 percent for women and 2.4 percent for men (CDC, 2014). One study found that instances of stalking escalate after separation and describes how IPV can remain prevalent through exertion of control over women in nonphysical forms (Li, 2023).

Emotional/Psychological Aggression: Emotional and psychological aggression is a type of non-physical abuse that aims to erode a partner's sense of self-worth and confidence (Stylianou, 2018). This includes behaviors that degrade a partner's logic and reasoning, and can manifest through behaviors such as insults, name-calling, or causing public embarrassment (Stylianou, 2018). The abuser uses these tactics to undermine the partner's value in order to exert control or dominance in the relationship (Stylianou, 2018). Results from the NISVS suggest almost half of women (49.4%) experience any psychological aggression by a partner within their lifetimes, with 6.7 percent reporting such experiences within the last 12 months (Leemis et al., 2022). Rates were similar for men with 45 percent reporting psychological aggression within their lifetime and 7 percent experiencing it within the last 12 months (Leemis et al., 2022). The most common forms of coercive control reported (in order from most to least prevalent) were tracking/demanding to know where their partner is, making decisions for the partner, destroying something important to them, threatening suicide or self-harm, and socially isolating them from friends and family (Leemis et al., 2022).

Financial/Economic Abuse: Financial or economic abuse includes behaviors which intend to control a partner's ability to acquire, use, or maintain resources, threaten economic security, or minimize potential for self-sufficiency (Stylianou, 2018). This may take the form of interfering with employment, dictating spending, stealing money or property, refusing to contribute financially to expenses, or generating debt through coercion or fraud (Adams et al., 2020). Amongst 1,823 women who called the National Domestic Violence Hotline, half of them had partners who had generated debt in their name either through coercion or fraud (Adams et al., 2020). Other studies have found that financial abuse occurs in 99 percent of cases of domestic violence, but 78 percent of Americans do not realize that financial abuse is a form of IPV (Adams, n.d.). Financial abuse can have immediate degrading effects on quality of life (Adams et al., 2019).

IPV Importance and Prevalence

The prevalence of IPV in the United States remains a significant public health issue, affecting individuals across varying demographics, age, gender, and socioeconomic status. Approximately 1 in 4 women and 1 in 7 men will experience severe violence perpetrated by an intimate partner (Stylianou, 2018). While research on male-to-female IPV has been more extensive, it is important to note that IPV occurs in both directions (Khanna et al., 2018). Furthermore, prevalence and experiences of IPV vary in diverse populations; a section below describes IPV in marginalized communities including the LGBTQ+ community, women of color, and immigrant women.

The National Survey on Teen Relationships and Intimate Violence found that 37 percent of 12 to 18-year-olds reported intimate violence in the current or past year of dating, and 69 percent reported experiencing adolescent relationship abuse within their lifetimes (Taylor et al., 2016). Thus, experiences of IPV begin early on and affect adolescents as young as 12. Lifetime IPV is perpetuated by a multitude of factors including cultural norms and the treatment of women, adverse childhood experiences or witnessing domestic abuse, lack of economic resources, or use of alcohol (Khanna et al., 2018).

Impacts of IPV

Impact of IPV on health

IPV significantly impacts life expectancy both directly and indirectly. Research has found that women who were exposed to domestic abuse face a heightened risk of all-cause mortality (Chandan et al., 2020). A systematic review found that approximately 50 percent of female U.S. homicide victims are murdered by intimate partners (Graham et al., 2021). Nearly 290,000 years of potential life were lost in 26 states over a decade-long study (Graham et al., 2021). In terms of homicide, women are twice as likely to be shot and killed by an intimate partner compared to other perpetrators (Sorenson, 2017). Many studies and reports highlight that a substantial number of women killed by intimate partners experienced prior abuse. Data from the CDC's National Violent Death Reporting System shows that around 20 percent of female intimate partner homicide victims had a documented history of prior abuse from their killer (CDC, 2024). This further aligns with broader research that suggests there is a strong connection between prior IPV and lethal outcomes among women. While IPV can result in death in cases of severe physical violence, IPV is also associated with chronic conditions which deteriorate health and affect life expectancy.

IPV has profound impacts on an individual's mental health and can contribute to depression, anxiety and suicidal behavior. The prevalence of mental health problems for women with a history of IPV was 47.6 percent in 18 studies of depression, 17.9 percent in 13 studies of suicidality, and 63.8 percent in 11 studies of PTSD (Golding, 1999). Women who were sexually abused show a 12-to-20-fold increase in suicide attempts *(*Bugeja et al., 2017). A study in a birth setting found that mothers who experienced economic abuse were 1.9 times more likely to exhibit depression than mothers who had not experienced economic abuse (Stylianou, 2018). According to a systematic review, women who were exposed to IPV were significantly more likely to develop PTSD, depression, and anxiety within a 12-month period (Bacchus et al., 2018). The review emphasized that the recurrence and chronic nature of IPV exacerbates the severity of mental health issues (Bacchus et al., 2018).

Financial importance and cost-effectiveness

The economic burden of IPV encompasses medical care, mental health services, legal services, and loss of productivity Impacts from injury, mental health conditions, premature death, and time spent on litigations. IPV is associated with increased healthcare utilization costs given the need for care to address mental health and/or physical injuries (Anderson et al., 2007). In 2012, the lifetime cost of IPV was $103,767 per female survivor and $23,414 per male survivor, adding up to a US population burden of almost $3.6 trillion (Peterson et al., 2018). This estimate included $2.1 trillion in medical costs (59% of the total), $1.3 trillion (37%) in lost productivity, $73 billion (2%) in litigation and criminal justice costs, and $62 billion (2%) in other costs (Peterson et al., 2018). The total annual healthcare expenses for women who experience physical IPV are high, reaching around $4.1 billion annually in medical and mental health services; emotional or psychological abuse lead to healthcare costs that are less straightforward to estimate (CDC, 2008). Unlike physical injuries, which can be immediately recorded and

treated, the lifelong impact of emotional abuse may require long-term therapy and medications, thus increasing indirect healthcare and productivity losses that accumulate over a survivor's lifetime (IWPR, 2017).

However, there is also a paradoxical impact of IPV on healthcare access that may lead to inappropriate reductions in healthcare utilization. Women who experience physical violence may refrain from attending a health care facility due to fear, shame, or embarrassment of experiencing IPV (Chojenta et al., 2019). This reluctance results in delayed treatment, worsened health outcomes, and higher healthcare costs in consequence. One study found that survivors of IPV were less likely to receive adequately skilled maternity care, further endangering the health of survivors and their infants (Chojenta, et al., 2019).

Addressing IPV for diverse populations

Populations with marginalized identities are at increased risk of experiencing IPV and facing adverse health outcomes as a result. Populations which experience IPV at disproportionate rates include individuals with disabilities, Indigenous populations, Black and Hispanic populations, Asian populations, Immigrant populations, and the LGBTQ community—especially trans individuals.

Intersection of disability status and IPV: Both mental and physical disabilities are associated with increased risk of IPV (Hahn et al., 2014). A systematic review of articles regarding the frequency of IPV in women with disabilities compared to those without found that most studies identified a statistically significant association between disability and various forms of violence, including psychological, physical, sexual, and particularly financial violence (Garcia-Cueller et al., 2021). One study examining perinatal health in women with disabilities found that women with disabilities were around 2.5 times more likely to experience IPV before or during pregnancy (Alhusen et al., 2022). Another article examining both men and women with disabilities found that women with disabilities were more likely to report experiencing rape, other sexual violence, physical violence, stalking, psychological aggression, and control of reproductive health (Breiding, 2015). Men with disabilities were more likely to experience stalking and psychological aggression than men without disabilities. Overall, individuals with disabilities are at increased risk of all forms of IPV, and targeted interventions to support this population could reduce the disparate prevalence.

Intersection of queer and trans identities and IPV: Violence amongst and against the LGBTQ community is disproportionately prevalent compared to heterosexual and cisgendered populations. One study of screening results for IPV in ED settings found that the prevalence of IPV in LGBTQ populations was significantly higher—with the highest prevalence amongst bisexuals and gay men (Harland et al., 2021). Results from the NISVS show that bisexual women experience more sexual violence, IPV, and stalking than heterosexual women and lesbians; gay and bisexual men also experienced more sexual violence and stalking than heterosexual men (Chen et al., 2021). Nuances exist in the extent of disparities for different forms of IPV experienced by various identified groups within the LGBTQ community. A body of literature focuses on the prevalence and impact of IPV on trans and gender diverse (TGD) populations. A systematic review of 85 articles found that compared to cisgender individuals, trans individuals experienced a dramatically higher prevalence of IPV regardless of trans sub-identity (trans male, trans female, non-binary, etc.) (Peitzmeier et al., 2020). TGD identity had a significant association with survey outcomes for physical violence and forced sex; unique forms of emotional abuse for TGD

individuals, such as threatened to be outed by a partner and had their gender belittled by a partner, were also reported (Kattari et al., 2022). Additionally, TGD populations who experienced homelessness were more likely to experience various forms of IPV (Jackson et al., 2022). Interestingly, TGD individuals were more likely to seek help than cisgender counterparts (Kurdyla et al., 2021) (Heron et al., 2021). Instances of heterosexist microaggressions and racial discrimination were confounding factors in IPV victimization amongst assigned-female-at-birth sexual minority youth of color; this suggests that there is a confounded effect of intersectional identities on risk of IPV (Swann, 2021).

IPV amongst Indigenous and Native Populations: IPV amongst Native populations is high compared to other racial/ethnic groups in the US, particularly difficult to characterize given data availability, and perpetuated in a context of cultural and historical oppression. Data from the 2010 NISVS found that 46 percent of Indigenous women experienced rape, physical violence, or stalking (Jock et al., 2022). This prevalence estimate is 10 percentage points higher than for women in the general population. Furthermore, advocates from groups such as Missing and Murdered Indigenous Women (MMIW) highlight the absence and misrepresentation of data for Indigenous women as a barrier to understanding the full scope of the violence experienced (Urban Indian Health Institute, 2018). Qualitative studies with Indigenous women on their experiences with IPV describe how patterns of violence are grounded in a history of oppression, disruption, dehumanization, and loss (Burnette, 2015). Furthermore, survivors describe a reluctance to seek assistance and barriers with the service system when they do (Finfgeld-Connett, 2015).

IPV and Race/Ethnicity: There is some variation in IPV rates between racial and ethnic groups in the US. A study found that Black populations were most at risk of experiencing IPV, followed by White and Latino groups, and Asian population had the lowest risk (Cho, 2012). Forty-five percent of Black women experience IPV compared to 25 percent of the general population, and Black women are three times more likely to be killed by an intimate partner than White women (Kelly et al., 2022). Variation in help-seeking behavior by race/ethnicity exists; White women were more likely to utilize mental health and social services, whereas Black and Latina women were more likely to utilize formal supports through hospitals or law enforcement (Satyen et al., 2019). In Latino men, it was found that discrimination was linked to poorer mental health and drug dependence, which in turn was associated with IPV perpetration (Maldonado et al., 2020). A variety of articles discussed the importance of cultural sensitivity in the development of interventions and support services for IPV (Ravi et al., 2022) (Alvarez et al., 2016).

IPV amongst Immigrant Communities: A systematic review found significant variation in the prevalence of IPV amongst immigrants. Estimates ranged from 3.8 percent to 46.9 percent for past-year IPV and 13.9 percent to 93 percent for lifetime IPV victimization rates (Morrison et al., 2023). It is difficult to determine actual rates of IPV in this population, but it is known that ethnic minority and immigrant women experience barriers to seeking help. Such barriers include institutional racism, immigration laws, religion and culture, and lack of diversity or cultural competence of frontline services (Hulley, 2022). A comprehensive report by Futures Without Violence discusses IPV in immigrant and refugee communities and describes several programs within the US which provide IPV services to immigrant and refugee populations, provide recommendations for program funders, and evaluate the small

evidence base of published IPV interventions for this population. The report stresses the importance of documentation of program activities and of impact for research and evaluation purposes (Runner et al., 2009).

Supporting Evidence for Measurement of IPV

The United States Preventive Task Force (USPTF) recommends that clinicians screen all women of reproductive age, including those who are pregnant or postpartum, for intimate partner violence (IPV) (USPTF, 2025). The recommendation received a B grade, due to moderate certainty of benefit. However, for older or vulnerable adults, the USPTF issues an "I" grade, citing insufficient evidence to assess the balance of benefits and harms of screening for abuse or neglect by caregivers. The USPTF is considering an update to the IPV recommendation and held a Public Comment period in November 2024. Their proposed updated recommendation states that pregnant and postpartum persons, as well as women of reproductive age, get screened by clinicians for IPV; this update reflects the robust evidence base focused on pregnant and postpartum persons. There is not sufficient evidence for the USPTF to recommend screening or interventions for IPV in men. Furthermore, there is insufficient evidence for the USPTF to recommend screening for abuse or neglect of elders by a caregiver or child maltreatment.

The Women's Preventive Services Initiative (WPSI) also recommends annual screening of adolescents and women for physical violence, sexual violence, stalking and psychological aggression (including coercion), reproductive coercion, neglect, and the threat of violence, abuse, or both (WPSI, 2024). Included in their recommendation is providing referrals to initial services and suggest that appropriate interventions include, but are not limited to, counseling, education, harm reduction strategies and referral to appropriate supportive services.

The National Academies of Sciences conducted a report, in collaboration with the US Health and Human Services Department, to determine guidelines for delivering essential IPV services during public health emergencies (NASEM, 2024). The formal recommendation determined that universal screening for IPV should be included as an essential health care service. They also recommended that providers pair IPV screening with education on IPV and, for individuals who screen positive for IPV, to refer them to support services regardless of steady state or public health emergency conditions. Further recommendations include providing culturally and linguistically relevant IPV resources.

Addressing IPV in Health Settings

IPV screening tools

A variety of screening tools have been developed and validated for identifying cases of IPV. Widely implemented tools are summarized in Table 1 and their association to Logical Observation Identifiers Names and Codes (LOINC) terminology is indicated. Screening tools exist that were developed for more specific populations, such as adolescents and trans individuals. For example, the Relationship Behavior Survey was designed to measure denigrating, controlling, and intrusive behaviors, as well as perpetrator intent, in adolescent relationships (Cascardi, 2023). There are nine existing screening tools specifically for trans populations and IPV, but they have not been validated (Maclin, 2024). Interviews with a diverse study population of trans survivors of IPV determined that the four crucial domains to include in transphobia-driven IPV questionnaires were pressure to perform, disrupting gender affirmation, belittling gender identity, and intentional misgendering (Maclin, 2024). While tools tailored for specific populations are crucial for identifying unique forms of IPV, they are often less standardized and not as widely implemented compared to standardized questionnaires that are embedded in toolkits and research initiatives worldwide.

Interventions for IPV in health settings

Healthcare setting interventions help identify IPV cases and provide information, resources and support to survivors. The intervention literature supports the importance of identifying cases of IPV and connecting survivors to resources and additional care. For example, a study conducted with

Spanish-speaking pregnant women found that screening for abuse was the most effective intervention for preventing IPV while studying briefings, counseling, and outreach strategies (McFarlane et al., 2000). Addressing mental health, fostering empowerment, and attending group sessions are all methods to help mitigate IPV and its effects. Psychosocial therapy for survivors likely reduces depression and may reduce anxiety (Hameed et al., 2020). One article focused on immigrant women experiencing IPV reported that empowerment interventions were able to reduce suicidality rates (Butter et al., 2024).

Partnerships between healthcare settings and community organizations to address domestic violence are shown to improve screening rates of IPV and support of survivors. For example, the Domestic Violence and Health Care Partnership initiative in California was a concerted effort in California health settings to train providers and domestic violence advocates to screen patients and refer them to support services (Blue Shield CA Foundation, n.d.). Evaluation of the program showed that providers doubled their rate of assessments for domestic violence, patients were more likely to report domestic violence, and there was an increased confidence in and comfort with helping patients connect to services (Blue Shield CA Foundation, 2016). Similarly, Kaiser Permanente Northern California has implemented an IPV identification and response effort since 2001. Their approach includes messaging regarding healthy relationships for patients, routine screening and referrals, safety planning services delivered by mental health clinicians, partnerships with advocacy organizations to connect survivors with crisis response or legal services, and embedded fields in electronic health record (EHR) systems to facilitate documentation and ensure patient privacy (Young-Wolff et al., 2016). Activities from the health system level, including partnerships and programming in health settings to identify IPV and support survivors, have the potential to effectively address the prevalence and impacts of IPV.

Another example of health systems implementing interventions for IPV includes the Intimate Partner Violence Assistance Program (IPVAP) at the Veterans Health Administration—an initiative developed with a person-centered, veteran-centric, and trauma-centric approach. Their programming is led by coordinators who connect survivors or partners to community-based support groups, advocacy or legal services, domestic violence shelters, or interventions for those who use violence (US Department of Veteran Affairs, 2024). The initiative developed toolkits and resources with relevant hotlines/call centers and safety planning tips to raise awareness. Furthermore, their plan integrates routine screenings and appropriate intervention planning for individuals experiencing IPV as well as those who use IPV.

Studies which aimed to identify key features of effective programs around the world concluded that well-trained staff responsible for screening and supporting, working with men and women, attunement to local context and target populations, gender and social empowerment activities, connection with mental health care, developing safety plans, improving economic and law literacy, and enhancing social support systems were all important factors and forms of intervention for successful support of IPV survivors (Jewkes, 2021) (Periyasamy et al., 2024). Interventions tailored to certain populations can help target the disparities experienced by marginalized communities and promote an intersectional, equitable approach.

Public policies related to health plans play an important role in addressing health coverage accessibility and clinician screenings. Federal marketplace plans allow survivors of IPV to enroll in health plans separately from their abusers, state on their applications that they are unmarried, and request special enrollment periods (Futures Without Violence, 2022). Additionally, the Affordable Care Act requires private insurers and Medicaid expansion programs to reimburse clinicians for IPV screening and brief intervention services to women (Ramaswamy et al., 2019).

Barriers to survivors of IPV seeking help include minimal awareness, fears around disclosure, and lack of materials resources (Robinson et al., 2020). Interactions with healthcare settings can be a key moment for connecting with individuals, facilitating a safe and confidential environment, and asking directly about abuse—all factors proven to encourage disclosure (Heron et al., 2021). IPV disclosure in healthcare settings can be supported through standardized protocol and having specialists available in medical facilities who are available to support survivors (Cheng et al., 2020).

Gaps in care

Overall, literature suggests that a performance gap in screening and intervening for IPV in healthcare settings exists. Addressing this gap would improve guideline adherence and connect survivors to interventions for addressing IPV.

Evidence suggests that screening for IPV in healthcare settings is an effective method for identifying survivors and delivering interventions, which can enhance quality of life. A study aimed at informing the USPTF found that while screening tools are reasonably effective at identifying IPV, screening alone was not associated with reductions in IPV or improvements in quality of life over a period of 3 to 18 months. However, some evidence suggests that addressing multiple risk factors through home visits and behavioral counseling may reduce IPV amongst pregnant or postpartum individuals (Feltner et al., 2018). A study conducted in EDs found that cases of identified IPV were helpful for providing legal documentation and connecting to police if needed; however, only 33 percent received safety assessments and were referred to survivor services 25 percent of the time (Kothari et al., 2012). Of a cohort of women who had a documented IPV incident and eventually visited the ED, only 72 percent were identified as survivors of abuse (Kothari et al., 2012). Findings from this study indicate that routine screenings and referrals for IPV in ED settings could help identify and support the large percentage of survivors whose survivor status is currently overlooked in this care setting.

Literature suggests that there is variability amongst providers regarding IPV screening practices, a lack of standardized protocols in healthcare settings, and some existing barriers for IPV disclosure and connection to interventions. A systematic review of studies regarding provider screening practices for IPV demonstrated that variability exists in provider screening practices, which may be due to a lack of system-level guidance (Alvarez, 2017). This finding suggests there is room for quality improvement activities to reduce such variability. A qualitative study of IPV screenings with healthcare workers found that none of the interviewed clinical sites had a protocol guiding screening for IPV and responding to disclosures (Alvarez et al., 2018). Healthcare workers felt that the clinical and community resources available for IPV were limited. Referral to a social worker or providing information on resources (e.g., safe houses and hotlines) were the most common forms of intervention. Furthermore, studies demonstrate that a

central barrier to survivors disclosing their experiences with IPV in healthcare settings is the reactions and attitudes of healthcare professionals (Heron et al., 2021). Survivors reported fear of being judged negatively and encountering unsympathetic, disinterested, or minimizing attitudes from their providers. Facilitators of disclosure included positive relationships, directly asking survivors about the abuse, and ensuring a safe and confidential environment. Implementation of protocols which facilitate and foster appropriate environments for IPV disclosure and support referrals can help address the screening performance gap, mitigate fears around disclosure, and improve intervention delivery.

Digital Considerations

PVS-E will be developed as an ECDS measure, meaning reporting will be supported using clinical data. Likewise, NCQA has found several screening tools for IPV that can be documented in clinical data. The screening tools and their associated LOINC codes can be found below in Table 1.

As part of NCQA's strategic transition to a fully digital quality measurement portfolio, we also conducted a feasibility assessment to inform eventual digital measure implementation. The assessment evaluates the measure's intent and associated clinical concepts within a digital framework. Refer to Appendix B for details on the overall measure digital feasibility.

Table 1. Screening Tools for Identifying IPV in Health Settings

Screening Tool	Tool Summary	Positive Screen Threshold (Range)	Validation findings	Associated LOINC Codes
Hurt, Insult, Threaten, Scream (HITS)	4 items, asks respondents how often their partner physically hurt, insulted, threatened with harm, or screamed at them	≥10 Points (4-20)	Good construct validity and internal consistency (Sherin et al., 1998).	95619-3
Extended–Hurt, Insult, Threaten, Scream (E-HITS)	5 items, modified version of the original HITS tool to include sexual violence	≥7 Points (5-25)	Specificity and accuracy of HITS with clinical benefit of sexual IPV item (Iverson et al., 2015).	None for sexual IPV item, awaiting
Humiliation, Afraid, Rape, Kick (HARK)	4 items, screens for emotional, sexual, and physical abuse	≥1 Yes (0-4)	Accurately identified women compared to 30 item composite abuse scale (Sohal, 2007).	76499-3
Intimate Partner Violence-4 (IPV-4)	4 items, asks about control and feeling trapped, feeling afraid, pressure or forcing something sexual, and physical abuse	≥1 Yes (0-4)	Development and integration of IPV-4, a patient-reported screening instrument of intimate partner violence for primary and HIV care (Fredericksen et al., 2022).	106925-1
Relationship Assessment Tool (RAT), previously Women's Experiences with Battering (WEB)	10 items, asks about behaviors of partners and assigned 6-point scale(1-disagree strongly to 6-agree strongly)	≥20 Points (10-60)	Reliability and construct validity demonstrated in previous version. (Smith et al, 1995). Recommended by	None

			Futures Without Violence.	
Partner Violence Screen (PVS)	3 items, asks about physical violence and perceived personal safety	≥1 Yes (0-3)	High sensitivity and specificity compared to 2 standardized measures (Feldhaus et al., 1997).	None
Woman Abuse Screening Tool (WAST)	8 items, screens for verbal, emotional, physical, and sexual abuse	≥4 Points (0-16)	Found reliable and valid in family practice settings (Brown et al., 2000).	None
Ongoing Violence Assessment Tool (OVAT)	4 items, asks if partner threaten, beaten, would like to kill you, shows no respect	≥1 Yes (0-4)	Validated for men and women in ED settings (Ernst, 2004).	None
Slapped, Threatened, and Throw (STaT) Measure	3 items, pushed or slapped; threatened with violence; partner has thrown, broken, or punched things	≥1 Yes (0-3)	High sensitivity and specificity compared to semi structured interviews determining lifetime IPV (Paranjape, 2003).	None
Abuse Assessment Screen (AAS)	5 items including sexual coercion, lifetime abuse, current abuse, abuse during pregnancy	≥1 Yes (0-5)	Reliable and valid instrument for screening for abuse (Soeken, 1998).	None
PErpetrator RaPid Scale (PERPS)	3 items, asks about physical abuse of a partner to identify perpetrators	≥1 Yes (0-3)	Accurate and valid compared to 25-question scale gold standard (Ernst, 2012).	None

Conclusion

Intimate partner violence (IPV) is a prevalent issue with serious consequences on health outcomes, mental health, children exposed to violence, and healthcare costs. Vulnerable communities experience IPV at greater rates and unique forms of IPV—including LGBTQ+ individuals, people with disabilities, Indigenous and Native peoples, and immigrant populations. Evidence-based interventions exist for improving health amongst IPV survivors and reducing IPV through prevention of aggression in relationships. Interventions designed for healthcare settings that promote partnerships, train providers and staff on IPV assessment and referrals, and implement quality improvement activities have proven effective in improving screening and intervention rates. Guidelines exist to support these activities including a variety of validated questionnaires and assessment tools exist to screen for IPV. A quality measure which assesses screenings for intimate partner violence as well as follow-up care for identified survivors would help address the performance gap, improve guideline adherence, and promote the health of people experiencing IPV.

References

Adams, A. E., Littwin, A. K., & Javorka, M. (2020). The Frequency, Nature, and Effects of Coerced Debt Among a National Sample of Women Seeking Help for Intimate Partner Violence. Violence Against Women, 26(11), 1324-1342. https://doi.org/10.1177/1077801219841445

Adams, A. E., & Beeble, M. L. (2019). Intimate partner violence and psychological well-being: Examining the effect of economic abuse on women's quality of life. Psychology of Violence, 9(5), 517–525. https://doi.org/10.1037/vio0000174

Adams, Adrienne E. (n.d.). "Measuring the Effects of Domestic Violence on Women's Financial Well-being." CFS Research Brief 2011-5.6. https://cfs.wisc.edu/2011/05/01/adams2011/

Alhusen JL, Lyons G, Laughon K, Hughes RB. Intimate partner violence during the perinatal period by disability status: Findings from a United States population-based analysis. J Adv Nurs. 2023 Apr;79(4):1493-1502. doi: 10.1111/jan.15340. Epub 2022 Jun 30. PMID: 35773949; PMCID: PMC9800646.

Alvarez CP, Davidson PM, Fleming C, Glass NE (2016) Elements of Effective Interventions for Addressing Intimate Partner Violence in Latina Women: A Systematic Review. PLoS ONE 11(8):e0160518. doi:10.1371/journal.pone.0160518

Alvarez, C., Fedock, G., Grace, K. T., & Campbell, J. (2017). Provider Screening and Counseling for Intimate Partner Violence: A Systematic Review of Practices and Influencing Factors. Trauma, Violence, & Abuse, 18(5), 479-495. https://doi.org/10.1177/1524838016637080

Alvarez C, Debnam K, Clough A, Alexander K, Glass NE. (2018). Responding to intimate partner violence: Healthcare providers' current practices and views on integrating a safety decision aid into primary care settings. Res Nurs Health. 41: 145–155. https://doi.org/10.1002/nur.21853

Anderson JC and Grace KT. (2018) Reproductive Coercion: A Systematic Review. Trauma Violence Abuse. 19(4):371-390. doi: 10.1177/1524838016663935. PMID: 27535921; PMCID: PMC5577387.

Bacchus , J. Loraine, Devries, Karen, Ranganathan, Meghna, and Watts, Charlotte. (2017). Recent intimate partner violence against women and health: a systematic review and meta-analysis of cohort studies. doi: 10.1136/bmjopen-2017-019995. PMID: 30056376; PMCID: PMC6067339.

Basile KC, Kresnow, MJ, Liu Y, Miller E, Smith SG,. Prevalence of Intimate Partner Reproductive Coercion in the United States: Racial and Ethnic Differences. J Interpers Violence. 2021 Nov;36(21-22):NP12324-NP12341. doi: 10.1177/0886260519888205. Epub 2019 Dec 6. PMID: 31808711; PMCID: PMC7274854

Beydoun HA, Beydoun MA, Eid SM, Williams M, Zonderman AB. (2017). Relationship of Physical Intimate Partner Violence with Mental Health Diagnoses in the Nationwide Emergency Department Sample. J Womens Health (Larchmt). 141-151. doi: 10.1089/jwh.2016.5840. Epub 2016 Aug 10. PMID: 27509203; PMCID: PMC5349220.

Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., Chen, J., & Stevens, M. R. (2011). The National Intimate Partner and Sexual Violence Survey: 2010 summary report. Centers for Disease Control and Prevention. https://www.cdc.gov/violenceprevention/pdf/NISVS_Report2010-a.pdf

Blue Cross Blue Shield of California Foundation. (n.d.) Building bridges between Domestic Violence Prevention and Health Care. https://dvhealthpartnerships.org/wp-content/uploads/2018/07/DVHCP-Evaluation-Summary_BSCF.pdf

Blue Cross Blue Shield of California Foundation. (2016). Lessons Learned from the Domestic Violence and Health Care Partnership Project. https://blueshieldcafoundation.org/sites/default/files/covers/Collaboration%20for%20Integrated%20Services%20and%20Systems%20Change%20-%20Lessons%20Learned%20from%20DVHCP.pdf

Breiding M.J. & Armour B.S. The association between disability and intimate partner violence in the United States. Ann Epidemiol. 2015 Jun;25(6):455-7. doi: 10.1016/j.annepidem.2015.03.017. Epub 2015 Mar 31. PMID: 25976023; PMCID: PMC4692458.

Bugeja, C. Lyndal, Jelinek, A. George, and MacIsaac B. Michael. The association between exposure to interpersonal violence and suicide among women: a systematic review. February 2017. Australian and New Zealand Journal of Public Health. https://www.sciencedirect.com/science/article/pii/S1326020023010907#:~:text=Psychological%20IPA%20is%20known%20to,fold%20increase%20in%20suicide%20attempts.

Burnette, C. (2015) Historical Oppression and Intimate Partner Violence Experienced by Indigenous Women in the United States: Understanding Connections. Social Service Review. https://www.jstor.org/stable/10.1086/683336

Butter SE, Sabri B, Hanson GC, Campbell JC. (2024). Empowerment Moderates the Relationship Between Partner Abuse and Suicidal Ideation for Immigrant Women. Journal of Psychosocial Nursing and Mental Health Services. 2024;62(9):19-28. doi:10.3928/02793695-20240308-01

Cascardi, M., Hassabelnaby, R., Schorpp, H., Smith Slep, A. M., Jouriles, E. N., & O'Leary, K. D. (2023). The Relationship Behavior Survey: A Comprehensive Measure of Psychological Intimate Partner Violence for Adolescents. Journal of interpersonal violence, 38(9-10), 7012–7036. https://doi.org/10.1177/08862605221140044

Centers for Disease Control and Prevention. (2016). About intimate partner violence. https://www.cdc.gov/intimate-partner-

violence/about/index.html?CDC_AAref_Val=https%3A%2F%2Fwww.cdc.gov%2Fviolenceprevention%2Fintimatepartnerviolence%2Fdefinitions%2Fhtml

Centers for Disease Control and Prevention. (2024). Notes from the Field: Intimate Partner Homicide Among Women – United States, 2018-2021. https://www.cdc.gov/mmwr/volumes/73/wr/mm7334a4.htm#:~:text=The%20overall%20rate%20of%20intimate,previously%20known%20to%20law%20enforcement.

Centers for Disease Control and Prevention. (2014). Prevalence and Characteristics of Sexual Violence, Stalking, and Intimate Partner Violence Victimization — National Intimate Partner and Sexual Violence Survey, United States, 2011. https://www.cdc.gov/mmwr/pdf/ss/ss6308.pdf

Chandan, J. S., Thomas, T., Bradbury-Jones, C., Taylor, J., Bandyopadhyay, S., & Nirantharakumar, K. (2020). Risk of cardiometabolic disease and all-cause mortality in female survivors of domestic abuse. Journal of the American Heart Association, 9(4). doi:10.1161/jaha.119.014580

Chen, J., Gilbert, L.K., Patel, N., Walters, M.L. (2021). Sexual Violence, Stalking, and Intimate Partner Violence by Sexual Orientation, United States. Psychological Violence Journal. 1 January 2021. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7020247/

Cheng TC, Lo CC. (2020). Telling Medical Professionals About Victimization by Intimate Partner: Analysis of Women Surviving Intimate Partner Violence. International Journal of Health Services. 50(2):129-136. https://journals.sagepub.com/doi/10.1177/0020731419896695

Cho, Hyunkag. Racial Differences in the Prevalence of Intimate Partner Violence Against Women and Associated Factors. Journal of Interpersonal Violence. 2012. https://pubmed.ncbi.nlm.nih.gov/21859761/

Chojenta, C., Geleto, A., Loxton, D., and Musa, A. The associations between intimate partner violence and maternal health care service utilization: a systematic review and meta-analysis. BMC Women's Health. 26 February 2019. https://bmcwomenshealth.biomedcentral.com/articles/10.1186/s12905-019-0735-0

Creech SK, Benzer JK, Bruce L, Taft CT. (2023). Evaluation of the Strength at Home Group Intervention for Intimate Partner Violence in the Veterans Affairs Health System. JAMA Netw Open. 6(3):e232997. doi:10.1001/jamanetworkopen.2023.2997

Cueva, M. Camila, Fasol, Malinda, Yonfa, D.A., Erick, and Zavgorodniaya, C. Anna. (2021). Intimate Partner Violence: A Literature Review. The Open Psychology Journal. http://dx.doi.org/10.2174/1874350102114010011

Dpng, XinQi and Wang, Bei. (2019). Associations of Child Maltreatment and Intimate Partner Violence With Elder Abuse in a US Chinese Population. JAMA Internal Medicine. doi: 10.1001/jamainternmed.2019.0313. PMID: 31107499; PMCID: PMC6537846.

Ernst, A. A., Weiss, S. J., Cham, E., Hall, L., & Nick, T. G. (2004). Detecting ongoing intimate partner violence in the emergency department using a simple 4-question screen: the OVAT. Violence and victims, 19(3), 375–384. https://doi.org/10.1891/vivi.19.3.375.65769

Feltner C, Wallace I, Berkman N, et al. (2018). Screening for Intimate Partner Violence, Elder Abuse, and Abuse of Vulnerable Adults: Evidence Report and Systematic Review for the US Preventive Services Task Force. JAMA. 320(16):1688–1701. doi:10.1001/jama.2018.13212

Finfgeld-Connett, D. (2015). Qualitative Systematic Review of Intimate Partner Violence among Native Americans. Issues in Mental Health Nursing, 36(10), 754–760. https://doi.org/10.3109/01612840.2015.1047072

Futures Without Violence (2022). Healthcare.gov Enrollment for Survivors of Domestic Violence. Retrieved from https://www.futureswithoutviolence.org/wp-content/uploads/Healthcare.gov-Enrollment-for-Survivors-of-Domestic-Violence60-003.pdf

Garcia-Cueller, M.M., Guadalupe, R.P., Isabel, H.M., and Jesus, P.M. (2021). The prevalence of intimate partner violence against women with disabilities: a systematic review of the literature. Disability and Rehabilitation Journal. 31 https://www.tandfonline.com/doi/full/10.1080/09638288.2022.2025927

Golding, J. M. (1999). Intimate partner violence as a risk factor for mental disorders: A meta-analysis. Journal of Family Violence, 14(2), 99–132. https://doi.org/10.1023/A:1022079418229

Estefan, Fuino, Lianne, Florence, Curtis, Gordon, Amy, Kearns, C. Megan, McCollister, E., Kathryn, McIntosh, LiKamWa, Wendy, Nicolaidis,and Christina, Peterson, Cora. (2018). Lifetime Economic Burden of Intimate Partner Violence Among U.S. Adults. https://pubmed.ncbi.nlm.nih.gov/30166082/

Graham LM, Lanier P, Macy RJ, Martin SL, Ranapurwala SI, Rizo CF, and Zimmer C. Disparities in potential years of life lost due to intimate partner violence: Data from 16 states for 2006-2015. PLoS One. 2021 Feb 17;16(2):e0246477. doi: 10.1371/journal.pone.0246477. PMID: 33596226; PMCID: PMC7888591.

Green, M., Ham, E., and Hilton, N. Z. (2019). Adverse Childhood Experiences and Criminal Propensity Among Intimate Partner Violence Offenders. Journal of Interpersonal Violence, 34(19), 4137-4161. https://doi.org/10.1177/0886260516674943

Hahn, J. W., Koenen, K. C., McCormick, M. C., Robinson, E. B., and Silverman, J. G. (2014). Examining the Impact of Disability Status on Intimate Partner Violence Victimization in a Population Sample. Journal of Interpersonal Violence, 29(17), 3063-3085. https://doi.org/10.1177/0886260514534527

Hameed M, O'Doherty L, Gilchrist G, Tirado-Muñoz J, Taft A, Chondros P, Feder G, Tan M, Hegarty K. (2020). Psychological therapies for women who experience intimate partner violence. Cochrane Database of Systematic Reviews. Issue 7. Art. No.: CD013017. DOI: 10.1002/14651858.CD013017.pub2. Accessed 10 October 2024.

Harland, K. Karisa, Peek-Asa, Corienne, and Saftlas, F. Audrey. (2021). Intimate Partner Violence and Controlling Behaviors Experienced by Emergency Department Patients: Differences by Sexual Orientation and Gender Identification. Journal of Interpersonal Violence. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7034778/

Heron, R.L. & Eisma, M.C. (2021). Barriers and facilitators of disclosing domestic violence to the healthcare ervice: A systematic review of qualitative research. Health and Social Care in the Community. 29: 612–630. https://doi.org/10.1111/hsc.13282

Hoppe, E., Jagasia, E., and Spearman, K.J. (2023). A systematic literature review of protective factors mitigating intimate partner violence exposure on early childhood health outcomes. Journal of Advanced Nursing. https://onlinelibrary.wiley.com/doi/10.1111/jan.15638

Hulley, J., Bailey, L., Kirkman, G., Gibbs, G. R., Gomersall, T., Latif, A., & Jones, A. (2023). Intimate Partner Violence and Barriers to Help-Seeking Among Black, Asian, Minority Ethnic and Immigrant Women: A Qualitative Metasynthesis of Global Research. Trauma, Violence, & Abuse, 24(2), 1001-1015. https://doi.org/10.1177/15248380211050590

Institute for Women's Policy Research. (2017). The Economic Cost of Intimate Partner Violence, Sexual Assault, and Stalking. https://iwpr.org/wp-content/uploads/2020/10/B367_Economic-Impacts-of-IPV-08.14.17.pdf

Jackson A., Hernandez C., Scheer S., Sicro S., Trujillo D., Arayasirikul et. al. (2022) Prevalence and Correlates of Violence Experienced by Trans Women. Journal of Women's Health. Vol. 31, No. 5. https://doi.org/10.1089/jwh.2021.0559

Jaquier, V., Hellmuth, J. C., & Sullivan, T. P. (2013). Posttraumatic stress and depression symptoms as correlates of deliberate self-harm among community women experiencing intimate partnerviolence. Psychiatry Research, 206(1), 37–42. doi:10.1016/j.psychres.2012.09.020

Jewkes, R.; Willan, S.; Heise, L.; Washington, L.; Shai, N.; Kerr-Wilson, A.; Gibbs, A.; Stern, E.; Christofides, N. (2021). Elements of the Design and Implementation of Interventions to Prevent Violence against Women and Girls Associated with Success: Reflections from the What Works to Prevent Violence against Women and Girls? Global Programme. Int. J. Environ. Res. Public Health, 18, 12129. https://doi.org/10.3390/ijerph182212129

Jock, B. W. I., Dana-Sacco, G., Arscott, J., Bagwell-Gray, M. E., Loerzel, E., Brockie, T., Packard, G., O'Keefe, V. M., McKinley, C. E., & Campbell, J. (2022). "We've Already Endured the Trauma, Who is Going to Either End that Cycle or Continue to Feed It?": The Influence of Family and Legal Systems on Native American Women's Intimate Partner Violence Experiences. Journal of interpersonal violence, 37(21-22), NP20602–NP20629. https://doi.org/10.1177/08862605211063200

Karr, J. E., Logan, T. K., and White, A. E. (2024). Depression, anxiety, and posttraumatic stress in women with and without brain injuries due to intimate partner violence: Psychometric evaluation of measurement approaches and group comparisons. Rehabilitation Psychology. Advance online publication. https://pubmed.ncbi.nlm.nih.gov/39172371/

Kattari, S.K, Kattari, L., Lacombe-Duncan, A., Shelton, J., Misiolek, B.A., (2022). Experiences of Sexual, Physical, and Emotional Intimate Partner Violence Among Transgender and Gender Diverse Adults. Journal of Interpersonal Violence. https://pubmed.ncbi.nlm.nih.gov/35271412/

Kelly, L. C., Spencer, C. M., Keilholtz, B., McAllister, P., & Stith, S. M. (2022). Is separate the new equal? A meta-analytic review of correlates of intimate partner violence victimization for Black and White women in the United States. Family Process, 00, 1– 16. https://doi.org/10.1111/famp.12754

Khanna, P., Patra, B., Patra P, and Prakash J. (2018). Intimate partner violence: Wounds are deeper. Indian J Psychiatry. 60(4):494-498. doi: 10.4103/psychiatry.IndianJPsychiatry_74_17. PMID: 30581217; PMCID: PMC6278226.

Kothari, C. L., Rhodes, K. V., Wiley, J. A., Fink, J., Overholt, S., Dichter, M. E., Marcus, S. C., & Cerulli, C. (2012). Protection orders protect against assault and injury: a longitudinal study of police-involved women victims of intimate partner violence. Journal of interpersonal violence, 27(14), 2845–2868. https://doi.org/10.1177/0886260512438284

Kurdyla, V., Messinger, A. M., & Ramirez, M. (2021). Transgender Intimate Partner Violence and Help-Seeking Patterns. Journal of Interpersonal Violence, 36(19-20), NP11046-NP11069. https://doi.org/10.1177/0886260519880171

Leemis R.W., Friar N., Khatiwada S., Chen M.S., Kresnow M., Smith S.G., Caslin, S., & Basile, K.C. (2022). The National Intimate Partner and Sexual Violence Survey: 2016/2017 Report on Intimate Partner Violence. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

Li, C. K. W. (2024). A qualitative study on how intimate partner violence against women changes, escalates, and persists from pre- to postseparation. Family Process, 63(3), 1446–1468. https://doi.org/10.1111/famp.12923

Maclin, B. J., Peitzmeier, S., Krammer, N. K., Todd, K. P., Bonar, E. E., & Gamarel, K. E. (2024). Toward the conceptualization and measurement of transphobia-driven intimate partner violence. Social Science & Medicine, 341, 116532. doi:10.1016/j.socscimed.2023.116532

Maldonado AI, Cunradi CB, Nápoles AM. (2020). Racial/Ethnic Discrimination and Intimate Partner Violence Perpetration in Latino Men: The Mediating Effects of Mental Health. International Journal of Environmental Research and Public Health. 17(21):8148. https://doi.org/10.3390/ijerph17218148

McFarlane, J., Soeken, K., & Wiist, W. (2000). An evaluation of interventions to decrease intimate partner violence to pregnant women. Public Health Nursing, 17(6), 443–451. https://doi.org/10.1046/j.1525-1446.2000.00443.x

Morrison, A. M., Campbell, J. K., Sharpless, L., & Martin, S. L. (2024). Intimate Partner Violence and Immigration in the United States: A Systematic Review. Trauma, Violence, & Abuse, 25(1), 846-861. https://doi.org/10.1177/15248380231165690

National Academies of Sciences, Engineering, and Medicine (NASEM). (2024). Essential Health Care Services Addressing Intimate Partner Violence. Washington, DC: The National Academies Press. https://doi.org/10.17226/27425.

Paranjape, A., & Liebschutz, J. (2003). STaT: a three-question screen for intimate partner violence. Journal of women's health (2002), 12(3), 233–239. https://doi.org/10.1089/154099903321667573

Peitzmeier S.M., Malik M., Kattari S.K., Marrow E., Stephenson R., Agénor M., Reisner, S.L. (2020). Intimate Partner Violence in Transgender Populations: Systematic Review and Meta-analysis of Prevalence and Correlates. AJPH. Vol 110, No. 9.

Periyasamy, C. Narayanan, G. Kandasamy, A., Ezhumalai, S. (2024). Mental Health Professionals' Perspectives on Group Intervention for Women Survivors of Intimate Partner Violence: A Qualitative Study. Journal of Psychiatry Spectrum 3(2):p 88-93. DOI: 10.4103/jopsys.jopsys_47_23

Peterson, C., Kearns, M. C., McIntosh, W. L., Estefan, L. F., Nicolaidis, C., McCollister, K. E., … Florence, C. (2018). Lifetime economic burden of intimate partner violence among U.S. adults. American Journal of Preventive Medicine, 55(4), 433–444. doi:10.1016/j.amepre.2018.04.049

Ramaswamy, A., Ranji, U., Salganicoff, A. (2019). Intimate Partner Violence (IPV) Screening and Counseling Services in Clinical Settings. Kaiser Family Foundation (KFF). https://www.kff.org/womens-health-policy/issue-brief/intimate-partner-violence-ipv-screening-and-counseling-services-in-clinical-settings/

Ravi, K. E., Robinson, S. R., & Schrag, R. V. (2022). Facilitators of Formal Help-Seeking for Adult Survivors of IPV in the United States: A Systematic Review. Trauma, Violence, & Abuse, 23(5), 1420-1436. https://doi.org/10.1177/1524838021995954

Robinson, S. R., Ravi, K., & Voth Schrag, R. J. (2021). A Systematic Review of Barriers to Formal Help Seeking for Adult Survivors of IPV in the United States, 2005–2019. Trauma, Violence, & Abuse, 22(5), 1279-1295. https://doi.org/10.1177/1524838020916254

Runner, M., Yoshihama, M., Novick, S. (2009). Intimate Partner Violence in Immigrant and Refugee Communities: Challenges, Promising Practices and Recommendations. Family Violence Prevention Fund. https://www.futureswithoutviolence.org/userfiles/file/ImmigrantWomen/IPV_Report_March_2009.pdf

Satyen, L., Rogic, A.C. & Supol, M. Intimate Partner Violence and Help-Seeking Behaviour: A Systematic Review of Cross-Cultural Differences. J Immigrant Minority Health 21, 879–892 (2019). https://doi.org/10.1007/s10903-018-0803-9

Smith, P. H., Earp, J. A., & DeVellis, R. (1995). Measuring battering: development of the Women's Experience with Battering (WEB) Scale. Women's health (Hillsdale, N.J.), 1(4), 273–288.

Soeken, K. L., McFarlane, J., Parker, B., & Lominack, M. C. (1998). The Abuse Assessment Screen: A clinical instrument to measure frequency, severity, and perpetrator of abuse against women. In J. C. Campbell (Ed.), Empowering survivors of abuse: Health care for battered women and their children (pp. 195–203). Sage Publications, Inc.

Sorenson, SB, Guns in Intimate Partner Violence: Comparing Incidents by Type of Weapon. Journal of Women's Health. 1 March 2017. https://www.liebertpub.com/doi/10.1089/jwh.2016.5832

Stylianou, M.A. (2018). Economic Abuse Within Intimate Partner Violence: A Review of the Literature. Violence and Victims. https://connect.springerpub.com/content/sgrvv/33/1/3.full.pdf

Swann, G., Dyar, C., Baidoo, L. et al. Intersectional Minority Stress and Intimate Partner Violence: The Effects of Enacted Stigma on Racial Minority Youth Assigned Female at Birth. Arch Sex Behav 51, 1031–1043 (2022). https://doi.org/10.1007/s10508-021-01958-1

Thurston, R. C., Chang, Y., Matthews, K. A., Harlow, S., El Khoudary, S. R., Janssen, I., & Derby, C. (2022). Interpersonal trauma and risk of incident cardiovascular disease events among women. Journal of the American Heart Association, 11(7). doi:10.1161/jaha.121.024724

Tjaden, P. & Thoennes, N. (1998). Stalking in America: Findings From the National Violence Against Women Survey. National Institute of Justice Centers for Disease Control and Prevention. https://www.ojp.gov/pdffiles/169592.pdf

University of California Sexual Violence Prevention & Response. n.d. FAQ: Understanding sexual violence and sexual assault. Retrieved from https://sexualviolence.universityofcalifornia.edu/faq/

Urban Indian Health Institute. (2018). Missing and Murdered Indigenous Women & Girls. Retrieved from https://www.uihi.org/resources/missing-and-murdered-indigenous-women-girls/

US Department of Veterans Affairs (2024). VHA Social Work. Retrieved from https://www.socialwork.va.gov/IPV/About.asp

US Preventive Services Task Force (USPTF); Curry SJ, Krist AH, Owens DK, Barry MJ, Caughey AB, Davidson KW, Doubeni CA, Epling JW Jr, Grossman DC, Kemper AR, Kubik M, Kurth A, Landefeld CS, Mangione CM, Silverstein M, Simon MA, Tseng CW, Wong JB. (2018). Screening for Intimate Partner Violence, Elder Abuse, and Abuse of Vulnerable Adults: US Preventive Services Task Force Final Recommendation Statement. JAMA.320(16):1678-1687. doi: 10.1001/jama.2018.14741. PMID: 30357305.

WPSI. (2024). Interpersonal and domestic violence recommendations. Retrieved from https://www.womenspreventivehealth.org/recommendations/interpersonal-and-domestic-violence/

Young-Wolff KC, Kotz K, McCaw B. Transforming the Health Care Response to Intimate Partner Violence: Addressing "Wicked Problems". JAMA. 2016;315(23):2517–2518. doi:10.1001/jama.2016.4837

Appendix B: Digital Feasibility

As part of NCQA's strategic transition to a fully digital quality measurement portfolio, we conduct a feasibility assessment to evaluate the measure's intent and associated clinical concepts within a digital framework. The primary objectives were to determine whether the clinical concepts could be represented using standardized data models and nationally recognized terminologies, and to assess the availability of discrete, structured data necessary to support accurate and reliable digital measurement.

Data and Terminology Standards

NCQA's digital quality measures are built on the Fast Healthcare Interoperability Resources (FHIR®) standard, developed by HL7®, to support interoperable exchange of electronic health data. In the U.S., FHIR US Core profiles provide detailed implementation guidance aligned with the United States Core Data for Interoperability (USCDI), a federal standard maintained by ASTP (formerly ONC). USCDI defines essential data classes and elements, while FHIR US Core specifies how to represent and exchange them. Additionally, NCQA uses nationally recognized clinical terminologies (e.g., ICD-10, CPT, LOINC) to define value sets, ensuring standardized interpretation and representation of clinical data in quality measures.

Digital Feasibility Assessment

The digital feasibility assessment is conducted at two stages during the measure development process, pre-testing phase and post-testing phase, summarized below. This assessment examines each measure concept across three high-level categories:

- **Data Standards and Terminology**. Evaluates the alignment with national standards (FHIR, USCDI) and recognized terminology standards (i.e., LOINC, ICD).
- **Clinical Workflow and Data Accuracy**. Evaluates whether the concept aligns with standard clinical practice and the likelihood that the data will be accurate, complete, and reliable.
- **Data Availability and Structure**. Assesses if the data is likely to be present, in structured fields, and accessible to health plans.

The digital feasibility assessment (shown in Figure A) rates each concept from high to low. High = Feasible with no concerns, Medium = Feasible with some concerns (with a potential mitigation strategy); Low = Low feasibility with concerns (with little to no mitigation strategy for the current development cycle).

Pre-Testing Feasibility Findings.

Overall, a digital version of this measure as currently specified is feasible. Terminology and data standards exist for the clinical concepts in the measure. However, the actual implementation and use of these terminology and data standards, as well as the collection of these clinical concepts in routine clinical workflow, will need to be assessed through testing.

Data Standards & Terminology. As shown in Figure A-1, all clinical concepts can be modeled in the FHIR data standard and represented in nationally recognized standard terminologies, supporting strong alignment with national interoperability requirements.

Clinical Workflow & Data Accuracy. There is uncertainty around the CUES Framework, positive findings for intimate partner violence screening, and gender identity being captured in routine clinical workflow.

Data Availability & Structure. Though diagnosis for intimate partner violence is often documented, it may be found more often in free text than structured fields. For positive findings on a screening, there does not seem to be consistency in how this data is stored across EHRs, as structured fields may exist, but is more likely to be found in free text, if at all. The CUES Framework raises the strongest concerns for data availability as the uncertainty around its collection in clinical workflow also makes it hard to find in the ideal format for data exchange. As a result of these clinical concepts being rated medium and low, their score for data accessibility, by extension, is also medium (i.e. uncertainty about being in discrete, structured fields leads to uncertainty about ability to exchange/access the data).

Figure A-1: Pre-Testing Digital Concept Feasibility Assessment

Score key: H-high, M-medium, L-low						
	Data Standards & Terminology		**Clinical Workflow & Data Accuracy**		**Data Availability & Structure**	
Clinical Concept	**Data Standards**	**Terminology Standards**	**Workflow**	**Data Accuracy**	**Data Availability**	**Data Accessibility**
Age	H	H	H	H	H	H
Positive finding or diagnosis for intimate partner violence	H	H	H	H	M	M
Documented finding for intimate partner violence pre-screening procedure (CUES Framework)	H	H	M	H	L/M	M
Positive finding for intimate partner violence screening	H	H	M	H	M	M
F/u on positive screen	H	H	H	H	H	H
Administrative gender	H	H	H	H	H	H
Gender identity	H	H	M	H	H	H

Post-Testing Feasibility Findings.

Overall, a digital version of this measure as currently specified is feasible, as all the clinical concepts used in the measure, except for the CUES Framework, demonstrate medium to high digital feasibility.

Data Standards & Terminology. As shown in Figure A-2, all clinical concepts can be modeled in the FHIR data standard and represented in nationally recognized standard terminologies, supporting strong alignment with national interoperability requirements.

Clinical Workflow & Data Accuracy. Based on preliminary testing results, the screening for intimate partner violence is limited to a few clinical settings. Additionally, gender identity is typically updated by a patient in their portal but could also be edited by a provider, which would suggest that its incorporation into the clinical workflow is not standardized.

Data Availability & Structure. Testing results did confirm data accessibility issues with the CUES Framework concept, as the test site was unable to pull SNOMED codes. Even if the test site had the ability to pull SNOMED codes, there is still reasonable uncertainty about the collection of this data in a structured field. However, the testing site did show successful, robust extraction of codes for diagnosis for intimate partner violence, elevating its score for data availability to an “H.”

Figure A-2: Post-Testing Digital Concept Feasibility Assessment

Score key: H-high, M-medium, L-low						
	Data Standards & Terminology		**Clinical Workflow & Data Accuracy**		**Data Availability & Structure**	
Clinical Concept	**Data Standards**	**Terminology Standards**	**Workflow**	**Data Accuracy**	**Data Availability**	**Data Accessibility**
Age	H	H	H	H	H	H
Positive finding or diagnosis for intimate partner violence	H	H	H	H	H	M
Documented finding for intimate partner violence pre-screening procedure (CUES Framework)	H	H	M	H	L/M	M
Positive finding for intimate partner violence screening	H	H	M	H	M	M
F/u on positive screen	H	H	H	H	H	H
Administrative gender	H	H	H	H	H	H
Gender identity	H	H	M	H	H	H

Proposed New Measure for HEDIS®[1] MY 2027: Person-Centered Outcome (PCO) Measures

NCQA seeks comments on the *Person-Centered Outcome* (PCO) measures, newly proposed measures for inclusion in HEDIS Measurement Year (MY) 2027 for Special Needs Plans (SNPs). This is a set of three measures that enable individuals and/or caregivers and their clinicians to identify and track meaningful, measurable goals for care planning, quality improvement and clinician accountability. The measures are as follows:

- *Person-Centered Outcome – Goal Identification (GID-E).* The percentage of persons 18 years of age and older with a complex care need who set a person-centered outcome goal.
- *Person-Centered Outcome – Goal Follow-Up (GIF-E)*. The percentage of persons 18 years of age and older with a complex care need who set a person-centered outcome goal and followed up on the goal.
- *Person-Centered Outcome – Goal Achievement (GIA-E)*. The percentage of persons 18 years of age and older with a complex care need who set a person-centered outcome goal and achieved the goal.

The measures are intended for reporting by SNPs only, excluding Institutional SNPs (I-SNPs).

There is growing consensus that health care should be guided by individuals' goals and preferences, especially for adults with complex care needs.[2] Over the past 10 years, with support from The John A. Hartford Foundation, The SCAN Foundation and The Gordon and Betty Moore Foundation, NCQA developed the Person-Centered Outcome (PCO) measures. These measures enable individuals and/or caregivers and their clinicians to identify and track meaningful, measurable goals for care planning, quality improvement and clinician accountability. The PCO measures have been successfully tested in multiple care delivery settings in over 30 organizations, across 17 states, with more than 700 clinicians (e.g., physicians, nurses, social workers, peer navigators and care managers) and over 30,000 individuals and are being used in a state Medicaid home and community-based care program for value-based payment. The PCO measures tailor measurement to the priorities that matter most to individuals and have the potential to fill a critical gap in accountability for whole-person care. SNPs are the ideal environment for the PCO measures due to the CMS Model of Care which requires documentation of person-centered goals.

Testing and Panel Feedback

NCQA conducted field testing in two Special Needs Plans (SNPs) to evaluate the feasibility and performance of the new measure concepts and to inform implementation at the health plan level. Field testing demonstrated strong feasibility and usability of the PCO measures across participating health plans. Plans successfully used electronic care management platforms to implement the PCO approach, validating the feasibility of digital reporting for these measures.

Overall, the average performance rate for GID-E was 95.67%, confirming that documenting person-centered goals is feasible and well-integrated into care management workflows. Participating plans were able to report the GIF-E (goal follow-up) and GIA-E (goal achievement) measures as well, demonstrating that plans can track progress toward goals over time. Overall, the average performance rate for GIF-E was 41.99% and 32.05% for GIA-E. Analysis of the results by demographics indicated that the measures can be implemented across diverse populations, and the diversity of goal domain selection highlights that plans were able to capture a wide range of priorities. This flexibility demonstrates that the PCO approach supports individualized care planning that is aligned with what matters most to members.

[1]HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).
[2]American Geriatrics Society Expert Panel on the Care of Older Adults with Multimorbidity. (2012). *Guiding principles for the care of older adults with multimorbidity: An approach for clinicians.* Journal of the American Geriatrics Society, 60(10), E1–E25.

Overall, testing confirms that the PCO measures (GID-E, GIF-E and GIA-E) are feasible, adaptable and capable of driving person-centered care.

Advisory panels expressed strong support for the measures and recognized their potential to advance the growing emphasis on person-centered care.

Public Comment Request

NCQA seeks general feedback on including the three PCO measures for SNPs only (excluding I-SNPs), and specific feedback on the **following:**

1. Do you support the inclusion of the new PCO measures in HEDIS MY 2027?
2. Should NCQA postpone public reporting of GIA-E until HEDIS MY 2029 to allow for additional time to monitor health plan performance?
3. Are there other populations for which the PCO measures would be applicable?

Supporting documents include three draft measure specifications and an evidence workup.

NCQA acknowledges the contributions of the Behavioral Health, Geriatric, Person-Centered Outcomes and Technical Measurement Advisory Panels.

Measure title	Person-Centered Outcome - Goal Identification	**Measure ID**	GID-E
Description	The percentage of persons 18 years of age and older with a complex care need who set a person-centered outcome goal.		
Measurement period	January 1–December 31.		
Copyright and disclaimer notice	**Adapted with financial support from The John A. Hartford Foundation and The SCAN Foundation.* Refer to the complete copyright and disclaimer information at the front of this publication. NCQA website: www.ncqa.org. Submit policy clarification support questions via My NCQA (https://my.ncqa.org).		
Clinical recommendation statement/ rationale	There is broad agreement that a person's goals and priorities should guide care and quality measures used to evaluate care.[1-3] For older adults with multiple chronic conditions and functional limitations, clinical guidelines have pointed to the importance of providing goal-based care.[4,5] For this complex population, goal setting has been shown to reduce patient-reported treatment burden and receipt of unwanted care and correlates with greater physical and social well-being and care satisfaction.[6,7] The Centers for Medicare & Medicaid Services (CMS) support aligning care with persons' goals as demonstrated by the "Meaningful Measures" initiative, which calls for quality measures where "care is personalized and aligned with patient's goals".[8]		
Citations	[1] McGlynn, E. A., Schneider, E. C., & Kerr, E. A. (2014). Reimagining Quality Measurement. *New England Journal of Medicine*, *371*(23), 2150–2153. https://doi.org/10.1056/NEJMp1407883. [2] Reuben, D. B., & Tinetti, M. E. (2012). Goal-oriented patient care—An alternative health outcomes paradigm. The New England Journal of Medicine, 366(9), 777–779. https://doi.org/10.1056/NEJMp1113631. [3] Tinetti, M. E., Naik, A. D., & Dodson, J. A. (2016). Moving From Disease-Centered to Patient Goals–Directed Care for Patients With Multiple Chronic Conditions: Patient Value-Based Care. JAMA Cardiology, 1(1), 9. https://doi.org/10.1001/jamacardio.2015.0248. [4] American Geriatrics Society Expert Panel on the Care of Older Adults With Multimorbidity. (2012). Patient-centered care for older adults with multiple chronic conditions: A stepwise approach from the American Geriatrics Society: American Geriatrics Society Expert Panel on the Care of Older Adults with Multimorbidity. *Journal of the American Geriatrics Society*, 60(10), 1957–1968. https://doi.org/10.1111/j.1532- 5415.2012.04187. [5] The American Geriatrics Society Expert Panel on Person-Centered Care. (2016). Person-centered care: A definition and essential elements. *Journal of the American Geriatrics Society*, *64*(1), 15–18. https://doi.org/10.1111/jgs.13866. [6] Kuipers, S. J., Cramm, J. M., & Nieboer, A. P. (2019). The importance of patient-centered care and co-creation of care for satisfaction with care and physical and social well-being of patients with multi-morbidity in the primary care setting. *BMC Health Services Research*, *19*(1), 13. https://doi.org/10.1186/s12913-018-3818-y.		

	[7] Tinetti, M. E., Naik, A. D., Dindo, L., Costello, D. M., Esterson, J., Geda, M., Rosen, J., Hernandez-Bigos, K., Smith, C. D., Ouellet, G. M., Kang, G., Lee, Y., & Blaum, C. (2019). Association of Patient Priorities–Aligned Decision-Making With Patient Outcomes and Ambulatory Health Care Burden Among Older Adults With Multiple Chronic Conditions: A Nonrandomized Clinical Trial. *JAMA Internal Medicine*, 179(12), 1688–1697. https://doi.org/10.1001/jamainternmed.2019.4235 [8] Meaningful Measures Hub | CMS. (2019, September 10). https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/MMF/General-info-Sub-Page
Characteristics	
Scoring	Proportion.
Type	Process.
Product lines	Medicare (only D-SNP and C-SNP benefit packages).
Stratifications	Age as of the start of the measurement period • 18–64 years. • 65 years and older.
Risk adjustment	None.
Improvement notation	Increased score indicates improvement.
Guidance	**Data collection methodology:** ECDS. Refer to the *General Guideline: Data Collection Methods* for additional information. **Date specificity:** Dates must be specific enough to determine the event occurred in the period being measured. **Documenting multiple goals:** The measure only requires the documentation of one person-centered outcome goal per measurement period. If a person and/or care partner documents multiple goals, only one goal that meets measure requirements (i.e., documentation of a person-centered outcome goal that includes a goal domain, baseline measurement and care plan) will be reported for the measure numerator. • *For example:* – If an individual sets three goals in a measurement period and only one meets the measure requirements, they have met the GID-E numerator. – An individual sets a goal on August 1 but does not meet GID-E because a baseline measurement was not documented. The individual comes back October 2, notifies their clinician that the goal is no longer relevant, sets a new goal and meets all measure requirements. The second goal would meet the GID-E numerator.
Definitions	
Baseline measurement	Completion of goal attainment scaling (GAS) or a patient-reported outcome measure (PROM) for the person-centered outcome goal that was set.

Care plan

The documented steps required to achieve the person-centered outcome goal. Each time a new goal is documented, the care plan should be developed and/or reviewed.

Complex care need

A complex care need represents physical, behavioral health and/or social challenges. Individuals may have multiple complex care needs. Enrollment in a Special Needs Plan (SNP) is indicative of having a complex care need.

GAS

Goal attainment scaling is a well-tested approach to measuring individualized goals of care. Individuals and clinicians jointly identify a goal that is most important to the individual and define a set of possible outcomes along a 5-point scale (Table 1) from "much less than expected" to "much better than expected."

Table 1. Goal Attainment Scaling Scoring

Much less than expected	Less than expected (at baseline, current state)	Expected outcome (person-centered outcome goal)	Better than expected	Much better than expected
-2	-1	0	+1	+2

Goal domain

A high-level description of the goal focus that must be chosen when the person-centered outcome goal is set. Recommended goal domain options are:

- Access to Services & Supports
- Housing
- Managing Conditions & Symptoms
- Caregiver Needs & Concerns
- Improving Health & Wellness
- Medication Management
- Emotional & Mental Health
- Independence
- Physical Function
- End of Life
- Legal
- Social & Role Functioning

PROM

A patient-reported outcome measure (PROM) is a standardized instrument used to report patient-reported outcomes. An example of a PROM includes the Patient-Reported Outcomes Measurement Information System (PROMIS®). The PROMIS instruments are used to assess and monitor mental, physical and social health in both children and adults. PROMIS instruments are used within the general population as well as with individuals living with chronic conditions. The following table provides the PROMs allowed for use for this measure.

Table 2. List of Approved PROMs

Instrument	Total Score LOINC Code
General Anxiety Disorder (GAD)–7	70274-6
PHQ-9	44261-6
Instrument	**T-Score LOINC Code**
PROMIS® Ability to Participate in Social Roles and Activities–Short Form v2.0–8a	77854-8
PROMIS® Alcohol Use–Short Form v1.0–7a	77848-0
PROMIS® Anger–Short Form v1.1–5a	89921-1
PROMIS® Anxiety–Short Form–7a	77862-1
PROMIS® Cognitive Function–Short Form v2.0–8a	81531-6
PROMIS® Depression	71965-8
PROMIS® Dyspnea Severity–Short Form v1.0–10a	92149-4
PROMIS® Fatigue–Short Form v1.0–7a	77864-7
PROMIS® Informational Support–Short Form v2.0–8a	77851-4

	<table><tr><td>PROMIS® Instrumental Support–Short Form v2.0–8a</td><td>77850-6</td></tr><tr><td>PROMIS® Mobility Item Bank–v2.1</td><td>91614-8</td></tr><tr><td>PROMIS® Pain behavior–v1.0–7a</td><td>77856-3</td></tr><tr><td>PROMIS® Pain Interference–Short Form v1.0–6a</td><td>77865-4</td></tr><tr><td>PROMIS® Physical Function–Short Form v2.0–10a</td><td>91721-1</td></tr><tr><td>PROMIS® Satisfaction with Participation in Social Roles–Short Form v1.0–8a</td><td>77855-5</td></tr><tr><td>PROMIS® Self-Efficacy for Managing Daily Activities–Short Form v1.0–8a</td><td>92391-2</td></tr><tr><td>PROMIS® Self-Efficacy for Managing Emotions–Short Form v1.0–8a</td><td>92329-2</td></tr><tr><td>PROMIS® Self-Efficacy for Managing Medications and Treatments–Short Form v1.0–8a</td><td>92418-3</td></tr><tr><td>PROMIS® Self-Efficacy for Managing Symptoms–Short Form v1.0–8a</td><td>92448-0</td></tr><tr><td>PROMIS® Sleep-Related Impairment–Short Form v1.0–8a</td><td>77859-7</td></tr><tr><td>PROMIS® Smoking: Negative Health Expectancies for All Smokers–Short Form v1.0–6a</td><td>92266-6</td></tr><tr><td>PROMIS® Smoking: Nicotine Dependence for All Smokers–Short Form v1.0–8a</td><td>92305-2</td></tr><tr><td>PROMIS® Social Isolation–Short Form v2.0–8a</td><td>77849-8</td></tr><tr><td>PROMIS® Smoking: Coping Expectancies for All Smokers–Short Form v1.0–4a</td><td>92213-8</td></tr></table>
Person-centered outcome goal	A goal identified by an individual and/or care partner as important. The goal should be specific, measurable, achievable, relevant and time-bound. Person-centered outcome goals may include something the person wishes to accomplish (e.g., taking a special trip, living to see a relative's life milestone), health and well-being outcomes, behavioral health outcomes or outcomes related to receiving services. Person-centered outcome goals must be documented using GAS or PROM to monitor and determine goal achievement. If the person and/or care partner deem that the initial goal is no longer relevant (e.g., person was hospitalized and they can no longer work towards the original goal), the person and/or care partner can set a new goal.
Initial population	*Measure item count:* Person. *Attribution basis:* Enrollment. • *Benefits:* Medical. • *Continuous enrollment:* August 1 of the year prior to the measurement period through the last day of the measurement period. • *Allowable gap:* – *Measurement period:* No more than one gap of ≤ 45 days. – *August 1 of the year prior to the measurement period through December 31 of the year prior to the measurement period:* None. *Ages:* 18 years of age and older as of August 1 of the year prior to the measurement period. *Event:* None.
Denominator exclusions	**Persons with a date of death.** Death in the measurement period, identified using data sources determined by the organization. Method and data sources are subject to review during the HEDIS audit. **Persons in hospice or using hospice services.** Persons who use hospice services (Hospice Encounter Value Set; Hospice Intervention Value Set) or elect to use a hospice benefit any time on or between August 1 of the year prior to the measurement period and the last day of the measurement period. Organizations that use the Monthly Membership Detail Data File to identify these persons must use only the run date of the file.

<table>
<tr><td></td><td>Persons 18 years of age or older by the last day of the measurement period, with Medicare benefits, enrolled in an institutional SNP (I-SNP) or living long-term in an institution (LTI).
Enrolled in an I-SNP any time on or between August 1 of the year prior to the measurement period and the last day of the measurement period.
Living long-term in an institution any time on or between August 1 of the year prior to the measurement period and the last day of the measurement period, as identified by the LTI flag in the Monthly Membership Detail Data File. Use the run date of the file to determine if a member had an LTI flag any time on or between August 1 of the year prior to the measurement period and the last day of the measurement period.</td></tr>
<tr><td>Denominator</td><td>The initial population minus denominator exclusions.</td></tr>
<tr><td>Numerator</td><td>Goal Identification
Persons with documentation of a person-centered outcome goal that includes a goal domain, baseline measurement and care plan.
Either of the following baseline measurements on or between August 1 of the year prior to the measurement period and July 31 of the measurement period:
Documentation of GAS (LOINC code 112296-9) and a goal domain (goal domain field is not null) on the same date of service. A care plan (Care Plan Value Set) documented within 7 days of GAS and goal domain documentation.
A documented score from a standardized PROM (Patient Reported Health Assessment Scores Value Set) and a goal domain (goal domain field is not null) on the same date of service. A care plan (Care Plan Value Set) documented within 7 days of standardized PROM score and goal domain documentation.
Do not include baseline measurements taken in an inpatient setting or during an ED visit.</td></tr>
<tr><td>Summary of changes</td><td>This is a first-year measure.</td></tr>
<tr><td>Data element tables</td><td>Organizations that submit data to NCQA must provide the following data elements in a specified file.
Table GID-E-3: Data Elements for Person-Centered Outcome—Goal Identification
<table>
<tr><th>Metric</th><th>Age</th><th>Data Element</th><th>Reporting Instructions</th></tr>
<tr><td rowspan="5">Goal Identification</td><td>18-64</td><td>InitialPopulation</td><td>For each Stratification</td></tr>
<tr><td>65+</td><td>Exclusions</td><td>For each Stratification</td></tr>
<tr><td>Total</td><td>Denominator</td><td>For each Stratification</td></tr>
<tr><td></td><td>Numerator</td><td>For each Stratification</td></tr>
<tr><td></td><td>Rate</td><td>(Percent)</td></tr>
</table></td></tr>
</table>

Measure title	Person-Centered Outcome—Goal Follow-Up	**Measure ID**	GIF-E
Description	The percentage of persons 18 years of age and older with a complex care need who set a person-centered outcome goal and followed up on the goal.		
Measurement period	January 1–December 31.		
Copyright and disclaimer notice	**Adapted with financial support from The John A. Hartford Foundation and The SCAN Foundation.* Refer to the complete copyright and disclaimer information at the front of this publication. NCQA website: www.ncqa.org. Submit policy clarification support questions via My NCQA (https://my.ncqa.org).		
Clinical recommendation statement/ rationale	There is broad agreement that a person's goals and priorities should guide care and quality measures used to evaluate care.[1-3] For older adults with multiple chronic conditions and functional limitations, clinical guidelines have pointed to the importance of providing goal-based care.[4,5] For this complex population, goal setting has been shown to reduce patient-reported treatment burden and receipt of unwanted care and correlates with greater physical and social well-being and care satisfaction.[6,7] The Centers for Medicare & Medicaid Services (CMS) support aligning care with persons' goals as demonstrated by the "Meaningful Measures" initiative, which calls for quality measures where "care is personalized and aligned with patient's goals".[8]		
Citations	[1] McGlynn, E. A., Schneider, E. C., & Kerr, E. A. (2014). Reimagining Quality Measurement. *New England Journal of Medicine*, *371*(23), 2150–2153. https://doi.org/10.1056/NEJMp1407883. [2] Reuben, D. B., & Tinetti, M. E. (2012). Goal-oriented patient care—An alternative health outcomes paradigm. The New England Journal of Medicine, 366(9), 777–779. https://doi.org/10.1056/NEJMp1113631. [3] Tinetti, M. E., Naik, A. D., & Dodson, J. A. (2016). Moving From Disease-Centered to Patient Goals–Directed Care for Patients With Multiple Chronic Conditions: Patient Value-Based Care. JAMA Cardiology, 1(1), 9. https://doi.org/10.1001/jamacardio.2015.0248. [4] American Geriatrics Society Expert Panel on the Care of Older Adults With Multimorbidity. (2012). Patient-centered care for older adults with multiple chronic conditions: A stepwise approach from the American Geriatrics Society: American Geriatrics Society Expert Panel on the Care of Older Adults with Multimorbidity. *Journal of the American Geriatrics Society*, 60(10), 1957–1968. https://doi.org/10.1111/j.1532- 5415.2012.04187.x [5] The American Geriatrics Society Expert Panel on Person-Centered Care. (2016). Person-centered care: A definition and essential elements. *Journal of*		

	the American Geriatrics Society, *64*(1), 15–18. https://doi.org/10.1111/jgs.13866. [6] Kuipers, S. J., Cramm, J. M., & Nieboer, A. P. (2019). The importance of patient-centered care and co-creation of care for satisfaction with care and physical and social well-being of patients with multi-morbidity in the primary care setting. *BMC Health Services Research*, *19*(1), 13. https://doi.org/10.1186/s12913-018-3818-y. [7] Tinetti, M. E., Naik, A. D., Dindo, L., Costello, D. M., Esterson, J., Geda, M., Rosen, J., Hernandez-Bigos, K., Smith, C. D., Ouellet, G. M., Kang, G., Lee, Y., & Blaum, C. (2019). Association of Patient Priorities–Aligned Decision-Making With Patient Outcomes and Ambulatory Health Care Burden Among Older Adults With Multiple Chronic Conditions: A Nonrandomized Clinical Trial. *JAMA Internal Medicine*, 179(12), 1688–1697. https://doi.org/10.1001/jamainternmed.2019.4235 [8] Meaningful Measures Hub | CMS. (2019, September 10). https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/MMF/General-info-Sub-Page
Characteristics	
Scoring	Proportion.
Type	Process.
Product lines	Medicare (only D-SNP and C-SNP benefit packages).
Stratifications	Age as of the start of the measurement period. • 18–65 years. • 65 years and older.
Risk adjustment	None.
Improvement notation	Increased score indicates improvement.
Guidance	**Data collection methodology:** ECDS. Refer to the *General Guideline: Data Collection Methods* for additional information. **Date specificity:** Dates must be specific enough to determine the event occurred in the period being measured. **Documenting goal follow-up:** Multiple follow-ups on a goal can be completed during the measurement period. If the clinician completes multiple follow-ups on the goal with the person and/or care partner, only one follow-up that meets measure requirements (see numerator criteria below) will be reported for the measure numerator. • *For example:* – A goal was developed on August 1. An initial follow-up was completed on September 10, but the goal was not met. Although the goal was not met, all GIF-E measure requirements were met meeting the GIF-E numerator.

Definitions

Baseline measurement

Completion of goal attainment scaling (GAS) or a patient-reported outcome measure (PROM) for the person-centered outcome goal that was set.

Care plan

The documented steps required to achieve the person-centered outcome goal. Each time a new goal is documented, the care plan should be developed and/or reviewed.

Complex care need

A complex care need represents physical, behavioral health and/or social challenges. Individuals may have multiple complex care needs. Enrollment in a Special Needs Plan (SNP) is indicative of having a complex care need.

Follow-up period

The 14–180 days after the baseline measurement (167 total days).

GAS

Goal attainment scaling is a well-tested approach to measuring individualized goals of care. Individuals and clinicians jointly identify a goal that is most important to the individual and define a set of possible outcomes along a 5-point scale (Table 1) from "much less than expected" to "much better than expected."

Table 1. Goal Attainment Scaling Scoring

Much less than expected	Less than expected (at baseline, current state)	Expected outcome (person-centered outcome goal)	Better than expected	Much better than expected
-2	-1	0	+1	+2
LOINC code LA34484-8	LOINC code LA34483-0	LOINC code LA34481-4	LOINC code LA34480-6	LOINC code LA34479-8

Goal domain

A high-level description of the goal focus that must be chosen when the person-centered outcome goal is set. Recommended goal domain options are:

- Access to Services & Supports
- Housing
- Managing Conditions & Symptoms
- Caregiver Needs & Concerns
- Improving Health & Wellness
- Medication Management
- Emotional & Mental Health
- Independence
- Physical Function
- End of Life
- Legal
- Social & Role Functioning

Goal intake period

August 1 of the year prior to the measurement period through July 31 of the measurement period.

PROM

A patient-reported outcome measure (PROM) is a standardized instrument used to report patient-reported outcomes. An example of a PROM includes the Patient-Reported Outcomes Measurement Information System (PROMIS®). The PROMIS instruments are used to assess and monitor mental, physical and social health in both children and adults. PROMIS instruments are used within the general population as well as with individuals living with chronic conditions. The following table provides the PROMs allowed for use for this measure and the meaningful change to count for goal achievement.

	Table 2. List of Approved PROMs

Instrument	Total Score LOINC Code
General Anxiety Disorder (GAD)—7	70274-6
PHQ-9	44261-6
PROMIS® Ability to Participate in Social Roles and Activities—Short Form v2.0–8a	77854-8
PROMIS® Alcohol Use—Short Form v1.0–7a	77848-0
PROMIS® Anger—Short Form v1.1–5a	89921-1
PROMIS® Anxiety—Short Form–7a	77862-1
PROMIS® Cognitive Function—Short Form v2.0–8a	81531-6
PROMIS® Depression	71965-8
PROMIS® Dyspnea Severity—Short Form v1.0–10a	92149-4
PROMIS® Fatigue—Short Form v1.0–7a	77864-7
PROMIS® Informational Support—Short Form v2.0–8a	77851-4
PROMIS® Instrumental Support—Short Form v2.0–8a	77850-6
PROMIS® Mobility Item Bank—v2.1	91614-8
PROMIS® Pain behavior—v1.0–7a	77856-3
PROMIS® Pain Interference—Short Form v1.0–6a	77865-4
PROMIS® Physical Function—Short Form v2.0–10a	91721-1
PROMIS® Satisfaction with Participation in Social Roles–Short Form v1.0–8a	77855-5
PROMIS® Self-Efficacy for Managing Daily Activities—Short Form v1.0–8a	92391-2
PROMIS® Self-Efficacy for Managing Emotions—Short Form v1.0–8a	92329-2
PROMIS® Self-Efficacy for Managing Medications and Treatments—Short Form v1.0–8a	92418-3
PROMIS® Self-Efficacy for Managing Symptoms—Short Form v1.0–8a	92448-0
PROMIS® Sleep-Related Impairment—Short Form v1.0–8a	77859-7
PROMIS® Smoking: Negative Health Expectancies for All Smokers—Short Form v1.0–6a	92266-6
PROMIS® Smoking: Nicotine Dependence for All Smokers—Short Form v1.0–8a	92305-2
PROMIS® Social Isolation—Short Form v2.0–8a	77849-8
PROMIS® Smoking: Coping Expectancies for All Smokers—Short Form v1.0–4a	92213-8

Person-centered outcome goal	A goal identified by an individual and/or care partner as important. The goal should be specific, measurable, achievable, relevant and time-bound. Person-centered outcome goals may include something the person wishes to accomplish (e.g., taking a special trip, living to see a relative's life milestone), health and well-being outcomes, behavioral health outcomes or outcomes related to receiving services. Person-centered outcome goals must be documented using GAS or PROM to monitor and determine goal achievement. If the person and/or care partner deem that the initial goal is no longer relevant (e.g., person was hospitalized and they can no longer work towards the original goal), the person and/or care partner can set a new goal.
Initial population	*Measure item count:* Person. *Attribution basis:* Enrollment. • *Benefits:* Medical. • *Continuous enrollment:* August 1 of the year prior to the measurement period through the last day of the measurement period.

	• *Allowable gap:* – *Measurement period:* No more than one gap of ≤ 45 days. – *August 1 of the year prior to the measurement period through December 31 of the year prior to the measurement period:* None. *Ages:* 18 years of age and older as of August 1 of the year prior to the measurement period. *Event:* None.
Denominator exclusions	**Persons with a date of death.** Death in the measurement period, identified using data sources determined by the organization. Method and data sources are subject to review during the HEDIS audit. **Persons in hospice or using hospice services.** Persons who use hospice services (Hospice Encounter Value Set; Hospice Intervention Value Set) or elect to use a hospice benefit any time on or between August 1 of the year prior to the measurement period and the last day of the measurement period. Organizations that use the Monthly Membership Detail Data File to identify these persons must use only the run date of the file. **Persons 18 years of age or older by the last day of the measurement period, with Medicare benefits, enrolled in an institutional SNP (I-SNP) or living long-term in an institution (LTI).** • Enrolled in an I-SNP any time on or between August 1 of the year prior to the measurement period and the last day of the measurement period. • Living long-term in an institution any time on or between August 1 of the year prior to the measurement period and the last day of the measurement period, as identified by the LTI flag in the Monthly Membership Detail Data File. Use the run date of the file to determine if a member had an LTI flag any time on or between August 1 of the year prior to the measurement period and the last day of the measurement period.
Denominator	The initial population minus denominator exclusions.
Numerator	**Goal Follow-up** Persons with documentation of a person-centered outcome goal that includes a goal domain, baseline measurement, care plan and who had a follow-up measurement on or between 14 and 180 days after baseline measurement. **Step 1**. Identify documentation of a person-centered outcome goal using either of the following baseline measurements on or between August 1 of the year prior to the measurement period and July 31 of the measurement period: • Documentation of GAS (LOINC code 112296-9) and a goal domain (goal domain field is not null) on the same date of service. A care plan (Care Plan Value Set) documented within 7 days of GAS and goal domain documentation. • A documented score from a standardized PROM (refer to direct reference codes in Table 2) and a goal domain (goal domain field is not null) on the same date of service. A care plan (Care Plan Value Set) documented

- within 7 days of standardized PROM score and goal domain documentation.

Step 2. Identify follow-up measurement using either of the following on or between 14 and 180 days after the baseline measurement (167 total days):

- For persons who used GAS (LOINC code 112296-9) as their baseline measurement, a follow-up GAS score. Persons who have both of the following on the same date of service meet criteria:
  - Documentation of a follow-up GAS score by the practitioner (LOINC code 107333-7) with Goal Attainment Scaling Scores Value Set).
  - Documentation of a follow-up GAS score by the patient (LOINC code 107334-5) with Goal Attainment Scaling Scores Value Set) or caregiver (LOINC code 107331-1) with Goal Attainment Scaling Scores Value Set).
- For persons who used PROM as their baseline measurement, a documented total score or t-score from the same PROM instrument that was used at baseline. To identify the same instrument, refer to direct reference codes in Table 2.

For persons with multiple goals, if any goal is compliant the person is compliant.

Do not include baseline or follow-up measurements taken in an inpatient setting or during an ED visit.

Summary of changes

- This is a first-year measure.

Data element tables

Organizations that submit data to NCQA must provide the following data elements in a specified file.

Table GIF-E-3: Data Elements for Person-Centered Outcome–Goal Follow up

Metric	Age	Data Element	Reporting Instructions
Goal Follow-up	18-64	InitialPopulation	For each Stratification
	65+	Exclusions	For each Stratification
	Total	Denominator	For each Stratification
		Numerator	For each Stratification
		Rate	(Percent)

Measure title	Person-Centered Outcome – Goal Achievement	**Measure ID**	GIA-E
Description	The percentage of persons 18 years of age and older with a complex care need who set a person-centered outcome goal and achieved the goal.		
Measurement period	January 1–December 31.		
Copyright and disclaimer notice	**Adapted with financial support from The John A. Hartford Foundation and The SCAN Foundation.* Refer to the complete copyright and disclaimer information at the front of this publication. NCQA website: www.ncqa.org. Submit policy clarification support questions via My NCQA (https://my.ncqa.org).		
Clinical recommendation statement/ rationale	There is broad agreement that a person's goals and priorities should guide care and quality measures used to evaluate care.[1-3] For older adults with multiple chronic conditions and functional limitations, clinical guidelines have pointed to the importance of providing goal-based care.[4,5] For this complex population, goal setting has been shown to reduce patient-reported treatment burden and receipt of unwanted care and correlates with greater physical and social well-being and care satisfaction.[6,7] The Centers for Medicare & Medicaid Services (CMS) support aligning care with persons' goals as demonstrated by the "Meaningful Measures" initiative, which calls for quality measures where "care is personalized and aligned with patient's goals".[8]		
Citations	[1] McGlynn, E. A., Schneider, E. C., & Kerr, E. A. (2014). Reimagining Quality Measurement. *New England Journal of Medicine*, *371*(23), 2150–2153. https://doi.org/10.1056/NEJMp1407883. [2] Reuben, D. B., & Tinetti, M. E. (2012). Goal-oriented patient care—An alternative health outcomes paradigm. The New England Journal of Medicine, 366(9), 777–779. https://doi.org/10.1056/NEJMp1113631. [3] Tinetti, M. E., Naik, A. D., & Dodson, J. A. (2016). Moving From Disease-Centered to Patient Goals–Directed Care for Patients With Multiple Chronic Conditions: Patient Value-Based Care. JAMA Cardiology, 1(1), 9. https://doi.org/10.1001/jamacardio.2015.0248. [4] American Geriatrics Society Expert Panel on the Care of Older Adults With Multimorbidity. (2012). Patient-centered care for older adults with multiple chronic conditions: A stepwise approach from the American Geriatrics Society: American Geriatrics Society Expert Panel on the Care of Older Adults with Multimorbidity. *Journal of the American Geriatrics Society*, 60(10), 1957–1968. https://doi.org/10.1111/j.1532- 5415.2012.04187.x [5] The American Geriatrics Society Expert Panel on Person-Centered Care. (2016). Person-centered care: A definition and essential elements. *Journal of the American Geriatrics Society*, *64*(1), 15–18. https://doi.org/10.1111/jgs.13866. [6] Kuipers, S. J., Cramm, J. M., & Nieboer, A. P. (2019). The importance of patient-centered care and co-creation of care for satisfaction with care and physical and social well-being of patients with multi-morbidity in the primary care setting. *BMC Health Services Research*, *19*(1), 13. https://doi.org/10.1186/s12913-018-3818-y.		

	[7] Tinetti, M. E., Naik, A. D., Dindo, L., Costello, D. M., Esterson, J., Geda, M., Rosen, J., Hernandez-Bigos, K., Smith, C. D., Ouellet, G. M., Kang, G., Lee, Y., & Blaum, C. (2019). Association of Patient Priorities–Aligned Decision-Making With Patient Outcomes and Ambulatory Health Care Burden Among Older Adults With Multiple Chronic Conditions: A Nonrandomized Clinical Trial. *JAMA Internal Medicine*, 179(12), 1688–1697. https://doi.org/10.1001/jamainternmed.2019.4235 [8] Meaningful Measures Hub | CMS. (2019, September 10). https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/MMF/General-info-Sub-Page
Characteristics	
Scoring	Proportion.
Type	Outcome.
Product lines	Medicare (only D-SNP and C-SNP benefit packages).
Stratifications	Age as of the start of the measurement period. • 18–65 years. • 65 years and older.
Risk adjustment	None.
Improvement notation	Increased score indicates improvement.
Guidance	**Data collection methodology:** ECDS. Refer to the *General Guideline: Data Collection Methods* for additional information. **Date specificity:** Dates must be specific enough to determine the event occurred in the period being measured. **Documenting goal achievement:** Documenting goal progress/achievement should be done during each follow-up visit. Goal achievement can be used to meet the GIA-E numerator if it happens by the initial follow-up or a subsequent follow-up, and if it meets all other GIA-E measure requirements.
Definitions	
Baseline measurement	Completion of goal attainment scaling (GAS) or a patient-reported outcome measure (PROM) for the person-centered outcome goal that was set.
Care plan	The documented steps required to achieve the person-centered outcome goal. Each time a new goal is documented, the care plan should be developed and/or reviewed.
Complex care need	A complex care need represents physical, behavioral health and/or social challenges. Individuals may have multiple complex care needs. Enrollment in a Special Needs Plan (SNP) is indicative of having a complex care need.
Follow-up period	The 14–180 days after the baseline measurement (167 total days).
Goal Achievement	Achievement of a person-centered outcome goal on or between 14 and 180 days after the baseline measurement (167 total days). Achievement is defined as a GAS score of 0, +1 or +2 documented by both the individual or caregiver **and** the clinician, or a PROM score with

meaningful change (see Table 1 below for meaningful change requirements for each PROM).

GAS

Goal attainment scaling is a well-tested approach to measuring individualized goals of care. Individuals and clinicians jointly identify a goal that is most important to the individual and define a set of possible outcomes along a 5-point scale (Table 1) from "much less than expected" to "much better than expected."

Table 1. Goal Attainment Scaling Scoring

Much less than expected	Less than expected (at baseline, current state)	Expected outcome (person-centered outcome goal)	Better than expected	Much better than expected
-2	-1	0	+1	+2
LOINC code LA34484-8	LOINC code LA34483-0	LOINC code LA34481-4	LOINC code LA34480-6	LOINC code LA34479-8

Goal domain

A high-level description of the goal focus that must be chosen when the person-centered outcome goal is set. Recommended goal domain options are:

- Access to Services & Supports
- Housing
- Managing Conditions & Symptoms
- Caregiver Needs & Concerns
- Improving Health & Wellness
- Medication Management
- Emotional & Mental Health
- Independence
- Physical Function
- End of Life
- Legal
- Social & Role Functioning

Goal intake period

August 1 of the year prior to the measurement period through July 31 of the measurement period.

PROM

A patient-reported outcome measure (PROM) is a standardized instrument used to report patient-reported outcomes. An example of a PROM includes the Patient-Reported Outcomes Measurement Information System (PROMIS®). The PROMIS instruments are used to assess and monitor mental, physical and social health in both children and adults. PROMIS instruments are used within the general population as well as with individuals living with chronic conditions. The following table provides the PROMs allowed for use for this measure and the meaningful change to count for goal achievement.

Table 2. List of Approved PROMs

Instrument	Total Score LOINC Code	Meaningful Change
General Anxiety Disorder (GAD)–7	70274-6	4-point decrease from initial total raw score
PHQ-9	44261-6	5-point decrease from initial total raw score
Instrument	**Total T-Score LOINC Code**	**Meaningful Change**
PROMIS® Ability to Participate in Social Roles and Activities–Short Form v2.0–8a	77854-8	3-point increase from initial T-score
PROMIS® Alcohol Use–Short Form v1.0–7a	77848-0	3-point decrease from initial T-score

PROMIS® Anger–Short Form v1.1–(5a)	89921-1	3-point decrease from initial T-score
PROMIS® Anxiety Short Form 7a	77862-1	3-point decrease from initial T-score
PROMIS® Cognitive Function–Short Form v2.0–8a	81531-6	3-point increase from initial T-score
PROMIS® Depression	71965-8	3-point decrease from initial T-score
PROMIS® Dyspnea Severity–Short Form v1.0–10a	92149-4	3-point decrease from initial T-score
PROMIS® Fatigue–Short Form v1.0–7a	77864-7	3-point decrease from initial T-score
PROMIS® Informational Support–Short Form v2.0–8a	77851-4	3-point increase from initial T-score
PROMIS® Instrumental Support–Short Form v2.0–8a	77850-6	3-point increase from initial T-score
PROMIS® Mobility Item Bank v2.1	91614-8	3-point increase from initial T-score
PROMIS® Pain behavior–v1.0–7a	77856-3	3-point decrease from initial T-score
PROMIS® Pain Interference–Short Form v1.0–6a	77865-4	3-point decrease from initial T-score
PROMIS® Physical Function–Short Form v2.0–10a	91721-1	3-point increase from initial T-score
PROMIS® Satisfaction with Participation in Social Roles–Short Form v1.0–8a	77855-5	3-point increase from initial T-score
PROMIS® Self-Efficacy for Managing Daily Activities–Short Form v1.0–8a	92391-2	3-point increase from initial T-score
PROMIS® Self-Efficacy for Managing Emotions–Short Form v1.0–8a	92329-2	3-point increase from initial T-score
PROMIS® Self-Efficacy for Managing Medications and Treatments–Short Form v1.0–8a	92418-3	3-point increase from initial T-score
PROMIS® Self-Efficacy for Managing Symptoms–Short Form v1.0–8a	92448-0	3-point increase from initial T-score
PROMIS® Sleep-Related Impairment–Short Form v1.0–8a	77859-7	3-point decrease from initial T-score
PROMIS® Smoking: Negative Health Expectancies for All Smokers–Short Form v1.0–6a	92266-6	3-point decrease from initial T-score
PROMIS® Smoking: Nicotine Dependence for All Smokers–Short Form v1.0–8a	92305-2	3-point decrease from initial T-score
PROMIS® Social Isolation–Short Form v2.0–8a	77849-8	3-point decrease from initial T-score
PROMIS® Smoking: Coping Expectancies for All Smokers–Short Form v1.0–4a	92213-8	3-point decrease from initial T-score

Person-centered outcome goal

A goal identified by an individual and/or care partner as important. The goal should be specific, measurable, achievable, relevant and time-bound. Person-centered outcome goals may include something the person wishes to accomplish (e.g., taking a special trip, living to see a relative's life milestone), health and well-being outcomes, behavioral health outcomes or outcomes related to receiving services. Person-centered outcome goals must be documented using GAS or PROM to monitor and determine goal achievement. If the person and/or care partner deem that the initial goal is no longer relevant (e.g., person was

	hospitalized and they can no longer work towards the original goal), the person and/or care partner can set a new goal.
Initial population	*Measure item count:* Person. *Attribution basis:* Enrollment. • *Benefits:* Medical. • *Continuous enrollment:* August 1 of the year prior to the measurement period through the last day of the measurement period. • *Allowable gap:* – *Measurement period:* No more than one gap of ≤ 45 days. – *August 1 of the year prior to the measurement period through December 31 of the year prior to the measurement period:* None. *Ages:* 18 years of age and older as of August 1 of the year prior to the measurement period. *Event:* None.
Denominator exclusions	**Persons with a date of death.** Death in the measurement period, identified using data sources determined by the organization. Method and data sources are subject to review during the HEDIS audit. **Persons in hospice or using hospice services.** Persons who use hospice services (Hospice Encounter Value Set; Hospice Intervention Value Set) or elect to use a hospice benefit any time on or between August 1 of the year prior to the measurement period and the last day of the measurement period. Organizations that use the Monthly Membership Detail Data File to identify these persons must use only the run date of the file. **Persons 18 years of age or older by the last day of the measurement period, with Medicare benefits, enrolled in an institutional SNP (I-SNP) or living long-term in an institution (LTI).** • Enrolled in an I-SNP any time on or between August 1 of the year prior to the measurement period and the last day of the measurement period. • Living long-term in an institution any time on or between August 1 of the year prior to the measurement period and the last day of the measurement period, as identified by the LTI flag in the Monthly Membership Detail Data File. Use the run date of the file to determine if a member had an LTI flag any time on or between August 1 of the year prior to the measurement period and the last day of the measurement period.
Denominator	The initial population minus denominator exclusions.
Numerator	**Goal Achievement** Persons with documentation of a person-centered outcome goal that includes a goal domain, a baseline measurement, a care plan and who achieved their goal on or between 14 and 180 days after baseline measurement. **Step 1**. Identify documentation of a person-centered outcome goal using either of the following baseline measurements on or between August 1 of the year prior to the measurement period and July 31 of the measurement period:

- Documentation of GAS (LOINC code 112296-9) and a goal domain (goal domain field is not null) on the same date of service. A care plan (Care Plan Value Set) documented within 7 days of GAS and goal domain documentation.
- A documented score from a standardized PROM (refer to direct reference codes in Table 2) and a goal domain (goal domain field is not null) on the same date of service. A care plan (Care Plan Value Set) documented within 7 days of standardized PROM score and goal domain documentation.

Step 2. Identify achievement using either of the following on or between 14 and 180 days after the baseline measurement (167 total days):

- For persons who used GAS (LOINC code 112296-9) as their baseline measurement both of the following on the same date of service:
  - Documentation of a follow-up GAS score by the practitioner (LOINC code 107333-7) with a GAS score of 0, +1 or +2 (GAS Achieved Outcome Scores Value Set).
  - Documentation of a follow-up GAS score by the patient (LOINC code 107334-5) or caregiver (LOINC code 107331-1) with a GAS score of 0, +1 or +2 (GAS Achieved Outcome Scores Value Set).
- For persons who used the same PROM for baseline and follow-up measurement, a meaningful change between their baseline and follow-up measurement scores. To identify meaningful change, refer to Table 2.

For persons with multiple goals, if any goal is compliant the person is compliant.

Do not include baseline or follow-up measurements taken in an inpatient setting or during an ED visit.

Summary of changes

- This is a first-year measure.

Data element tables

Organizations that submit data to NCQA must provide the following data elements in a specified file.

Table GIA-E-3. Data Elements for Person-Centered Outcome—Goal Achievement

Metric	Age	Data Element	Reporting Instructions
Goal Achievement	18-64	InitialPopulation	For each Stratification
	65+	Exclusions	For each Stratification
	Total	Denominator	For each Stratification
		Numerator	For each Stratification
		Rate	(Percent)

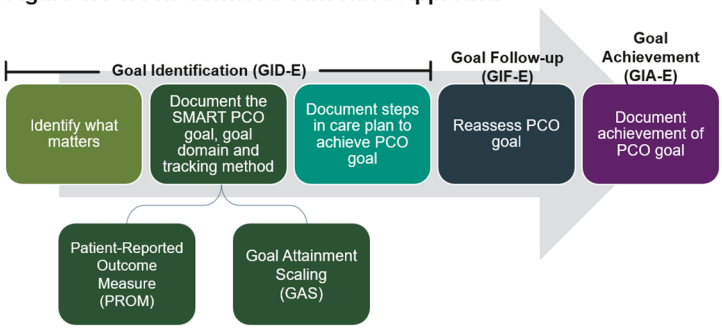
Person-Centered Outcomes (PCO)
Measure Workup

Topic Overview

Background

There is growing consensus that health care should be guided by individuals' goals and preferences, especially for adults with complex care needs (American Geriatrics Society Expert Panel on the Care of Older Adults with Multimorbidity, 2012). Over the past 10 years, with support from The John A. Hartford Foundation, The SCAN Foundation, and The Gordon and Betty Moore Foundation, NCQA developed the Person-Centered Outcome (PCO) measures, an approach captured by three measures (see Figure 1) that enable individuals or caregivers to identify and track meaningful, measurable goals for care planning, quality improvement and clinician accountability. The PCO measures have been successfully tested in multiple care delivery settings in over 30 practices across 17 states, with more than 700 clinicians (e.g., physicians, nurses, social workers, peer navigators and care managers) and over 30,000 individuals and are being used in a state Medicaid home and community-based care program for value-based payment.

Figure 1. Person-Centered Outcomes Approach



This workup describes the evidence and rationale to support the three measures that evaluate the implementation of the person-centered outcomes approach:

1. ***Person-Centered Outcomes – Goal Identification (GID-E).*** Percentage of persons 18 years of age and older with a complex care need who set a person-centered outcome goal.
2. ***Person-Centered Outcomes – Goal Follow-up (GIF-E).*** Percentage of persons 18 years of age and older with a complex care need who set a person-centered outcome goal and followed up on the goal.
3. ***Person-Centered Outcomes – Goal Achievement (GIA-E).*** Percentage of persons 18 years of age and older with a complex care need who set a person-centered outcome goal and achieved the goal.

Importance of Goal-Based Care

Prevalence of Adults with Complex Care Needs

Individuals with multiple chronic conditions, functional limitations and/or behavioral health or social challenges are classified as having complex care needs, a group that comprises a substantial portion of the U.S. population. The 2011 Medicare Expenditure Panel Survey (MEPS) found that about 12 million U.S. adults, age 18 and older, living in the community had three or more chronic conditions and a functional limitation in their ability to care for themselves (defined as experiencing difficulties with activities of daily living) or perform routine daily activities (defined as experiencing difficulties with instrumental activities of daily living) (Hayes et al., 2016). In 2018, just over a quarter (27.2%) of US adults had multiple chronic conditions, with multiple chronic conditions higher among older adults, adults aged 18–64 on Medicaid, and dual-eligible adults (Medicare and Medicaid) (Boersma et al., 2020). These individuals often face trade-offs when determining the appropriate course of treatment and frequently require services and supports beyond traditional medical care (American Geriatrics Society Expert Panel on Person-Centered Care, 2016; American Geriatrics Society Expert Panel on the Care of Older Adults with Multimorbidity, 2012; The SCAN Foundation, 2016).

Current State of Measurement

Many quality measures focus on a single condition or disease. Such measures are frequently based on evidence from clinical trials which underrepresent individuals with complex care needs. The causes and nature of complex care needs are varied and diverse, resulting in health-related concerns, experiences and preferences for care that may not align with single-disease guideline-based care (Bayliss et al., 2014; Fried et al., 2011; Montori et al., 2013).

Disease-specific measures may also have an unintended consequence of encouraging care that is misaligned with an individual's preferences or goals. In recent years, NCQA has taken steps to exclude patients with complex health status and near end-of-life conditions from quality measures to avoid this unintended consequence. However, there is still a need to measure quality of care for this vulnerable population. Given the heterogeneity and complexity in this population, traditional measures that use a "one-size fits all" approach may not be appropriate. Goal-based care based on an individual's priorities and goals has the ability to complement traditional disease-specific care.

Person-centered outcomes support whole person care by aligning care delivery with individual goals and preferences**.** Several experts in the field of geriatrics have suggested the use of patient-centered goals for assessing health outcomes rather than disease-specific outcomes, such as blood pressure or hemoglobin A1c targets, particularly for populations with complex care needs (Reuben & Tinetti, 2012; Tinetti et al., 2016). The Centers for Medicare and Medicaid Services (2019) have also identified a desire for quality measures that support "care [that] is personalized and aligned with patient's goals."

Utilization Impact

The Centers for Disease Control and Prevention (CDC) reports that chronic diseases and mental health conditions account for about 90% of the $4.5 trillion the U.S. spends on healthcare each year (Feke, 2025). While the implementation of the person-centered outcomes approach can increase operational costs – particularly due to staff training, workflow redesign and system updates – long-term financial benefits can outweigh these upfront costs. By incorporating goal-based care into the clinical workflow, Tinetti et al. found a statistically significant improvement in reducing treatment burden; individuals in the intervention group were more likely to have medications stopped (52.0% vs. 33.8%) and had fewer diagnostic tests ordered (80.8% vs. 86.4%) (Tinetti et al., 2019).

Individuals who perceive their visit as person-centered receive fewer diagnostic tests and referrals and lower hospital utilization (Bertakis & Azari, 2011). During PCO measures' testing, NCQA found a significant decrease in hospitalization six months post-goal conversation and a non-significant decrease in ED use (Blaum et al., 2024).

Supporting Evidence for Goal-Based Care

Goal-based care enables a clinician to learn more about the outcomes that the individual values and about their preferences regarding their conditions, possible treatments and their tradeoffs (Lenzen et al., 2017; Vermunt et al., 2017). Goal setting has become a key component of rehabilitation programs for adults with disabilities (Levack et al., 2015) and for care management of adults with complex conditions (National Committee for Quality Assurance, 2015).

There is growing evidence that supports the use of personalized goal setting in specific patient populations. Goal setting has been linked to more positive outcomes and improvements in health and functioning in a variety of populations, such as those with dementia (Clare et al., 2015), coronary heart disease (Janssen et al., 2013), stroke (Warner et al., 2015), mental health conditions (Bouwens et al., 2008; McCue et al., 2021),

end-stage renal disease (Kauric-Klein, 2012), diabetes (Naik et al., 2011), and those with rehabilitation needs (Müller et al., 2011).

An established model for developing and setting personalized goals is the SMART framework. SMART goals are Specific, Measurable, Attainable, Realistic, and Time-specific. Using structured goal setting frameworks has been demonstrated as feasible in the clinical setting (Naik et al., 2018) and shown to improve self-management and clinical outcomes in adults with diabetes (Naik et al., 2011; Teal et al., 2012).

Guidelines on Goal-Based Care

The American Geriatric Society's Guiding Principles for the Care of Older Adults with Multimorbidity and Person-Centered Care: A Definition and Essential Elements recommends that an individual's preferences and goals should guide their care (American Geriatrics Society Expert Panel on Person-Centered Care, 2016; American Geriatrics Society Expert Panel on the Care of Older Adults with Multimorbidity, 2012).

In addition to those recommendations, The John A. Hartford Foundation and the Institute for Healthcare Improvement's Age Friendly Health System initiative (Institute for Healthcare Improvement, 2020) and the Health Resources and Services Administration (HRSA) both promote care focused on "What Matters" to older adults (Health Resources & Service Administration, 2016).

Other guidelines and organizations that recommend patient-centered goals and preferences include:

- Clinical Practice Guidelines for Quality Palliative Care, National Coalition for Hospice and Palliative Care (National Coalition for Hospice and Palliative Care, 2018)
- The Medicaid Final Rule for Home and Community Based Services, Centers for Medicare and Medicaid Services (Centers for Medicare & Medicaid Services, 2014)
- Person-Centered Planning and Practice, National Quality Forum (2020)
- 2025 Standards of Medical Care in Diabetes, American Diabetes Association Professional Practice Committee (2024)
- Department of Health and Human Services Centers for Medicare & Medicaid Services (42 CFR Part 422.101) (2025)

Rationale for Person-Centered Outcomes

A central challenge to measuring individual goal attainment is the lack of adequate processes to elicit, document and monitor progress towards patient goals. Goals, when discussed and documented, are frequently documented in multiple places in the electronic record (e.g., progress notes, scanned documents or problem lists) and may conflict with one another (Bernacki et al., 2014; Berntsen et al., 2015). When clinicians document goals of care, the identified goals often focus on end-of-life care or the clinician's goals for disease management, resulting in disease-specific biomarker goals (e.g., blood pressure) or referral for specific medical care (e.g., get preventive screenings) (Berntsen et al., 2015; Sockolow et al., 2017) rather than on quality-of-life outcomes, such as participating in social activities (Bernacki et al., 2014). Furthermore, clinicians and individuals may disagree about documented goals of care (Bogardus et al., 2001; Heisler et al., 2003). Even when documented, these goals are rarely communicated across care teams or tracked systematically (Dykes et al., 2014). Movement towards patient-centered, goal-based care requires a more structured approach to eliciting, documenting and monitoring goals from the patient's perspective. Recent studies have explored more structured approaches to eliciting patient-centered goals (Blaum et al., 2018; Jennings et al., 2018; Naik et al., 2018; Tinetti et al., 2019, Clair et al., 2022).

Using evidence from these studies, NCQA developed and tested an approach to identifying, documenting and measuring structured patient goals called person-centered outcomes. A person-centered outcome is a goal identified by an individual or

caregiver that can be used for care planning and quality measurement. The person centered-outcome is measured using either goal attainment scaling or a patient-reported outcome measure (PROM). This approach promotes the development of SMART goals (specific, measurable, achievable, relevant and time-bound) while also standardizing goal measurement and tracking, simplifying chart review and eventually facilitating digitalization of goal tracking and measurement.

The Person-Centered Outcomes Approach

NCQA has developed an approach to goal-based care called the person-centered outcomes approach. Person-centered outcomes are goals identified by an individual or caregiver that can be used for care planning and quality measurement.

The PCO Approach

The PCO approach is an iterative, incremental process for goal-based care. The steps outlined below represent the general framework of the approach.

Step 1: Identify what matters to the individual. The clinician and individual or caregiver discuss personal goals, ensuring the selected goal is meaningful and relevant to the individual's needs.

Step 2: Document and measure a person-centered outcome goal. The goal is measured using either Goal Attainment Scaling (GAS) or a Patient-Reported Outcome Measure (PROM), both of which provide structured, specific, and measurable ways to track progress.

Step 3: Care planning. The clinician and individual create a care plan outlining steps and responsibilities to support goal achievement, addressing barriers and involving care team members as needed.

Step 4: Goal follow-up. Progress is reassessed within 14 and 180 days of when the goal was developed to determine if the goal is on track, needs adjustment, or has been met, while also addressing any challenges.

Step 5: Assess goal achievement. The clinician and individual evaluate whether the goal has been achieved based on the selected measurement method.

Goal Domains

A goal domain is a high-level description of the focus of a goal, used to categorize and organize individual goals. Our list of 12 goal domains was originally based off Jennings et al. (2017) goal taxonomy for adults with dementia and later refined for older adults with functional limitations (Clair et al., 2020). Based on extensive reviews of goals developed by individuals and care partners through our testing, we expanded the list to the 12 domains provided in **Table 1**. For quality measurement, the goal domains provide a high-level understanding of the goal focus, which is typically provided in free text and not documented in a standard, reportable format. Tracking goal domains is also beneficial in helping an organization understand the overall needs of their population and better tailor their resources to meet those needs.

Table 1. Goal Domains and Definitions

Goal Domain	Definition
Housing	Goals related to individuals' place of residence.
Access to Services & Supports	Goals focused on the ability to access, afford, and utilize appropriate health and community resources including access to transportation, stable food resources, and assistance with financial concerns.

Caregiver Needs & Concerns	Goals expressed by and for caregivers that focus on caregiving responsibilities and skills, finding respite care, and receiving social support.
End of Life	Goals related to end-of-life care and desires.
Independence	Goals that center on living one's life independently without help or assistance from others.
Legal	Goals related to legal issues or legal involvement.
Managing Conditions & Symptoms	Goals related to health care received or desired and to experiences with providers and the health care system.
Medication Management	Goals focused on the ability to manage medications.
Improving Health & Wellness	Goals related to developing, improving and maintaining positive health and wellness habits.
Physical Function	Goals related to managing physical functioning, physical symptoms or conditions and improving or maintaining the ability to participate in physical activities.
Social & Role Functioning	Goals focused on engaging in meaningful activities like work, hobbies, or social interaction with family and friends.
Emotional & Mental Health	Goals related to managing mental health symptoms or participating in activities that impact emotional aspects of quality of life.

Goal Attainment Scaling

Goal attainment scaling is a well-tested approach to measuring individualized goals of care. Originally developed for use in mental health, goal attainment scaling is a reliable, valid, and sensitive measurement approach often used for evaluating complex interventions (Kiresuk & Sherman, 1968; Lewis et al., 2013; Rockwood et al., 2003). See **Figure 1** for an example of goal measurement using goal attainment scaling.

Goal attainment scaling has been used among older adult populations in various settings, including psychiatric (Bouwens et al., 2008), hospital (Rockwood et al., 1993; Stolee et al., 1992, 2012), primary care (Toto et al., 2015; Verdoorn et al., 2018), and physical rehabilitation (Rushton & Miller, 2002). Research has found goal attainment scaling to be a feasible strategy in facilitating patient-centered care among diverse populations of older adults with complex needs, including older adults with multiple chronic conditions (Toto et al., 2015; Giovannetti et. al, 2021; Clair et. Al., 2022) and individuals with dementia (Jennings et al., 2018).

Achievement of goals using goal attainment scaling is associated with increased patient engagement, satisfaction with their treatment (Scobbie et al., 2013; Turner-Stokes, 2011) and improved health outcomes (Anderson et al., 2010).

Figure 1. Goal Attainment Scaling

Individuals and clinicians jointly set a goal and define a set of possible outcomes along a 5-point scale from "worse than expected" to "much better than expected." A numerical weight from -2 to +2 is assigned to each possible outcome. At follow-up, the individual and clinician discuss the individual's progress and decide independently which outcome most closely matches what the individual achieved.				
Example Goal: Walk her dog outside once a week for the next 2 months.				
Worse than expected (-2)	**Current state (-1)**	**Expected level (0)**	**Better than expected (+1)**	**Much better than expected (+2)**
Unable to let the dog outside.	Does not go outside to walk her dog	Walk her dog outside once a week for the next 2 months.	Walk her dog outside twice a week for the next 2 months.	Walk her dog outside three times a week for the next 2 months.

Patient-Reported Outcome Measures

Patient-reported outcome measures (PROMs) are tools that offer an alternative approach to setting goals and assessing outcomes. PROMs add value by bringing attention to feelings, functioning and experiences that matter to the individual (Nelson et al., 2015; Snyder et al., 2012). These tools can assist individuals, caregivers and clinicians with tracking the impact of lifestyle changes and treatments on symptoms and inform clinicians when additional treatment may be necessary to manage a condition or functional limitation (Forsberg et al., 2015; Lavallee et al., 2016).

As the use of PROMs increases, there is interest in using PROM results in quality measurement as part of value-based purchasing (Centers for Medicare & Medicaid Services, 2016; Safran & Higgins, 2019). However, the goals expressed by older adults and their caregivers are heterogeneous (Bogardus et al., 2001; Howard & Louvar, 2017; Morrow et al., 2008; Schulman-Green et al., 2006), and a single PROM tool, such as a standardized quality of life questionnaire, may not address the goals and priorities relevant to a specific individual. Some individuals may prioritize their physical functioning, while others may prioritize their mental health. To address this limitation, some experts recommend clinicians use multiple PROMs to measure the condition or symptom most relevant to a patient's priorities (Working Group on Health Outcomes for Older Persons with Multiple Chronic Conditions, 2012). See **Figure 2** for a list of PROMs used in NCQA's person-centered outcome measures testing.

Figure 2. Patient-Reported Outcome Measures (PROMs)

Individuals and clinicians jointly set a goal and select a PROM from the table below that best matches that goal (i.e., a patient's goal is to reduce pain would correspond to a pain PROM). At follow-up, the individual completes the same PROM to assess change over time in their outcome.	
General Anxiety (GAD-7)	PROMIS© Pain Behavior – v1.0 – 7a
Anxiety (PHQ-9)	PROMIS© Pain Interference – Short Form v1.0 – 6a
PROMIS© Ability to Participate in Social Roles and Activities – Short Form v2.0 – 8a	PROMIS© Physical Function – Short Form v2.0 – 10a
PROMIS© Alcohol Use – Short Form v1.0 – 7a	PROMIS© Satisfaction with Participation in Social Roles – Short Form v1.0 – 8a
PROMIS© Anger – Short Form v1.1 – 5a	PROMIS© Self-Efficacy for Managing Daily Activities – Short Form v1.0 – 8a
PROMIS© Anxiety – Short Form – 7a	PROMIS© Self-Efficacy for Managing Emotions – Short Form v1.0 – 8a
PROMIS© Cognitive Function – Short Form v2.0 – 8a	PROMIS© Self-Efficacy for Managing Medications and Treatments – Short Form v1.0 – 8a
PROMIS© Depression	PROMIS© Self-Efficacy for Managing Symptoms – Short Form v1.0 – 8a
PROMIS© Dyspnea Severity – Short Form v1.0 – 10a	PROMIS© Sleep-Related Impairment – Short Form v1.0 – 8a
PROMIS© Fatigue – Short Form v1.0 – 7a	PROMIS© Smoking: Negative Health Expectancies for All Smokers – Short Form v1.0 – 8a
PROMIS© Informational Support – Short Form v2.0 – 8a	PROMIS© Smoking: Nicotine Dependence for All Smokers – Short Form v1.0 – 8a
PROMIS© Instrumental Support – Short Form v2.0 – 8a	PROMIS© Social Isolation – Short Form v2.0 – 8a

PROMIS© Mobility Item Bank – v2.1	PROMIS© Smoking: Coping Expectancies for All Smokers – Short Form v1.0 – 4a

Development and Testing of the Person-Centered Outcome (PCO) Measures

Since 2013, The John A. Hartford Foundation, The SCAN Foundation, and The Gordon and Betty Moore Foundation have funded NCQA's development, testing and expansion of PCO measures. To date, the PCO measures have been successfully tested in multiple care delivery settings in over 30 practices and across 17 states, with more than 700 clinicians (e.g., physicians, nurses, social workers, peer navigators and care managers) and over 30,000 individuals. NCQA is leading this work in collaboration with Patient Partners and a diverse, multi-stakeholder PCO Measures Advisory Panel. Target audience groups represented on the panel include consumers, policymakers, providers and payers. To accelerate adoption, NCQA developed a resource page, implementation resources and outreach materials tailored for providers, state leaders and industry stakeholders. For additional information on dissemination activities since 2024, please see Appendix A-1.

Person-Centered Outcomes Pilot in Complex Care Sites

In 2016-2017 NCQA conducted a prospective cohort study of feasibility in seven sites (33 clinicians) using goal attainment scaling and PROMs with 229 individuals. We found both approaches were feasible to implement, and a goal-based outcome could be calculated for 189 (82%) of participants (Giovanetti et al, 2021). Most individuals met their goal-based outcome (73%) with no statistical difference between the goal attainment scaling approach (74%) and the PROMs approach (70%). Goals were heterogeneous, ranging from participating in activities, health management, independence and physical health. Clinicians chose to use goal attainment scaling (N=184, 80%) more often than prioritized PROMs (N=49, 20%) and rated the goal attainment scaling approach as useful for providing patient care (Clair et al., 2022). Qualitative findings on the use of goal attainment scaling indicated that most individuals and clinicians had positive experiences using the approach (Giovannetti et al., 2021).

Person-Centered Outcomes Demonstration in Complex Care Sites

Between 2017-2020, NCQA tested both approaches (goal attainment scaling and PROMs) in a sample of 384 individuals enrolled in 4 geographically diverse organizations (mix of health plans, integrated care network, geriatric primary care) with 33 clinicians (mix of MD, RN, SW and care coordinators). Data sources for the intervention group included clinical encounters, telephone surveys, service utilization and qualitative interview data.

Of the 384 individuals who set a goal, 238 had a follow-up completed, with 157 individuals achieving their goal. Clinicians had a choice to use either goal attainment scaling or a PROM. Qualitative analysis found that individuals and caregivers had a positive experience with the person-centered outcomes approach. Individuals and caregivers appreciated being asked what matters most; for some, it was the first time a health care professional had asked what was important to them. Patients mentioned that the approach offered accountability for their progress; for some, this accountability was motivating, but for a few, it was demotivating. Clinicians and administrators had more mixed reactions to the approach. Many clinicians felt the approach improved the quality of the care discussions with their patients and offered accountability for an individual's progress; however, clinicians and administrators pointed to the need for documentation of goals to be seamless and integrated into the current workflow and their organization's existing goal setting requirements. Claims-based analysis of hospitalization and emergency department use showed a significant decrease (multi-level model, interaction effect = 0.45, $p<0.001$) in hospital admissions for the intervention arm pre/post (38% vs. 23%) compared to the comparison group (33% vs. 34%), with a non-significant decrease in emergency department visits pre/post (Intervention: 43% vs. 39%; Comparison: 56% vs. 58%) (Blaum et al, 2024).

Person-Centered Outcomes Demonstration in Serious Illness Sites

Serious illness care programs are often characterized by patient-clinician discussion and documentation regarding advance care planning and end-of-life preferences and wishes (Bernacki et al., 2015). In 2019-2020, NCQA tested the PCO measures in this population using goal attainment scaling for 679 individuals across 4 geographically diverse serious illness care programs with 37 clinicians (mix of MD, NP, RN, SW and DO). Data sources for the intervention group included clinical encounter data, mixed methods survey data and qualitative interview data. The majority of individuals (77%) had a follow-up, with 62% of those with a follow-up achieving their goal. Findings from this work were presented at the 2025 American Geriatrics Society Annual Meeting, highlighting disparities in performance metrics between dementia and non-dementia patients and the positive impact of caregiver involvement on goal achievement (Zhou et al., 2025).

Implementing and Disseminating Person-Centered Outcome Measures

Incorporation into NCQA Products. NCQA incorporated the PCO approach into four NCQA products: PCMH Recognition, Patient-Centered Specialty Practice (PCSP) Recognition, Accreditation of Case-Management for LTSS (CM-LTSS), and LTSS Distinction for Health Plans.

Testing in Learning Collaboratives. Between 2021-2024, NCQA implemented and tested the PCO measures in Age-Friendly Health Systems, primary care, LTSS and behavioral health care settings in 17 sites across 6 states. Over 180 clinicians, including registered nurses, social workers and mental health therapists, completed training and technical assistance webinars on the PCO approach and set goals with over 8,000 individuals over the testing period. Measure performance varied based on care setting, as shown in **Figure 3**. The behavioral health sites performed significantly higher on goal identification (measure 1) compared to the primary care/LTSS sites; however, performance significantly decreased for goal follow-up (measure 2) and goal achievement (measure 3). Some reasons shared by behavioral health clinicians for the decline were loss to follow-up, staff turnover and difficulty with onboarding new clinicians to the process for documenting goals in reportable fields. Overall, clinicians in both settings noted the PCO approach was useful for helping monitor patient progress, eased broaching difficult conversations and provided a good way to engage their patients.

Figure 3. 2021-2024 PCO Learning Collaborative Measure Performance

	Primary Care/LTSS (N=5 sites)			Behavioral Health (N=8 sites)		
	Measure 1	**Measure 2**	**Measure 3**	**Measure 1**	**Measure 2**	**Measure 3**
Mean	51.8%	31.0%	13.9%	76.1%	13.2%	4.2%
Min	18.1%	11.8%	4.6%	6.9%	0.0%	0.0%
Median	40.1%	20.0%	9.7%	99.9%	9.7%	1.9%
Max	86.7%	60.6%	35.7%	100.0%	47.9%	12.1%

Inclusion of PCO Measures in CMS Measures Under Consideration List. In 2024, NCQA submitted the PCO measures to CMS' Measures Under Consideration (MUC) list and participated in the 2024 Pre-Rulemaking Measure Review (PRMR) cycle. At CMS' recommendation, NCQA submitted one measure with three indicators for MUC consideration for use in the Merit-based Incentive Payment System (MIPS) program. The PRMR final recommendation for the submitted measure was Recommend with conditions. The conditions outlined were for the measures to get consensus-based endorsement, stratify performance by program (NCQA recommendation) and further assess for reporting burden.

Implementation of the PCO Measures in a State

The Connecticut Home and Community-Based Services Person-Centered Outcome Measures contract (January 2023–September 2025) aimed to use the PCO measures for value-based payment for home and community-based services (HCBS) in the state of Connecticut. In collaboration with the Connecticut Department of Social Services and the University of Connecticut Health Center on Aging, NCQA trained staff from four Access Agencies to implement, monitor and report on the three PCO measures. The project's primary goal was to drive better team-based care, coordination and follow-up for individuals receiving HCBS, with the measures being integrated into case management records within the Connecticut Health Information Exchange for benchmarking and value-based payment purposes. (Campbell et al., 2025; Robison et al, 2025). In testing, nearly 300 clinicians worked with approximately 19,500 clients enrolled in Medicaid waiver programs to implement and report the PCO measures. Measure performance across the four Access Agencies is shown in **Figure 4**. Based on more detailed data (not shown) and a payment model developed by Connecticut, the PCO measures will be used as part of value-based payment for home and community-based care providers beginning in November 2025.

Figure 4. CT HCBS PCO Implementation Measure Performance

	Measure 1 Goal Identification	Measure 2 Goal Follow-Up	Measure 3 Goal Achievement
Mean	99.9%	51.5%	35.2%
Min	99.8%	27.8%	20.7%
Median	100%	44.1%	34.4%
Max	100%	89.2%	56.7%

Person-Centered Outcomes Current and Ongoing Work

NCQA is actively advancing the implementation and testing of the PCO measures across multiple initiatives.

Testing in Special Needs Plans (SNPs). NCQA is advancing the PCO measures for broader adoption beyond the delivery system and completed testing the measures in Special Needs Medicare Advantage health plans (April 2024 – March 2026), aiming to enhance quality improvement and support value-based payment. This work is supported through funding from The John A. Hartford Foundation and The SCAN Foundation. Testing within SNPs concluded in September 2025 and data from testing will be used to support potential inclusion of these measures in HEDIS MY 2027. NCQA will also be conducting additional qualitative interviews with SNPs in early 2026.

Individuals with Intellectual and Developmental Disabilities (IDD). NCQA is conducting an environmental scan (June 2024 – December 2025) to identify and review measures relevant to individuals with intellectual and developmental disabilities. PCO measures will be voted on by individuals with lived experience for inclusion in an IDD health outcomes framework.

Transition for Youth with Autism and/or Epilepsy (YAES). NCQA, under the Health Resources and Services Administration (HRSA) YAES initiative, is evaluating the applicability of PCO measures for youth with autism and/or epilepsy transitioning to adult systems (September 2024 – August 2029).

Testing in Certified Community Behavioral Health Clinics (CCBHC). Using funding from the National Institute of Mental Health (NIMH), NCQA is currently testing the PCO measures in five CCBHC sites to assess reliability and effectiveness for individuals with a serious mental illness (September 2024 – June 2028). The project builds off past work assessing the feasibility of the PCO measures within these five

CCBHCs to assess the usability, validity and alignment with recovery orientation through both measure performance and qualitative research.

Digital Considerations

As part of NCQA's strategic transition to a fully digital quality measurement portfolio, we conducted a feasibility assessment to inform eventual digital measure implementation. The assessment evaluates the measure's intent and associated clinical concepts within a digital framework.

The PCO measures display medium digital feasibility. Goal assessment tools (GAS, PROM), goal domains and care plans have high to medium feasibility related to data standards and terminology, with some standards work still in progress to enhance feasibility. Data availability and structure challenges likely exist related to goal assessments, domain and care plans being captured in structured fields and available to health plans. Elements display high to medium feasibility for clinical workflow and accuracy, with some current limitations likely existing for rolling goals up to goal domains. NCQA continues to partner with HL7® and standards bodies to improve data availability and exchange of these important data points. Refer to Appendix B for more detail.

References

American Diabetes Association Professional Practice Committee. (2024). 5. Facilitating Positive Health Behaviors and Well-being to Improve Health Outcomes: Standards of Care in Diabetes—2025. Diabetes Care, 48(Supplement_1), S86–S127. https://doi.org/10.2337/dc25-S005

American Geriatrics Society Expert Panel on Person-Centered Care. (2016). Person-Centered Care: A Definition and Essential Elements. *Journal of the American Geriatrics Society*, *64*(1), 15–18. https://doi.org/10.1111/jgs.13866

American Geriatrics Society Expert Panel on the Care of Older Adults with Multimorbidity. (2012). Guiding Principles for the Care of Older Adults with Multimorbidity: An Approach for Clinicians. *Journal of the American Geriatrics Society*, *60*(10), E1–E25. https://doi.org/10.1111/j.1532-5415.2012.04188.x

Anderson, D., Christison-Lagay, J., & Procter-Gray, E. (2010). Self-Management Goal Setting in a Community Health Center: The Impact of Goal Attainment on Diabetes Outcomes. *Diabetes Spectrum*, *23*, 97–105. https://doi.org/10.2337/diaspect.23.2.97

Bayliss, E. A., Bonds, D. E., Boyd, C. M., Davis, M. M., Finke, B., Fox, M. H., Glasgow, R. E., Goodman, R. A., Heurtin-Roberts, S., Lachenmayr, S., Lind, C., Madigan, E. A., Meyers, D. S., Mintz, S., Nilsen, W. J., Okun, S., Ruiz, S., Salive, M. E., & Stange, K. C. (2014). Understanding the Context of Health for Persons With Multiple Chronic Conditions: Moving From What Is the Matter to What Matters. *Annals of Family Medicine*, *12*(3), 260–269. https://doi.org/10.1370/afm.1643

Bernacki, R. E., Block, S. D., & American College of Physicians High Value Care Task Force. (2014). Communication about serious illness care goals: A review and synthesis of best practices. *JAMA Internal Medicine*, *174*(12), 1994–2003. https://doi.org/10.1001/jamainternmed.2014.5271

Bernacki, R., Hutchings, M., Vick, J., Smith, G., Paladino, J., Lipsitz, S., Gawande, A. A., & Block, S. D. (2015). Development of the Serious Illness Care Program: A randomised controlled trial of a palliative care communication intervention. *BMJ Open*, *5*(10), e009032. https://doi.org/10.1136/bmjopen-2015-009032

Berntsen, G. K. R., Gammon, D., Steinsbekk, A., Salamonsen, A., Foss, N., Ruland, C., & Fønnebø, V. (2015). How do we deal with multiple goals for care within an individual patient trajectory? A document content analysis of health service research papers on goals for care. *BMJ Open*, *5*(12). https://doi.org/10.1136/bmjopen-2015-009403

Bertakis, K. D., & Azari, R. (2011). Patient-centered care is associated with decreased health care utilization. *Journal of the American Board of Family Medicine : JABFM*, *24*(3), 229–239. https://doi.org/10.3122/jabfm.2011.03.100170

Blaum, C. S., Rosen, J., Naik, A. D., Smith, C. D., Dindo, L., Vo, L., Hernandez-Bigos, K., Esterson, J., Geda, M., Ferris, R., Costello, D., Acampora, D., Meehan, T., & Tinetti, M. E. (2018). Feasibility of Implementing Patient Priorities Care for Older Adults with Multiple Chronic Conditions. *Journal of the American Geriatrics Society*, *66*(10), 2009–2016. https://doi.org/10.1111/jgs.15465

Blaum, C., Zhou, X., Lawton, D., Resnick, H., Giovannetti, E., & Scholle, S. (2024). Impact of Goal-Directed Care in Patients with Functional Disabilities: A Quality Improvement Outcome Study. *Journal of American Geriatrics Society*, *72*(S1), S12-S13. https://doi.org/10.1111/jgs.18893

Boersma, P., Black, L. I., & Ward, B. W. (2020). Prevalence of Multiple Chronic Conditions Among US Adults, 2018. *Preventing chronic disease*, *17*, E106. https://doi.org/10.5888/pcd17.200130

Bogardus, S. T., Bradley, E. H., Williams, C. S., Maciejewski, P. K., van Doorn, C., & Inouye, S. K. (2001). Goals for the care of frail older adults: Do caregivers and clinicians agree? *The American Journal of Medicine*, *110*(2), 97–102. https://doi.org/10.1016/s0002-9343(00)00668-9

Bouwens, S. F. M., van Heugten, C. M., & Verhey, F. R. J. (2008). Review of goal attainment scaling as a useful outcome measure in psychogeriatric patients with cognitive disorders. *Dementia and Geriatric Cognitive Disorders*, *26*(6), 528–540. https://doi.org/10.1159/000178757

Campbell, L., Sutherland, B., & Mincey, A. (2025, July 20). *What is Important to You? Integrating Goal Conversations into Value-Based Care* [Panel Presentation]. USAging Answers on Aging Annual Conference and Tradeshow, Chicago, IL, United States.

Centers for Medicare & Medicaid Services. (2014). *Home and Community Based Services*. https://www.medicaid.gov/sites/default/files/2019-12/final-rule-fact-sheet.pdf

Centers for Medicare & Medicaid Services. (2016). *CMS Quality Measure Development Plan: Supporting the Transition to the Merit-Based Incentive Payment System (MIPS) and Alternative Payment Models*

(APMs). https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/Final-MDP.pdf

Centers for Medicare & Medicaid Services (2019). *Meaningful Measures Hub*. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/MMF/General-info-Sub-Page

Clair, C. A., Henry, M., Jennings, L. A., Reuben, D. B., Sandberg, S. F., & Giovannetti, E. R. (2020). Refining a Taxonomy of Goals for Older Adults With Functional Limitations and Their Caregivers to Inform Care Planning. Journal of applied gerontology : the official journal of the Southern Gerontological Society, 40(9), 1008–1019. https://doi.org/10.1177/0733464820944326

Clair, C.A., Sandberg, S.F., Scholle, S.H., Willitts, J., Jennings, L. A., Giovannetti, E. R. (2022). Patient and provider perspectives on using goal attainment scaling in care planning for older adults with complex needs. *J Patient Rep Outcomes* 6(37). https://doi.org/10.1186/s41687-022-00445-y

Clare, L., Nelis, S. M., Jones, I. R., Hindle, J. V., Thom, J. M., Nixon, J. A., Cooney, J., Jones, C. L., Tudor Edwards, R., & Whitaker, C. J. (2015). The Agewell trial: A pilot randomised controlled trial of a behaviour change intervention to promote healthy ageing and reduce risk of dementia in later life. *BMC Psychiatry*, *15*(1), 25. https://doi.org/10.1186/s12888-015-0402-4

Dykes, P. C., Samal, L., Donahue, M., Greenberg, J. O., Hurley, A. C., Hasan, O., O'Malley, T. A., Venkatesh, A. K., Volk, L. A., & Bates, D. W. (2014). A patient-centered longitudinal care plan: Vision versus reality. *Journal of the American Medical Informatics Association: JAMIA*, *21*(6), 1082–1090. https://doi.org/10.1136/amiajnl-2013-002454

Feke, T. (2025). *Chronis Care Management for Medicare*. Verywell Health. https://www.verywellhealth.com/medicare-chronic-care-management-5199917

Forsberg, H. H., Nelson, E. C., Reid, R., Grossman, D., Mastanduno, M. P., Weiss, L. T., Fisher, E. S., & Weinstein, J. N. (2015). Using patient-reported outcomes in routine practice: Three novel use cases and implications. *The Journal of Ambulatory Care Management*, *38*(2), 188–195. https://doi.org/10.1097/JAC.0000000000000052

Fried, T. R., Tinetti, M. E., Iannone, L., O'Leary, J. R., Towle, V., & Van Ness, P. H. (2011). Health Outcome Prioritization as a Tool for Decision Making among Older Persons with Multiple Chronic Conditions. *Archives of Internal Medicine*, *171*(20), 1854–1856. https://doi.org/10.1001/archinternmed.2011.424

Giovannetti, E. R., Clair, C. A., Jennings, L. A., Sandberg, S. F., Bowman, A., Reuben, D. B., & Scholle, S. H. (2021). Standardised approach to measuring goal-based outcomes among older disabled adults: results from a multisite pilot. *BMJ quality & safety*, *30*(2), 157–166. https://doi.org/10.1136/bmjqs-2019-010742Hayes, S., Salzberg, C., McCarthy, D., Radley, D., Abrams, M., Shah, T., & Anderson, G. (2016, August 29). *High-Need, High-Cost Patients: Who Are They and How Do They Use Health Care? | Commonwealth Fund*. https://www.commonwealthfund.org/publications/issue-briefs/2016/aug/high-need-high-cost-patients-who-are-they-and-how-do-they-use

Health Resources & Service Administration. (2016, October 20). *Geriatric Workforce Enhancement Program: Health Resources & Service Administration*. Bureau of Health Workforce. https://bhw.hrsa.gov/grants/geriatrics

Heisler, M., Vijan, S., Anderson, R. M., Ubel, P. A., Bernstein, S. J., & Hofer, T. P. (2003). When Do Patients and Their Physicians Agree on Diabetes Treatment Goals and Strategies, and What Difference Does It Make? *Journal of General Internal Medicine*, *18*(11), 893–902. https://doi.org/10.1046/j.1525-1497.2003.21132.x

Howard, E. P., & Louvar, K. E. (2017). Examining Life Goals of Community-Dwelling, Low-Income Older Adults. *Research in Gerontological Nursing*, *10*(5), 205–214. https://doi.org/10.3928/19404921-20170831-02

Institute for Healthcare Improvement. (2020). *Age-Friendly Health Systems Guide to Using the 4Ms in the Care of Older Adults*. http://www.ihi.org/Engage/Initiatives/Age-Friendly-Health-Systems/Documents/IHIAgeFriendlyHealthSystems_GuidetoUsing4MsCare.pdf

Janssen, V., De Gucht, V., Dusseldorp, E., & Maes, S. (2013). Lifestyle modification programmes for patients with coronary heart disease: A systematic review and meta-analysis of randomized controlled trials. *European Journal of Preventive Cardiology*, *20*(4), 620–640. https://doi.org/10.1177/2047487312462824

Jennings, L. A., Ramirez, K. D., Hays, R. D., Wenger, N. S., & Reuben, D. B. (2018). Personalized Goal Attainment in Dementia Care: Measuring what persons with dementia and their caregivers want. *Journal of the American Geriatrics Society*, *66*(11), 2120–2127. https://doi.org/10.1111/jgs.15541

Kauric-Klein, Z. (2012). Improving blood pressure control in end stage renal disease through a supportive educative nursing intervention. *Nephrology Nursing Journal: Journal of the American Nephrology Nurses' Association*, *39*(3), 217–228.

Kiresuk TJ, Sherman RE. Goal attainment scaling: A general method for evaluating comprehensive community mental health programs. Community Ment Health J. 1968 Dec;4(6):443-53. doi: 10.1007/BF01530764. PMID: 24185570.

Lavallee, D. C., Chenok, K. E., Love, R. M., Petersen, C., Holve, E., Segal, C. D., & Franklin, P. D. (2016). Incorporating Patient-Reported Outcomes Into Health Care To Engage Patients And Enhance Care. *Health Affairs (Project Hope)*, *35*(4), 575–582. https://doi.org/10.1377/hlthaff.2015.1362

Lenzen, S. A., Daniëls, R., van Bokhoven, M. A., van der Weijden, T., & Beurskens, A. (2017). Disentangling self-management goal setting and action planning: A scoping review. *PLoS ONE*, *12*(11). https://doi.org/10.1371/journal.pone.0188822

Levack, W. M. M., Weatherall, M., Hay-Smith, E. J. C., Dean, S. G., McPherson, K., & Siegert, R. J. (2015). Goal setting and strategies to enhance goal pursuit for adults with acquired disability participating in rehabilitation. *The Cochrane Database of Systematic Reviews*, *7*, CD009727. https://doi.org/10.1002/14651858.CD009727.pub2

Lewis, V. J., Dell, L., & Matthews, L. R. (2013). Evaluating the feasibility of Goal Attainment Scaling as a rehabilitation outcome measure for veterans. *Journal of Rehabilitation Medicine*, *45*(4), 403–409. https://doi.org/10.2340/16501977-1131

McCue, M., Sarkey, S., Eramo, A., François, C., & Parikh, S. V. (2021). Using the Goal Attainment Scale adapted for depression to better understand treatment outcomes in patients with major depressive disorder switching to vortioxetine: a phase 4, single-arm, open-label, multicenter study. *BMC psychiatry*, *21*(1), 622. https://doi.org/10.1186/s12888-021-03608-1

Montori, V. M., Brito, J. P., & Murad, M. H. (2013). The Optimal Practice of Evidence-Based Medicine: Incorporating Patient Preferences in Practice Guidelines. *JAMA*, *310*(23), 2503–2504. https://doi.org/10.1001/jama.2013.281422

Morrow, A. S., Haidet, P., Skinner, J., & Naik, A. D. (2008). Integrating diabetes self-management with the health goals of older adults: A qualitative exploration. *Patient Education and Counseling*, *72*(3), 418–423. https://doi.org/10.1016/j.pec.2008.05.017

Müller, M., Strobl, R., & Grill, E. (2011). Goals of patients with rehabilitation needs in acute hospitals: Goal achivement is an indicator for improved functioning. *Journal of Rehabilitation Medicine*, *43*(2), 145–150. https://doi.org/10.2340/16501977-0652

Naik, A. D., Dindo, L. N., Van Liew, J. R., Hundt, N. E., Vo, L., Hernandez-Bigos, K., Esterson, J., Geda, M., Rosen, J., Blaum, C. S., & Tinetti, M. E. (2018). Development of a Clinically Feasible Process for Identifying Individual Health Priorities. *Journal of the American Geriatrics Society*, *66*(10), 1872–1879. https://doi.org/10.1111/jgs.15437

Naik, A. D., Palmer, N., Petersen, N. J., Street, R. L., Rao, R., Suarez-Almazor, M., & Haidet, P. (2011). Comparative effectiveness of goal setting in diabetes mellitus group clinics: Randomized clinical trial. *Archives of Internal Medicine*, *171*(5), 453–459. https://doi.org/10.1001/archinternmed.2011.70

National Coalition for Hospice and Palliative Care. (2018). *Clinical Practice Guidelines for Quality Palliative Care*. https://www.nationalcoalitionhpc.org/wp-content/uploads/2018/10/NCHPC-NCPGuidelines_4thED_web_FINAL.pdf

National Committee for Quality Assurance. (2015). *Policy Approaches to Advancing Person-Centered Outcome Measurement*. https://www.ncqa.org/wp-content/uploads/2018/07/20150930_Policy_AdvancingPersonCenteredOutcomeMeasurement.pdf

National Quality Forum. (2020). *Person Centered Planning and Practice Final Report.* https://www.n-a-q.org/assets/site/PersonCenteredness/pcpp_final_report%20.pdf

Nelson, E. C., Eftimovska, E., Lind, C., Hager, A., Wasson, J. H., & Lindblad, S. (2015). Patient reported outcome measures in practice. *BMJ (Clinical Research Ed.)*, *350*, g7818. https://doi.org/10.1136/bmj.g7818

Reuben, D. B., & Tinetti, M. E. (2012). Goal-Oriented Patient Care—An Alternative Health Outcomes Paradigm. *New England Journal of Medicine*, *366*(9), 777–779. https://doi.org/10.1056/NEJMp1113631

Robison, J., Porter, M., Lawton, D., Kane, E., Wilson, H., & Peccerilli, M. (2025, August 26). *Jerry is My Client Too: Improving HCBS Provider Teaming and Quality of Life Through Value-Based Payments & Health Information Exchange* [Panel Presentation]. 2025 HCBS Conference, Baltimore, MD, United States.

Rockwood, K., Howlett, S., Stadnyk, K., Carver, D., Powell, C., & Stolee, P. (2003). Responsiveness of goal attainment scaling in a randomized controlled trial of comprehensive geriatric assessment. *Journal of Clinical Epidemiology*, *56*(8), 736–743. https://doi.org/10.1016/s0895-4356(03)00132-x

Rockwood, K., Stolee, P., & FoxP, R. A. (1993). Use of goal attainment scaling in measuring clinically important change in the frail elderly. *Journal of Clinical Epidemiology*, *46*(10), 1113–1118. https://doi.org/10.1016/0895-4356(93)90110-M

Rushton, P. W., & Miller, W. C. (2002). Goal attainment scaling in the rehabilitation of patients with lower-extremity amputations: A pilot study. *Archives of Physical Medicine and Rehabilitation*, *83*(6), 771–775. https://doi.org/10.1053/apmr.2002.32636

Safran, D., & Higgins, A. (2019, January 29). Getting To The Next Generation Of Performance Measures For Value-Based Payment | Health Affairs. *Health Affairs Blog*. https://www.healthaffairs.org/do/10.1377/hblog20190128.477681/full/

Schulman-Green, D. J., Naik, A. D., Bradley, E. H., McCorkle, R., & Bogardus, S. T. (2006). Goal setting as a shared decision making strategy among clinicians and their older patients. *Patient Education and Counseling*, *63*(1–2), 145–151. https://doi.org/10.1016/j.pec.2005.09.010

Scobbie, L., McLean, D., Dixon, D., Duncan, E., & Wyke, S. (2013). Implementing a framework for goal setting in community based stroke rehabilitation: A process evaluation. *BMC Health Services Research*, *13*(1), 190. https://doi.org/10.1186/1472-6963-13-190

Snyder, C. F., Aaronson, N. K., Choucair, A. K., Elliott, T. E., Greenhalgh, J., Halyard, M. Y., Hess, R., Miller, D. M., Reeve, B. B., & Santana, M. (2012). Implementing patient-reported outcomes assessment in clinical practice: A review of the options and considerations. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation*, *21*(8), 1305–1314. https://doi.org/10.1007/s11136-011-0054-x

Sockolow, P., Radhakrishnan, K., Chou, E. Y., & Wojciechowicz, C. (2017). Patient Health Goals Elicited During Home Care Admission: A Categorization. *Western Journal of Nursing Research*, *39*(11), 1447–1458. https://doi.org/10.1177/0193945916676541

Stolee, P., Awad, M., Byrne, K., DeForge, R., Clements, S., Glenny, C., & Ontario, T. D. H. G. A. S. I. G. of the R. G. P. of. (2012). A multi-site study of the feasibility and clinical utility of Goal Attainment Scaling in geriatric day hospitals. *Disability and Rehabilitation*, *34*(20), 1716–1726. https://doi.org/10.3109/09638288.2012.660600

Stolee, P., Rockwood, K., Fox, R. A., & Streiner, D. L. (1992). The Use of Goal Attainment Scaling in a Geriatric Care Setting. *Journal of the American Geriatrics Society*, *40*(6), 574–578. https://doi.org/10.1111/j.1532-5415.1992.tb02105.x

Teal, C. R., Haidet, P., Balasubramanyam, A. S., Rodriguez, E., & Naik, A. D. (2012). Measuring the quality of Patients' goals and action plans: Development and validation of a novel tool. *BMC Medical Informatics and Decision Making*, *12*(1), 152. https://doi.org/10.1186/1472-6947-12-152

The SCAN Foundation (2016). *What Matters Most: Essential Attributes of a High-Quality System of Care for Adults with Complex Care Needs*. https://www.thescanfoundation.org/publications/what-matters-most-essential-attributes-of-a-high-quality-system-of-care-for-adults-with-complex-care-needs/

Tinetti, M. E., Fried, T. R., & Boyd, C. M. (2012). Designing Health Care for the Most Common Chronic Condition—Multimorbidity. *JAMA : The Journal of the American Medical Association*, *307*(23), 2493–2494. https://doi.org/10.1001/jama.2012.5265

Tinetti, M. E., Naik, A. D., Dindo, L., Costello, D. M., Esterson, J., Geda, M., Rosen, J., Hernandez-Bigos, K., Smith, C. D., Ouellet, G. M., Kang, G., Lee, Y., & Blaum, C. (2019). Association of Patient Priorities–Aligned Decision-Making With Patient Outcomes and Ambulatory Health Care Burden Among Older Adults With Multiple Chronic Conditions: A Nonrandomized Clinical Trial. *JAMA Internal Medicine*, *179*(12), 1688–1697. https://doi.org/10.1001/jamainternmed.2019.4235

Tinetti, M. E., Naik, A. D., & Dodson, J. A. (2016). Moving From Disease-Centered to Patient Goals-Directed Care for Patients With Multiple Chronic Conditions: Patient Value-Based Care. *JAMA Cardiology*, *1*(1), 9–10. https://doi.org/10.1001/jamacardio.2015.0248

Toto, P. E., Skidmore, E. R., Terhorst, L., Rosen, J., & Weiner, D. K. (2015). Goal Attainment Scaling (GAS) in geriatric primary care: A feasibility study. *Archives of Gerontology and Geriatrics*, *60*(1), 16–21. https://doi.org/10.1016/j.archger.2014.10.022

Turner-Stokes, L. (2011). Goal Attainment Scaling and its relationship with standardized outcome measures: A commentary. *Journal of Rehabilitation Medicine: Official Journal of the UEMS European Board of Physical and Rehabilitation Medicine*, *43*, 70–72. https://doi.org/10.2340/16501977-0656

Verdoorn, S., Kwint, H.-F., Blom, J., Gussekloo, J., & Bouvy, M. L. (2018). DREAMeR: Drug use Reconsidered in the Elderly using goal Attainment scales during Medication Review; study protocol of a randomised controlled trial. *BMC Geriatrics*, *18*(1), 190. https://doi.org/10.1186/s12877-018-0877-1

Vermunt, N. P. C. A., Harmsen, M., Westert, G. P., Olde Rikkert, M. G. M., & Faber, M. J. (2017). Collaborative goal setting with elderly patients with chronic disease or multimorbidity: A systematic review. *BMC Geriatrics*, *17*(1), 167. https://doi.org/10.1186/s12877-017-0534-0

Warner, G., Packer, T., Villeneuve, M., Audulv, A., & Versnel, J. (2015). A systematic review of the effectiveness of stroke self-management programs for improving function and participation outcomes: Self-management programs for stroke survivors. *Disability and Rehabilitation*, *37*(23), 2141–2163. https://doi.org/10.3109/09638288.2014.996674

Working Group on Health Outcomes for Older Persons with Multiple Chronic Conditions. (2012). Universal health outcome measures for older persons with multiple chronic conditions. *Journal of the American Geriatrics Society*, *60*(12), 2333–2341. https://doi.org/10.1111/j.1532-5415.2012.04240.x

Zhou, X., Lawton, D., & Blaum, C. S. (2025). Exploring caregiver involvement and performance disparities between dementia and non-dementia patients in person-centered care [Conference abstract]. American Geriatrics Society Annual Scientific Meeting.

Appendix A: PCO Measures Dissemination Activities (2024 – Present)

Activity	Details
FHIR Connectathon and Work Group Meetings (January 2026)	***Meeting:*** HL7 FHIR Connectathon
	Audience: EHR Vendors, Providers, Health Plans, Interoperability Experts, Digital Programmers
	Date*:* January 13 – 15 ***Title****:* PACIO PROMIS Session ***Speakers****:* **Daniela Lawton** ***Description****:* Provide feedback on how PACIO PROMs workflow aligns with the PCO IG and approach.
Presentation – Connecticut State Webinar (December 2025)	***Meeting:*** Connecticut State Webinar
	Audience: Area Agencies on Aging, State Medicaid, Clinicians
	Date: Monday, December 8 from 12:45 – 2pm ET ***Title:*** State Spotlight: Connecticut's Strategy for Leveraging Its HIE and NCQA's Person-Centered Outcomes Measures in Value-Based Care ***Speakers:*** **Daniela Lawton**, Julie Robinson, Erin Kane ***Description:*** This session will focus on the implementation of Person-Centered Outcome (PCO) measures within Connecticut's Access Agencies (AAs) for value-based payment purposes, including adapting the measures for use in Connecticut's HIE to support sharing of an individual's goals, provider services and support care coordination.
Presentation –Civitas Webinar (November 2025)	***Meeting:*** Civitas Network Webinar
	Audience: Leaders in health care data and community health ecosystems
	Date*:* Wednesday, November 12 from 3 – 4pm ET ***Title****:* A Pragmatic Glidepath for Digitizing Goal-Directed Care and Person-Centered Outcomes ***Speakers****:* **Daniela Lawton**, Evelyn Gallego, Dave Carlson ***Description:*** This session offers a focused look at how FHIR®-based technologies are already transforming care planning and coordination. Using real-world implementation examples, the webinar will explore how HL7® FHIR® Implementation Guides—including the MCC eCare Plan IG, eLTSS IG, and Person-Centered Outcomes (PCO) IG—can help digitize person-centered care and align with regulatory, quality, and strategic goals.
Presentation –SNP Alliance Fall Forum (October 2025)	***Meeting****:* SNP Alliance Fall Forum
	Audience*:* State Medicaid, Clinicians, Health Plans, Consumer Advocates
	Date*:* Monday, October 27 from 3:00 - 4:50pm ET ***Title****:* Measuring Quality and Managing Care within SNPs: Part 1 – Quality Measurement and Part 2 – Care Management ***Speakers****:* Anne Boffa, **Alan Hoffman,** Sherri Simko, Lisa Benrud, Deborah Paone ***Description****:* This session provides attendees with a high-level understanding of SNP performance measurement and shared options for addressing challenges and seeking opportunities in this measurement environment for special needs plans.
Presentation –Health Innovation Summit (October 2025)	***Meeting****:* Health Innovation Summit
	Audience*:* State Medicaid, Clinicians, Health Plans, Consumer Advocates
	Date*:* Wednesday, October 15 from 10:30 – 11:15am PT ***Title****:* What Matters Most to You? Incorporating Patient Goals into Quality Measurement ***Speakers****:* **Caroline Blaum,** Meghan Crane, Esther Elefant, Steven Phillips ***Description****:* This session will focus on the implementation of Person-Centered Outcome (PCO) measures within Medicare Advantage Special Needs Plans (SNPs) via a learning collaborative as part of their transition into HEDIS. Attendees will gain insight into feasibility testing, structured data reporting and best practices essential for integrating PCO measures into SNP workflows.
Presentation – Health and Aging Policy Fellows (September 2025)	***Meeting****:* Health and Aging Policy Fellows Meeting
	Audience*:* Professionals in health and aging, clinicians, health care administrators, lawyers
	Date*:* Wednesday, September 17 from 2:40-3:40pm ET ***Title****:* Health Care Quality for Older People ***Speakers****:* **Daniela Lawton**

Activity	Details
	Description: This session will provide an overview of NCQA's work towards advancing health care quality for older people, highlighting the PCO measures and testing efforts.
Panel Presentation – Advancing States (August 2025)	***Meeting:*** 2025 HCBS Conference
	Audience*:* State Medicaid, Clinicians, Health Policy, Consumer Advocates
	Date*:* Wednesday, August 26 from 3:30 – 4:15pm ET ***Title****:* Jerry is My Client Too: Improving HCBS Provider Teaming and Quality of Life Through Value-Based Payments and Health Information Exchange ***Speakers****:* Julie Robison, Martha Porter, **Daniela Lawton**, Erin Kane, Heidi Wilson, Michael Peccerilli ***Description:*** This session will describe Connecticut's three value-based payment (VBP) performance measures and implementation using CT's health information exchange (CONNIE). Care management agencies use NCQA's person-centered outcome (PCO) measures to develop, track, and measure achievement of a participant's person-centered goals over time. Presenters from NCQA, CT Community Care, CONNIE, UConn and CT DSS will provide their perspectives on the development and implementation of the HCBS provider VBP program. Participants will learn about a novel, comprehensive approach to support VBP achievement among diverse HCBS providers.
Panel Presentation – USAging (July 2025)	***Meeting****:* USAging Answers on Aging Annual Conference and Tradeshow
	Audience*:* Area Agencies on Aging, State Medicaid, Implementers
	Date*:* Sunday, July 20 from 2:30 – 3:30pm CT ***Title****:* What is Important to You? Integrating Goal Conversations into Value-Based Care ***Speakers****:* **Lauren Campbell**, Bonnie Sutherland, Andy Mincey ***Description****:* Since 2023, NCQA, Connecticut Department of Social Services, and the UConn Center of Aging have been collaborating to implement the person-centered outcomes (PCO) measures in Connecticut's Access Agencies (AAs) for value-based payment purposes. We will discuss our experiences implementing the PCO approach including clinician training, technical assistance and adapting the measures for use in Connecticut's HIE to support sharing of an individual's goals, provider services and support care coordination. Session attendees will learn how to successfully implement the PCO approach, measures, strategies and learnings on building person-centered care into clinical workflows for value-based care from a participating AA.
Poster Presentation – AcademyHealth (June 2025)	***Meeting****:* AcademyHealth 2025 Annual Research Meeting
	Audience*:* Clinicians, Health Systems, Health Plans, Health Policy, Consumer Advocates
	Date*:* Monday, June 9 from 5 – 6:15pm ET ***Title****:* Distinct Pathways: Comparative Analysis of PCO Implementation Outcomes in Certified Community Behavioral Health Clinics and Long-Term Services and Supports/Primary Care Settings ***Speakers****:* **Daniela Lawton** ***Description****:* This presentation will share study results focused on differences in goal identification, follow-up, and goal achievement to uncover contextual factors driving variations, while evaluating and comparing the implementation of Person-Centered Outcomes (PCOs) in Certified Community Behavioral Health Clinics (CCBHCs) and Long-Term Services and Supports/Primary Care (LTSS/PC) settings.
Presidential Poster Session – AGS (May 2025)	***Meeting:*** 2025 Annual Scientific Meeting of the American Geriatrics Society
	Audience: Clinicians
	Date: Thursday, May 8 from 5 – 6pm CT ***Title:*** Driving Care That Matters for Individuals with Dementia ***Speaker:*** Xiaofei Zhou ***Description:*** Care that matters focused on personal health-outcome goals is essential for individuals with dementia and their care partners. NCQA has developed Person-Centered Outcome (PCO) measures to assess and promote the delivery of goal-directed care. This presentation will share results from a study that compares performance on PCO measures—specifically goal follow-up and achievement—between individuals with dementia and those without.
HL7 Workgroup Meeting (May 2025)	***Meeting****:* HL7 Workgroup Meetings – Madrid
	Audience: Health Policy, Vendors, Clinicians
	Date*:* Monday, May 12 – Thursday, May 15 ***Title****:* Person-Centered Outcomes Implementation Guide ***Speaker****:* **Daniela Lawton** ***Description****:* Presentation on PCO FHIR IG and PCO measures

Activity	Details
Presentation – Suburban Hospital Alliance New York State (May 2025)	***Meeting**:* Suburban Hospital Alliance of New York State Presentation
	***Audience**:* Hospital Executives, Policymakers and Advocates, Health Care Administrators, Regulatory and Compliance Experts
	***Date**:* Wednesday, May 28 from 9 – 10am ET ***Title**:* Person-Centered Outcome (PCO) Measures ***Speakers**:* **Daniela Lawton** ***Description**:* This presentation offered an overview of the history of the PCO measures, including development and testing. The presentation also highlighted how these measures align with and support the goals of Age-Friendly Health Systems and current testing efforts. Implementation resources were shared with meeting attendees.
Presentation – AGS (May 2024)	***Meeting**:* Annual Scientific Meeting of the American Geriatrics Society
	***Audience**:* Clinicians, policymakers, research professionals, advocacy groups
	***Date**:* Saturday, May 11, 2024 from 10 – 11am ET ***Title**:* Impact of Goal-Directed Care in Patients with Functional Disabilities: A Quality Improvement Outcome Study ***Speakers**:* Kah Poh Loh (Moderator), **Caroline Blaum**, Anil Prasad & Carolyn Chen, Jennifer Gabbard, Christina Minami ***Description**:* Presentation on the latest peer-reviewed geriatrics research with questions and answers. Learning Objectives: (1) discuss new and original geriatrics research; (2) describe an emerging concept or new scientific focus in aging research; and (3) summarize the key findings of projects with relevance to care of older adults.
Panel Presentation – International Center of Mental Health Policy and Economics (March 2025)	***Meeting*:** Seventeenth Workshop on Costs and Assessment in Psychiatry (March 28-30, 2025)
	***Audience*:** Global leaders in behavioral health care
	Date*:** March 29, 2025 ***Speaker*: Caroline Blaum** ***Title*:** Patient Centered Outcome Measures: Driving care that matters to people ***Description: Goal directed care (GDC) is crucial for recovery-oriented mental health services, but there are no existing quality measures that directly assess GDC outcomes. Patient-Centered Outcome (PCO) measures, a suite of 3 standardized measures under development by the National Committee for Quality Assurance (NCQA) that feature two process measures, goal identification and goal follow up, and one outcome measure, goal achievement, fill this gap by combining individualized treatment goals with formal quantitative process and outcome assessments.
NCQA Blog (March 2025)	***Title:*** NCQA's Person-Centered Outcome Measures Recommended for MIPS
	Audience: All NCQA connections on Listserv
	Date: March 25, 2025 ***Author:*** Becky Kolinsky. ***Description:*** This blog discusses how the PCO measures recently went through CMS measures under consideration process and have been recommended for inclusion in MIPs for Medicare.
Panel Presentation – Association for Behavioral Health and Wellness (March 2025)	***Meeting*:** Association for Behavioral Health and Wellness (ABHW)
	***Audience*:** Health plans, Healthcare organizations, and Hill staffers.
	Date*:** March 24, 2025 ***Speaker*:** Tom Valentine ***Title*:** Leveraging Measurement-Informed Strategies to Improve Behavioral Health ***Description: NCQA participated as a panelist on a webinar on measurement-informed care (MIC) in behavioral health. The discussion focused primarily on what can be done to promote acceptance of MIC, challenges to implementing MIC, and overcoming implementation barriers. NCQA shared recent developments in PCO including SNP testing and future inclusion in HEDIS and recommendation for PCO to be added into MIPs.
Short Session – HIMSS 2025	***Meeting***: HIMSS Global Health Conference & Exhibition (March 3-6, 2025)
	***Audience*:** Health care leaders, IT professionals

Activity	Details
(March 2025)	***Date*:** March 4, 2025 ***Speakers*: Daniela Lawton** and Anne Marie Smith ***Title*:** Industry Readiness for Incorporating Patient-Reported Data into Quality Measurement ***Description***: Speakers shared an overview of the PCO FHIR IG, which standardizes the exchange of person-centered care data among patients, caregivers, healthcare practitioners and digital health platforms.
Presentation – Fountain House: Measures that Matter Advisory Committee Meeting (January 2025)	***Meeting:*** Fountain House Measures that Matter Advisory Committee Meeting
	Audience: National policy and clinical stakeholders, individuals with lived experience (SMI)
	Date: January 15, 2025 ***Speaker:* Sarah Sweeney** ***Description:*** The Measures that Matter Project, led by Fountain House, aims to reshape approaches to measuring recovery for people with SMI and lay the groundwork for adopting measures that reflect their recovery needs. The goal is to identify the most important behavioral health measures, as identified by people with SMI and other key stakeholders, determine how they can be integrated into payment and reimbursement programs, and develop a roadmap for moving forward.
FHIR Connectathon and Work Group Meetings (January 2025)	***Meeting:*** HL7 FHIR Connectathon 38 (January 13-15, 2025)
	Audience: EHR Vendors, Providers, Health Plans, Interoperability Experts, Digital Programmers
	Date: January 13 – 16, January 29 (all day) ***Title:*** Goal-Directed Care Planning Track ***Speakers:* Daniela Lawton (Co-Lead),** Dave Carlson (Lead), ***Description:*** Advancing the use of goal-directed, person-centered care planning and outcome assessment for patients with multiple chronic conditions (MCC). Presented on the PCO measures and approach and discussed the PCO FHIR IG at multiple Work Group Meetings.
Presentation – Gerontological Society of America (November 2024)	***Meeting:*** GSA 2024 Annual Scientific Meeting (November 13-16, 2024)
	Audience: Researchers, clinicians, educators, and other professionals in the aging field
	Date: November 14, 2024 from 8:00-9:30am ET (Room 3A) ***Title:*** Health Priorities Identification for Individuals Living with Dementia and Their Caregivers ***Speaker:* Caroline Blaum** ***Description:*** "What matters" is the foundation for the Age-Friendly Health System Initiative and yet many clinicians have a difficult time addressing it with their patients. Patient Priorities Care (PPC) is an evidence-based approach that identifies health priorities by first eliciting health values of older adults with multiple chronic conditions, integrating values into health outcome goals, and describing the one-thing to focus on. This symposium will present results from three studies that use PPC across diverse cultural and clinical contexts and discuss the role of PPC to achieve better dementia care.
Panel Presentation – BH Tech 2024 (November 2024)	***Meeting:*** Behavioral Health Tech
	Audience: Diverse audience of health plan executives, providers/health systems, investors, employers/benefits consultants, and digital health enthusiasts.

Activity	Details
	Date: November 6, 2024 ***Title*:** Looking for your insight goldmine? Check the Qual. ***Speakers*: Sarah Sweeney**, Chris Hemphill, Kay Nikiforova, Katrina Roundfield ***Description*:** With the increasing focus on outcomes in behavioral health tech, there has been a strong turn towards quantitative assessments and measurement-based care. The addition of established measures to behavioral health treatment in the healthtech space is important to gauge efficacy of treatments and products. However, the use of these measures and other quantitative data can obscure meaningful underlying trends in treatment that cannot be captured by questionnaires. What do patients and providers really think and feel? While qualitative data often goes unanalyzed, it can often be the source of deep understanding of behavioral health patient and provider motivations, states and concerns. In this workshop, the presenters will share an overview of qualitative data and its various forms in behavioral health treatment. From open text entry fields to interviews, the presenters will share on the methods of collection of qualitative data and its analysis. They will use real-life examples of qualitative insights that have produced rich insights above and beyond quantitative data within the same dataset. They will also explore how qualitative insights can be used to power care and business decisions. The presenters will lastly review how qualitative data may provide insights on patient communities that may otherwise be missed because measurements that are currently popularized may not have the same level of validity for culturally diverse patients.
NCQA Blog (November 2024)	***Title:*** Moving Forward With Person-Centered Outcome Measures
	Audience: All NCQA connections on Listserv
	Date: November 6, 2025 ***Author:*** Becky Kolinski ***Description:*** This blog reviews the evolution of the PCO measures and where they are currently being implemented. Also highlighted the new SNP learning collaborative and focus on incorporating into HEDIS and other payment mechanisms.
Presentation – University of Texas-Houston Huffington Lecture Series (November 2024)	***Meeting**:* Geriatric and Palliative Care Grand Rounds
	***Audience**:* Geriatric, Oncology and Palliative Care Providers
	***Date**:* November 9, 2024 from 9 – 10am ET ***Title**:* Geriatric and Palliative Grand Rounds ***Speakers**:* **Caroline Blaum, Daniela Lawton** ***Description**:* Provide a high-level overview of the person-centered outcome measures and specifically the structured processes (PROMs and goal attainment scaling) to track and monitor goals over time.
Presentation – Health Innovation Summit (November 2024)	***Meeting**:* Health Innovation Summit (October 31-November 2, 2024)
	***Audience**:* Health plans, health systems, government, technology vendors and consultancies
	***Date**:* November 2, 2024 from 10 – 10:45AM ET ***Title**:* Persons and Payers: How Incorporating What Matters Most Can Support Value-Based Care ***Speakers**:* **Caroline Blaum (Moderator)**, Desiree Bradley, Michael Mason, Sarah Scholle ***Description**:* During this session, presenters will share how health plans are implementing person-centered care, the benefits of incorporating the PCO approach into clinical care for both the patient and clinician, and opportunities to promote person-centered care through quality measurement and payment mechanisms.
Presentation – Society for Medical Decision Making (October 2024)	***Meeting**:* Society for Medical Decision Making 46th Annual Meeting (October 27-30, 2024)
	Audience: Experts from numerous fields, including economics, psychology, sociology, education, communication, mathematics, organizational theory, clinical epidemiology, public health, and clinical medicine
	***Date**:* October 28, 2024 from 4:10 – 5:35PM ET ***Title**:* Implementation of the Person-Centered Outcome Measures in Certified Community Behavioral Health Clinics ***Speaker**:* **Sarah Sweeney** ***Description**:* SMDM24 will offer attendees opportunities to explore diverse topics in medical decision making. The meeting will provide interactive forums for the presentation of novel research and plenty of time to network with colleagues from around the world.
Presentation – AHRQ Meeting	***Meeting:*** AHRQ Person-Centered Care Planning for Persons with Multiple Chronic Conditions Partner Roundtable Meeting

Activity	Details
(October 2024)	***Meeting Focus:*** The purpose of the Partner Roundtable is to discuss innovative models of PCCP that may hold promise for further development, testing, dissemination, and implementation, and identify key organizational, policy, payment, technology, cost, and resource requirements for implementing equitable PCCP across diverse health systems and populations, practices, and settings.
	Date: October 17, 2024 ***Title:*** Implementing and Disseminating the Person-Centered Outcome Measures ***Speaker:*** **Caroline Blaum** ***Description:*** Provided a high-level overview of the PCO measures and existing testing efforts.
Article – Health Affairs (September 2024)	***Title:*** A Core Measure Set For Age-Friendly Health Care Delivery
	Audience: Government and health industry leaders; health care advocates; scholars of health, health care and health policy; and others concerned with health and health care issues in the United States and worldwide.
	Date: *Friday, September 13, 2024* ***Authors:*** **Caroline Blaum**, Helaine Resnick, Daniela Lawton, Angelia Bowman ***Description:*** This article discusses a set of measures based on the 4M's AFHS framework that NCQA believes can drive quality of care for older adults with complex health needs.
FHIR Connectathon (September 2024)	***Meeting****:* HL7 FHIR Connectathon 37 (September 21-27, 2024)
	Audience: EHR Vendors, Providers, Health Plans, Interoperability Experts, Digital Programmers
	Date*:* September 21 – 22, 2024 (all day) ***Title****:* Goal-Directed Care Planning Track ***Speakers****:* **Daniela Lawton (Co-Lead),** Dave Carlson (Lead), Anne Marie Smith, Karen Bertodatti ***Description****:* Advancing the use of goal-directed, person-centered care planning and outcome assessment for patients with multiple chronic conditions (MCC). Goal-directed care in healthcare centers on setting and achieving specific, personalized goals that prioritize an individual's well-being and "What Matters Most" to each person.
Presentation – PTAC (June 2024)	***Meeting****:* Physician-Focused Payment Model Technical Advisory Committee (June 10-11, 2024)
	PTAC Description: Independent federal advisory committee that makes recommendations to the Secretary of HHS on stakeholder-submitted physician-focused payment models and related topics.
	Date*:* Monday, June 10, 2024 from 2:40 – 4:10pm ET ***Title****:* Listening Session 1 - Best Practices for Measuring Quality and Outcomes Related to Caring for Patients with Complex Chronic Conditions or Serious Illnesses in PB-TCOC Models ***Speakers****:* Brynn Bowman, Paul Mulhausen, **Caroline Blaum**, David Kendrick ***Description****:* Best practices for measuring quality and outcomes related to caring for patients with complex chronic conditions or serious illnesses in population-based total cost of care (PB-TCOC) models with a focus on their area of expertise
Presentation – ISPOR 2024 (May 2024)	***Meeting****:* ISPOR 2024 (May 5-8, 2024)
	Audience*:* Global health leaders, clinicians, policymakers, research professionals
	Date*:* Monday, May 6, 2024 from 8:30-9:45AM ET ***Title****:* Advancing Whole Health: How do We Know When We're Succeeding? ***Speakers****:* Charlene Wong (Moderator), Seth Berkowitz, **Eric Schneider,** Denise Webb ***Description*** Whole person health requires a holistic approach that considers multiple factors that promote health or disease. In this session, panelists made the case for why HEOR needs to help drive innovation in whole person health by evaluating the effectiveness and value of interventions designed to support whole health
NCQA Blog (April 2024)	***Blog Title****:* The YOU FIRST Approach to Quality Measurement
	Audience*:* All NCQA connections on Listserv
	Date: Thursday, April 18, 2024 ***Author***: Andy Reynolds ***Description****:* Authored by Andy Reynolds. This blog covered an overview of the PCO measures. It explains the value of the PCO measures as well as how the measures can be used in health plans.

Appendix B: Digital Feasibility

As part of NCQA's strategic transition to a fully digital quality measurement portfolio, we conduct a feasibility assessment to evaluate the measure's intent and associated clinical concepts within a digital framework. The primary objectives were to determine whether the clinical concepts could be represented using standardized data models and nationally recognized terminologies, and to assess the availability of discrete, structured data necessary to support accurate and reliable digital measurement.

Data and Terminology Standards
NCQA's digital quality measures are built on the Fast Healthcare Interoperability Resources (FHIR®) standard, developed by HL7®, to support interoperable exchange of electronic health data. In the U.S., FHIR US Core profiles provide detailed implementation guidance aligned with the United States Core Data for Interoperability (USCDI), a federal standard maintained by the Assistant Secretary for Technology Policy (ASTP) (formerly the Office of the National Coordinator for Health Information Technology [ONC]). USCDI defines essential data classes and elements, while FHIR US Core specifies how to represent and exchange them. Additionally, NCQA uses nationally recognized clinical terminologies (e.g., ICD-10, CPT, LOINC) to define value sets, ensuring standardized interpretation and representation of clinical data in quality measures.

Digital Feasibility Assessment
The digital feasibility assessment is conducted at two stages during the measure development process, pre-testing phase and post-testing phase, summarized below. This assessment examines each measure concept across three high-level categories:

- **Data Standards & Terminology**. Evaluates the alignment with national standards (FHIR, USCDI) and recognized terminology standards (i.e., LOINC, ICD).
- **Clinical Workflow & Data Accuracy**. Evaluates whether the concept aligns with standard clinical practice and the likelihood that the data will be accurate, complete and reliable.
- **Data Availability & Structure**. Assesses if the data is likely to be present, in structured fields, and accessible to health plans.

The digital feasibility assessment (shown in Figure A) rates each concept from high to low. High = Feasible with no concerns, Medium = Feasible with some concerns (with a potential mitigation strategy); Low = Low feasibility with concerns (with little to no mitigation strategy for the current development cycle).

Post-Testing Feasibility Findings.

> **Summary:** The PCO measures display medium digital feasibility. Goal assessment tools (GAS, PROM), goal domains and care plans have high to medium feasibility related to data standards and terminology, with some standards work still in progress to enhance feasibility. Data availability and structure challenges likely exist related to goal assessments, domain and care plans being captured in structured fields and available to health plans. Elements display high to medium feasibility for clinical workflow and accuracy, with some current limitations likely existing for rolling goals up to goal domains. NCQA continues to partner with HL7® and standards bodies to improve data availability and exchange of these important data points.

Data Standards & Terminology. Pre-testing data standard feasibility rating remain consistent, with all concepts able to be modeled in the FHIR data standard and some gaps in interoperability requirements for goal domains. Regarding terminology standards, care plan (LOINC, SNOMED), GAS (LOINC), and PROM (LOINC) are represented by standard terminology, however there is likely still limited use of the terminology codes across elements. The goal domains used by the measures do not currently have terminology standards available, however NCQA has submitted for standard codes (LOINC) and continues to expects the codes to be available prior to the measures being included in HEDIS.

Data Availability & Structure. Testing confirmed medium feasibility for elements across data availability and accessibility, with the goal domain element remaining low feasibility due to the gaps in coding at current state. Challenges exist as GAS and PROM results and goal documentation are not always documented in structured fields. Additionally, there may be challenges with the care plans being available in a structured way, however care plans are included in Models of Care requirements for SNPs.

Clinical Workflow & Data Accuracy. High feasibility was confirmed for goal assessments, results, domain, and care plans related to workflows and accuracy. There may be some workflow challenges related to tracking goal progress over time in a timely manner, and rolling up goals to goal domains given current data standard and terminology limitations.

As noted in the pre-testing assessment, NCQA continues to recommend additions to USCDI and future iterations of US Core to further specify care plans, which will support better availability and exchange of these data. Additionally, given the priority of person-centered data and care, NCQA partnered with HL7 and Veterans Affairs to develop a PCO Implementation Guide that provides further specificity and guidance on how to collect and exchange person-centered outcomes data. This implementation guide supports the PCO measures as well as goal-directed care in general.

Figure A-1: Post-Testing Digital Concept Feasibility Assessment

Score key: H = high, M = medium, L = low						
	Data Standards & Terminology		**Clinical Workflow & Data Accuracy**		**Data Availability & Structure**	
Clinical Concept	**Data Standards**	**Terminology Standards**	**Workflow**	**Data Accuracy**	**Data Availability**	**Data Accessibility**
Assessments: GAS, PROM	H	M	H	H	M	M
Assessment results: GAS, PROM scores	H	M	H	H	M	M
Person-centered goal: goal domain	M	M	M	M	L	L
Care plan	H	M	H	H	M	M

Pre-Testing Feasibility Findings.

> **Summary:** Goal assessment tools (GAS, PROM), goal domains and care plans have high to medium feasibility related to data standards and terminology, with some standards work still in progress to improve feasibility. Data availability and structure challenges likely exist related to goal assessments, domain and care plans being captured in structured fields and available to health plans. Clinical workflow and accuracy challenges also may exist related to utilizing goal domains and tracking goal progress over time. NCQA continues to partner with HL7® and standards bodies to improve data availability and exchange of these important data points.

Data Standards & Terminology. All the concepts (GAS and PROM assessments, goal domains and care plans) used in the measures can be modeled in the FHIR data standard. While USCDI includes a "patient goals" element, it does not require specific tools such as GAS or PROM be used to assess goals and does not require goals be categorized into goal domains. Goal domain is also not required to be included in the related FHIR profile, though it can be modeled. Regarding terminology standards, care plan (LOINC, SNOMED), GAS (LOINC), and PROM (LOINC) are represented by standard terminology, however there may be limited use of the available terminology codes especially for care plans. The goal domains used by the measures do not all currently have terminology standards available, however NCQA is in the process of submitting for standard codes (LOINC) and expects the codes to be available prior to the measures being included in HEDIS.

Data Availability & Structure. Data availability challenges may exist as GAS and PROM tools may not be utilized consistently with results documented in structured fields; Unstructured goal documentation and goals not rolled up to structured goal domains are still common. Additionally, there may be challenges with the care plans being available in a structured way, however care plans are included in Models of Care requirements for SNPs. Because all critical goal elements for these measures are captured in clinical systems, there may also be challenges related to health plan accessibility of the data.

Clinical Workflow & Data Accuracy. Workflow challenges may exist as not all clinical workflows utilize GAS and PROM tools and it is not always standard workflow to roll goals up to goal domains. Additionally, there may be some workflow and accuracy challenges related to tracking goal progress over time, specifically related to accessing both a clinician and patient GAS score.

While some challenges currently exist, NCQA continues to recommend additions to USCDI and future iterations of US Core to further specify care plans, which will support better availability and exchange of these data. Additionally, given the priority of person-centered data and care, NCQA partnered with HL7 and Veterans Affairs to develop a PCO Implementation Guide that provides further specificity and guidance on how to collect and exchange person-centered outcomes data. This implementation guide supports the PCO measures as well as goal-directed care in general.

Figure A-2: Pre-Testing Digital Concept Feasibility Assessment

Score key: H = high, M = medium, L = low						
	Data Standards & Terminology		**Clinical Workflow & Data Accuracy**		**Data Availability & Structure**	
Clinical Concept	**Data Standards**	**Terminology Standards**	**Workflow**	**Data Accuracy**	**Data Availability**	**Data Accessibility**
Assessments: GAS, PROM	H	H	M	H	M	M
Assessment results: GAS, PROM scores	H	H	M	M	M	M
Person-centered goal: goal domain	M	M	L	L	L	L
Care plan	H	H	H	H	M	M

Proposed New Measure for HEDIS®[1] MY 2027: Prenatal Syphilis Screening and Follow-Up (PSF-E)

NCQA seeks comments on the proposed new measure concept: *Prenatal Syphilis Screening and Follow-Up* (PSF-E) measure.

The United States Preventive Services Task Force (USPSTF) recommends screening for syphilis in pregnant individuals to prevent congenital syphilis in early pregnancy or at the first presentation to care. The PSF-E measure assesses the percentage of deliveries screened for syphilis during pregnancy, and if screened positive, that received appropriate follow-up after the positive test. Two rates are reported:

- *Prenatal Syphilis Screening*. The percentage of deliveries that had a syphilis screening with a documented result during the first trimester, or within 14 days of the first pregnancy diagnosis or prenatal visit, or within 30 days of enrollment in the organization.
- *Follow-Up on Positive Screen*. The percentage of deliveries with a positive syphilis screen which received appropriate follow-up care.

Testing and Panel Feedback

NCQA conducted field testing with one health plan (Medicaid and commercial) and one database (commercial) to evaluate the feasibility and performance of the new measure concepts and to gather information to inform implementation at the health plan level. Due to data testing challenges and limitations, NCQA was unable to complete performance rate analyses for the PSF-E measure. Public comment feedback and results from additional testing, to be completed in April 2026, will be shared with measurement advisory panels and the Committee on Performance Measurement in Spring 2026.

Advisory panels were supportive of the measure as specified but encouraged NCQA to consider aligning the measure with the American College of Obstetricians and Gynecologists (ACOG) recommendation to include universal rescreening during the third trimester and at delivery.

Public Comment Request

NCQA seeks general feedback on the measure and specific feedback on the following:

1. Should this measure include universal rescreening during third trimester and delivery in accordance with ACOG recommendation?
2. Does your organization have access to syphilis screening results that could be mapped onto SNOMED CT codes?
3. Do you have any concerns about the alignment of this measure with state congenital syphilis screening mandates?

Supporting documents include the draft measure specification and evidence workup.

NCQA acknowledges the contributions of the Congenital Syphilis Prevention and Technical Measurement Advisory Panels, and the Coding Panel.

[1]HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

Prenatal Syphilis Screening and Follow-Up (PSF-E)

Measure title	Prenatal Syphilis Screening and Follow-Up	**Measure ID**	PSF-E
Description	The percentage of deliveries screened for syphilis during pregnancy, and if screened positive, received appropriate follow-up after the positive test. Two rates are reported: • *Prenatal Syphilis Screening*. The percentage of deliveries that had a syphilis screening with a documented result during the first trimester or within 14 days of the first pregnancy diagnosis or prenatal visit or within 30 days of enrollment in the organization. • *Follow-Up on Positive Screen*. The percentage of deliveries with a positive syphilis screen which received appropriate follow-up care.		
Measurement period	January 1–December 31.		
Copyright and disclaimer notice	**Developed with financial support from the Centers for Disease Control and Prevention and the National Association of County and City Health Officials.* Refer to the complete copyright and disclaimer information at the front of this publication. NCQA website: www.ncqa.org. Submit policy clarification support questions via My NCQA (https://my.ncqa.org).		
Clinical recommendation statement/rationale	The American College of Obstetricians and Gynecologists (ACOG) recommends all pregnant persons should be screened serologically for syphilis at the first prenatal care visit, during the third trimester, and at delivery. The U.S. Preventive Services Task Force (USPSTF) recommends screening early or at the first available opportunity for syphilis infection in all pregnant persons (grade A recommendation). The Centers for Disease Control and Preventive Services (CDC) recommends screening all pregnant persons serologically at the first prenatal care visit and rescreening during the third trimester and at delivery for individuals at risk.		
Citations	American College of Obstetricians and Gynecologists. 2024. "Screening for Syphilis in Pregnancy: Practice Advisory." Screening for Syphilis in Pregnancy. April 2024. https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2024/04/screening-for-syphilis-in-pregnancy Silverstein, M., Wong, J. B., Davis, E. M., Chelmow, D., Coker, T. R., Fernandez, A., ... & US Preventive Services Task Force. (2025). Screening for Syphilis Infection During Pregnancy: US Preventive Services Task Force Reaffirmation Recommendation Statement. *JAMA*. https://jamanetwork.com/journals/jama/fullarticle/2833883 Centers for Disease Control and Prevention, Division of STI Prevention. 2021. "Syphilis During Pregnancy." Sexually Transmitted Infections Treatment Guidelines, 2021. July 22, 2021. https://www.cdc.gov/std/treatment-guidelines/syphilis-pregnancy.htm		

Characteristics	
Scoring	Proportion
Type	Process
Product Lines	• Commercial. • Medicaid.
Stratifications	Race (Refer to the *General Guideline: Race and Ethnicity Stratification*). • American Indian or Alaska Native. • Asian. • Black or African American. • Middle Eastern or North African • Native Hawaiian or Pacific Islander. • White. • Some Other Race. • Two or More Races. • Asked But No Answer. • Unknown. Ethnicity (Refer to the *General Guideline: Race and Ethnicity Stratification*). • Hispanic or Latino. • Not Hispanic or Latino. • Asked But No Answer. • Unknown.
Risk Adjustment	None
Improvement Notation	Increased score indicates improvement.
Guidance	**Data Collection Methodology:** ECDS. Refer to the *General Guideline: Data Collection Methods* for additional information. **Date Specificity:** Dates must be specific enough to determine the event occurred in the period being measured. **Which Services Count?** When using claims, include all paid, suspended, pending and denied claims. **Other Guidance**: • For each person, the organization must identify gestational age at delivery to define the start and end of the first trimester. The last menstrual period may not be used to determine the first trimester. • The measure is based on deliveries; therefore, it is possible for the denominator to include multiple deliveries for the same person.

Definitions	
First enrollment	First enrollment refers to a new enrollment in a plan on or after the pregnancy start date. Persons who were enrolled prior to pregnancy do not meet this criteria.
First trimester	The first trimester is calculated as the pregnancy start date through 13 weeks from pregnancy start date.
Pregnancy start	Pregnancy start date is calculated by subtracting the gestational age (in weeks) at the time of delivery from the delivery date. Use the last gestational age assessment or diagnosis within 1 day of the delivery date.
Negative confirmatory test	A negative confirmatory test is based on what type of test was used for the index (first) screening. If the index screening is a nontreponemal test, the negative confirmatory test must be a treponemal test, completed within 5 days. If the index screening is a treponemal test, the negative confirmatory test must be a nontreponemal test, completed within 5 days.
Syphilis screening	A nontreponemal or treponemal syphilis test completed during the pregnancy period up to 3 days after delivery. Date of syphilis screening should be used.
Initial population	*Measure item count:* Episode. *Attribution basis:* Enrollment. • *Benefits:* Medical. • *Continuous enrollment*: 30 days prior to delivery through 17 days after delivery. • *Allowable gap:* None. *Ages:* None. *Event:* **Deliveries.** **Step 1.** Identify all deliveries or miscarriages (Delivery and Miscarriage Treatment Procedures Value Set) that occurred on or between December 15 of the year prior to the measurement period and December 14 of the measurement period with a gestational age of 14 weeks or greater. The gestational age documentation must be within 1 day of the start or end of the delivery or miscarriage procedure. Use either of the following to identify gestational age: • Gestational age assessment (Weeks of Gestation Value Set); value ≥14 weeks. • Gestational age diagnosis (Weeks of Gestation Greater Than or Equal to 14 Value Set). ***Note:*** *Delivery Date: The intent is to identify the date of delivery using the date as of the end of the delivery procedure; when available, use that date. When using inpatient claims to identify delivery date, use the following hierarchy to determine the date:* • *When a procedure date or date of service is available, use that date.* • *When a procedure date or date of service is not available, use the discharge date from the inpatient claim.*

	Step 2. Identify continuous enrollment. Determine if enrollment was continuous 30 days prior to delivery through 17 days after delivery, with no gaps. **Step 3.** Remove multiple deliveries in a 180-day period. If a person has more than one delivery in a 180-day period, include only the first eligible delivery. Then, if applicable, include the next delivery that occurs after the 180-day period. Identify deliveries chronologically, including only one per 180-day period. ***Note:*** *The initial population for this measure is based on deliveries, not on persons. All eligible deliveries that were not removed in steps 1–3 remain in the initial population.*
Denominator exclusions	**Persons in hospice or using hospice services.** Persons who use hospice services (Hospice Encounter Value Set; Hospice Intervention Value Set) or elect to use a hospice benefit any time in the year prior to the measurement period or during the measurement period. Organizations that use the Monthly Membership Detail Data File to identify these persons must use only the run date of the file. **Persons receiving palliative care.** Persons receiving palliative care (Palliative Care Assessment Value Set; Palliative Care Encounter Value Set; Palliative Care Intervention Value Set) or who had an encounter for palliative care (ICD-10-CM code Z51.5)* any time in the year prior to the measurement period or during the measurement period. **Coding Guidance** *Do not include laboratory claims (claims with POS code 81).
Denominator	**Denominator 1:** The initial population minus denominator exclusions. **Denominator 2:** Deliveries from numerator 1 with a documented positive screening result for syphilis: (Treponemal Syphilis Tests Value Set; Non Treponemal Syphilis Tests Value Set) with Positive Syphilis Test Result or Finding Value Set.
Numerator	**Numerator 1: Prenatal syphilis screening.** Use the date the syphilis screening was collected. Any of the following may apply: • Deliveries that were screened for syphilis (Treponemal Syphilis Tests Value Set; Non Treponemal Syphilis Tests Value Set) during the first trimester and with a result (Positive Syphilis Test Result or Finding Value Set; Negative Syphilis Test Result or Finding Value Set). • Deliveries with a syphilis screening (Treponemal Syphilis Tests Value Set; Non Treponemal Syphilis Tests Value Set) any time from pregnancy start date through 14 days after the first pregnancy diagnosis or the first prenatal visit with a syphilis test result (Positive Syphilis Test Result or Finding Value Set; Negative Syphilis Test Result or Finding Value Set). Use any of the following to identify earliest indication of pregnancy or first prenatal visit. Use the diagnosis or visit with the earliest date on or after pregnancy start: • A bundled service (Prenatal Bundled Services Value Set) where the organization can identify the date when prenatal care was initiated (because bundled service codes are used on the date of delivery, these

codes may be used only if the claim form indicates when prenatal care was initiated)
    - A visit for prenatal care (Standalone Prenatal Visits Value Set)
    - A pregnancy-related diagnosis code (Pregnancy Diagnosis Value Set*)
- Deliveries with a syphilis screening (Treponemal Syphilis Tests Value Set; Non Treponemal Syphilis Tests Value Set) any time from pregnancy start date through 30 days after first enrollment, with a documented result (Positive Syphilis Test Result or Finding Value Set; Negative Syphilis Test Result or Finding Value Set).

Note: Do not include syphilis screenings that occurred 4 days or more after the delivery date.

Coding Guidance

*Do not include laboratory claims (claims with POS code 81).

Numerator 2: Follow-up care on positive screen.
Deliveries that received appropriate follow-up care. Either of the following meets criteria:

- A documented negative confirmatory test (Treponemal Syphilis Tests Value Set; Non Treponemal Syphilis Tests Value Set with a negative result Negative Syphilis Test Result or Finding Value Set) on or within 5 days of the first positive syphilis screening.
    - If the first positive screening was a nontreponemal test, the confirmatory test must be a treponemal test.
    - If the first positive screening was a treponemal test, the confirmatory test must be a nontreponemal test.
- Penicillin treatment (Penicillin G Injection Value Set; Syphilis Antibiotic Medications List) on or within 14 days of the first positive syphilis screening.

Summary of changes

- This is a first-year measure.

Data elements for reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table PSF-E-A-1/2: Metadata Elements for Prenatal Syphilis Screening and Follow-Up

Metric	Data Element	Reporting Instructions
PrenatalSyphilisScreening	InitialPopulation	Repeat per Metric
Follow-Up	Exclusions	Repeat per Metric
	Denominator	For each Metric
	Numerator	For each Metric
	Rate	(Percent)

Table PSF-E -B-1/2: Data Elements for Prenatal Syphilis Screening and Follow-Up: Stratifications by Race

Metric	Race	Data Element	Reporting Instructions
PrenatalSyphilisScreening	AmericanIndianOrAlaskaNative	InitialPopulation	For each Stratification, repeat per Metric
Follow-Up	Asian	Exclusions	For each Stratification, repeat per Metric
	BlackOrAfricanAmerican	Denominator	For each Stratification and Metric
	MiddleEasternOrNorthAfrican	Numerator	For each Stratification and Metric
	NativeHawaiianOrPacificIslander	Rate	(Percent)
	White		
	SomeOtherRace		
	TwoOrMoreRaces		
	AskedButNoAnswer		
	Unknown		

Table PSF-E-C-1/2: Data Elements for Prenatal Syphilis Screening and Follow-Up: Stratifications by Ethnicity

Metric	Ethnicity	Data Element	Reporting Instructions
PrenatalSyphilisScreening	HispanicOrLatino	InitialPopulation	For each Stratification, repeat per Metric
Follow-Up	NotHispanicOrLatino	Exclusions	For each Stratification, repeat per Metric
	AskedButNoAnswer	Denominator	For each Stratification and Metric
	Unknown	Numerator	For each Stratification and Metric
		Rate	(Percent)

Prenatal Syphilis Screening & Follow-Up (PSF-E)
Measure Workup

Topic Overview

Importance & Prevalence

Congenital syphilis (CS), or syphilis transmitted from a pregnant individual to the fetus during pregnancy, is preventable if pregnant individuals are routinely screened for syphilis and receive treatment if positive before delivery (Bowen et al., 2015). CS prevalence is increasing in the United States despite evidence, guideline recommendations and state policies that promote syphilis screening during pregnancy.

Prior to 2012, congenital and infectious syphilis prevention efforts in the U.S. were largely successful, with infectious syphilis prevalence declining by 89.2% between 1990 and 2000 (Nelson, 2022; Carrier & Haughton, 2019). This trend reversed sharply in the 2010s, with severe consequences for CS rates in newborns.

If untreated, syphilis acquired at any point prior to or during pregnancy can lead to CS in newborns, with a transmission frequency of up to 90% (Pérez-Cavazos et al., 2022). In 2012, there were 1,561 reported cases of syphilis in pregnant U.S. individuals. In 2016, the prevalence of syphilis in pregnant U.S. individuals increased by 61% to 2,508 reported cases (Trivedi et al., 2019). Syphilis rates in pregnant individuals continued to climb after 2012, mirroring the increases seen in CS across the same period (Gregory & Ely, 2024). In 2024, 3,941 infants were born with congenital syphilis–a nearly 700% increase from 2015, when only 495 cases were reported (CDC, 2025).

CS can cause severe issues throughout a newborn's body, including jaundice, skin/organ lesions, skeletal deformities and respiratory issues. More severe consequences such as sensory impairments, brain abnormalities and seizures are possible as well (Lim et al., 2021; Pañgan et al., 2024). Syphilis infection in pregnant individuals is strongly associated with preterm birth, miscarriage, and stillbirths, and drives adverse population health outcomes such as neonatal mortality and a loss of lifetime Quality-Adjusted Life Years (Gulersen et al., 2023; Schlueter et al., 2021; Canto et al., 2019; Lee et al., 2023; Tong et al., 2023).

Financial importance and cost-effectiveness

Routinely screening and treating pregnant individuals is the most cost-effective approach for addressing CS. On average, a standard nontreponemal/treponemal antibody test costs $6.59, and an average use of penicillin costs $12.53 (Sykes et al., 2021). Applied routinely throughout pregnancy, these tools can reliably prevent the transmission of syphilis to a newborn. In doing so, this type of care is demonstrably more cost effective than CS treatment in newborns: Once identified, best practice for CS treatment is to immediately begin a 10 to 14 day course of intravenous penicillin G (CDC, 2021). Administering penicillin intravenously and treating the multiple physical sequalae of CS in newborns requires hospitalizations ranging from $18,151 to $56,802 (Tanne, 2023; Boodman et al., 2022; Umapathi et al., 2019). This eclipses the cost associated with non-CS newborn hospitalizations (Staneva et al., 2023).

Given the high financial cost of treating CS, CS prevention is much more cost-effective and reliably prevents the severe consequences associated with CS. Assuming that all pregnant individuals screened receive treatment as needed, syphilis screening during pregnancy can reduce preterm birth risk associated with CS by 52% (Tong et al., 2023). Up to 90% of CS cases are preventable with timely testing and adequate treatment during pregnancy (Harris, 2023).

Health care disparities

Structural inequities that inhibit pregnant individuals' access to care also inhibit the receipt of services to prevent CS. As a result, groups

disproportionately affected by these structural barriers due to race and income experience a disproportionate burden of CS (Cuffe et al., 2022; Fang et al., 2022; Aslam et al., 2019; Kimball et al., 2020). This burden is especially true for black individuals – where previous research has demonstrated that despite continuous Medicaid coverage ensuring a higher likelihood of receiving first trimester syphilis screening, Black pregnant individuals were less likely to have received first-trimester syphilis screening compared to white pregnant persons enrolled in Medicaid (Hammerslag et al., 2023).

Supporting Evidence for Screening, Timing and Treatment

In pregnant individuals, syphilis screening involves a nontreponemal antibody test or treponemal antibody test followed by a confirmatory treponemal antibody test or a nontreponemal antibody test (respectively). Syphilis transmission between a pregnant individual and fetus is related to the stage of infection in the pregnant individual (Lin, 2018; Round et al, 2022; Adhikari, 2020). As such, screening for syphilis early in pregnancy empowers clinicians to treat infectious syphilis before fetal transmission occurs. More frequent screenings allow providers to mitigate the risk of syphilis being transmitted to the fetus after the initial screening: an especially relevant strategy for groups at high risk of exposure/re-exposure (Peng et al., 2023; Pham et al., 2022). Rapid, point of care tests may be an effective solution to mitigate disparities relating to health care access, but there are limited U.S.-based recommendations for their use in pregnant individuals.

The United States Preventive Services Task Force (USPSTF) recommends that all pregnant individuals receive syphilis screening at their first presentation to care, or at delivery if they do not receive prenatal care (Lin, 2018). The USPSTF also recommends providing additional screenings at 28 weeks gestation and at delivery for individuals with characteristics that place them at high risk of infection (i.e., living in areas with high syphilis prevalence, HIV infection, history of incarceration and/or commercial sex work, exposure to infected partner). The World Health Organization (WHO) recommends that all pregnant individuals are screened for syphilis at first presentation to antenatal care (World Health Organization (WHO) Global Health Observatory, 2024; Centers for Disease Control and Prevention, Division of STI Prevention, 2021). The Centers for Disease Control and Prevention (CDC) 2021 CS prevention guidelines largely mirror USPSTF recommendations.

Recent recommendations from the American College of Obstetricians and Gynecologists (ACOG) are more robust, stating that all pregnant individuals should be screened for syphilis at the first prenatal care visit, followed by universal rescreening during the third trimester and at birth (rather than a risk-based approach to rescreening) (American College of Obstetricians and Gynecologists, 2024). Many public health authorities echo this recommendation (Plotzker et al., 2020; Georgia Department of Public Health, 2023; Minnesota Department of Health, Infectious Disease Epidemiology, Prevention, and Control Division, 2024; New Mexico Department of Health, Epidemiology and Response Health Alert Network, 2023; Oklahoma State Department of Health Sexual Health and Harm Reduction Service, 2022; Texas Department of State Health Services, 2023; Oregon Health Authority, Oregon STD Authority, and Oregon Perinatal Collaborative, 2023; Watkins & Huff, 2022).

Treatment for syphilis in pregnant individuals after a positive screen is a standard course of long-acting penicillin G (Centers for Disease Control and Prevention, Division of STI Prevention, 2021; Peeling et al., 2023; Adhikari, 2020). Recommended dosages depend on the stage of syphilis. A single dose is typically adequate for early, secondary and early latent syphilis; however, two doses administered over two consecutive weeks is often cited as best practice. Late latent syphilis in pregnancy requires three doses administered over three consecutive weeks. Prompt identification of syphilis throughout pregnancy allows full treatment regimens to be followed to prevent fetal transmission (Peeling et al., 2023; Adhikari, 2020).

Policy and Quality Measurement

Legislation in all U.S. states necessitates that every individual receiving prenatal care also receives a screening test for syphilis at their first prenatal visit (Centers for Disease Control and Prevention, Division of STI Prevention, 2023). Many public health authorities require or strongly recommend applying additional screenings (typically limited to high-risk populations) to all pregnant individuals (Plotzker et al., 2020; Georgia Department of Public Health, 2023; Minnesota Department of Health, Infectious Disease Epidemiology, Prevention, and Control Division, 2024; New Mexico Department of Health, Epidemiology and Response Health Alert Network, 2023; Oklahoma State Department of Health Sexual Health and Harm Reduction Service, 2022; Texas Department of State Health Services, 2023; Oregon Health Authority, Oregon STD Authority, and Oregon Perinatal Collaborative, 2023; Watkins & Huff, 2022).

There is a gap in national-level quality measurement for CS prevention. Some existing measures are intended for use in quality improvement (QI) programs that only target a subset of the U.S. population (AmeriHealth Caritas Louisiana, 2022; Cigna Healthcare, 2023; Partnership for Quality Measurement, 2024; California Maternal Quality Care Collaborative (CMQCC) Maternal Data Center (MDC), 2024). Others encompass larger population bases but are only designed and implemented for public health surveillance (World Health Organization (WHO) Global Health Observatory, 2024; Diesel et al., 2022).

National-level measurement activities related to prenatal care and STI screening demonstrate that a more robust CS prevention measure is feasible. NCQA's *Prenatal and Postpartum Care* (PPC) measure assesses timely provision of appropriate prenatal care to pregnant individuals and is used in multiple QI programs with national reach (National Committee for Quality Assurance (NCQA), 2024b). Similarly, NCQA's *Chlamydia Screening in Women* (CHL) measure and the Health Resources and Services Administration's (HRSA) *Sexually Transmitted Disease Screening for Chlamydia, Gonorrhea, and Syphilis* measure both incentivize STI screenings at a national level, albeit not specifically for pregnant individuals (National Committee for Quality Assurance (NCQA), 2024a; Health Resources and Services Administration (HRSA) Ryan White HIV/AIDS Program, 2023).

Digital Considerations

As part of NCQA's strategic transition to a fully digital quality measurement portfolio, we conducted a feasibility assessment to inform eventual digital measure implementation. The assessment evaluates the measure's intent and associated clinical concepts within a digital framework.

Overall, this measure has medium feasibility, with identifying completed screening being more feasible than identifying positive screening results and follow-up. All the clinical concepts used in the measure are feasible related to interoperability data standards (FHIR, USCDI). Terminology standards are available for all concepts; however, there are challenges related to the SNOMED CT codes being utilized for screening results. There are also challenges with all screening results and medication treatments being available and in structured fields, which impacts accessibility to data for health plans. Workflow challenges exist due to the flexible sequencing of syphilis screenings to confirm a positive diagnosis, which does lead to challenges in identifying necessary data and timing components for the measure concept. Refer to Appendix A for more detail.

References

Adhikari, Emily H. 2020. “Syphilis in Pregnancy.” *Obstetrics & Gynecology* 135 (5): 1121–35. https://doi.org/10.1097/AOG.0000000000003788.

American College of Obstetricians and Gynecologists. 2024. “Screening for Syphilis in Pregnancy: Practice Advisory.” Screening for Syphilis in Pregnancy. April 2024. https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2024/04/screening-for-syphilis-in-pregnancy.

AmeriHealth Caritas Louisiana, ed. 2022. “The Perinatal Quality Enhancement Program: Improving Quality Care and Health Outcomes.” AmeriHealth Caritas Louisiana. https://www.amerihealthcaritasla.com/pdf/provider/resources/qep-manual-preinatal.pdf.

Aslam, Maria V., Kwame Owusu-Edusei, Sarah E. Kidd, Elizabeth A. Torrone, and Patricia M. Dietz. 2019. “Increasing Syphilis Diagnoses Among Females Giving Birth in US Hospitals, 2010–2014.” *Sexually Transmitted Diseases* 46 (3): 147–52. https://doi.org/10.1097/OLQ.0000000000000945.

Boodman, Carl, Jared Bullard, Derek Riley Stein, Santina Lee, Vanessa Poliquin, and Paul Van Caeseele. 2022. “Expanded Prenatal Syphilis Screening in Manitoba, Canada: A Direct Short-Term Cost-Avoidance Analysis in an Outbreak Context.” *Canadian Journal of Public Health* 114 (September):287–94. https://doi.org/10.17269/s41997-022-00682-0.

Bowen, Virginia, John Su, Elizabeth Torrone, Sarah Kidd, and Hillard Weinstock. 2015. “Increase in Incidence of Congenital Syphilis — United States, 2012–2014.” *Morbidity and Mortality Weekly Report (MMWR) Weekly* 64 (44): 1241–45.

California Maternal Quality Care Collaborative (CMQCC) Maternal Data Center (MDC). 2024. “Maternal Data Center (MDC) Measure List 2024.” California Maternal Quality Care Collaborative (CMQCC). https://www.cmqcc.org/sites/default/files/Measure%20List_CA_January%202024.pdf.

Canto, Surama Valena Elarrat, Maria Alix Leite Araújo, Angélica Espinosa Miranda, Ana Rita Paulo Cardoso, and Rosa Lívia Freitas de Almeida. 2019. “Fetal and Infant Mortality of Congenital Syphilis Reported to the Health Information System.” *PLOS ONE* 14 (1): e0209906. https://doi.org/10.1371/journal.pone.0209906.

Carrier, Jessica, and Vivian Haughton. 2019. “Congenital Syphilis: A Challenging Case for NICU Clinicians.” *Neonatal Network* 38 (3): 170–77. https://doi.org/10.1891/0730-0832.38.3.170.

Centers for Disease Control and Prevention, Division of STI Prevention. 2021. “Syphilis During Pregnancy.” Sexually Transmitted Infections Treatment Guidelines, 2021. July 22, 2021. https://www.cdc.gov/std/treatment-guidelines/syphilis-pregnancy.htm.

Centers for Disease Control and Prevention, Division of STI Prevention. 2023. “State Statutory and Regulatory Language Regarding Prenatal Syphilis Screenings in the United States.” Sexually Transmitted Infections (STIs). November 1, 2023. https://www.cdc.gov/std/treatment/syphilis-screenings.htm.

Centers for Disease Control and Prevention. (2025). Sexually transmitted infections surveillance, 2024 (provisional).

Cigna Healthcare, ed. 2023. “2024 Quality, Cost-Efficiency, and Cigna Care Designation Methodology.” Cigna Healthcare.

Cuffe, Kendra M., Elizabeth A. Torrone, Jaeyoung Hong, Jami S. Leichliter, Thomas L. Gift, Phoebe G. Thorpe, and Kyle T. Bernstein. 2022. “Identification of United States Counties at Elevated Risk for Congenital Syphilis Using Predictive Modeling and a Risk Scoring System, 2018.” *Sexually Transmitted Diseases* 49 (3): 184–89. https://doi.org/10.1097/OLQ.0000000000001561.

Diesel, Jill C., Amy S. Peterson, Karen Lightheart, Aleigha Phillips, and Katie Macomber. 2022. “Prenatal Syphilis and HIV Screenings in the Early Third Trimester Have Increased Following New Legislation in Michigan.” Abstract. Detroit, GA.

Easterlin, Molly Crimmins, Rangasamy Ramanathan, and Theodore De Beritto. 2021. “Maternal-to-Fetal Transmission of Syphilis and Congenital Syphilis.” *NeoReviews* 22 (9): e585–99. https://doi.org/10.1542/neo.22-9-e585.

Fang, Juliet, Rona M. Silva, Daniel J. Tancredi, Kent E. Pinkerton, and Deepika Sankaran. 2022. “Examining Associations in Congenital Syphilis Infection and Socioeconomic Factors between California’s Small-to-Medium and Large Metro Counties.” *Journal of Perinatology* 42 (June):1434–39. https://doi.org/10.1038/s41372-022-01445-y.

Georgia Department of Public Health. 2023. “Congenital Syphilis.” Congenital Syphilis. July 31, 2023. https://dph.georgia.gov/congenitalsyphilis.

Gregory, Elizabeth C. W., and Danielle M. Ely. 2024. “Trends and Characteristics in Maternal Syphilis Rates During Pregnancy: United States, 2016–2022.” Data Brief 496. NCHS Data Briefs. Hyattsville, MD: National Center for Health Statistics. https://doi.org/10.15620/cdc:145590.

Gulersen, Moti, Erez Lenchner, Yael Eliner, Amos Grunebaum, Lisa Johnson, Frank A. Chervenak, and Eran Bornstein. 2023. “Risk Factors and Adverse Outcomes Associated with Syphilis Infection during Pregnancy.” *American Journal of Obstetrics & Gynecology MFM* 5 (6). https://doi.org/10.1016/j.ajogmf.2023.100957.

Hammerslag, Lindsey R., Rachel E. Campbell-Baier, Caitlin A. Otter, Ana Lopez-De Fede, Jheramy P. Smith, L. Angel Whittington, Larry J. Humble, et al. 2023. “Prenatal Syphilis Screening among Pregnant Medicaid Enrollees by Sexually Transmitted Infection History as Well as Race and Ethnicity.” *American Journal of Obstetrics & Gynecology MFM* 5 (6): 100937. https://doi.org/10.1016/j.ajogmf.2023.100937.

Harris, Emily. 2023. “CDC: 90% of Congenital Syphilis Cases Could Have Been Prevented.” *JAMA* 330 (22): 2145. https://doi.org/10.1001/jama.2023.22929.

Health Resources and Services Administration (HRSA) Ryan White HIV/AIDS Program. 2023. “Performance Measure: Syphilis Screening.” HRSA Ryan White HIV/AIDS Program. August 2023. https://ryanwhite.hrsa.gov/grants/performance-measure-portfolio/adolescent-adult-measures/syphilis-screening#:~:text=Department%20of%20Health%20and%20Human.

Kimball, Anne, Elizabeth Torrone, Kathryn Miele, Laura Bachmann, Phoebe Thorpe, Hillard Weinstock, and Virginia Bowen. 2020. “Missed Opportunities for Prevention of Congenital Syphilis — United States, 2018.” *Morbidity and Mortality Weekly Report (MMWR) Weekly* 69 (22): 661–65. https://doi.org/10.15585/mmwr.mm6922a1.

Lee, Kyueun, Shiying You, Yunfei Li, Harrell Chesson, Thomas L Gift, Andrés A Berruti, Katherine Hsu, Reza Yaesoubi, Joshua A Salomon, and Minttu Rönn. 2023. “Estimation of the Lifetime Quality-Adjusted Life Years (QALYs) Lost Due to Syphilis Acquired in the United States in 2018.” *Clinical Infectious Diseases* 76 (3): e810–19. https://doi.org/10.1093/cid/ciac427.

Lim, Joohee, So Jin Yoon, Jeong Eun Shin, Jung Ho Han, Soon Min Lee, Ho Seon Eun, Min Soo Park, and Kook In Park. 2021. “Outcomes of Infants Born to Pregnant Women with Syphilis: A Nationwide Study in Korea.” *BMC Pediatrics* 21 (47). https://doi.org/10.1186/s12887-021-02502-9.

Lin, Jennifer S., Michelle Eder, and Sarah Bean. 2018. “Screening for Syphilis Infection in Pregnant Women: A Reaffirmation Evidence Update for the U.S. Preventative Services Task Force.” Evidence Synthesis 167. Agency for Healthcare Research and Quality (U.S.): Rockville, MD. https://www.ncbi.nlm.nih.gov/books/NBK525910/.

Minnesota Department of Health, Infectious Disease Epidemiology, Prevention, and Control Division. 2024. “2024 Pregnancy Syphilis Screening Recommendations.” Minnesota Department of Health. https://www.health.state.mn.us/diseases/syphilis/screenrecfaq.pdf.

National Committee for Quality Assurance (NCQA). 2024a. “Chlamydia Screening in Women (CHL).” National Committee for Quality Assurance: Measuring Quality. Improving Health Care. 2024.

———. 2024b. “Prenatal and Postpartum Care (PPC).” National Committee for Quality Assurance: Measuring Quality. Improving Health Care. 2024.

Nelson, Roxanne. 2022. “Congenital Syphilis Increases in the USA.” *The Lancet Microbe* 3 (3): e171. https://doi.org/10.1016/S2666-5247(22)00041-6.

New Mexico Department of Health, Epidemiology and Response Health Alert Network. 2023. “Recommendation for Expanded Syphilis Screening to Reduce Rising Rates of Congenital Syphilis.” New Mexico Department of Health. https://www.nmhealth.org/publication/view/general/8530/.

Oklahoma State Department of Health Sexual Health and Harm Reduction Service. 2022. “Clinical Guidance for Syphilis During Pregnancy and Congenital Syphilis, Including Infants and Children.” Guidelines. Oklahoma City, OK: Oklahoma State Department of Health. https://oklahoma.gov/content/dam/ok/en/health/health2/aem-documents/prevention-and-preparedness/sexual-health-harm-reduction/syphilis-resources/clinical-guidance-for-syphilis-during-pregnancy-and-congenital.pdf.

Oregon Health Authority, Oregon STD Authority, and Oregon Perinatal Collaborative. 2023. “Emerging Practices for Responding to the Congenital Syphilis Emergency in Oregon: Recommendations for Health Care Providers.” Salem, OR: Oregon Health Authority; Oregon STD Program; Oregon Perinatal Collaborative. https://www.oregon.gov/oha/PH/DISEASESCONDITIONS/HIVSTDVIRALHEPATITIS/SEXUALLYTRANSMITTEDDISEASE/Documents/Emerging_Practices_CS_Emergency_OR_2023_1002.pdf.

Pañgan, Erika Anne C., Imelda Asetre-Luna, Maria Esterlita V. Uy, and Angela Katrina M. Esguerra. 2024. “Pemphigus Syphiliticus with Jarisch–Herxheimer Reaction in a Newborn.” *Pediatric Dermatology* 41 (1): 153–55. https://doi.org/10.1111/pde.15428.

Partnership for Quality Measurement. 2024. “Pregnant Women That Had Syphilis Screening.” Partnership for Quality Measurement, Powered by Battelle. 2024. https://p4qm.org/measures/0607.

Peeling, Rosanna W., David Mabey, Xiang-Sheng Chen, and Patricia J. Garcia. 2023. “Syphilis.” *The Lancet* 402 (10398): 336–46. https://doi.org/10.1016/S0140-6736(22)02348-0.

Peng, Lei-Wen, Yu-Jie Gao, Ya-li Cui, Huang Xu, and Zheng-Xiang Gao. 2023. “Missed Opportunities for Screening Congenital Syphilis Early during Pregnancy: A Case Report and Brief Literature Review.” *Frontiers in Public Health* 10 (2022). https://doi.org/10.3389/fpubh.2022.1073893.

Pérez-Cavazos, Samantha, María Mayela Rodríguez-Saldívar, Abiel Homero Mascareñas-De los Santos, and José Iván Castillo-Bejarano. 2022. “Congenital Syphilis: The Irrevocable Burden of a Late Diagnosis.” *Pediatrics & Neonatology* 63 (3): 306–7. https://doi.org/10.1016/j.pedneo.2021.10.006.

Pham, Minh D., Jason J. Ong, David A. Anderson, Heidi E. Drummer, and Mark Stoové. 2022. “Point-of-Care Diagnostics for Diagnosis of Active Syphilis Infection: Needs, Challenges and the Way Forward.” *International Journal of Environmental Research and Public Health* 19 (13): 8172. https://doi.org/10.3390/ijerph19138172.

Plotzker, Rosalyn E., Sarah L. Rudman, Jennifer L. Harmon, and Laura Kovaleski. 2020. “Expanded Syphilis Screening Recommendations for the Prevention of Congenital Syphilis: Guidelines for California Medical Providers.” Guidelines for California Medical Providers. Sacramento, CA; Oakland, CA; California Deparrtment of Public Health Sexually Transmitted Diseases Control Branch; California STD/HIV Controllers Association; California Prevention Training Center. https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Expanded-Syphilis-Screening-Recommendations.pdf.

Round, Jessica M., Sabrina S. Plitt, Lisa Eisenbeis, Petra Smyczek, Jennifer Gratrix, Carmen Charlton, Sumana Fathima, and Allen O’Brien. 2022. “Examination of Care Milestones for Preventing Congenital Syphilis Transmission Among Syphilis-Infected Pregnant Women in Alberta, Canada: 2017–2019.” *Sexually Transmitted Diseases* 49 (7): 477–83. https://doi.org/10.1097/OLQ.0000000000001640.

Schlueter, Alison, Uma Doshi, Bharti Garg, Alyssa R. Hersh, and Aaron B. Caughey. 2021. “Adverse Pregnancy Outcomes Associated with Maternal Syphilis Infection.” *The Journal of Maternal-Fetal & Neonatal Medicine* 35 (25): 5828–33. https://doi.org/10.1080/14767058.2021.1895740.

Seiler, Naomi, Katie Horton, William S. Pearson, Ryan Cramer, Madina Adil, Darla Bishop, and Claire Heyison. 2022. “Addressing the STI Epidemic Through the Medicaid Program: A Roadmap for States and Managed Care Organizations.” *Public Health Reports*® 137 (1): 5–10. https://doi.org/10.1177/0033354920985476.

Staneva, Manuela, Charlotte V. Hobbs, and Thomas Dobbs. 2023. “Spike in Congenital Syphilis, Mississippi, USA, 2016–2022 - Volume 29, Number 10—October 2023 - Emerging Infectious Diseases Journal - CDC.” *Emerging Infectious Diseases* 29 (10). https://doi.org/10.3201/eid2910.230421.

Sykes, Kaitlyn J., Rebecca A. Scranton, Lisa Villarroel, Bree V. Anderson, Sara Salek, and Jonathan Stall. 2021. “Using Surveillance Data to Respond to an Outbreak of Congenital Syphilis in Arizona Through Third-Trimester Screening Policies, 2017-2018.” *Public Health Reports*® 136 (1): 61–69. https://doi.org/10.1177/0033354920967350.

Tanne, Janice Hopkins. 2023. “Congenital Syphilis: Public Health Failures Are Blamed for ‘Alarming’ Increase in Cases in Mississippi.” *BMJ* 382 (September):p2180. https://doi.org/10.1136/bmj.p2180.

Texas Department of State Health Services. 2023. “Congenital Syphilis in Texas.” Texas Health and Human Services. https://www.dshs.texas.gov/sites/default/files/hivstd/info/edmat/CongenitalSyphilis.pdf.

Tong, Hannah, Austin Heuer, and Neff Walker. 2023. “The Impact of Antibiotic Treatment for Syphilis, Chlamydia, and Gonorrhoea during Pregnancy on Birth Outcomes: A Systematic Review and Meta-Analysis.” *Journal of Global Health* 2023 (13): 04058.

Trivedi, Shivika, Charnetta Williams, Elizabeth Torrone, and Sarah Kidd. 2019. “National Trends and Reported Risk Factors Among Pregnant Women With Syphilis in the United States, 2012–2016.” *Obstetrics & Gynecology* 133 (1): 27–32. https://doi.org/10.1097/AOG.0000000000003000.

Umapathi, Krishna Kishore, Aravind Thavamani, and Kobkul Chotikanatis. 2019. “Incidence Trends, Risk Factors, Mortality and Healthcare Utilization in Congenital Syphilis-Related Hospitalizations in the United States: A Nationwide Population Analysis.” *The Pediatric Infectious Disease Journal* 38 (11): 1126–30. https://doi.org/10.1097/INF.0000000000002445.

Watkins, Margaret, and Bianca Huff. 2022. “Congenital Syphilis in West Virginia.” Presented at the West Virginia Department of Health & Human Resources Bureau for Public Health, Division of STD, HIV, Hepatitis, and Tuberculosis: Congenital Syphilis in West Virginia, Charleston, WV, August. https://oeps.wv.gov/syphilis/Documents/lhd/Congenital_Syphilis_2022.pdf.

World Health Organization (WHO) Global Health Observatory. 2024. “Women Accessing Antenatal Care (ANC) Services Who Were Tested for Syphilis (%).” The Global Health Observatory. 2024. https://www.who.int/data/gho/data/indicators/indicator-details/GHO/women-accessing-antenatal-care-(anc)-services-who-were-tested-for-syphilis-(-).

Appendix A: Digital Feasibility

As part of NCQA's strategic transition to a fully digital quality measurement portfolio, we conduct a feasibility assessment to evaluate the measure's intent and associated clinical concepts within a digital framework. The primary objectives were to determine whether the clinical concepts could be represented using standardized data models and nationally recognized terminologies, and to assess the availability of discrete, structured data necessary to support accurate and reliable digital measurement.

Data and Terminology Standards

NCQA's digital quality measures are built on the Fast Healthcare Interoperability Resources (FHIR®) standard, developed by HL7®, to support interoperable exchange of electronic health data. In the U.S., FHIR US Core profiles provide detailed implementation guidance aligned with the United States Core Data for Interoperability (USCDI), a federal standard maintained by ASTP (formerly ONC). USCDI defines essential data classes and elements, while FHIR US Core specifies how to represent and exchange them. Additionally, NCQA uses nationally recognized clinical terminologies (e.g., ICD-10, CPT, LOINC) to define value sets, ensuring standardized interpretation and representation of clinical data in quality measures.

Digital Feasibility Assessment

The digital feasibility assessment is conducted at two stages during the measure development process, pre-testing phase and post-testing phase, summarized below. This assessment examines each measure concept across three high-level categories:

- Data Standards & Terminology. Evaluates the alignment with national standards (FHIR, USCDI) and recognized terminology standards (i.e., LOINC, ICD).
- Clinical Workflow & Data Accuracy. Evaluates whether the concept aligns with standard clinical practice and the likelihood that the data will be accurate, complete and reliable.
- Data Availability & Structure. Assesses if the data is likely to be present, in structured fields, and accessible to health plans.

Post-Testing Feasibility Findings.

Summary: Overall, this measure has medium feasibility, with identifying completed screening being more feasible than identifying positive screening results and follow-up. All the clinical concepts used in the measure are feasible related to interoperability data standards (FHIR, USCDI). Terminology standards are available for all concepts; however, there are challenges related to the SNOMED CT codes being utilized for screening results. There are also challenges with all screening results and medication treatments being available and in structured fields, which impacts accessibility to data for health plans. Workflow challenges exist due to the flexible sequencing of syphilis screenings to confirm a positive diagnosis, which does lead to challenges in identifying necessary data and timing components for the measure concept.

The digital feasibility assessment (shown in Figure A) rates each concept from high to low. High = Feasible with no concerns, Medium = Feasible with some concerns (with a potential mitigation strategy); Low = Low feasibility with concerns (with little to no mitigation strategy for the current development cycle).

Data Standards & Terminology. All the clinical concepts used in the measure can be modeled in the FHIR data standard. The clinical concepts can be represented using nationally recognized terminologies including LOINC, CPT, ICD-10, and Systematized Medical Nomenclature for Medicine (SNOMED), however SNOMED codes for screening results are not consistently utilized.

Data Availability & Structure. There are challenges related to availability of data in structured fields for syphilis screening results to identify positive findings. Some medication treatment data may be challenging to access if occurring during an inpatient delivery encounter. Screenings, results and medication administration data will all be found in clinical systems, so health plans may not currently have access to all the data.

Clinical Workflow & Data Accuracy. There are some workflow feasibility challenges related to finding the correct screening data due to sequencing flexibility that needs to be accounted for in the measure specification.

Figure A-2: Post-Testing Digital Concept Feasibility Assessment

Score key: H = high, M = medium, L = low						
	Data Standards & Terminology		**Clinical Workflow & Data Accuracy**		**Data Availability & Structure**	
Clinical Concept	**Data Standards**	**Terminology Standards**	**Workflow**	**Data Accuracy**	**Data Availability**	**Data Accessibility**
Procedure/Encounter: Deliveries	H	H	H	H	H	H
Diagnosis/Observation: Gestational age	M	H	H	H	M	M
Encounter: Pregnancy encounter	H	H	H	H	H	H
Laboratory Test: Syphilis screening	H	H	M	H	M	M
Laboratory Test: Syphilis screening result	H	M	M	H	M	M
Treatment: Medication administration	H	H	H	H	M	M

Pre-Testing Feasibility Findings.

Summary: All the clinical concepts used in the measure have high feasibility for interoperability standards (FHIR and USCDI), with one element (gestational age) having medium feasibility. Terminology standards are available for all concepts, with some potential concerns about screening results terminology being utilized. There are concerns about some key data elements (syphilis screenings, results, medication treatment) being available in structured fields and accessible to health plans. Due to the screening sequencing, there may be some workflow challenges related to clear documentation and finding the appropriate screening and results data for the measure. To achieve overall feasibility as the measure is currently specified, testing should seek to understand if these elements are captured in structured fields and mapped to standard terminology.

The digital feasibility assessment (shown in Figure A) rates each concept from high to low. High = Feasible with no concerns, Medium = Feasible with some concerns (with a potential mitigation strategy); Low = Low feasibility with concerns (with little to no mitigation strategy for the current development cycle).

Data Standards & Terminology. All the clinical concepts used in the measure can be modeled in the FHIR data standard. While procedures, encounters, laboratory tests, and medications are included in the USCDI standard, gestational age observations are not directly included. the clinical concepts can be represented using nationally recognized terminologies including LOINC, CPT, ICD-10, and Systematized Medical Nomenclature for Medicine (SNOMED).

Data Availability & Structure. There may be some potential challenges related to availability of data in structured fields for several data elements, including availability of syphilis screening results to identify positive findings and availability of data related to treatment for a positive syphilis screening. Regarding data accessibility by health plans, syphilis screening results and medication treatment are more likely to be captured in clinical data in the EHR and not found in administrative data, so health plans may not currently have access to all the data.

Clinical Workflow & Data Accuracy. While screening for syphilis during pregnancy is recommended via clinical guidelines, there may be some workflow challenges related to when screening occurs based on how soon a pregnant person is seen for care, and challenges related to identifying the two sequence testing necessary to confirm a positive diagnosis.

Figure A-1: Pre-Testing Digital Concept Feasibility Assessment

Score key: H = high, M = medium, L = low						
	Data Standards & Terminology		**Clinical Workflow & Data Accuracy**		**Data Availability & Structure**	
Clinical Concept	**Data Standards**	**Terminology Standards**	**Workflow**	**Data Accuracy**	**Data Availability**	**Data Accessibility**
Procedure/Encounter: Deliveries	H	H	H	H	H	H
Diagnosis/Observation: Gestational age	M	H	H	H	H	M
Encounter: Pregnancy encounter	H	H	H	H	H	H
Laboratory Test: Syphilis screening	H	H	M	H	M	M
Laboratory Test: Syphilis screening result	H	M	M	H	M	M
Treatment: Medication administration	H	H	H	H	M	M

Proposed Changes to Existing Measure for HEDIS®[1] MY 2027: Adult Immunization Status (AIS-E)

NCQA seeks comments on proposed modifications to the HEDIS Health Plan *Adult Immunization Status* (AIS-E) measure. NCQA proposes to update the pneumococcal indicator denominator age range and age stratifications.

The AIS-E measure assesses the percentage of adults who are up to date on vaccines recommended for adults by the Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP) and the American Academy of Family Physicians (AAFP). The measure includes separate indicators for influenza; tetanus and diphtheria (Td) or tetanus, diphtheria and acellular pertussis (Tdap); zoster; pneumococcal; hepatitis B; and coronavirus disease (COVID-19) immunization. AIS-E is specified for the commercial, Medicaid and Medicare product lines and uses the HEDIS Electronic Clinical Data Systems (ECDS) reporting standard. This method captures receipt of vaccinations using data from electronic sources including administrative claims, immunization registries and electronic health records (EHRs). The measure is stratified by age, race and ethnicity for each product line.

In October 2024, the ACIP voted to update pneumococcal vaccination guidelines. They now recommend a single dose of PCV for all adults ages 50 and older.[2] This recommendation expanded the age range from ages 65 and older. In addition to the ACIP, the AAFP also recommends pneumococcal vaccination for all adults ages 50 and older.[3]

Based on the updates to the guidelines outlined above, NCQA recommends two updates to the pneumococcal indicator specification which are detailed below in red:

- Denominator: 50 and older
- Exclusions: Hospice and Death
- Numerators:
    - Received at least one dose of adult pneumococcal vaccine on or after their 19th birthday, any time before or during the measurement period.
    - Had anaphylaxis due to the pneumococcal vaccine any time before or during the measurement period.
- Age Stratifications:
    - 50-64
    - 65 and older

Our expert panels supported updating the pneumococcal indicator to align with these guideline updates.

NCQA seeks general feedback on the proposed modifications.

Supporting documents include the current measure specification, evidence workup and performance data.

NCQA acknowledges the contributions of the Immunization and Technical Measurement Advisory Panels.

[1]HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).
[2]https://www.cdc.gov/mmwr/volumes/74/wr/mm7401a1.htm?s_cid=mm7401a1_e&ACSTrackingID=USCDC_921-DM143559&ACSTrackingLabel=This%20Week%20in%20MMWR%3A%20Vol.%2074%2C%20January%209%2C%202025&deliveryName=USCDC_921-DM143559
[3]https://www.aafp.org/family-physician/patient-care/prevention-wellness/immunizations-vaccines/immunization-schedules/adult-immunization-schedule.html?

Adult Immunization Status (AIS-E)

Measure title	Adult Immunization Status*	**Measure ID**	AIS-E
Description	The percentage of persons 19 years of age and older who are up to date on recommended routine vaccines for influenza, tetanus and diphtheria (Td) or tetanus, diphtheria and acellular pertussis (Tdap), zoster, pneumococcal, hepatitis B and coronavirus disease 2019 (COVID-19).		
Measurement period	January 1–December 31.		
Copyright and disclaimer notice	**Developed with support from the Department of Health and Human Services (DHHS), Office of the Assistant Secretary for Health (OASH), National Vaccine Program Office (NVPO) and The Hepatitis Education Project.* Refer to the complete copyright and disclaimer information at the front of this publication. NCQA website: www.ncqa.org. Submit policy clarification support questions via My NCQA (https://my.ncqa.org).		
Clinical recommendation statement/ rationale	The Advisory Committee on Immunization Practices and the American Academy of Family Physicians recommends annual influenza vaccination; and tetanus, diphtheria and acellular pertussis (Tdap) and/or tetanus and diphtheria (Td) vaccine; herpes zoster, pneumococcal, hepatitis B and COVID-19 vaccination for adults at various ages.		
Citations	Wodi, A.P, A.N. Issa, C.A. Moser, S. Cineas. 2025. "Advisory Committee on Immunization Practices Recommended Immunization Schedule for Adults Aged 19 Years or Older—United States, 2025." *MMWR Morb Mortal Wkly Rep* 74:30–33. doi: http://dx.doi.org/10.15585/mmwr.mm7402a3 AAFP. 2025. "Immunization Schedules." https://www.aafp.org/family-physician/patient-care/prevention-wellness/immunizations-vaccines/immunization-schedules.html		
Characteristics			
Scoring	Proportion.		
Type	Process.		
Product lines	• Commercial. • Medicaid. • Medicare.		
Stratifications	Influenza and Td/Tdap: Age as of the start of the measurement period. • 19–64 years. • 65 years and older.		

	Zoster and Pneumococcal: Age as of the start of the measurement period. • 50–64 years. 65 years and older. ~~Pneumococcal and COVID-19: Age as of the start of the measurement period.~~ ~~65 years and older.~~ Hepatitis B: Age as of the start of the measurement period. • 19–30 years. • 31–59 years. COVID-19: Age as of the start of the measurement period. • 65 years and older. Race. (Refer to *General Guideline: Race and Ethnicity Stratification*.) • American Indian or Alaska Native. • Asian. • Black or African American. • Middle Eastern or North African. • Native Hawaiian or Pacific Islander. • White. • Some Other Race. • Two or More Races. • Asked But No Answer. • Unknown. Ethnicity. (Refer to *General Guideline: Race and Ethnicity Stratification*.) • Hispanic or Latino. • Not Hispanic or Latino. • Asked But No Answer. • Unknown.
Risk adjustment	None.
Improvement notation	Increased score indicates improvement.
Guidance	**Data collection methodology:** ECDS. Refer to *General Guideline: Data Collection Methods* for additional information. **Date specificity:** Dates must be specific enough to determine the event occurred in the period being measured. **Which services count?** When using claims, include all paid, suspended, pending and denied claims. **Other guidance:** Measure rates are specific to clinical guideline recommendations for the age group included in the rates.

Initial population	*Measure item count:* Person. *Attribution basis:* Enrollment. • *Benefits:* Medical. • *Continuous enrollment:* The measurement period. • *Allowable gap:* No more than one gap of ≤45 days during the measurement period. No gaps on the last day of the measurement period. *Ages:* • *Initial populations 1 and 2:* 19 years of age and older at the start of the measurement period. • *Initial population 3 and 4*: 50 years of age and older at the start of the measurement period. • ~~*Initial populations 4 and 6*: 65 years of age and older at the start of the measurement period.~~ • *Initial population 5*: 19–59 years of age at the start of the measurement period. • *Initial populations 6*: 65 years of age and older at the start of the measurement period. *Event:* None.
Denominator exclusions	**Persons with a date of death.** Death in the measurement period, identified using data sources determined by the organization. Method and data sources are subject to review during the HEDIS audit. **Persons in hospice or using hospice services.** Persons who use hospice services (Hospice Encounter Value Set; Hospice Intervention Value Set) or elect to use a hospice benefit any time during the measurement period. Organizations that use the Monthly Membership Detail Data File to identify these persons must use only the run date of the file.
Denominator	**Denominator 1 and Denominator 2: Immunization status—Influenza and Td/Tdap.** The initial populations 1 and 2 minus denominator exclusions. **Denominator 3 and Denominator 4: Immunization status—Zoster and Pneumococcal.** The initial populations 3 and 4 minus denominator exclusions. ~~**Denominator 4 and Denominator 6: Immunization status—Pneumococcal and COVID-19.**~~ ~~The initial populations 4 and 6 minus denominator exclusions.~~ **Denominator 5: Immunization status—Hepatitis B.** The initial population 5 minus denominator exclusions. **Denominator 6: Immunization status—COVID-19.** The initial population 6 minus denominator exclusions.

Numerator	**Numerator 1: Immunization status—Influenza.** Persons who meet either of the following criteria: • Received the influenza vaccine (Adult Influenza Immunization Value Set; Adult Influenza Vaccine Procedure Value Set; Influenza Virus LAIV Immunization Value Set; Influenza Virus LAIV Vaccine Procedure Value Set) on or between July 1 of the year prior to the measurement period and June 30 of the measurement period. • Had anaphylaxis due to the influenza vaccine (SNOMED CT code 471361000124100) any time before or during the measurement period. **Numerator 2: Immunization status—Td/Tdap.** Persons who meet any of the following criteria: • Received at least one Td or Tdap vaccine (Td and Tdap Immunization Value Set; Td and Tdap Vaccine Procedure Value~~CPT code 90714, CVX code 115; CPT code 90715~~) between 9 years prior to the start of the measurement period and the last day of the measurement period. • Had anaphylaxis due to the diphtheria, tetanus or pertussis vaccine (Anaphylaxis Due to Diphtheria, Tetanus or Pertussis Vaccine Value Set) any time before or during the measurement period. • Had encephalitis due to the diphtheria, tetanus or pertussis vaccine (Encephalitis Due to Diphtheria, Tetanus or Pertussis Vaccine Value Set) any time before or during the measurement period. **Numerator 3: Immunization status—Zoster.** Persons who meet either of the following criteria: • Received two doses of the herpes zoster recombinant vaccine (CVX code 187; CPT code 90750) at least 28 days apart, on October 20, 2017, through the last day of the measurement period. • Had anaphylaxis due to the herpes zoster vaccine (Anaphylaxis Due to Herpes Zoster Vaccine Value Set) any time before or during the measurement period. **Numerator 4: Immunization status—Pneumococcal.** Persons who meet either of the following criteria: • Received at least one dose of adult pneumococcal vaccine (Adult Pneumococcal Immunization Value Set; Adult Pneumococcal Vaccine Procedure Value Set) on or after their 19th birthday**,** any time before or during the measurement period. • Had anaphylaxis due to the pneumococcal vaccine (SNOMED CT code 471141000124102) any time before or during the measurement period. **Numerator 5: Immunization status—Hepatitis B.** Persons who meet any of the following criteria: • Received at least three doses of the childhood Hepatitis B vaccine (Hepatitis B Immunization Value Set; Hepatitis B Vaccine Procedure Value Set) with different dates of service on or before their 19th birthday. – One of the three vaccinations can be a newborn hepatitis B vaccination (ICD-10-PCS code 3E0234Z) during the 8-day period that begins on the date of birth and ends 7 days after the date of birth.

	• Received Hepatitis B vaccine series on or after their 19th birthday, before or during the measurement period, including either of the following: – At least two doses of the recommended two-dose adult Hepatitis B vaccine (CVX code 189; Adult Hepatitis B Vaccine Procedure (2 dose) Value Set) administered at least 28 days apart; ***or*** – At least three doses of any other recommended adult Hepatitis B vaccine (Adult Hepatitis B Immunization (3 dose) Value Set; Adult Hepatitis B Vaccine Procedure (3 dose) Value Set) administered on different days of service. • Had a hepatitis B surface antigen, hepatitis B surface antibody or total antibody to hepatitis B core antigen test with a finding of immunity any time before or during the measurement period, including either of the following: – A test (Hepatitis B Tests With Threshold of 10 Value Set) with a result greater than 10 mIU/mL. – A test (Hepatitis B Prevaccination Tests Value Set) with a finding of immunity (Hepatitis B Immunity Finding Value Set). • History of hepatitis B illness (Hepatitis B and History of Hepatitis B Value Set*) any time before or during the measurement period. • Had anaphylaxis due to the hepatitis B vaccine (SNOMED CT code 428321000124101) any time before or during the measurement period. **Numerator 6: Immunization status—COVID-19.** Persons who meet either of the following criteria: • Received at least one dose of a COVID-19 vaccine (Adult COVID19 Immunization Value Set; Adult COVID19 Vaccine Procedure Value Set) that occurred **both** on or between July 1 of the year prior to the measurement period through June 30 of the measurement period **and** on or after their 65th birthday. • Had anaphylaxis due to the COVID-19 vaccine (SNOMED CT code 914587451000119107) any time before or during the measurement period. **Coding Guidance** *Do not include laboratory claims (claims with POS code 81).
Summary of changes	• -Updated the denominator age range and age stratifications for the pneumococcal indicator • Updated clinical recommendation statement/rationale and citations

Data element tables

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table AIS-E-A:-1/2/3 Data Elements for Adult Immunization Status

Metric	Age	Data Element	Reporting Instructions
Influenza	19-64	InitialPopulation	For each Metric and Stratification
TdTdap	65+	Exclusions	For each Metric and Stratification
	Total	Denominator	For each Metric and Stratification
		Numerator	For each Metric and Stratification
Zoster	50-64	Rate	(Percent)
Pneumococcal	65+		
	Total		
~~Pneumococcal~~COVID-19	65+		
~~COVID-19~~			
HepatitisB	19-30		
	31-59		
	Total		

Table AIS-E-B-1/2/3: Data Elements for Adult Immunization Status: Stratifications by Race

Metric	Race	Data Element	Reporting Instructions
Influenza	AmericanIndianOrAlaskaNative	InitialPopulation	For each Metric and Stratification
TdTdap	Asian	Exclusions	For each Metric and Stratification
Zoster	BlackOrAfricanAmerican	Denominator	For each Metric and Stratification
Pneumococcal	MiddleEasternOrNorthAfrican	Numerator	For each Metric and Stratification
HepatitisB	NativeHawaiianOrPacificIslander	Rate	(Percent)
COVID-19	White		
	SomeOtherRace		
	TwoOrMoreRaces		
	AskedButNoAnswer		
	Unknown		

Table AIS-E-C-1/2/3: Data Elements for Adult Immunization Status: Stratifications by Ethnicity

Metric	Ethnicity	Data Element	Reporting Instructions
Influenza	HispanicOrLatino	InitialPopulation	For each Metric and Stratification
TdTdap	NotHispanicOrLatino	Exclusions	For each Metric and Stratification
Zoster	AskedButNoAnswer	Denominator	For each Metric and Stratification
Pneumococcal	Unknown	Numerator	For each Metric and Stratification
HepatitisB		Rate	(Percent)
COVID-19			

Adult Immunization Status (AIS-E)
Measure Workup

Topic Overview

Importance and Prevalence

Routine vaccination against influenza, tetanus, diphtheria and pertussis, hepatitis B, herpes zoster, pneumococcal and COVID-19 disease are recommended for adults to prevent serious disease. The Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP) and the American Academy of Family Physicians (AAFP) publish vaccination recommendations for adults, including ages for receiving vaccines, number of doses, timing between doses and contraindications.

Influenza vaccine

The influenza vaccine protects against influenza, a serious disease that can lead to hospitalization and death (CDC, 2024a). It is characterized by a variety of symptoms related to the nose, throat and lungs that can range in severity (CDC, 2024b). Flu viruses spread mainly by droplets made when people with flu cough, sneeze or talk (CDC, 2024c). Flu season in the United States can start as early as October and last as late as May; peak influenza activity occurs most frequently between December and February (CDC, 2024d). Anyone can get the flu; however, people 65 and older, young children and those with chronic conditions are at higher risk of developing serious complications (CDC, 2024b).

The impact of influenza is variable because influenza seasons can vary in severity. The CDC estimates that between 2010 and 2024, yearly influenza cases have ranged from 9.3–41 million; influenza-related hospitalizations, from 120,000–710,000; and influenza-related deaths, from 6,300–52,000 (CDC, 2024e). Between October 2023 and April 2024, there was an estimated 40 million influenza cases, 18 million flu-related medical visits, 470,000 influenza-related hospitalizations and 28,000 influenza-related deaths (CDC, 2024x). Deaths associated with influenza are typically higher in older adults. In an analysis based on the 2022–2023 flu seasons, 68% of deaths from influenza were among adults 65 and older (CDC, 2024x).

Td/Tdap vaccine

There are three types of combination vaccines that protect against diphtheria, tetanus and pertussis (or whooping cough), including DTaP, Td and Tdap (CDC, 2024f). Tetanus results in painful muscle spasms that can cause fractures, difficulty breathing, arrhythmia and death (CDC, 2024g).

Diphtheria can present as a respiratory or cutaneous disease (CDC, 2024h). Complications include myocarditis, which can lead to heart failure, and neuritis, which may temporarily paralyze motor nerves. Death occurs in 5%–10% of cases (CDC, 2024h).

Pertussis, also known as whooping cough, is a respiratory infection characterized by a prolonged cough; it can spread easily and is transmitted via respiratory droplets from coughing or sneezing (CDC, 2024i).

There were 267 tetanus cases and 13 deaths reported from 2013–2022; only 16 cases were among adults who had been fully vaccinated (CDC, 2024j). Adults 20 through 64 years of age make up 61% of reported cases (CDC, 2024j). Tetanus is more prevalent in other countries. In 2024, 25,149 cases of diphtheria were reported to the World Health Organization. In 2023, 24,782 cases were reported (WHO, n.d.).

Pertussis is much more prevalent today than tetanus and diphtheria, even though vaccines offer protection against the disease. Before the vaccine was introduced in the 1940s, there were about 200,000 cases of pertussis annually (CDC, 2024k). Since widespread use of the vaccine, pertussis cases decreased by 75% but have been increasing since the 1980s, with 48,277 pertussis cases reported in 2012 (CDC, 2024k). Pertussis is usually milder in children, adolescents and adults than in infants and young children who may

not be fully immunized. Adults, adolescents or older school-age children are often found to be the source of infection for infants and children (CDC, 2024k).

Herpes zoster vaccine

The herpes zoster vaccine protects against herpes zoster, commonly known as shingles. Herpes zoster is a painful skin rash caused by reactivation of the varicella zoster virus (CDC, 2024l). After a person recovers from primary infection of varicella (chickenpox), the virus stays inactive in the body and can reactivate years later. Most people typically only have one episode of herpes zoster, but it can recur. People who are older and those with compromised immune systems are at higher risk of developing herpes zoster (CDC, 2024l).

The most common complication of herpes zoster is post-herpetic neuralgia (PHN), severe, debilitating pain at the site of the rash that has no treatment or cure (CDC, 2024m). Herpes zoster can also lead to serious complications of the eye, pneumonia, hearing problems, encephalitis or death (CDC, 2024m). In the U.S., there are 1 million new cases of herpes zoster each year; 1 of every 3 people will be diagnosed with herpes zoster in their lifetime (CDC, 2024l). A person's risk for developing herpes zoster increases sharply after age 50 (CDC, 2024l). As people age, they are more likely to develop PHN; it rarely occurs in people under 40 (CDC, 2024m).

Between 1% and 4% of adults with herpes zoster are hospitalized for complications, and an estimated 96 deaths each year are directly caused by the virus (CDC, 2024l). The vaccine can reduce the risk of developing herpes zoster and related complications (CDC, 2024l).

Pneumococcal vaccine

Vaccines protect against pneumococcal disease, which is a common cause of illness and death in older adults and in persons with certain underlying conditions (CDC, 2024o). The major clinical syndromes of pneumococcal disease include pneumonia, bacteremia and meningitis, with pneumonia being the most common (CDC, 2024n). Pneumonia symptoms generally include fever, chills, pleuritic chest pain, cough with sputum, dyspnea, tachypnea, hypoxia tachycardia, malaise and weakness (CDC, 2024n).

Bacteremia, a blood infection, is a complication of pneumococcal disease (CDC, 2024n). Bacteremia has a 20% mortality rate among all adults, and up to a 60% mortality rate among older adults (CDC, 2024n).

Pneumococcal disease can also cause meningitis (CDC, 2024n). Meningitis symptoms may include headache, lethargy, vomiting, irritability, fever, nuchal rigidity, cranial nerve signs, seizures and coma. Meningitis has a 22% mortality rate among adults (CDC, 2024n).

Hepatitis B vaccine

The hepatitis B vaccine protects against hepatitis B, a liver disease that causes illness in varying degrees of severity (CDC, 2023a). Acute hepatitis B is characterized by fever, fatigue, loss of appetite, jaundice and body pains (CDC, 2023a). Those with chronic hepatitis B are often asymptomatic, with threats of cirrhosis, liver cancer and death (CDC, 2023a).

In 2023, there were 2,214 new cases of acute hepatitis B, but since many people may be asymptomatic, this number was estimated to be about 14,400 acute cases (CDC, 2023b). In 2023, there were also 17,650 cases of newly reported chronic hepatitis B (CDC, 2023b). Also in 2023, 1,769 hepatitis-B related deaths were reported (CDC, 2023b). Adults aged 40-59 years made up 48% of acute cases, and adults aged 30-49 made up 46% of chronic cases in 2023 (CDC, 2023b).

COVID-19

COVID-19 infection can lead to severe illness and death when left untreated (CDC, 2024p). Infection with the disease is characterized by symptoms related to the nose, throat, lungs and muscles (CDC, 2024q). COVID-19 is spread person-to-person by droplets made when those infected with COVID-19 come into close contact with others (CDC, 2024r). Adults over age 65 and people with underlying medical conditions or

comorbidities are at highest risk (CDC, 2024s). For the 2024-2025 COVID-19 season, people 65 years of age and older had a cumulative hospitalization rate of 386.8 per 100,000 people (CDC, 2025b). Further, trends show people 75 years and older have higher rates of death compared to those younger than 75 years of age (CDC, 2024t).

As of June 1, 2024, nearly 1.2 million people have died of COVID-19 in the U.S. (CDC, 2024r). At the end of 2022, it was estimated that COVID-19 vaccines prevented 18.5 million hospitalizations and 3.2 million deaths in the United States (Regan et al., 2023).

Financial importance and cost-effectiveness

Influenza vaccine

Influenza is an important cause of outpatient medical visits and worker absenteeism among adults. The average annual burden of seasonal influenza is estimated to include approximately 9.3–41 million illnesses, 120,000–710,000 hospitalizations and 6,300–52,000 deaths (CDC, 2024e). A 2023 study estimated that the incremental cost-effectiveness ratio of the influenza vaccine was less than $95,000 per quality-adjusted life year (QALY) for all age and risk groups except for non-high risk adults 18–49 (Kim DeLuca, 2023).

Tdap/Td vaccine

Administering the Tdap vaccine to adults helps prevent the spread of pertussis to infants and prevents hospitalizations. Because of a rise in pertussis over decades in the U.S., studies have evaluated the cost-effectiveness of providing Tdap immunizations to adults.

One study found that that incremental cost-effectiveness ratio of vaccinating adults 19–85 with one Tdap dose ranged from $248,000 to $900,000 per QALY (Cho et al., 2020). A systematic review found that, out of 11 studies evaluating cost-effectiveness of adult Tdap vaccination programs across several countries, 6 were considered cost-effective and 2 were considered cost-saving (Fernandes et al., 2019).

Herpes zoster vaccine

In 2015, a systematic literature review estimated that total medical costs in the U.S. from zoster were $2.4 billion (Harvey et al., 2020). A CDC study estimated that vaccination with the recombinant zoster vaccine, compared with no vaccination, cost $31,000 per QALY, on average, for immunocompetent adults 50 and older. The number of people needed to be vaccinated with the recombinant zoster vaccine to prevent one case of zoster ranged from 11–17, and to prevent one case of PHN, ranged from 70–187 (Dooling et al., 2018). A study of the cost-effectiveness of the live herpes zoster vaccine among people 50 and older found that vaccination at age 60 would prevent the most cases (103,603 cases per 1 million people) (Curran et al., 2018).

Pneumococcal vaccine

Pneumococcal infections result in significant health care costs each year. Adult patients with pneumonia require hospitalization in nearly 10% of cases. (Isturiz et al., 2021). The annual aggregate burden for the fee-for-service Medicare population is approximately $13 billion (Brown et al., 2018).

Pneumococcal vaccines have been shown to be highly effective in preventing invasive pneumococcal disease. When comparing costs, outcomes and QALY, immunization with recommended pneumococcal vaccines was found to be economically efficient. In one study comparing all adults 65 and older, cost-effectiveness estimates ranged from $209,000–$544,000 per QALY gained for use of PCV20 alone, and from $531,000–$676,000 per QALY gained for use of PCV15 in series with PPSV23 (Smith et al., 2021).

Hepatitis B vaccine

With over 800,000 cases of chronic hepatitis B, vaccination against this disease will reduce burden and preserve medical resources. A National Center for HIV, Hepatitis, STD, and TB Prevention Epidemiologic and Economic Modeling Agreements study showed that universal vaccination against hepatitis B with the 3-dose series in adults reduces acute cases by about 25% and about 23% of hepatitis-B related deaths. This is approximately $152,722 per QALY gained (CDC, 2024u). Results were similar with the 2-dose strategy. The study also showed cost-effectiveness of $152,722 for the 3-dose strategy and $155,429 for the 2-dose strategy (CDC, 2024u).

COVID-19 vaccine

Administration of the COVID-19 vaccine can decrease overall health care costs by preventing severe disease and hospitalization. For the 2023-2024 formulation of the updated COVID-19 vaccine, vaccination was shown to be cost-effective. For adults 18-49 years of age, the incremental cost-effectiveness ratio for the updated COVID-19 vaccine was estimated to be $115,599 per quality-adjusted life year (QALY). For adults 50-64 years of age, the incremental cost-effectiveness ratio of the updated vaccine was estimated to be $25,787 per QALY. For adults 65 years and older, a dose of the vaccine was found to be cost saving (Regan et al., 2023). For the 2024-2025 formulation, preliminary estimates of incremental cost-effectiveness ratios provide a societal perspective of $212,225 per QALY for 18-49 years, $113,248 per QALY for 50-64 years and $23,308 per QALY for people 65 and older (University of Michigan, 2024).

Supporting Evidence

Age for vaccine administration

Influenza vaccine

ACIP recommends routine annual influenza vaccination for all people 6 months of age and older (Grohskopf et al., 2025). For people 19 years and older, any age-appropriate inactivated influenza vaccine (IIV) formulation or recombinant influenza vaccine (RIV) formulation are acceptable options. Vaccination should ideally be offered during September or October; however, vaccination efforts should continue throughout flu season (Grohskopf et al., 2025). People who have a history of severe allergic reaction (e.g., anaphylaxis) to any component of the vaccine should not receive the influenza vaccine (CDC, 2024a).

AAFP also recommends routine annual influenza vaccination for all people 6 months of age and older (AAFP, 2025). For people 19 years or older, AAFP

recommends that they receive 1 dose of any influenza vaccine appropriate for their age and health status annually (AAFP, 2025).

Tdap/Td vaccine

ACIP recommends that regardless of the interval since their last tetanus or diphtheria toxoid–containing vaccine, persons aged 19 and older who have never received a dose of Tdap should receive one dose. To ensure continued protection against tetanus and diphtheria, booster doses of either Td or Tdap should be administered every 10 years throughout life (Havers et al., 2020). Pregnant women should receive a dose of Tdap during each pregnancy, irrespective of a history of receiving Tdap. Tdap should be administered at 27–36 weeks' gestation, preferably during the earlier part of this period, although it may be administered at any time during pregnancy.

For women not previously vaccinated with Tdap, if not administered during pregnancy, it should be administered immediately postpartum (Havers et al., 2020). People who have a history of severe allergic reaction (e.g., anaphylaxis) to any component of the Tdap or Td vaccine should not receive it. Tdap is contraindicated for adults with a history of encephalopathy (e.g., coma or prolonged seizures) not attributable to an identifiable cause within 7 days of administration of a vaccine with pertussis components (CDC, 2024v).

AAFP also recommends 1 dose of Tdap for each pregnancy, 1 dose of Td/Tdap for wound management and 1 dose of Td or Tdap as a booster every 10 years after initial Tdap dose for those 19 years and older (AAFP, 2025).

Herpes zoster vaccine

One type of zoster vaccine is currently recommended for older adults: the recombinant zoster vaccine (RZV). In October 2017, the FDA approved the RZV for adults 50 and older. In January 2018, ACIP published a guideline recommending RZV for immunocompetent adults 50 and older, irrespective of prior receipt of varicella vaccine or ZVL (Dooling et al., 2018). In July 2021, the FDA expanded the indication to include immunodeficient or immunosuppressed adults. In October 2021, ACIP published a guideline recommending two RZV doses for prevention of herpes zoster and related complications in immunodeficient or immunosuppressed adults ≥19 years (Anderson et al., 2022).

AAFP also recommends the 2-dose recombinant vaccine series 2-6 months apart for adults 50 years and older regardless of previous herpes zoster or history of zoster live vaccine vaccination (AAFP, 2025).

Pneumococcal vaccine

In 2021, two new pneumococcal vaccines were licensed for use in the U.S.: the 15-valent pneumococcal conjugate vaccine (PCV15) and the 20-valent pneumococcal conjugate vaccine (PCV20). Both include additional serotypes and therefore provide better coverage against pneumococcal disease than the 13-valent pneumococcal conjugate vaccine (PCV13) or 23-valent pneumococcal polysaccharide vaccine (PPSV23). In October 2021, ACIP approved new recommendations for pneumococcal disease, stating that a dose of the newer pneumococcal conjugate vaccine (either PCV20 or PCV15) is beneficial for immunocompetent adults 65 and older, and for adults 19–64 with certain underlying medical conditions or risk factors, given that both

populations account for over 90% of invasive pneumococcal disease cases in the U.S.[1] (Kobayashi et al., 2023).[2] In 2025, the ACIP recommended that all adults 50 and older be vaccinated with pneumococcal conjugate vaccines (Kobayashi et al., 2025). AAFP also recommends pneumococcal vaccination for adults 50 and older (AAFP, 2025).

Hepatitis B vaccine

ACIP recommends universal HepB vaccination for adults 19–59 years and adults aged 60 years and older with risk factors for HepB. Adults 60 years and older without known risk factors for HepB may also receive HepB vaccines (Weng et al. 2022). ACIP also states that persons who have completed a HepB vaccination series at any point, or who have a history of HBV infection, should not receive additional HepB vaccination, although there is no evidence that receiving additional vaccine doses is harmful (Weng et al., 2022), stating that providers should only accept dated records as evidence of HepB vaccination.

Additionally, in settings where the patient population has a high rate of previous HBV infection, prevaccination testing, which may be performed concomitantly with administration of the first dose of vaccine, might reduce costs by avoiding complete vaccination of persons who are already immune. Prevaccination testing consists of testing for HBsAg, antibody to HBsAg (anti-HBs), and antibody to hepatitis B core antigen (anti-HBc). The presence of HBsAg indicates current HBV infection. The presence of anti-HBs is generally interpreted as indicating immunity, either from HepB vaccination after a complete series or after recovery from HBV infection. The presence of total anti-HBc indicates previous or ongoing infection with HBV (Weng et al. 2022). There are five approved HepB vaccines for adults 19–59; the recommended dosage and schedule varies (Murthy et al., 2024):

- Two-dose series only applies when 2 doses of Heplisav-B are used at least 4 weeks apart.
- Three-dose series of Engerix-B, PreHevbrio or RecombivaxHB at 0, 1 and 6 months (minimum intervals: dose 1 to dose 2, 4 weeks; dose 2 to dose 3, 8 weeks; dose 1 to dose 3, 16 weeks).
- Three-dose series of HepA–HepB (Twinrix) standard schedule at 0, 1 and 6 months (minimum intervals: dose 1 to dose 2, 4 weeks; dose 2 to dose 3, 5 months).
- Four-dose series HepA–HepB (Twinrix) accelerated schedule of 3 doses at 0, 7 and 21–30 days, followed by a booster dose at 12 months.

Special situations: Patients on dialysis should complete a 3- or 4-dose series:

- Three-dose series of RecombivaxHB at 0, 1 and 6 months.
- Four-dose series of Engerix-B at 0, 1, 2 and 6 months.

AAFP also recommends hepatitis B vaccination using the 2-, 3- or 4-dose series for those 19 years to 59 years (AAFP, 2025).

[1] Includes alcoholism, chronic heart/liver/lung disease, cigarette smoking, diabetes mellitus, chronic renal failure, nephrotic syndrome, immunodeficiency, iatrogenic immunosuppression, generalized malignancy, human immunodeficiency virus, Hodgkin disease, leukemia, lymphoma, multiple myeloma, solid organ transplants, congenital or acquired asplenia, sickle cell disease or other hemoglobinopathies, CSF leak or cochlear implant.

[2] ACIP includes additional guidance on dosing and timing based on receipt of previous vaccinations at: https://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html#note-pneumo

COVID-19 vaccine

In 2023, ACIP began recommending annual COVID-19 vaccination for all people 6 months of age and older. In October 2023, ACIP recommended vaccination with the updated 2023-2024 formulation of the COVID-19 vaccine for all persons aged 6 months and older (Regan et al., 2023). In April 2024, ACIP recommended that all people 65 years and older receive an additional dose of the updated 2023-2024 COVID-19 vaccine (Panagiotakopoulos et al., 2024a). In June 2024, ACIP recommended the updated 2024-2025 COVID-19 vaccine for all people 6 months of age or older whether or not they have ever previously been vaccinated with a COVID-19 vaccine (Panagiotakopoulos et al., 2024b). In October 2024, ACIP recommended all persons aged 65 years and older and immunocompromised persons aged 6 months-64 years of age receive a second dose of the COVID-19 vaccine (Roper et al., 2024). Most recently, in September 2025, ACIP recommended all persons 65 and older receive 2 or more doses of the 2025-2026 COVID-19 vaccine using shared clinical decision-making (CDC, 2025c).

AAFP also recommends routine vaccination for all adults 19 and older. They also recommend that adults 65 and older receive 2 or more doses of the 2025-2026 vaccine (AAFP, 2025).

Health care disparities

There are racial and ethnic disparities in adult vaccination coverage. The 2022 NHIS survey found that White adults 65 and older had higher pneumococcal vaccination coverage rates (69.1%) than Black (53.5%), Hispanic (41.7%) and Asian (50.2%) adults 65 and older (Hung et al., 2024). Further, White adults 50 and older reported higher herpes zoster vaccination coverage rates than Black, Hispanic and Asian adults 50 and over. Similar trends were seen for adults 60 and older who reported receiving a herpes zoster vaccine (Hung et al., 2024). Lastly, White adults had higher coverage of any tetanus toxoid-containing vaccination compared with Black, Hispanic and Asian adults. Tdap coverage showed similar trends with White adults 19 and older reporting higher coverage rates (32.6%) than Black (17.8%), Hispanic (21.2%) and Asian (28.9%) adults (Hung et al., 2024). The 2021 NHIS survey also found that White 19–49-year-olds were more likely to have received the HepB vaccine (48%) than Black (34%) and Hispanic (38%) adults, but less likely than Asian adults (54%) (Hung et al., 2023). White 30–59-year-olds were more likely to have received the HepB vaccine (38%) than Black (31%) and Hispanic (32%) adults, but less likely than Asian adults (47%) (Hung et al., 2023).

Vaccination coverage also varies by age for influenza. In the 2023–2024 influenza season the overall vaccination rate among adults was 45%; 33% of adults 18–49 reported receiving the flu vaccine, compared with 46% of adults 50–64 and 70% of adults 65 and older (CDC, 2024w). However, compared to the 2021–2022 influenza season, adult influenza vaccination coverage was lower for adults 65 and older than for adults 19–64 in the 2022–2023 season (CDC, 2024w).

There are also geographical and racial-ethnic disparities in adult HepB infection rates. In 2023, Florida, West Virginia, Kentucky, Maine and Tennessee had the highest rates of acute hepatitis B compared to the nationwide average (CDC, 2023b). Non-Hispanic Black adults had the highest rates of acute hepatitis B in 2023 (CDC, 2023b). The rate of newly reported

chronic hepatitis B cases was highest among non-Hispanic Asian/Pacific Islanders in 2023 (CDC, 2023b).

Gaps in care

Healthy People 2030, which provides science-based, 10-year national objectives for improving the health of all Americans, has established goals for routinely recommended adult vaccinations (U.S. Department of Health and Human Services, 2022):

- Reduce the rate of deaths with hepatitis B as a cause.
- Reduce the rate of acute hepatitis B.
- Reduce the rate of hepatitis A.
- Increase the proportion of adults age 19 years or older who get recommended vaccines.
- Increase the proportion of people who get the flu vaccine every year.

Estimates of national vaccination coverage are available through the National Health Interview Survey (NHIS), in which a sample of adults self-report receipt of vaccines. Data from 2021 indicate that:

- 49% of adults 19 and older reported receiving the influenza vaccine (Hung et al., 2024).
- 59% of adults 19 and older reported having received any tetanus toxoid-containing vaccination in the past 10 years, and 29% reported receiving the Tdap vaccine (Hung et al., 2024).
- 36% of adults 50 and older reported receiving one or more doses of any type of herpes zoster vaccine (Hung et al., 2024).
- 64% of adults 65 and older reported receiving one or more doses of any type of pneumococcal vaccine (Hung et al., 2024).

Additionally, NHIS data from 2021 found that 34% of adults 19 and older reported receiving the hepatitis B vaccines (Hung et al., 2023). Further, as of May 2023, 81% of the U.S. population have received at least one dose of any of the COVID-19 vaccines (USA Facts, 2023). More recent estimates of national vaccination coverage are available through the National Center for Immunization and Respiratory Diseases and show that for the 2024-2025 season, 23% of adults received an updated 2024-2025 COVID-19 vaccine (CDC, 2025a).

Barriers to adult vaccination in general include provider and patient lack of knowledge and awareness of the importance of vaccines, missed opportunities for vaccination and operational and systemic barriers (e.g., cost, lack of access to immunization records) (Chadi et al., 2023; Eiden et al., 2022; Kilich et al., 2020; Kolobova et al., 2022; Wang et al., 2023). Having health insurance coverage is also associated with higher vaccination coverage (Chadi et al., 2023; Kolobova et al., 2022). There are some unique barriers to COVID-19 vaccination. For example, one study found that one of the most quoted reasons for hesitancy towards COVID-19 vaccination is due to how fast the vaccines were developed and subsequently brought to market (Nawas et al., 2023). The same article also found that hesitancy is also related to a lack of understanding regarding the ingredients of the COVID-19 vaccines and how it works (Nawas et al., 2023). Some articles also cited politically motived skepticism towards the COVID-19 vaccine as a major barrier to vaccine uptake (Kuehn et al., 2022; Nawas et al., 2023).

There are evidence-based practices for improving adult vaccination coverage. Health care providers should routinely assess patients' vaccination history, offer needed vaccines to adults or refer patients to a provider who can administer the vaccine and document vaccinations received by their patients in an immunization information system (Lu et al., 2021). In addition, providing easy access and convenience for adult vaccination in and outside the health care setting is important for increasing equitable adult vaccine uptake (Kaiser Family Foundation 2020). Influenza vaccines are commonly offered at retail pharmacies; offering other types of adult vaccines at retail pharmacies could potentially increase uptake (Murray et al., 2021). For COVID-19 vaccination specifically, one of the major strategies to overcoming barriers was educating patients on the safety and efficacy of COVID-19 vaccination (Nawas et al., 2023). Sharing immunization related information between providers, health systems, public health agencies and patients is required to increase vaccination coverage and ensure high-quality data to inform clinical and public health interventions (Scharf et al., 2021). Leveraging health information technology, such as immunization information systems, is important for targeting and monitoring immunization program activities and providing clinical decision support at the point of care (Scharf et al., 2021).

Digital Considerations

As part of NCQA's strategic transition to a fully digital quality measurement portfolio, we conduct a feasibility assessment to inform eventual digital measure implementation. The assessment evaluates the measure's intent and associated clinical concepts within a digital framework.

The updates being considered for this measure reevaluation do not impact digital feasibility. Therefore, an assessment is not included.

References

AAFP. 2025. “Immunization Schedules.” https://www.aafp.org/family-physician/patient-care/prevention-wellness/immunizations-vaccines/immunization-schedules.html

Anderson, T.C., N.B. Masters, A. Guo, L. Shepersky, A.J. Leidner, G.M., Lee, et al. 2022. “Recommendations of the Advisory Committee on Immunization Practices for Use of Herpes Zoster Vaccines.” *MMWR Recomm Rep* 67(3):103–8. https://www.cdc.gov/mmwr/volumes/71/wr/mm7103a2.htm

Brown, J.D., J. Harnett, R. Chambers, R. Sato. 2018. “The Relative Burden Of Community-Acquired Pneumonia Hospitalizations In Older Adults: A Retrospective Observational Study In The United States.” *BMC Geriatrics* 18:92, 1–11. https://doi.org/10.1186/s12877-018-0787-2

CDC. 2023a. “Hepatitis B Vaccine: What You Need to Know.” Updated May 12. https://www.cdc.gov/vaccines/hcp/current-vis/downloads/hep-b.pdf?CDC_AAref_Val=https://www.cdc.gov/vaccines/hcp/vis/vis-statements/hep-b.pdf

CDC. 2023b. “Hepatitis B Surveillance.” Updated April 15, 2025. https://www.cdc.gov/hepatitis-surveillance-2023/hepatitis-b/index.html

CDC. 2024a. “Key Facts About Seasonal Flu Vaccine.” Updated September 17, 2024. https://www.cdc.gov/flu/vaccines/keyfacts.html

CDC. 2024b. “Signs and Symptoms of Flu.” Updated August 26, 2024. https://www.cdc.gov/flu/signs-symptoms/?CDC_AAref_Val=https://www.cdc.gov/flu/symptoms/symptoms.htm

CDC. 2024c. “About Flu.” Updated August 13, 2024. https://www.cdc.gov/flu/about/?CDC_AAref_Val=https://www.cdc.gov/flu/about/keyfacts.htm

CDC. 2024d. “Flu Season.” Updated September 26, 2025. https://www.cdc.gov/flu/about/season.html?CDC_AAref_Val=https://www.cdc.gov/flu/about/season/index.html

CDC. 2024e. “About Estimated Flu Burden.” Updated November 13, 2024. https://www.cdc.gov/flu-burden/php/about/index.html

CDC. 2024f. “Diphtheria Vaccination.” Updated May 12, 2025. https://www.cdc.gov/vaccines/vpd/dtap-tdap-td/public/index.html

CDC. 2024g. “About Tetanus.” Updated May 30, 2025. https://www.cdc.gov/tetanus/about/index.html

CDC. 2024h. “Features of Diphtheria.” Updated May 12, 2025. https://www.cdc.gov/diphtheria/hcp/clinical-signs/index.html

CDC. 2024i. “About Whooping Cough.” Updated April 2, 2024. https://www.cdc.gov/pertussis/about/?CDC_AAref_Val=https://www.cdc.gov/pertussis/about/causes-transmission.html

CDC. 2024j. “Chapter 16: Tetanus.” Updated October 22, 2024. https://www.cdc.gov/surv-manual/php/table-of-contents/chapter-16-tetanus.html?CDC_AAref_Val=https://www.cdc.gov/vaccines/pubs/surv-manual/chpt16-tetanus.html

CDC. 2024k. “Chapter 16 : Pertussis.” In Epidemiology and Prevention of Vaccine-Preventable Diseases, 13th Edition. Updated April 12, 2024. https://www.cdc.gov/pinkbook/hcp/table-of-contents/chapter-16-pertussis.html?CDC_AAref_Val=https://www.cdc.gov/vaccines/pubs/pinkbook/pert.html

CDC. 2024l. “Shingles (Herpes Zoster): Clinical Overview of Shingles (Herpes Zoster).” Updated June 27, 2024. https://www.cdc.gov/shingles/hcp/clinical-overview/?CDC_AAref_Val=https://www.cdc.gov/shingles/hcp/clinical-overview.html

CDC. 2024m. “Shingles (Herpes Zoster): Symptoms and Complications of Shingles.” Updated April 19, 2024. https://www.cdc.gov/shingles/about/complications.htmlhttps://www.cdc.gov/shingles/signs-symptoms/?CDC_AAref_Val=https://www.cdc.gov/shingles/about/complications.html

CDC. 2024n. “Clinical Features of Pneumococcal Disease.” Updated February 6, 2024. https://www.cdc.gov/pneumococcal/hcp/clinical-signs/index.htmlhttps://www.cdc.gov/pneumococcal/clinicians/clinical-features.html

CDC. 2024o. "Pneumococcal Disease." Updated May 1. https://www.cdc.gov/pinkbook/hcp/table-of-contents/chapter-17-pneumococcal-disease.html?CDC_AAref_Val=https://www.cdc.gov/vaccines/pubs/pinkbook/pneumo.html

CDC. 2024p. “Benefits of Getting a COVID-19 Vaccine.” Updated June 11, 2025. https://www.cdc.gov/covid/vaccines/benefits.html?CDC_AAref_Val=https://www.cdc.gov/coronavirus/2019-ncov/vaccines/vaccine-benefits.html
CDC. 2024q. “Symptoms of COVID-19.” Updated March 10, 2025. https://www.cdc.gov/covid/signs-symptoms/?CDC_AAref_Val=https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html
CDC. 2024r. “About COVID-19.” Updated June 13, 2024. https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html
CDC. 2024s. “People with Certain Medical Conditions and COVID-19 Risk Factors.” Updated June 11, 2025. https://www.cdc.gov/covid/risk-factors/?CDC_AAref_Val=https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html
CDC. 2024t. “COVID-19 Data Tracker.” Updated September 5, 2025. https://covid.cdc.gov/covid-data-tracker/#datatracker-home
CDC. 2024u. “Success Story: Costs and Effectiveness Hepatitis B Screening and Vaccination.” Updated February 16, 2024. https://www.cdc.gov/neema/php/successstories/cost-effectiveness-of-hepatitis-b-screening-vaccination.html
CDC. 2024v. “Contraindications and Precautions.” Updated July 25, 2024. https://www.cdc.gov/vaccines/hcp/imz-best-practices/contraindications-precautions.html#:~:text=Severely%20immunocompromised%20persons%20generally%20should,receipt%20of%20rotavirus%20vaccines6.
CDC. 2024w. “Flu Vaccination Coverage, United States, 20232-243 Influenza Season.” Updated September 20. https://www.cdc.gov/fluvaxview/coverage-by-season/2023-2024.html
CDC. 2024x. “Preliminary Estimated Flu Disease Burden 2023-2024 Flue Season.” Updated November 20, 2024. https://www.cdc.gov/flu-burden/php/data-vis/2023-2024.html
CDC. 2025a. “Weekly COVID-19 Vaccination Dashboard.” Updated March 19. https://www.cdc.gov/covidvaxview/weekly-dashboard/?CDC_AAref_Val=https://www.cdc.gov/vaccines/imz-managers/coverage/covidvaxview/interactive/vaccination-dashboard.html
CDC. 2025b. “COVID-NET.” Updated June 5, 2025. https://www.cdc.gov/covid/php/covid-net/index.html
CDC. 2025c. “Adult Immunization Schedule by Age.” Updated October 7, 2025. https://www.cdc.gov/vaccines/hcp/imz-schedules/adult-age.html#table-age
Chadi, A., D. Thirion, D. Pierre-Marie. 2023. “Vaccine Promotion Strategies in Community Pharmacy Addressing Vulnerable Populations: A Scoping Review.” *BMC Public Health*. https://doi.org/10.1186/s12889-023-16601-y
Cho, B.-H., A.M. Acosta, A.J. Leidner, A.E. Faulkner, F. Zhou. 2020. “Tetanus, Diphtheria And Acellular Pertussis (Tdap) Vaccine for Prevention of Pertussis Among Adults Aged 19 Years and Older in the United States: A Cost-Effectiveness Analysis.” *Preventive Medicine* 134: 1–23. https://doi.org/10.1016%2Fj.ypmed.2020.106066
Curran, D., B. Patterson, L. Varghese, D.V. Oorschot, P. Buck, J. Carrico, K. Hicks, B. Lee, B. Yawn. 2018. “Cost-Effectiveness of an Adjuvanted Recombinant Zoster Vaccine in Older Adults in the United States.” *Vaccine* 36:5037-5045. https://doi.org/10.1016/j.vaccine.2018.07.005
DeLuca, K.E., A. Gebremariam, A. Rose, M. Biggerstaff, M.I. Meltzer, L.A. Prosser. June 2023. “Cost-Effectiveness of Routine Annual Influenza Vaccination by Age and Risk Status.” *Vaccine* 29;41(29):4239–48. doi: 10.1016/J.Vaccine.2023.04.069.
Dooling, K.L., A. Guo, M. Patel, G.M. Lee, K. Moore, E.A. Belongia, R. Harpaz. 2018. “Recommendations of the Advisory Committee on Immunization Practices for Use of Herpes Zoster Vaccines.” *MMWR Recomm Rep* 67(3):103–8. https://www.cdc.gov/mmwr/volumes/67/wr/mm6703a5.htm
Eiden, A.L., J. Barratt, & M.K. Nyaku. 2022. “Drivers of and Barriers to Routine Adult Vaccination: A Systematic Literature Review.” *Human Vaccines & Immunotherapeutics* 18(6), 2127290.
Fernandes, E.G., C.C.M. Rodrigues, A.M.C. Sartori, P.C. De Soárez, H.M.D. Novaes. 2019. “Economic Evaluation of Adolescents and Adults’ Pertussis Vaccination: A Systematic Review of Current Strategies.” *Hum Vaccine & Immunotherapeutics* 15(1):14–27. https://doi.org/10.1080/21645515.2018.1509646.
Grohskopf, L.A., L.H. Blanton, J.M. Ferdinands, J.R. Chung, et al. 2025. “Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization

Practices-United States, 2025-26 Influenza Season." CDC *MMWR Morb Mortal Wkly Rep* 2025;74:500-507. DOI: http://dx.doi.org/10.15585/mmwr.mm7432a2http://dx.doi.org/10.15585/mmwr.rr7202a1

Harvey, M., L.A. Prosser, A.M. Rose, I.R. Ortega-Sanchez, R. Harpaz. 2020. "Aggregate Health and Economic Burden of Herpes Zoster in the United States: Illustrative Example of a Pain Condition." *Pain* 161(2): 361–8. https://doi.org/10.1097/j.pain.0000000000001718

Havers, F.P., P.L. Moro, P. Hunter, S. Hariri, H. Bernstein. 2020. "Use of Tetanus Toxoid, Reduced Diphtheria Toxoid, and Acellular Pertussis Vaccines: Updates Recommendations of the Advisory Committee on Immunization Practices – United States, 2019". *MMWR Recomm Rep. 69(3)*:77-83. Retrieved from https://www.cdc.gov/mmwr/volumes/69/wr/mm6903a5.htm

Hung, M.-C. et al. 2023. "Vaccination Coverage among Adults in the United States, National Health Interview Survey, 2024." Updated July 19. https://www.cdc.gov/adultvaxview/publications-resources/vaccination-coverage-adults-2021.html?CDC_AAref_Val=https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/pubs-resources/vaccination-coverage-adults-2021.html.

Hung, M.-C. et al. 2024. "Vaccination Coverage among Adults in the United States, National Health Interview Survey, 2022." Updated October 4. https://www.cdc.gov/adultvaxview/publications-resources/adult-vaccination-coverage-2022.html

Isturiz R., L. Grant, S. Gray, et al. 2021. "Expanded Analysis Of 20 Pneumococcal Serotypes Associated With Radiographically Confirmed Community-Acquired Pneumonia In Hospitalized US Adults." *Clinical Infectious Disease* 73:1216–22. https://doi.org/10.1093/cid/ciab375

Kaiser Family Foundation. 2020. "Addressing Racial Equity in Vaccine Distribution." https://www.kff.org/racial-equity-and-health-policy/issue-brief/addressing-racial-equity-vaccine-distribution/ (accessed January 31, 2024).

Kilich, E., S. Dada, M.R. Francis, J. Tazare, R.M. Chico, P. Paterson, & H.J. Larson. 2020. "Factors That Influence Vaccination Decision-Making Among Pregnant Women: A Systematic Review and Meta-Analysis." *PloS One* 15(7), e0234827.

Kolobova, I., M.K. Nyaku, A. Karakusevic, D. Bridge, I. Fotheringham, & M. O'Brien. 2022. "Vaccine Uptake and Barriers to vaccination Among At-Risk Adult Populations in the US." *Human Vaccines & Immunotherapeutics* 18(5), 2055422.

Kobaysahi, M., T. Pilishvili, J.L. Farrar, A.J. Leidner, R. Gierke, N. Prasad, P. Moro, et al. 2023. "Pneumococcal Vaccine for Adults Aged ≥19 Years: Recommendations of the Advisory Committee on Immunization Practices, United States, 2023." CDC *MMWR Recomm Rep.* 72(No. RR-3):1–39. DOI: http://dx.doi.org/10.15585/mmwr.rr7203a1.

Kobayashi M, Leidner AJ, Gierke R, et al 2025. Expanded Recommendations for Use of Pneumococcal Conjugate Vaccines Among Adults Aged ≥50 Years: Recommendations of the Advisory Committee on Immunization Practices — United States, 2024. MMWR Morb Mortal Wkly Rep 2025;74:1–8. DOI: http://dx.doi.org/10.15585/mmwr.mm7401a1.

Kuehn, M., LaMori, J., DeMartino, J.K. et al. "Assessing barriers to access and equity for COVID-19 vaccination in the US." *BMC Public Health* 22, 2263 (2022). https://doi.org/10.1186/s12889-022-14636-1

Lu, P., M. Hung, et al. 2021. "Surveillance of Vaccination Coverage among Adult Populations—United States, 2018." *MMWR Surveill Summ* 70(No. SS-3):1–26. http://dx.doi.org/10.15585/mmwr.ss7003a1.

Murray, E., K. Bieniek, M. Del Aguila, S. Egodage, S. Litzinger, A. Mazouz, H. Mills, & J. Liska. 2021. "Impact of Pharmacy Intervention on Influenza Vaccination Acceptance: A Systematic Literature Review and Meta-Analysis." *International Journal of Clinical Pharmacy* 43(5), 1163–72.

Murthy, N., A.P. Wodi, V.V. McNally, M.F. Daley, S. Cineas. 2024. "Advisory Committee on Immunization Practices Recommended Immunization Schedule for Adults Aged 19 Years or Older—United States, 2024." *MMWR Morbidity and Mortality Weekly Report* 2024;73:11–15. DOI: http://dx.doi.org/10.15585/mmwr.mm7301a3.

Nawas GT, Zeidan RS, Edwards CA, El-Desoky RH. "Barriers to COVID-19 Vaccines and Strategies to Improve Acceptability and Uptake." *Journal of Pharmacy Practice*. 2023;36(4):900-904. doi:10.1177/08971900221081621

Panagiotakopoulos, L., Godfrey, M., Moulia, D. L., Link-Gelles, R., Taylor, C. A., Chatham-Stephens, K., Brooks, O., Daley, M. F., Fleming-Dutra, K. E., & Wallace, M. 2024a. "Use of an Additional Updated 2023-2024 COVID-19 Vaccine Dose for Adults Aged ≥65 Years: Recommendations of the Advisory

Committee on Immunization Practices – United States, 2024." *MMWR Morbidity and Mortality Weekly Report,* 73, 377-381. https://doi.org/10.15585/mmwr.mm7316a4

Panagiotakopoulos L., Moulia, D.L., Godfrey, M., Link-Gelles, R., Roper, L., Havers, F., Taylor, C., Stokley, S., Talbot, K., Schechter, R., Brooks, O., Daley, M., Fleming-Dutra, K., Wallace, M. 2024b. "Use of COVID-19 Vaccines for Persons Aged ≥6 Months: Recommendations of the Advisory Committee on Immunization Practices — United States, 2024–2025." *MMWR Morbidity and Mortality Weekly Report*, 73, 819-824. http://dx.doi.org/10.15585/mmwr.mm7337e2

Regan, J.J., Moulia, D.L., Link-Gelles, R., Godfrey, M., Mak, J., Najdowski, M., Rosenblum, H.G., Shah, M.M., Twentyman, E., Meyer, S., Peacock, G., Thornburg, N., Havers, F.P., Saydah, S., Brooks, O., Talbot H.K., Lee, G.M., Bell, B.P., Mahon, B.E., Daley, M.F., Fleming-Dutra, K.E., Wallace, M. 2023. "Use of Updated COVID-19 Vaccines 2023–2024 Formula for Persons Aged ≥6 Months: Recommendations of the Advisory Committee on Immunization Practices — United States, September 2023." *MMWR Morbidity and Mortality Weekly Report*, 72, 1140-1146. *http://dx.doi.org/10.15585/mmwr.mm7242e1*

Roper, L. E., Godfrey, M., Link-Gelles, R., Moulia, D. L., Taylor, C. A., Peacock, G., Brewer, N., Brooks, O., Kuchel, G., Talbot, H. K., Schecter, R., Fleming-Dutra, K. E., & Panagiotakopolous, L. 2024. "Use of Additional Doses of 2024-2025 COVID-19 Vaccine for Adults Aged ≥65 Years and Persons ≥6 Months with Moderate or Severe Immunocompromise: Recommendations of the Adivosry Committee on Immunization Practices – United States, 2024." *MMWR Morbidity and Mortality Weekly Report*, 73(49), 1118-1123. http://dx.doi.org/10.15585/mmwr.mm7349a2

Scharf, L.G., Coyle, R., Adeniyi, K., Fath, J., Harris, L., Myerburg, S., Kurilo, M., & Abbott, E. (2021). "Current Challenges and Future Possibilities for immunization Information Systems." *Academic Pediatrics* 21(4), S57–64. https://doi.org/10.1016/j.acap.2020.11.0

Smith, K.J., A.R. Wateska, M.P. Norwalk, L.H. Harrison. 2021. "Higher-Valency Pneumococcal Conjugate Vaccines: An Exploratory Cost-Effectiveness Analysis in U.S. Seniors." American Journal of Preventive Medicine 61:1, 28-36. https://doi.org/10.1016/j.amepre.2021.01.023

USA Facts. 2023. "U.S. Coronavirus Vaccine Tracker." https://usafacts.org/visualizations/covid-vaccine-tracker-states/

Ullrich, F. & Mueller, K. 2023. "COVID-19 Cases and Deaths, Metropolitan and Nonmetropolitan Countries Over Time" Rupri Center for Rural Health Policy Analysis. *https://rupri.public-health.uiowa.edu/publications/policybriefs/2020/COVID%20Longitudinal%20Data.pdf*

University of Michigan. 2024. "Economic analysis of COVID-19 vaccination." Updated June 24. Presentation at the Advisory Committee for Immunization Performance [ACIP]. https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2024-06-26-28/05-COVID-Prosser-508.pdf

U.S. Department of Health and Human Services. 2022. https://health.gov/healthypeople/objectives-and-data/browse-objectives/vaccination/increase-proportion-adults-age-19-years-or-older-who-get-recommended-vaccines-iid-d03

Weng, M.K., M. Doshani, M.A. Khan, S. Frey, K. Ault, K.L. Moore, E.W. Hall, R.L. Morgan et al. 2022. "Universal Hepatitis B Vaccination in Adults Aged 19–59 Years: Updated Recommendations of the Advisory Committee on Immunization Practices — United States, 2022." *MMWR Morbidity and Mortality Weekly Report* 71:477–483.http://dx.doi.org/10.15585/mmwr.mm7113a1

WHO. n.d. "Diphtheria reported cases and incidence." https://immunizationdata.who.int/global/wiise-detail-page/diphtheria-reported-cases-and-incidence?CODE=Global&YEAR=

HEDIS Health Plan Performance Rates: Adult Immunization Status (AIS-E) Pneumococcal Indicator

This report only presents data for the pneumococcal indicator, as no other indicators have proposed updates.

Starting in Measurement Year 2023, all product lines report for each indicator and stratify by age (see table below).

Indicator	Commercial, Medicaid and Medicare
Influenza	19-65 66 and older Total
Td/Tdap	19-65 66 and older Total
Zoster	50-65 66 and older Total
Pneumococcal	66 and older (Tables 1, 2 and 3)

Pneumococcal Immunization Indicator

Table 1. HEDIS AIS-E Pneumococcal Indicator Performance—Commercial Plans, Ages 66+

Measurement Year	Total Number of Plans (N)	Number of Plans Reporting (N (%))	Performance Rates (%)						
			Mean	Standard Deviation	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
2024*	398	377 (94.7)	54.5	14.5	33.8	43.6	55.8	65.3	72.4
2023	420	401 (95.5)	50.8	16.2	28.9	37.6	51.8	64.1	71.4

*For 2024 the average denominator across plans was 6,509.7 individuals, with a standard deviation of 10,907.9.

Table 2. HEDIS AIS-E Pneumococcal Indicator Performance—Medicaid Plans, Ages 66+

Measurement Year	Total Number of Plans (N)	Number of Plans Reporting (N (%))	Performance Rates (%)						
			Mean	Standard Deviation	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
2024*	276	188 (68.1)	50.8	17.0	28.8	40.7	51.8	62.9	71.9
2023	278	182 (65.5)	45.7	17.1	21.0	35.1	44.4	58.2	68.1

*For 2024 the average denominator across plans was 5,842.8 individuals, with a standard deviation of 9,543.8.

Table 3. HEDIS AIS-E Pneumococcal Indicator Performance—Medicare Plans, Ages 66+

Measurement Year	Total Number of Plans (N)	Number of Plans Reporting (N (%))	Performance Rates (%)						
			Mean	Standard Deviation	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
2024*	700	668 (95.4)	50.4	23.8	12.9	33.0	55.0	69.1	79.1
2023	760	713 (93.8)	44.0	23.2	11.8	26.4	43.9	62.2	75.5

*For 2024 the average denominator across plans was 37,161.2 individuals, with a standard deviation of 140,253.7.

Proposed Changes to Existing Measure for HEDIS®[1] MY 2027: Emergency Department Utilization (EDU)

NCQA seeks comments on proposed modifications to the *Emergency Department Utilization* (EDU) measure.

The EDU measure assesses the risk-adjusted ratio of observed-to-expected (O/E) emergency department (ED) visits for members 18 years of age and older. The measure is currently separately specified for the commercial and Medicare product lines and for different age strata (commercial members 18+, Medicare members 18–64, Medicare members 65+). NCQA seeks to expand this measure into the Medicaid product line for members 18–64 years of age. This initiative was motivated by NCQA's commitment to improving quality across diverse populations.

To examine ED utilization in this population, NCQA tested the concept using 2023-2024 Medicaid administrative claims data using the Merative™ MarketScan® Research Database.[2] Testing demonstrated that the measure can be feasibly reported by health plans with a sufficient denominator size for HEDIS reporting for the Medicaid product line. After evaluating the distribution of events and considering trends in utilization, the outlier definition for the Medicaid product line will be set at 9 or more ED visits. This represents approximately 0.7% of Medicaid members excluded as outliers, which is a similar rate to other product lines and measures. After excluding outliers, the average observed rate of ED visits across Medicaid plans was 597.7 events per 1,000 beneficiaries.

NCQA developed and tested a two-part risk adjustment model for this measure that adjusts for variables such as age, gender and clinical conditions (using the CMS Hierarchical Condition Categories [HCC]). Testing demonstrated that risk adjustment models for the Medicaid 18–64 population performed adequately and were calibrated well. Across the testing population, the O/E ratio was 1.01 (95% confidence interval: 1.01, 1.02). Table 1 contains the distribution of plan-level O/E ratios. The mean plan-level O/E ratio was 0.94. Poor-performing plans in the 90th percentile had 36% more ED visits than expected (O/E ratio: 1.36); high-performing plans in the 10th percentile had 58% fewer ED visits than expected (O/E ratio: 0.42). Note that while the plan-level O/E is slightly lower than 1 (expected for performance on average), the population level O/E is very close to 1, suggesting that the model is well calibrated.

Table 1. Distribution of EDU Measure O/E Ratios Across Medicaid Plans

Age Group	N of Plans*	Mean	Percentile O/E Ratio						
			Min	10th	25th	50th	75th	90th	Max
18-64	48	0.94	0.07	0.42	0.75	1.01	1.20	1.36	1.59

*Includes plans that meet the minimum denominator size of 150 members.
O/E interpretation: 1 = as expected, <1 = better than expected, >1 = worse than expected.

Advisory panels expressed overall support for expanding this measure to the Medicaid product line.

NCQA seeks general feedback on proposed changes and specific feedback on whether you support publishing this measure for the Medicaid product line.

Supporting documents include the current measure specification and evidence workup.

NCQA acknowledges the contributions of the Technical and Utilization Measurement Advisory Panels.

[1]HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).
[2]Data for this analysis was obtained from the Merative™ MarketScan® Research Database. The data assets contain de-identified administrative claims and other data elements, representing a diverse mixture of ages, ethnicities and geographical regions across the United States. The claims data includes medical and pharmacy claims, laboratory results and enrollment records for commercial, Medicare Advantage, and Medicaid enrollees. Study data were accessed using techniques compliant with the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and, because this study involved analysis of pre-existing, de-identified data, it was exempt from Institutional Review Board approval.

Measure title	Emergency Department Utilization	**Measure ID**	EDU
Description	For people 18 years of age and older, the risk-adjusted ratio of observed-to-expected emergency department (ED) visits during the measurement period.		
Measurement period	January 1–December 31.		
Copyright and disclaimer notice	Refer to the complete copyright and disclaimer information at the front of the publication. NCQA website: www.ncqa.org. Submit policy clarification support questions via My NCQA (https://my.ncqa.org).		
Clinical recommendation statement/ rationale	Each year, approximately 1 out of 5 U.S. adults uses the ED for health care, and utilization rates have trended upward in recent years. Studies have estimated that up to 60% of all ED visits are potentially preventable or nonurgent, leading to overcrowding, increased wait times and reduction in the ability of hospital staff to provide efficient, quality care to patients with truly emergent conditions. To reduce avoidable ED visits, payers can provide appropriate disease management services, access to primary care clinics and care coordination.		
Citations	Gindi, R.M., L.I. Black, & R.A. Cohen. 2016. "Reasons for Emergency Room Use among U.S. Adults Aged 18–64: National Health Interview Survey, 2013–2014." National Health Statistics Reports; No 90. Hyattsville, MD: National Center for Health Statistics. Sun, R., Z. Karaca, & S. Wong. 2018. "Trends in Hospital Emergency Department Visits by Age and Payer, 2006–2015." HCUP Statistical Brief #238. Agency for Healthcare Research and Quality: Rockville, MD. https://www.hcup-us.ahrq.gov/reports/statbriefs/sb238-Emergency-Department-Age-Payer-2006-2015.pdf Hu, T., K. Mortensen, & J. Chen. 2018. "Medicaid Managed Care in Florida and Racial and Ethnic Disparities in Preventable Emergency Department Visits." *Medical Care* 56: 477–83. Johnson, P.J., N. Ghildayal, A.C. Ward, B.C. Westgard, L.L. Boland, & J.S. Hokanson. 2012. "Disparities in Potentially Avoidable Emergency Department (ED) Care: ED Visits for Ambulatory Care Sensitive Conditions." *Medical Care* 50(12):1020–8.		
Characteristics			
Scoring **Product lines**	Ratio. • Commercial. • Medicaid. • Medicare.		

Stratifications	Ages as of the last day of the measurement period for Medicaid. • 18–44 years. • 45–54 years. • 55–64 years. Ages as of the last day of the measurement period for commercial and Medicare. • 18–44 years. • 45–54 years. • 55–64 years. • 65–74 years. • 75–84 years. • 18–64 years. • 65+ years. • 85+ years.
Guidance	***Programming Guidance*** **Dual enrollment:** Persons with dual commercial/Medicaid enrollment may only be reported in the commercial product line. Persons with dual Medicaid and Medicare enrollment may only be reported in the Medicare product line. Dual enrollment is assessed after the continuous enrollment criteria are applied. To meet criteria for dual enrollment, persons must have dual enrollment at the end of the continuous enrollment period. ***Risk Adjustment Measure Specific Guidance*** **Observation stays:** For observation stays (Observation Stay Value Set) that do not have a recorded admission or discharge date, set the admission date to the earliest date of service on the claim and set the discharge date to the last date of service on the claim. **Which services count?** • Use all paid, suspended, pending and denied claims when applying risk adjustment comorbidity category determination and the hospice exclusion. • Do not include denied claims when identifying all other events (e.g., observed events); only report claims the organization paid for or expects to pay for (i.e., claims incurred but not paid), with the exception below. • When confirming that an ED visit does not result in an inpatient or observation stay, all inpatient and observation stays must be considered, regardless of payment status (paid, suspended, pending, denied). *For example,* if an ED visit is paid but an inpatient stay is denied, the ED visit resulted in an inpatient stay and is not included in the Emergency Department Utilization measure when identifying observed ED visits. **Supplemental data exceptions:** Supplemental data may only be used for the hospice exclusion. **Transfers:** • Treat transfers *between* institutions as separate admissions.

	• Base transfer reports *within* an institution on the type and level of services provided. • Report separate admissions when the transfer is between acute and nonacute levels of service or between mental health/chemical dependency services and non-mental health/chemical dependency services. • Count only one admission when the transfer takes place within the same service category, but to a different level of care (e.g., from intensive care to a lesser level of care; from a lesser level of care to intensive care). **Risk adjustment:** Organizations may not use risk assessment protocols to supplement diagnoses for calculation of the risk adjustment scores for these measures. The measurement model was developed and tested using only claims-based diagnoses; diagnoses from additional data sources would affect the validity of the models as they are currently implemented in the specification. ***General Rules*** **Data collection methodology:** Administrative. Refer to *General Guideline: Data Collection Methods* for additional information. **Date specificity:** Dates must be specific enough to determine the event occurred in the period being measured. **Improvement notation:** To interpret the ratio as better or worse than expected, the ratio must be calibrated. Organizations can calibrate ratios by dividing individual organization ratios or national percentiles by the national average ratio. Organizations may be more successful at achieving fewer ED visits than expected, given the types of cases treated by the organization (calibrated ratio with a value <1.0), or may be less successful (calibrated ratio with a value >1.0).
Definitions	
Outlier	Medicare enrollees 18–64 years of age with six or more ED visits in the measurement period. Medicare enrollees 65 years of age and older with four or more ED visits in the measurement period. Commercial enrollees 18 years of age and older with four or more ED visits in the measurement period. Medicaid enrollees 18-64 years of age with nine or more ED visits in the measurement period.
Nonoutlier	Medicare enrollees 18–64 years of age with five or fewer ED visits during the measurement period. Medicare enrollees 65 years of age and older with three or fewer ED visits during the measurement period. Commercial enrollees 18 years of age and older with three or fewer ED visits during the measurement period. Medicaid enrollees 18-64 years of age with eight or fewer ED visits during the measurement period.

PPV	Predicted probability of a visit. The predicted probability of a person having an ED visit in the measurement period.
PUCV	Predicted unconditional count of visits. The unconditional count of ED visits during the measurement period.
Initial population	*Measure item count:* Person. *Attribution basis:* Enrollment. • *Benefits:* Medical. • *Continuous enrollment:* The measurement period and the year prior to the measurement period. • *Allowable gap:* No more than one gap of ≤45 days during each year of continuous enrollment. No gaps on the last day of the measurement period. *Ages:* • *Commercial and Medicare:* 18 years of age and older as of the last day of the measurement period. • *Medicaid:* 18–64 years of age as of the last day of the measurement period. ~~18 years of age and older as of the last day of the measurement period.~~ *Gender/sex criteria:* • Administrative Gender of Female (AdministrativeGender code female). • Administrative Gender of Male (AdministrativeGender code male). *Exclusion:* **Episodes for persons in hospice or using hospice services.** Persons who use hospice services (Hospice Encounter Value Set; Hospice Intervention Value Set) or elect to use a hospice benefit any time during the measurement period. Organizations that use the Monthly Membership Detail Data File to identify these persons must use only the run date of the file.
Measure observation	**Calculation of Observed Events** **Step 1.** Count each visit to an ED once, regardless of the intensity or duration of the visit. Count multiple ED visits on the same date of service as one visit. Identify all ED visits during the measurement period using either of the following: • An ED Visit (ED Value Set). • A procedure code (ED Procedure Code Value Set) ***with*** an ED place of service code (POS code 23). Do not include ED visits that result in an inpatient stay (Inpatient Stay Value Set) or an observation stay (Observation Stay Value Set). **Step 2.** Exclude encounters with any of the following: • A principal diagnosis of mental health or chemical dependency (Mental and Behavioral Disorders Value Set). • Psychiatry (Psychiatry Value Set). • Electroconvulsive therapy (Electroconvulsive Therapy Value Set).

	Step 3. For the remaining ED visits, calculate the number of visits per person and remove visits for outlier persons. Report these persons as outliers. **Step 4.** Calculate the total using all ED visits identified after completing steps 1–3. Assign each remaining ED visit to an age and stratification category using the reporting instructions below.
Risk adjustment factors	***Risk Adjustment Determination*** For each person among nonoutliers, identify risk adjustment weights based on comorbidity, age and gender. Weights are specific to product line (Medicare Under 65, Medicare 65 Plus, ~~and~~ commercial, Medicaid). Refer to the reporting indicator column in the risk adjustment tables to ensure that weights are linked appropriately. **Comorbidities:** **Step 1.** Identify all diagnoses for encounters during the year prior to the measurement period. Include the following when identifying encounters: • Outpatient visits, ED visits, telephone visits, nonacute inpatient encounters and acute inpatient encounters (Outpatient, ED, Telephone, Acute Inpatient and Nonacute Inpatient Value Set) with a date of service during the year prior to the measurement period. • Acute and nonacute inpatient discharges (Inpatient Stay Value Set) with a discharge date during the year prior to the measurement period. **Step 2.** Assign each diagnosis to one or more comorbid Clinical Condition (CC) category using Table CC—Mapping in the Risk Adjustment Shared Tables. If the code appears more than once in Table CC—Mapping, it is assigned to multiple CCs. Exclude all diagnoses that cannot be assigned to a comorbid CC category. For persons with no qualifying diagnoses from face-to-face encounters, skip to *Risk Adjustment Calculation*. All digits must match exactly when mapping diagnosis codes to the comorbid CCs. ***Step 3.*** Determine HCCs for each comorbid CC identified. Refer to Table HCC—Rank. For each person's comorbid CC list, match the comorbid CC code to the comorbid CC code in the table, and assign: • The ranking group. • The rank. • The HCC. For comorbid CCs that do not match to Table HCC—Rank, use the comorbid CC as the HCC and assign a rank of 1. One comorbid CC can map to multiple HCCs; each HCC can have one or more comorbid CCs. **Step 4.** Assess each ranking group separately and select only the highest ranked HCC in each ranking group using the "Rank" column (1 is the highest rank possible).

Drop all other HCCs in each ranking group, and de-duplicate the HCC list if necessary.

- *For example,* assume a person with the following comorbid CCs: CC-85, CC-17 and CC-19 (assume no other CCs).
  - CC-85 does not have a map to the ranking table and becomes HCC-85.
  - HCC-17 and HCC-19 are part of Diabetes Ranking Group 1. Because CC-17 is ranked higher than CC-19 in Ranking Group Diabetes 1, the comorbidity is assigned as HCC-17 for Ranking Group 1.

  The final comorbidities for this person are HCC-17 and HCC-85.

Table HCC—Rank

Ranking Group	CC	Description	Rank	HCC
NA	CC-85	Congestive Heart Failure	NA	HCC-85
Diabetes 1	CC-17	Diabetes With Acute Complications	1	HCC-17
	CC-18	Diabetes With Chronic Complications	2	HCC-18
	CC-19	Diabetes Without Complications	3	HCC-19

Step 5. Identify combination HCCs listed in Table HCC—Comb.

Some combinations suggest a greater amount of risk when observed together. For example, when diabetes *and* CHF are present, an increased amount of risk is evident. Additional HCCs are selected to account for these relationships.

Compare each person's list of unique HCCs to those in the *Comorbid HCC* columns in Table HCC—Comb and assign any additional HCC conditions.

If there are overlapping combinations, use both sets of combinations. Based on the combinations, a person can have none, one or more of these added HCCs.

- *For example,* for a person with comorbidities HCC-17 and HCC-85 (assume no other HCCs), assign HCC-901 in addition to HCC-17 and HCC-85. This *does not* replace HCC-17 and HCC-85.

Table HCC—Comb

Comorbid HCC 1	Comorbid HCC 2	Comorbid HCC 3	HCC-Combination	HCC-Comb Description
HCC-17	HCC-85	NA	HCC-901	Combination: Diabetes and CHF
HCC-18	HCC-85	NA	HCC-901	Combination: Diabetes and CHF
HCC-19	HCC-85	NA	HCC-901	Combination: Diabetes and CHF

Risk adjustment	***Risk Adjustment Calculation*** Calculation of risk-adjusted outcomes (counts of ED visits) uses predetermined risk weights generated by two separate regression models. Weights from each model are combined to predict how many visits each person might have during the measurement period. **For each nonoutlier person in the initial population, assign PPV risk weights.** **Step 1.** For each person with a comorbidity HCC Category, link the PPV weights. **Step 2.** Link the age-gender PPV weights for each person. **Step 3.** Sum all PPV weights associated with the person (comorbidities, age and gender). **Step 4.** Calculate the predicted probability of each person having at least one visit based on the sum of the weights for each person using the formula below. $$\text{PPV} = \frac{e^{(\sum \text{PPV WeightsForEachPerson})}}{1+e^{(\sum \text{PPV WeightsForEachPerson})}}$$ Truncate the final PPV for each person to 10 decimal places. Do not truncate or round in previous steps. **For each person in the initial population, assign PUCV risk weights.** **Step 1**. For each person with a comorbidity HCC Category, link the PUCV weights. If a person does not have any comorbidities to which weights can be linked, assign a weight of 1. **Step 2.** Link the age-gender PUCV weights for each person. **Step 3.** Calculate the predicted unconditional count of visits in the measurement period by multiplying all PUCV weights (comorbidities, age and gender). Use the following formula: PUCV = Age/Gender Weight * HCC Weight ***Note:*** *Multiply by each HCC associated with the person. For example, assume a person with HCC-2, HCC-10, HCC-47. The formula would be:* *PUCV = Age/gender Weight * HCC-2 * HCC-10 * HCC-47* Truncate the final PUCV for each person to 10 decimal places. Do not truncate or round in previous steps. *Expected count of ED visits.* Calculate the final person-level expected count of ED visits for each category using the formula below: Expected Count of ED Visits = PPV x PUCV Round the person-level results to 4 decimal places using the .5 rule and sum over all persons in the category. **Step 4.** Use the formula below to calculate the covariance of the predicted outcomes for each category. For categories with a single person (n_c=1), set the covariance to zero. Do not round the covariance before using it in step 5.

	$$COV_c = \frac{\sum_{m=1}^{n_c}(PPV_m - mean(PPV)_c) \times (PUCV_m - mean(PUCV)_c)}{n_c - 1}$$ Where: c denotes an individual category n_c is the number of persons in the category indicated by c m is an individual person within the category indicated by c PPV_m is the truncated PPV for the person denoted by m $mean(PPV)_c$ is the unrounded and untruncated mean PPV in the category indicated by c $mean(PUCV)_c$ is the unrounded and untruncated mean PUCV $PUCV_m$ is the truncated PUCV for the person denoted by m in the category indicated by c **Step 5.** Once the covariance between PPV and PUCV for a given category is calculated, it can be used as indicated in the formula below to calculate the variance for that category. $$Variance_c = \sum_{m=1}^{n_c}(PPV_m \times PUCV_m)^2 \times \left(1 + (1 - PPV_m)^2 + \left(\frac{2 \times COV_c}{PPV_m \times PUCV_m}\right)\right)$$ Where: c denotes an individual category n_c is the number of persons in the category indicated by c m is an individual person within the category indicated by c PPV_m is the truncated PPV for the person denoted by m $PUCV_m$ is the truncated PUCV for the person denoted by m n_c is the number of persons in the category indicated by c Round the variance for reporting to 4 decimal places using the .5 rule.
Summary of changes	• Added the Medicaid product line.
Data element tables	***Reporting:*** **Number of nonoutliers** The number of nonoutlier persons for each age group, reported as the NonOutlierPersonCount. ***Reporting:*** **Number of outliers** The number of outlier persons for each age group, reported as the OutlierPersonCount. ***Calculated:*** **Number of persons in the initial population** The number of persons in the initial population (including outliers) for each age group and totals. Calculated by IDSS as the PersonCount. ***Calculated:*** **Outlier rate** The number of outlier persons (OutlierPersonCount) divided by the number of

persons in the initial population (PersonCount), multiplied by 1,000 for each age group and totals. Calculated by IDSS as the OutlierRate.

Reporting: **Number of observed events among nonoutlier persons**
The number of observed ED visits for each age group, reported as the ObservedCount.

Calculated: **Observed visits per 1,000 nonoutlier persons**
The number of observed ED visits (ObservedCount) divided by the number of nonoutlier persons in the initial population (NonOutlierPersonCount), multiplied by 1,000 for each age group and totals. Calculated by IDSS as the ObservedRate.

Reporting**: Number of expected events among nonoutlier persons**
The number of expected ED visits for each age group, reported as the ExpectedCount.

Calculated**: Expected visits per 1,000 nonoutlier persons**
The number of expected ED visits (ExpectedCount) divided by the number of nonoutlier persons in the initial population (NonOutlierPersonCount), multiplied by 1,000 for each age group and totals. Calculated by IDSS as the ExpectedRate.

Reporting**: Variance among nonoutlier persons**
The variance (*Risk Adjustment Calculation,* PUCV, step 5) for each age group, reported as the CountVariance.

Calculated: **O/E ratio**
The number of observed events among nonoutlier persons (ObservedCount) divided by the number of expected events among nonoutlier persons (ExpectedCount) for each age group and totals. Calculated by IDSS as the OE.

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table EDU-1: Data Elements for Emergency Department Utilization

Metric	Age	Data Element	Reporting Instructions
EmergencyDepartmentUtilization	18-44	NonOutlierPersonCount	For each Stratification
	45-54	OutlierPersonCount	For each Stratification
	55-64	PersonCount	NonOutlierPersonCount + OutlierPersonCount
	Total	OutlierRate	OutlierPersonCount / PersonCount (Permille)
		ObservedCount	For each Stratification
		ObservedRate	1000 * ObservedCount/ NonOutlierPersonCount
		ExpectedCount	For each Stratification
		ExpectedRate	1000 * ExpectedCount / NonOutlierPersonCount
		CountVariance	For each Stratification
		OE	ObservedCount / ExpectedCount

Table EDU-2/3: Data Elements for Emergency Department Utilization

Metric	Age	Data Element	Reporting Instructions
EmergencyDepartmentUtilization	18-44	NonOutlierPersonCount	For each Stratification
	45-54	OutlierPersonCount	For each Stratification
	55-64	PersonCount	NonOutlierPersonCount + OutlierPersonCount
	18-64	OutlierRate	OutlierPersonCount / PersonCount (Permille)
	65-74	ObservedCount	For each Stratification
	75-84	ObservedRate	1000 * ObservedCount/ NonOutlierPersonCount
	85+	ExpectedCount	For each Stratification
	65+	ExpectedRate	1000 * ExpectedCount / NonOutlierPersonCount
	Total	CountVariance	For each Stratification
		OE	ObservedCount / ExpectedCount

Emergency Department Utilization (EDU)
Measure Workup

Topic Overview

Importance and Prevalence

In 2022, approximately 20% of adults had visited the emergency department (ED) in the prior 12 months (Cairns et al., 2024). Within the last decade, ED utilization has trended steadily upward, reaching over an estimated 155 million visits annually. In 2022, the most common reason for ED visits was stomach or abdominal pain, followed by chest pain, cough and shortness of breath (National Center for Health Statistics, 2024). Researchers investigating utilization have found that behavioral health factors also increase both the likelihood and number of ED visits in older adults with higher needs and higher costs (Daly, 2022; Karaca & Moore, 2020). People may use the ED rather than lower cost urgent care or primary care facilities due to 1) perceived severity of the medical problem, 2) inconvenient doctor's office hours and 3) lack of access to primary care providers.

In recent studies, researchers estimate between 30% and 60% of all ED visits are potentially avoidable or nonurgent, with an approximated savings of up to $4.4 billion annually if preventable ED visits instead occurred in urgent care or primary care settings (Giannouchos et al., 2022; Moore & Liang, 2020; Uscher-Pines et al., 2013). Avoidable ED use can cause overcrowding, increase wait times and limit hospital staff from providing efficient, quality care to people with truly emergent conditions. Additionally, avoidable ED use strains limited hospital and community resources, as ED visits are costlier to hospitals and individuals seeking care than comparable office visits. In some studies, researchers have suggested that nonurgent ED visits can be prevented by optimization of care in outpatient settings (Giannouchos et al., 2021; Nummedal et al., 2024). Key interventions for potentially preventable ED visits are described in greater detail below.

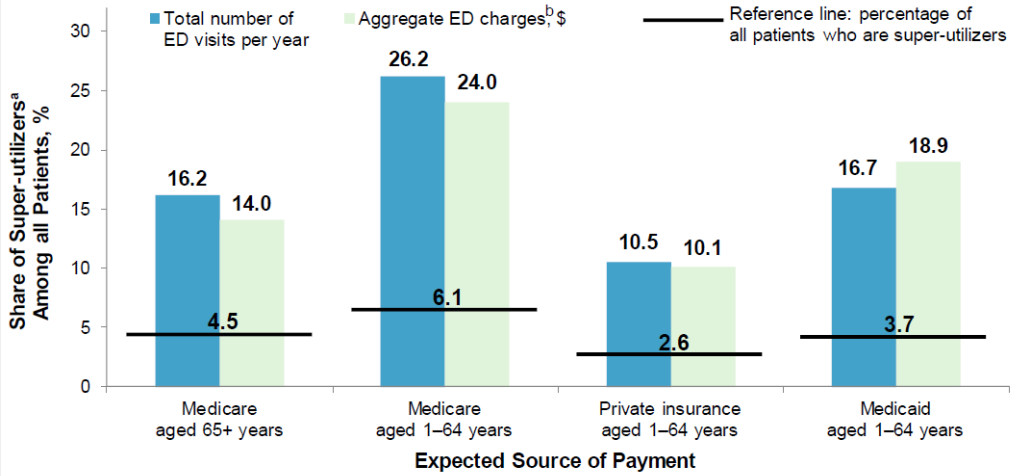
High-frequency ED Utilizers (Also Known as "Super-utilizers")

A very small portion of the population accounts for a disproportionate share of ED utilization across all health payers. In 2014, 6.1% of Medicare enrollees under the age of 65 accounted for over one quarter of ED visits among that population, and 4.5% of Medicare enrollees over 65 years old accounted for over 16% of ED visits for that population. High-frequency ED utilizers have been shown to have differences in their behaviors and reasons for ED utilization compared to non-high frequency ED utilizers, across all payer types. Among all payers, individuals with 3 or more chronic conditions accounted for a larger share of ED visits for high-frequency ED utilizers than among other individuals. Among Medicare enrollees ages 65 and older, those with 3 or more chronic conditions constituted 33.3% of visits for high-frequency ED utilizers and only 26.7% of visits for other individuals. Similar trends are seen in private insurance and Medicaid populations. High-frequency ED utilizers under 65 also had a greater share of discharges against medical advice compared to other individuals. For Medicare, 3.5% of high-frequency ED utilizers were discharged against medical advice, compared to 2.6% for other individuals. For Medicaid and private insurance, 3.2% and 2.2% of high-frequency ED utilizers were discharged against medical advice compared to 1.9% and 1.5% of other individuals, respectively by payer (Jiang et al., 2017).

Expanding upon earlier work on hospital inpatient high-frequency ED utilizers, the Agency for Health Care Research and Quality (AHRQ) released a Healthcare Cost and Utilization Project statistical brief in February 2017 describing high-frequency ED utilizers. Using a cut-off rule of two standard deviations above the mean number of ED visits, AHRQ specified high-frequency ED utilizers for each payer as follows:

- Medicare aged 65+ -- *four or more* ED visits per year.
- Medicare aged 1 to 64 -- *six or more* ED visits per year.
- Private insurance aged 1 to 64 -- *four or more* ED visits per year.
- Medicaid aged 1 to 64 -- *six or more* ED visits per year.

Figure 1. Share of ED super-utilizers[a] among all patients by payer, 13 States, 2014



Abbreviations: ED, emergency department

Note: ED visits comprise patients who were treated in the ED and then released from the ED, transferred to another nonhospital health facility, or died in the ED. Patients who were treated in the ED and then admitted to a hospital for inpatient services were not included.

[a] Super-utilizers are patients aged 1–64 years covered by Medicare or Medicaid with six or more ED visits and privately insured patients aged 1–64 years or Medicare patients aged 65 years and older with four or more ED visits in 2014 (approximately 2 standard deviations above the mean within each payer group).

[b] Charges represent the total charges for ED services. ED costs are not presented because ED cost-to-charge ratios are not available.

Source: Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), State Emergency Department Databases (SEDD) from 13 States, 2014

The National Committee for Quality Assurance (NCQA) conducted testing of large Medicare and commercial sample populations to determine high-frequency ED utilizer thresholds and confirmed those specified by AHRQ.

Disparities in Utilization

In the United States, ED utilization rates are higher among women as well as Black and unhoused individuals (Giannouchos et al., 2022). The highest rates of ED use are reported among Medicare and Medicaid enrollees, as these populations tend to be in poorer health with more chronic conditions, relative to those with commercial insurance or no coverage (Decker et al., 2013; Gindi et al., 2016).

Implementation of the Patient Protection and Affordable Care Act (ACA) was projected to reduce disparities by increasing health care coverage and access to primary health care services and decrease reliance on the ED. However, shortly after implementation of the ACA in 2014, there was no apparent decline in ED use within any racial or ethnic group. In fact, researchers found that Black adults still had the highest ED use despite increased health care coverage under the ACA (Chen et al., 2016). Lack of access to other providers as the reason for an ED visit was most prevalent among non-Hispanic Black adults, compared to non-Hispanic White adults and Hispanic adults (Gindi et al., 2016). These trends have continued, with data from 2022 showing that the ED visit rate was significantly higher for Black adults, 91 visits per 100 people, compared to all other racial and ethnic groups. The next highest ED visit rate was for White adults, 45 visits per 100 people ($p < 0.05$) (Cairns et al., 2024). This suggests health disparities are not solely related to health care coverage

and highlights the need for better care coordination and health service availability.

Behaviors associated with health care coverage may influence how individuals who gain or lose coverage interact with the health care system for chronic and acute concerns. Studies have found an association between loss of Medicaid coverage and delaying care or avoiding care due to financial burden (Gordon et al., 2020; McIntyre et al., 2024).

Research on Payer-level Interventions

Efforts to reduce preventable ED utilization are primarily centered on hospital-level interventions. However, researchers have highlighted the need for interventions beyond the hospital. Important components to explore for these interventions are chronic disease management and care coordination. Providing appropriate disease management in primary care for ambulatory care sensitive conditions can reduce preventable ED visits, particularly among members of AHRQ's priority populations, including women, children, non-White racial and ethnic groups, populations with special health care needs (chronic illness, disabilities and end of life care needs), older adults, low-income populations and inner-city and rural residents (Johnson et al., 2012). Care coordination can also decrease ED utilization disparities. In a study of Florida's Statewide Mandatory Managed Care program, researchers showed that, after implementation, there was a significant reduction in preventable ED visits among non-Hispanic Black ($p < 0.01$) and Hispanic ($p < 0.01$) Medicaid enrollees compared to non-Hispanic White Medicaid enrollees (Hu et al., 2018).

Researchers have thoroughly documented health disparities, with increasing focus on preventable hospitalizations and ED visits among non-White racial and ethnic populations. Cultural competency training has been emphasized in recent years to ensure the health care delivery system respectfully interacts with and understands differences in health care utilization and goals for people from diverse backgrounds. The National Standards for Culturally and Linguistically Appropriate Services (CLAS), published by the Office of Minority Health, emphasize language assistance and health literacy services to address underlying social elements (e.g., limited English proficiency) that may be factors in higher ED utilization (Adepoju et al., 2015).

Benefits (Improvements in Quality) Envisioned by Use of this Measure

Many ED visits are necessary, and this measure does not aim for a reduction of ED utilization rates to zero. Rather, this measure intends to assess a health care system's success with disease management and outpatient care for conditions that do not warrant an ED visit. The research detailed in this workup suggests that reducing preventable ED visits requires involvement from payers. The lack of recent data on this topic in the literature may signal a need for continued research efforts. Further, this measure can act as an indicator of potential health care quality problems in chronic disease management and acute care, alerting health payers to focus additional resources on effective care coordination in their respective networks.

Emergency Department Utilization in Populations With Medicaid Coverage

Trends in Utilization

ED use for populations with Medicaid coverage grew steadily between 2013 and 2017 (likely due to the implementation of the ACA) and remained stable from 2017 to 2021 (Santo et al., 2024). Using data from the 2022 National Hospital Ambulatory Medical Care Survey (NHAMCS), researchers estimated that the national ED visit rate for people with health care coverage through

Medicaid, Children's Health Insurance Program (CHIP) or other state-based programs is 99 visits per 100 people (National Center for Health Statistics, 2024), higher than ED visit rates for Medicare (56 visits per 100 people) and commercial insurance (21 visits per 100 people). In a study of the factors associated with ED overuse, Medicaid enrollees had 2.9 times the odds ($p < 0.001$) of presenting to the ED than non-Medicaid enrollees, adjusting for demographics, education, employment and poverty status (Bakare et al., 2023).

In 2013, among ED visits by adults ages 18 to 64 years old, Medicaid enrollees constituted 23.7% of all visits. In 2016, this increased to 37.2% of all ED visits among this age group. In 2016, the share of ED visits among adults ages 18 to 64 was higher for Medicaid enrollees (37.2%) compared to commercially insured enrollees (34.8%). This trend continued from 2017 to 2021 (Santo et al., 2024).

Statistics from the CDC show that Medicaid enrollees use EDs more frequently than individuals with commercial insurance, Medicare and those with no coverage (Joffe, 2023). AHRQ researchers report that, of the over 118.5 million ED visits in 2018, approximately 42.7 million (36%) of those visits had Medicaid as the primary expected payer (Weiss & Jiang, 2021). Top reasons for ED visits among the population with Medicaid coverage are similar to those for other health care coverage types. The ten most frequent reasons for treat-and-release ED visits among adults with Medicaid coverage (by first-listed diagnosis) are non-specific chest pain, abdominal pain, superficial injury/contusion, musculoskeletal pain, urinary tract infection, respiratory signs/symptoms, sprains and strains, skin and subcutaneous tissue infections, open wounds to limbs and chronic obstructive pulmonary disease and bronchiectasis (Sun & Wong, 2018). These top ten diagnoses accounted for 35.7% of all ED visits in 2018 with Medicaid as the primary expected payer (Weiss & Jiang, 2021).

Current Policy Landscape

Policies under the ACA, such as Medicaid expansion, have been shown to increase access to preventive health services and reduce financial barriers to health care. However, evidence on the association between Medicaid expansion under the ACA and change in ED utilization rates is inconclusive. In one study of selected states with and without Medicaid expansion, researchers used a difference-in-differences analysis to evaluate data from 2011-2017. They found that Medicaid expansion decreased ED visit rates in expansion states, from 50.5 ED visits per 1,000 people before expansion to 48.3 ED visits per 1,000 people after expansion, while increasing rates in nonexpansion states, from 53.9 ED visits per 1,000 people before expansion to 56.3 ED visits per 1,000 people after expansion. When comparing the difference in visit rate changes between expansion and nonexpansion states, there was a significant decrease of 4.7 ED visits per 1,000 people ($p < 0.01$) (Giannouchos et al., 2022). In related studies, researchers found that ED visit rates increased in expansion states relative to nonexpansion states. There were 2.5 more visits per 1,000 people observed in expansion states than nonexpansion states ($p < 0.05$) (Nikpay et al., 2017). Furthermore, another study found that improvements under the ACA have not translated to an overall reduction in ED utilization disparities across payers (Griffith & Bor, 2020). Using the same data and similar parameters as Giannouchos and colleagues, researchers found that ED use for nonurgent conditions increased in expansion states relative to

nonexpansion states, whereas for emergent conditions it did not (Sabbatini & Dugan, 2022).

State-level Medicaid interventions for ED utilization have varying levels of success. In Michigan, for example, improved access to primary care through Patient Centered Medical Homes contributed to a 19% lower rate of ED visits for adults and a 25% lower rate of ambulatory care-sensitive inpatient stays for adults (Bettinger et al., 2019). Colorado's Bridges to Care (B2C) program redirects Medicaid enrollees with a history of frequent ED use to primary care providers, assists in prescription management and facilitates transportation and housing procurance. The program led to 29.7% fewer ED visits and 123.2% more primary care visits among these high utilizers, including those with behavioral health comorbidities, compared to enrollees in the control group (Capp et al., 2017).

The Centers for Medicare & Medicaid Services gives states the option to charge up to $8 to a Medicaid enrollee for visiting an ED without a true emergency (Medicaid and CHIP Learning Collaboratives, 2014). This option, however, has only been enforced in 14 states with several exemptions and varying success at reducing visit rates.

Disparities in the Medicaid Population

Medicaid enrollees have differential ED utilization and experiences in obtaining ED care by race and ethnicity. In a 2022 study, researchers found that Black adult Medicaid enrollees had 9.5 more ED visits per 100 enrollees per year than non-Hispanic White adult Medicaid enrollees ($p < 0.001$). Additionally, Black adult Medicaid enrollees had 4.3 more potentially avoidable ED visits per 100 enrollees per year than non-Hispanic White adult Medicaid enrollees ($p < 0.001$) (Wallace et al., 2022).

Medicaid enrollees with specific chronic conditions may also experience disparities in utilization and health outcomes. In a 2024 study analyzing Medicaid claims, researchers investigated ED utilization in a cohort of people with epilepsy. When stratifying their classification and regression tree model by race and ethnicity, they found that while race and ethnicity were not predictors of higher ED utilization within this population, comorbidities predicting higher ED visits varied by racial and ethnic group. For Hispanic individuals, back problems and injury were important predictors of ED utilization; for White individuals, anxiety and mood disorders and injury were notable; for Black individuals, injury, urinary tract infections, headache and anxiety and mood disorders were predictors of higher ED utilization (Bensken et al., 2023).

Additionally, in a 2023 study of adult Medicaid enrollees who had an ED visit for chest pain, researchers found that people with any behavioral health or serious behavioral health diagnoses had 1.9 times ($p < 0.05$) and 2.6 times ($p < 0.05$) the odds of being rehospitalized for a cardiovascular condition after 6 months, respectively, compared to enrollees without behavioral health diagnoses (Kumar et al., 2022). In a 2022 study of adult Medicaid enrollees between the ages of 18 and 64 years old with a diabetes diagnosis, researchers found that Black enrollees had 1.5 times higher ED utilization for preventable diabetes conditions relative to White enrollees ($p < 0.05$) (Chehal et al., 2023).

Considerations for Policy or Practice

Little is known about the reasons for high ED utilization rates, which likely involve complex factors such as socioeconomic status and social determinants of health, as well as individual care-seeking behaviors, described above. The relationship between socioeconomic status and health is multifaceted, making it difficult to distinguish which health outcomes are related to health care quality and which are related to a person's experience of unmet social needs.

More granular research may be needed to better understand care patterns for other groups, including older adults and people with behavioral health conditions, with high ED utilization for conditions that may be treated effectively in urgent, transitional or primary care settings (Jehloh et al., 2022, Serrano et al., 2018). Some payer-level efforts, including financial disincentives, education and encouragement for primary care providers to expand available hours, have not prevented an increase in ED use. In one study, researchers found state-specific evidence for changes in ED use for non-emergent and primary care treatable conditions after Medicaid expansion. In New York State, ED and primary care are substitutes state-wide, meaning that one location's utilization increases because of a decrease in the other. However, in highly urban and lower income counties during nights and weekends, ED use and primary care are complements (i.e., the ED is used *in addition* to primary care). Thus, aspects of primary care access may be differently related to low-acuity ED use (Denham et al., 2024).

Furthermore, there are concerns that certain interventions, such as managed care and financial incentives for individuals, may inadvertently increase ED utilization (Nummedal et al., 2024). In recent research, researchers suggest that for some states, expanding Medicaid improves the efficiency of ED use, resulting in fewer ED visits for conditions that may be prevented with better access to primary care. However, in other states, especially those that may have lower ambulatory capacity to meet increased demand for any health care utilization from people newly enrolled in Medicaid, there may be a notable, initial increase in ED visits as enrollees seek care that they had delayed while not having health insurance (Sabbatini & Dugan, 2022).

References

Adepoju, O. E., Preston, M. A., & Gonzales, G. (2015). Health Care Disparities in the Post-Affordable Care Act Era. *American Journal of Public Health*, *105 Suppl 5*(Suppl 5), S665-667. https://doi.org/10.2105/AJPH.2015.302611

Bakare, O., Akintujoye, I. A., Gbemudu, P. E., Mbaezue, R. N., Akinbolade, A. O., & Olopade, S. (2023). Medicaid Coverage and Emergency Department Utilization in Southeastern Pennsylvania. *Cureus*, *15*(9), e45464. https://doi.org/10.7759/cureus.45464

Bensken, W. P., Vaca, G. F.-B., Williams, S. M., Khan, O. I., Jobst, B. C., Stange, K. C., Sajatovic, M., & Koroukian, S. M. (2023). Disparities in Adherence and Emergency Department Utilization Among People with Epilepsy: A Machine Learning Approach. *Seizure*, *110*, 169–176. https://doi.org/10.1016/j.seizure.2023.06.021

Bettinger, J., Davis, J., & Fields, W. (2019). *Medicaid Cost Saving Measures for Emergency Care*. American College of Emergency Physicians. https://www.acep.org/siteassets/uploads/uploaded-files/acep/clinical-and-practice-management/policy-statements/information-papers/medicaid-cost-savings-for-emergency-care-final-2.pdf

Cairns, C., Ashman, J. J, & Kang, K. (2024, August). Emergency department visit rates by selected characteristics: United States, 2022. NCHS Data Brief, no 503. Hyattsville, MD: National Center for Health Statistics. https://dx.doi.org/10.15620/cdc/159284

Capp, R., Misky, G. J., Lindrooth, R. C., Honigman, B., Logan, H., Hardy, R., Nguyen, D. Q., & Wiler, J. L. (2017). Coordination Program Reduced Acute Care Use And Increased Primary Care Visits Among Frequent Emergency Care Users. *Health Affairs*, *36*(10), 1705–1711. https://doi.org/10.1377/hlthaff.2017.0612

Chehal, P. K., Uppal, T. S., Ng, B. P., Alva, M., & Ali, M. K. (2023). Trends and Race/Ethnic Disparities in Diabetes-Related Hospital Use in Medicaid Enrollees: Analyses of Serial Cross-sectional State Data, 2008–2017. *Journal of General Internal Medicine*, *38*(10), 2279–2288. https://doi.org/10.1007/s11606-022-07842-5

Chen, J., Vargas-Bustamante, A., Mortensen, K., & Ortega, A. N. (2016). Racial and Ethnic Disparities in Health Care Access and Utilization Under the Affordable Care Act. *Medical Care*, *54*(2), 140–146. https://doi.org/10.1097/MLR.0000000000000467

Daly, R. (2022, December 13). *Reducing "Avoidable" ED Visits for Mental Health Could Cut Billions in Costs, Improve Patient Outcomes*. AJMC. https://www.ajmc.com/view/reducing-avoidable-ed-visits-for-mental-health-could-cut-billions-in-costs-improve-patient-outcomes

Decker, S. L., Kostova, D., Kenney, G. M., & Long, S. K. (2013). Health status, risk factors, and medical conditions among persons enrolled in Medicaid vs uninsured low-income adults potentially eligible for Medicaid under the Affordable Care Act. *JAMA*, *309*(24), 2579–2586. https://doi.org/10.1001/jama.2013.7106

Denham, A., Hill, E. L., Raven, M., Mendoza, M., Raz, M., & Veazie, P. J. (2024). Is the emergency department used as a substitute or a complement to primary care in Medicaid? *Health Economics, Policy and Law*, *19*(1), 73–91. https://doi.org/10.1017/S1744133123000270

Giannouchos, T. V., Biskupiak, J., Moss, M. J., Brixner, D., Andreyeva, E., & Ukert, B. (2021). Trends in outpatient emergency department visits during the COVID-19 pandemic at a large, urban, academic hospital system. *The American Journal of Emergency Medicine*, *40*, 20–26. https://doi.org/10.1016/j.ajem.2020.12.009

Giannouchos, T. V., Ukert, B., & Andrews, C. (2022). Association of Medicaid Expansion With Emergency Department Visits by Medical Urgency. *JAMA Network Open*, *5*(6), e2216913. https://doi.org/10.1001/jamanetworkopen.2022.16913

Gindi, R. M., Black, L. I., & Cohen, R. A. (2016). Reasons for Emergency Room Use Among U.S. Adults Aged 18-64: National Health Interview Survey, 2013 and 2014. *National Health Statistics Reports*, *90*, 1–16.

Griffith, K. N., & Bor, J. H. (2020). Changes in Health Care Access, Behaviors, and Self-reported Health Among Low-income US Adults Through the Fourth Year of the Affordable Care Act. *Medical Care*, *58*(6), 574. https://doi.org/10.1097/MLR.0000000000001321

Hu, T., Mortensen, K., & Chen, J. (2018). Medicaid Managed Care in Florida and Racial and Ethnic Disparities in Preventable Emergency Department Visits. *Medical Care*, *56*(6), 477–483. https://doi.org/10.1097/MLR.0000000000000909

Jehloh, L., Songwathana, P., & Sae-Sia, W. (2022). Transitional care interventions to reduce emergency department visits in older adults: A systematic review. *Belitung Nursing Journal*, *8*(3), 187–196. https://doi.org/10.33546/bnj.2100

Jiang, H. J., Weiss, A., & Barrett, M. (2017, February). *Characteristics of Emergency Department Visits for Super-Utilizers by Payer, 2014 #221*. Agency for Health Reserach and Quality (AHRQ). https://hcup-us.ahrq.gov/reports/statbriefs/sb221-Super-Utilizer-ED-Visits-Payer-2014.jsp

Joffe, M. (2023, July 11). *Medicaid and Emergency Room Use*. Cato Institute. https://www.cato.org/blog/medicaid-emergency-room-use

Johnson, P. J., Ghildayal, N., Ward, A. C., Westgard, B. C., Boland, L. L., & Hokanson, J. S. (2012). Disparities in potentially avoidable emergency department (ED) care: ED visits for ambulatory care sensitive conditions. *Medical Care*, *50*(12), 1020–1028. https://doi.org/10.1097/MLR.0b013e318270bad4

Karaca, Z., & Moore, B. (2020, October). *Costs of Emergency Department Visits for Mental and Substance Use Disorders in the United States, 2017 #257*. https://hcup-us.ahrq.gov/reports/statbriefs/sb257-ED-Costs-Mental-Substance-Use-Disorders-2017.jsp

Kumar, S., Duber, H. C., Kreuter, W., & Sabbatini, A. K. (2022). Disparities in Cardiovascular Outcomes Among Emergency Department Patients with Mental Illness. *The American Journal of Emergency Medicine*, *55*, 51–56. https://doi.org/10.1016/j.ajem.2022.02.037

Medicaid and CHIP Learning Collaboratives. (2014, November 25). *Overview of Medicaid Cost Sharing and Premium Requirements*.

Moore, B., & Liang, L. (2020). Costs of Emergency Department Visits in the United States, 2017. *HCUP Statistical Brief #268*.

National Center for Health Statistics. (2024, July 25). *Estimates of Emergency Department Visits in the United States, 2016-2022*. https://www.cdc.gov/nchs/dhcs/ed-visits/index.htm

Nikpay, S., Freedman, S., Levy, H., & Buchmueller, T. (2017). Effect of the Affordable Care Act Medicaid Expansion on Emergency Department Visits: Evidence From State-Level Emergency Department Databases. *Annals of Emergency Medicine*, *70*(2), 215-225.e6. https://doi.org/10.1016/j.annemergmed.2017.03.023

Nummedal, M. A., King, S., Uleberg, O., Pedersen, S. A., & Bjørnsen, L. P. (2024). Non-emergency department (ED) interventions to reduce ED utilization: A scoping review. *BMC Emergency Medicine*, *24*(1), 117. https://doi.org/10.1186/s12873-024-01028-4

Sabbatini, A. K., & Dugan, J. (2022). Medicaid Expansion and Avoidable Emergency Department Use—Implications for US National and State Government Spending. *JAMA Network Open*, *5*(6), e2216917. https://doi.org/10.1001/jamanetworkopen.2022.16917

Santo, L., Schappert, S., & Ashman, J. (2024). Trends in Emergency Department Visits Among People Younger Than Age 65 by Insurance Status: United States, 2010-2021. *National Health Statistics Reports, Number 197,*. https://www.cdc.gov/nchs/data/nhsr/nhsr197.pdf

Serrano, N., Prince, R., Fondow, M., & Kushner, K. (2018). Does the Primary Care Behavioral Health Model Reduce Emergency Department Visits? *Health Services Research*, *53*(6), 4529–4542. https://doi.org/10.1111/1475-6773.12862

Sun, R., & Wong, H. S. (2018). Trends in Hospital Emergency Department Visits by Age and Payer, 2006-2015. *Healthcare Cost and Utilization Project*. https://hcup-us.ahrq.gov/reports/statbriefs/sb238-Emergency-Department-Age-Payer-2006-2015.pdf

Uscher-Pines, L., Pines, J., Kellermann, A., Gillen, E., & Mehrotra, A. (2013). Emergency department visits for nonurgent conditions: Systematic literature review. *The American Journal of Managed Care*, *19*(1), 47–59.

Wallace, J., Lollo, A., Duchowny, K. A., Lavallee, M., & Ndumele, C. D. (2022). Disparities in Health Care Spending and Utilization Among Black and White Medicaid Enrollees. *JAMA Health Forum*, *3*(6), e221398. https://doi.org/10.1001/jamahealthforum.2022.1398

Weiss, A., & Jiang, J. (2021). *Most Frequent Reasons for Emergency Department Visits, 2018 #286*. Agency for Health Reserach and Quality (AHRQ). https://hcup-us.ahrq.gov/reports/statbriefs/sb286-ED-Frequent-Conditions-2018.jsp

Proposed Changes to Existing Measure for HEDIS®[1] MY 2027: Pharmacotherapy Management of COPD Exacerbation (PCE)

NCQA seeks comments on proposed modifications to the HEDIS Health Plan *Pharmacotherapy Management of COPD Exacerbation* (PCE) measure. As currently specified, PCE assesses whether appropriate medications were dispensed following a chronic obstructive pulmonary disease (COPD) exacerbation for Medicaid, commercial and Medicare members aged 40 years and older.

The 2025 Global Initiative for Chronic Obstructive Lung Disease (GOLD) guidelines include updates to pharmacotherapy recommendations for patients who experience COPD exacerbations.[2] To align with these updated guidelines, NCQA tested several updates to the PCE measure in the commercial and Medicare populations using data from OptumLabs®[3] Data Warehouse (OLDW) National View. While NCQA did not test the updated specifications in the Medicaid population, the updated PCE measure is still slated to be reported for all product lines. Medicaid health plan performance will be evaluated following the first year of reporting if this measure is approved for HEDIS.

Proposed updates to the PCE measure for MY 2027 are outlined below:

Additional Exclusion for Members with Asthma – Clinical guidelines state that individuals with comorbid asthma and COPD should prioritize asthma treatment recommendations over COPD treatment. Given that pharmacotherapies for asthma differ from those for COPD, NCQA proposes an additional exclusion for individuals with two or more asthma diagnoses during the measurement period. During testing, this resulted in the exclusion of 2.2% (n = 114,324) of commercial members and 4.3% (n = 344,313) of Medicare members from the initial population.

Denominator – Currently, the PCE denominator is the count of COPD exacerbations (acute inpatient or emergency department [ED] visits) between January 1 and November 30 of the Measurement Year (MY). The updated PCE measure denominator would be the count of members with a qualifying COPD exacerbation event, defined by ***either of the following*** occurring during the measurement period:

- One or more inpatient or observation stay visits with a COPD diagnosis in any claim position.
- Two or more outpatient visits, including any combination of the following:
    - ED visits with a COPD diagnosis in any claim position.
    - Urgent care visits with a COPD diagnosis in any claim position.
    - Ambulatory care visits with a COPD *exacerbation* diagnosis in any claim position.

Numerator – Currently, the PCE numerator assesses two rates: 1) if a systemic corticosteroid is dispensed within 14 days of a COPD exacerbation event; and 2) if a bronchodilator is dispensed within 30 days of a COPD exacerbation event. The updated numerator would be one rate and would include members in the denominator who had a dispensing event for ***all of the following*** in the measurement period:

- At least one short-acting medication (short-acting muscarinic antagonist [SAMA] ***or*** short-acting beta agonist [SABA]).
- At least one long-acting muscarinic antagonist (LAMA).[4]
- At least one long-acting beta agonist (LABA).[4]

[1] HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).
[2] https://goldcopd.org/2025-gold-report/
[3] Data for this analysis was obtained from the OptumLabs® Data Warehouse. The OptumLabs® Data Warehouse contains de-identified administrative claims and other data elements, representing a diverse mixture of ages, ethnicities and geographical regions across the United States. The claims data in OLDW includes medical and pharmacy claims, laboratory results and enrollment records for commercial and Medicare Advantage enrollees. Study data were accessed using techniques compliant with the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and, because this study involved analysis of pre-existing, de-identified data, it was exempt from Institutional Review Board approval.
[4] LAMA and LABA medications can be dispensed either separately or as a combined LAMA/LABA formulation.

Measure Performance

Testing showed that the updated measure would be feasible for plans to report, with an average of 45.1% of commercial plans and 73.1% of Medicare plans producing reportable rates with at least 30 denominator events. Reporting feasibility is similar to that of the current PCE measure.

The updated PCE measure also showed variation in performance across plans and room for improvement. On average, 19.3% (10^{th} percentile: 10.6%; 90^{th} percentile: 26.4%) of commercial plans and 23.7% (10^{th} percentile: 17.4%; 90^{th} percentile: 30.4%) of Medicare plans dispensed the appropriate pharmacotherapies for members who experienced a COPD exacerbation during the measurement period.

Advisory panel members, including experts with respiratory and technical expertise, strongly supported the proposed updates to PCE for MY 2027 to bring the measure into alignment with clinical guidelines.

NCQA seeks feedback on the following questions:

1. Do you support the proposed updates to the PCE measure for MY 2027?
2. Do you support the use of any claim position to identify COPD exacerbation events among members in the denominator?

Supporting documents include the current measure specification, evidence workup and performance data.

NCQA acknowledges the contributions of the Respiratory, Geriatric and Technical Measurement Advisory Panels.

Pharmacotherapy Management of COPD Exacerbation (PCE)

Measure title	Pharmacotherapy Management of COPD Exacerbation	**Measure ID**	PCE
Description	The percentage of ~~COPD exacerbations for~~ persons 40 years of age and older who had a chronic obstructive pulmonary disease (COPD) exacerbation or used acute care for COPD during ~~inpatient discharge or ED visit on or between January 1–November 30 of~~ the measurement period and were dispensed appropriate COPD medications ~~during the measurement period~~. ~~Two rates are reported:~~ ~~Dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event.~~ ~~Dispensed a bronchodilator (or there was evidence of an active prescription) within 30 days of the event.~~		
Measurement period	January 1–December 31.		
Copyright and disclaimer notice	Refer to the complete copyright and disclaimer information at the front of this publication. NCQA website: www.ncqa.org. Submit policy clarification support questions via My NCQA (https://my.ncqa.org).		
Clinical recommendation statement/ rationale	~~Patients with chronic obstructive pulmonary disorder (COPD) who experience exacerbations are at higher risk for repeat exacerbations, more rapid decline in lung function, and reduced exercise capacity, and these effects are more pronounced for patients with severe COPD. Proper and timely therapy following an exacerbation, including pharmacotherapy, can slow disease progression and reduce the risk of future exacerbations. Guidelines recommend the use of bronchodilators and systemic steroids as treatment for COPD exacerbations.~~COPD is a lung disease characterized by the chronic presence of respiratory symptoms due to abnormalities and/or emphysema causing persistent, often progressive airway obstruction and acute exacerbations, or “flare ups” (ALA, n.d.). COPD is primarily caused by harmful exposure to gases, including cigarette smoke which is the most common cause of the condition globally (Agarwal, Raja, and Brown, 2023). Clinical guidelines offer standards for COPD treatment options to manage COPD and its impact on one’s quality of life. Proper treatment of COPD via appropriate pharmacotherapy can help individuals manage COPD exacerbations and long-term maintenance care (GOLD, 2025).		
Citations	~~Donaldson, G.C., T.A.R. Seemungal, A. Bhowmik, and J.A. Wedzicha. 2002. “Relationship Between Exacerbation Frequency and Lung Function Decline in Chronic Obstructive Pulmonary Disease.” *Thorax* 57:847–52.~~		

	~~Spencer, S., P.M.A. Calverley, P.S. Burge, and P.W. Jones. 2004. "Impact of Preventing Exacerbations on Deterioration of Health Status in COPD." *European Respiratory Journal* 23:698–702.~~ ~~Global Initiative for Chronic Obstructive Lung Disease (GOLD). 2020. "Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease." https://goldcopd.org/wp-content/uploads/2019/11/GOLD-2020-REPORT-ver1.0wms.pdf~~Agarwal, A.K.; Raja, A.; Brown, B.D (2023). Chronic obstructive pulmonary disease. *StatPearls [Internet]*, StatPearls Publishing, 7 August 2023. PMID: 32644707. American Lung Association. (n.d.). *COPD trends brief*. https://www.lung.org/research/trends-in-lung-disease/copd-trends-brief/copd-burden Global Initiative for Chronic Obstructive Lung Disease (2025). *Global strategy for the prevention, diagnosis and management of COPD: 2025 report*. Global Initiative for Chronic Obstructive Lung Disease, Inc. https://goldcopd.org/2025-gold-report/
Characteristics	
Scoring	Proportion.
Type	Process.
Product lines	• Commercial. • Medicaid. • Medicare.
Stratifications	None.
Risk adjustment	None.
Improvement notation	Increased score indicates improvement.
Guidance	**Data collection methodology:** Administrative. Refer to *General Guideline: Data Collection Methods* for additional information. **Date specificity:** Dates must be specific enough to determine the event occurred in the period being measured. **Which services count?** When using claims, use all paid, suspended, pending and denied claims. ~~**Other guidance:** The measure is based on episodes; therefore, it is possible for the denominator to include multiple events for the same person.~~
Definitions	
~~**Active prescription**~~	~~A prescription is considered active if the "days supply" indicated on the date when the person was dispensed the prescription is the number of days or more between that date and the relevant date.~~ ~~*For an acute inpatient stay,* the relevant date is the date of admission.~~

Direct transfer	~~*For an ED visit,* the relevant date is the date of service.~~ When the discharge date from the first inpatient setting precedes the admission date to a second inpatient setting by 1 calendar day or less. • *For example:* – An inpatient or observation stay discharge on June 1, followed by an admission to another inpatient setting on June 1, *is a direct transfer.* – An inpatient or observation stay discharge on June 1, followed by an admission to an inpatient setting on June 2, *is a direct transfer.* – An inpatient or observation stay discharge on June 1, followed by an admission to another inpatient setting on June 3, *is not a direct transfer;* these are two distinct inpatient stays.
COPD e~~E~~pisode date	The date of service for any acute inpatient or observation stay discharge, ~~or~~ ED/urgent care visit or other outpatient visit during the intake period with a ~~principal~~ diagnosis of COPD. *For an acute inpatient or observation stay discharge,* the episode date is the date of discharge. *For direct transfers (to acute or nonacute settings),* the episode date is the discharge date from the transfer admission. *For an ED, urgent care or outpatient visit,* the episode date is the date of service.
Intake period	January 1 of the measurement period to November 30 of the measurement period. The intake period captures eligible episodes of treatment.
Initial population	*Measure item count:* ~~Episode~~Person. *Attribution basis:* Enrollment. • *Benefits:* Medical and pharmacy. • *Continuous enrollment:* ~~Episode date through 30 days after the episode date~~The measurement period. • *Allowable gap:* No~~ne~~ more than one gap of ≤45 days during the measurement period. No gaps on the last day of the measurement period. *Ages:* 40 years of age or older as of the first day of the measurement period. *Event:* **COPD exacerbation.** **Step 1.** Identify all persons who had a COPD episode during the intake period. E~~e~~ither of the following ~~during the intake period~~meet criteria: • An acute inpatient or observation stay discharge~~acute inpatient discharge~~ with a diagnosis of COPD (Chronic Obstructive Pulmonary Diseases Value Set) on the discharge claim. To identify acute inpatient and observation stay discharges: 1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) and observation stays (Observation Stay Value Set). 2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).

3. Identify the discharge date for the stay.

- At least two ED, urgent care or ~~or more~~ outpatient visits ~~(any combination of the following)~~ with different dates of service during the intake period:
  - An ED visit (ED Value Set) with a ~~principal~~ diagnosis of COPD~~, emphysema or chronic bronchitis~~ (Chronic Obstructive Pulmonary Diseases Value Set).
  - An urgent care visit (Outpatient and Telehealth Value Set with POS code 20) with a diagnosis of COPD (Chronic Obstructive Pulmonary Diseases Value Set).
  - Any outpatient visit (Outpatient and Telehealth Value Set) with a diagnosis of a COPD exacerbation (Chronic Obstructive Pulmonary Diseases Exacerbation Value Set).

  Multiple visits on the same date are counted as one episode.

Step 2. Exclude ED, urgent care or other outpatient visits that result in an acute inpatient or observation stay.

To identify admissions to an acute inpatient or observation stay care setting:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set) and observation stays (Observation Stay Value Set).
2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
3. Identify the admission date for the stay.

- ~~An acute inpatient discharge with a principal diagnosis of COPD, emphysema or chronic bronchitis (Chronic Obstructive Pulmonary Diseases Value Set) on the discharge claim. To identify acute inpatient discharges:~~
  1. ~~Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).~~
  2. ~~Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).~~
  3. ~~Identify the discharge date for the stay.~~

~~**Step 2.** Identify all COPD episodes. For each person identified in step 1, identify all acute inpatient discharges and ED visits. An acute inpatient discharge and ED visit on the same date are counted as one COPD episode. Multiple ED visits on the same date are counted as one COPD episode. Do not include ED visits that result in an inpatient stay (Inpatient Stay Value Set).~~

Step ~~3~~2~~3~~. Test for direct transfers. For episodes with a direct transfer to an acute or nonacute setting for any diagnosis the episode date is the discharge date from the last admission.

To identify admissions to and discharges from inpatient settings:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Identify the admission and discharge dates for the stay.

***Note:** The direct transfer does not require a COPD diagnosis.*

Step ~~4~~3~~4~~. Exclude both the initial discharge and the direct transfer discharge if the last discharge occurs after November 30 of the measurement

	period~~Calculate continuous enrollment. All episodes that were not excluded remain in the initial population~~.
Denominator exclusions	**Persons with a date of death.** Death in the measurement period, identified using data sources determined by the organization. Method and data sources are subject to review during the HEDIS audit. **Persons in hospice or using hospice services.** Persons who use hospice services (Hospice Encounter Value Set; Hospice Intervention Value Set) or elect to use a hospice benefit any time during the measurement period. Organizations that use the Monthly Membership Detail Data File to identify these persons must use only the run date of the file. **Persons with asthma.** Persons with two or more diagnoses of asthma (Asthma Value Set) on the same or different dates of service during the measurement period or the year prior to the measurement period.
Denominator	The initial population minus denominator exclusions.
Numerator	**Appropriate COPD medications.** Persons who had ~~dispensing events for~~ all of the following ~~medications~~ on the same or different dates of service during the measurement period: • At least ~~1~~one short-acting muscarinic antagonist (SAMA) *or* short-acting beta agonist (SABA) (Short Acting COPD Medications List)., ~~*and*~~ • At least one of the following: – ~~At least 1~~One long-acting beta-agonist (LABA) (LABA Medications List) *and* – ~~At least 1~~one long-acting muscarinic antagonist (LAMA) (LAMA Medications List). – One LABA/LAMA combination~~e~~ medication (LABA and LAMA Combination Medications List). ***Note:*** *Dispensing events that occur prior to the COPD exacerbation event meet criteria.* ~~*Include all prescriptions that were dispensed during the measurement period, including thoseeven if prior to the COPD exacerbation event.*~~ ~~***Numerator 1: Systemic corticosteroid.***~~ ~~*Persons who were dispensed a prescription for systemic corticosteroid (Systematic Corticosteroid Medications List) on or 14 days after the episode date. Count systemic corticosteroids that are active on the relevant date.*~~ ~~**Numerator 2: Bronchodilator.**~~ ~~Persons who were dispensed a prescription for a bronchodilator (Bronchodilator Medications List) on or 30 days after the episode date. Count bronchodilators that are active on the relevant date.~~
Summary of changes	• Updated the measure description. • Updated clinical recommendation language to be consistent with updated clinical practice guidelines.

<table>
<tr><td></td><td>

Removed the definition of active prescription and replaced the definition of episode date with COPD episode date.
Changed the measure item count from episode to person.
Expanded the continuous enrollment period to the measurement period.
Expanded the allowable gap period to allow one gap up to 45 days.
Revised the initial population event criteria.
Added an asthma exclusion to the Denominator exclusions section.
Revised the numerator criteria; removed numerator 2.
Revised the data elements tables.

</td></tr>
<tr><td>Data element tables</td><td>
Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table PCE-1/2/3: Data Elements for Pharmacotherapy Management of COPD Exacerbation
<table>
<tr><th>Metric</th><th>Data Element</th><th>Reporting Instructions</th></tr>
<tr><td>AppropriateCOPDMedications~~SystemicCorticosteroid~~</td><td>Benefit</td><td>Metadata</td></tr>
<tr><td rowspan="6">~~Bronchodilator~~</td><td>InitialPopulation</td><td>~~Repeat per Metric~~Report once</td></tr>
<tr><td>Exclusions</td><td>Report once~~Repeat per Metric~~</td></tr>
<tr><td>Denominator</td><td>Report once~~Repeat per Metric~~</td></tr>
<tr><td>NumeratorByAdmin</td><td>Report once~~For each Metric~~</td></tr>
<tr><td>NumeratorBySupplemental</td><td>Report once~~For each Metric~~</td></tr>
<tr><td>Rate</td><td>(Percent)</td></tr>
</table>
</td></tr>
</table>

Pharmacotherapy Management of COPD Exacerbation (PCE)
Measure Workup

Topic Overview

Health Importance & Quality Measurement Considerations

Chronic obstructive pulmonary disease (COPD) is a lung disease characterized by the chronic presence of respiratory symptoms due to abnormalities and/or emphysema, causing persistent, often progressive airway obstruction (GOLD, 2025). COPD is primarily caused by harmful exposure to gases, including cigarette smoke, which is the most common cause of the condition globally (Agarwal et al., 2023). Exposure to these harmful gases commonly occurs in lived environments where someone may be smoking and/or inhaling secondhand smoke, and in occupational environments where chemical fumes and dust inhalation is present.

There are two types of COPD: emphysema and chronic bronchitis. Emphysema is defined as a chronic lung disease with restricted breathing, frequently associated with the inhalation of harmful gases (GOLD, 2025). Chronic bronchitis, or CB, is the persistent presence of a cough with mucus or phlegm over three months consistently per year (GOLD, 2025). These two types can often occur together in COPD patients, and the severity of the symptoms can vary (American Lung Association, n.d.). Currently, there is no cure for COPD; however, there are treatment options to manage the disease and its impact on one's quality of life. Failure to treat COPD properly can lead to poor respiratory health outcomes that contribute to severe conditions such as lung cancer and heart disease (American Lung Association, n.d.). Clinical guidelines outline appropriate pharmacotherapy and non-pharmacotherapy strategies to manage COPD exacerbations and long-term maintenance care.

Prevalence & disparities

COPD typically presents in smokers and individuals ages 40 years and older, and the likelihood of being diagnosed with COPD increases with age (Agarwal et al., 2023). Despite COPD prevalence rates declining among adults ages 18-44, the rates have remained elevated in women, smokers, individuals ages 65+, non-working adults, individuals with lower education rates and individuals living in rural areas (Liu et al., 2023). According to the CDC, approximately 16 million adults have been diagnosed with COPD; however, it is estimated that millions more are living with the disease without a diagnosis (Agarwal et al., 2023; CDC, 2024).

People of all ethnic backgrounds are at risk of COPD; however, Black and Hispanic individuals are less likely to receive a COPD diagnosis despite the presence of symptoms (Forno et al., 2023). Both groups have lower prevalence rates of COPD compared to non-Hispanic White individuals but experience worsened outcomes, including higher mortality rates (Forno et al., 2023). Disparities in prevalence have been associated with socioeconomic status, environmental exposures, health care access, health care quality, systemic inequities and the use of race-based reference values when diagnosing using spirometry (Forno et al., 2023; Wang et al., 2024). Historically, lung function prediction equations did not consider the influence of social determinants of health on lung functionality and were based on racially-biased data (Davidson et al., 2024). For instance, National Health and Nutrition Survey (NHANES) III data falsely indicated that forced expiratory volume (FEV) and forced vital capacity (FVC) in African American individuals was 12-15% lower than non-Hispanic White individuals. This resulted in symptomatic African American individuals being underdiagnosed due to seemingly normal lung function resulting from pseudoscientific notions about inherent biological differences (Davidson et al., 2024). Despite efforts by governing COPD organizations to standardize practices, many health care providers still maintain implicit or explicit biases towards patients, which can impact how care is delivered.

Individual/population health relevance

COPD exacerbations can have significant impacts on quality of life, thus requiring risk factors and triggers to be managed appropriately. Exacerbations can lead to worsened respiratory symptoms, including increased breathlessness, coughing and sputum production (Machado et al., 2023). Frequent exacerbations can lead to more frequent hospitalizations, increased medication use and a feeling of a lack of control over one's health. Over time, COPD exacerbations are linked to an accelerated decline in lung functionality and an increased risk of mortality (Machado et al., 2023).

COPD exacerbations directly impact the long-term health and functionality of one's lungs. Tissue damage, inflammation and oxidative stress (a process that damages DNA and cellular structures) resulting from exacerbations accelerate the decline of lung function (Easter et al., 2020). As individuals age with COPD, they also experience inflammaging, which is the chronic low-grade inflammation associated with aging that contributes to diminished functionality (Easter et al., 2020). While the underlying damage done to lungs is irreversible, improvement to lung function is possible with appropriate treatment and lifestyle changes.

Financial importance & cost-effectiveness

COPD has been associated with both direct and indirect economic burdens to the U.S. health care system and society. The estimated financial burden annually is estimated to be around $3.6 billion (Yawn et al., 2021). In 2019, it was determined that direct costs for COPD in the United States were approximately $31.3 billion and are projected to grow to $60.5 billion by 2029 (Mannino et al., 2024). Prescription and hospital-related care are significant cost drivers in COPD care. The average annual costs for COPD care are approximately $4,300 per patient (Agarwal et al., 2023). Annually, COPD medical costs equate to a total of approximately $24 billion for patients ages 45 years old and older, with prescription drugs making up $11.9 billion and inpatient costs accounting for $6.3 billion (Agarwal et al., 2023).

Insurance coverage via government (Medicaid, Medicare) and private (commercial) insurance can impact a patient's ability to seek and continue care. Cost of care heavily correlates to misuse and underuse of COPD medication, often requiring a combination of personal strategies and physician-patient conversation to address (O'Toole et al., 2022). In order to reduce personal financial burdens associated with treatment, patients and physicians may use several strategies to mitigate impact. Strategies to streamline prescriptions and manage personal costs include pharmacy coupons, medication samples and close collaboration with their physicians to change or adjust prescriptions to meet insurance requirements (O'Toole et al., 2022).

Quality measure landscape

There are 15 health care quality measures relevant to COPD diagnosis, treatment and outcomes, 6 of which are specified for health plans.[*] Three out of 15 measures focus on diagnostic activities for COPD and 6 focus on health outcomes for patients with COPD. The remaining 6 (including the HEDIS®[†] *Pharmacotherapy Management of COPD Exacerbation* [PCE] measure) focus on pharmacological treatments for COPD. A full list of the COPD-related measures identified are listed in the appendix.

While a number of these measures may drive accountability for positive health outcomes, COPD prevention and the non-pharmaceutical aspects of COPD care, there is a gap in measures focused on COPD diagnostics and pharmaceutical treatment. The American Thoracic Society's (ATS) *COPD:*

[*] See Appendix A
[†] HEDIS is a registered trademark of the National Committee for Quality Assurance.

Spirometry Evaluation measure is endorsed by the Consensus-Based Entity (CBE) and aligns with current clinical guidelines for COPD diagnostics but is not included in major national quality accountability programs such as MIPS, CMS Stars or HEDIS. NCQA's *Use of Spirometry Testing in the Assessment and Diagnosis of COPD* (SPR) measure once filled this gap, but it was retired in 2019 because it was underutilized by health plans.

Of the six measures focused on pharmaceutical treatment for COPD, only one (the ATS' CBE-endorsed *COPD: Inhaled Bronchodilator Therapy* measure) is fully aligned with current clinical guidelines. NCQA is working to respecify the PCE measure to correct misalignments with clinical guidelines for pharmacological COPD treatment strategies. As currently specified, the measure's clinical considerations are out of date, despite being used in multiple national quality accountability programs. The four remaining measures also only partially align with guidelines for COPD care.

Public health concerns surrounding respiratory health suggest the need for a better accountability structure for respiratory conditions such as COPD. The field of quality measurement can support this need by filling gaps in the current landscape of quality measures for COPD. To do so, measures should be created or refined to incentivize evidence-based clinical activities for COPD diagnosis and pharmacological care.

Priorities for High-Quality Care

The content below summarizes the key components of existing COPD guidelines, from prevention to follow-up care, while the final section highlights systemic issues such as underdiagnosis, misdiagnosis and health care access disparities that hinder optimal COPD management.

Prevention

COPD prevention centers on identifying and mitigating risk factors and promoting protective health behaviors. The most critical intervention is smoking abstinence or cessation, which significantly reduces the risk of developing COPD and slows disease progression. Individuals who use cigarettes experience a greater incidence and prevalence of COPD compared to non-smokers, and recent studies suggest that e-cigarette use drives similar outcomes (GOLD, 2025). Smoking cessation has been shown to reduce the rate of lung function decline in individuals with COPD and is associated with improved COPD symptoms, fewer exacerbations and reduced mortality (Department of Veterans Affairs & Department of Defense, 2021; Stevermer et al., 2021). Among individuals with COPD, sustained smoking cessation can lead to a 39% reduction in all-cause mortality over five years (Nici et al., 2020).

While clinical guidelines for COPD recommend tailoring smoking cessation treatment to individual needs and tobacco dependence, combined behavioral therapy and pharmacotherapy appear to be most effective (Stevermer et al., 2021). Behavioral techniques may include intensive practical counseling, patient education and social support, while pharmacotherapies may include varenicline, bupropion, nortriptyline and nicotine replacement therapies (USPSTF, 2022; Liu et al., 2023; Machado et al., 2023).

Other (non-smoking) exposures to environmental and occupational pollutants play a substantial role in COPD risk. Recent estimates suggest that 50% of the total attributable risk of COPD can be linked to ambient air pollution from biomass fuels, household particulates (including secondhand smoke) and occupational dust and fumes (Forno et al., 2023). While many of these factors are not managed in typical care settings, awareness of risk factors can help individuals make informed

choices and recognize symptoms such as chronic cough, dyspnea and wheeze for timely intervention (USPSTF, 2022).

Preventing and managing respiratory diseases during childhood may also help to prevent COPD. Asthma and serious respiratory infections such as pneumonia and bronchitis can contribute to airway remodeling in children. Reducing the severity of these conditions through timely and appropriate pediatric care can prevent COPD by limiting the airway remodeling that can lead to irreversible airway obstruction (Wang et al., 2024; CDC, 2024).

Diagnosis & initial assessment

COPD diagnoses begin with a clinician identifying persistent symptomology (most notably, chronic cough, dyspnea and wheezing) in the context of COPD risk factors. After identifying potential cases, COPD is diagnosed using a spirometer: a device that quantifies the degree of airway obstruction by measuring the volume and speed of exhaled air (Easter et al., 2020). While physical examinations, validated symptom questionnaires and simpler measures of expiratory airflow (i.e., peak expiratory flow) can support COPD diagnoses, spirometry is the only clinically recommended approach for diagnosing COPD (USPSTF, 2022; Machado et al., 2023). Spirometry testing is not recommended for asymptomatic individuals; however, targeted screening is advised for individuals with chronic cough, sputum production, dyspnea, wheezing or significant exposure to risk factors such as smoking or occupational hazards (Liu et al., 2023).

The standard diagnostic criterion using spirometry is a post-bronchodilator FEV_1/FVC ratio of less than 0.7, indicating non-fully reversible airflow obstruction (USPSTF, 2022; Liu et al., 2023; Machado et al., 2023). This criterion distinguishes COPD from asthma, which is indicated by excessive variability in expiratory lung function (Yawn et al., 2021). While COPD and asthma present similar symptoms, clinical guidelines emphasize the need to follow distinct treatment pathways for each condition. If a patient is diagnosed with both asthma and COPD, guidelines direct clinicians to primarily refer to asthma guidelines for pharmacotherapy (USPSTF, 2022).

The Global Initiative for Chronic Obstructive Lung Disease (GOLD) recommends a combined initial assessment strategy to classify diagnosed cases of COPD by the severity of airflow obstruction, level of symptoms and frequency of previous exacerbations. This initial assessment informs both pharmacologic and non-pharmacologic management strategies and helps identify patients at risk for rapid disease progression (USPSTF, 2022; Machado et al., 2023). Severity of airway obstruction is assessed using spirometry and defined by four ranges of actual FEV_1 values as a percentage of expected FEV_1 values (USPSTF, 2022):

- GOLD 1 (mild, $FEV_1 \geq 80\%$ of expected)
- GOLD 2 (moderate, $50\% \leq FEV_1 < 80\%$ of expected)
- GOLD 3 (severe, $30\% \leq FEV_1 < 50\%$ of expected)
- GOLD 4 (very severe, $FEV_1 < 30\%$ of expected)

GOLD recommends defining levels of symptoms and exacerbation frequencies using a combined assessment tool that sorts individuals into Group A, B, or E. This tool, termed “ABE” relies primarily on patient exacerbation histories and secondarily on patient-reported symptoms using the COPD Assessment Test (CAT) and modified Medical Research Council (mMRC) dyspnea scale (GOLD, 2025). The CAT uses a 0 to 5 scale to assess the degree to which COPD impacts an individual’s cough, sputum production, dyspnea, activity limitation and sleep. The mMRC scales dyspnea symptoms from 0 to 4. Patients in mMRC Grade 0 only report breathlessness with strenuous exercise, while patients in mMRC Grade 4 report breathlessness that inhibits outdoor activities, dressing or undressing.

These results are combined to assign COPD patients to group A, B or E, as follows:

- Group A:
  - Exacerbations per year: 0-1 (none leading to hospitalization)
  - CAT score: 0-9
  - mMRC score: 0-1
- Group B:
  - Exacerbations per year: 0-1 (none leading to hospitalization)
  - CAT score: 10+
  - mMRC score: 2+
- Group E:
  - Exacerbations per year: 2+ (none leading to hospitalization) OR 1+ exacerbations leading to hospitalization
  - CAT score: NA
  - mMRC score: NA

Initial treatment

After diagnosis and initial assessment, individuals diagnosed with COPD are treated by managing acute exacerbations, reducing risk factors and using appropriate pharmacological and non-pharmacological interventions. In some cases, addressing exacerbations may necessitate systemic antibiotics, short courses of systemic corticosteroids (SCSs), short-acting beta-agonists (SABAs) and supplemental oxygen (Liu et al., 2023; Machado et al., 2023; Mannino et al., 2024). Hospital admission should be considered in cases of severe exacerbation symptoms such as use of accessory muscles, tachypnea, hypoxemia, hypercapnia or failure to respond to outpatient therapy (Machado et al., 2023).

Once acute exacerbations are stabilized, the focus of COPD treatment shifts to reducing risk factors—most importantly, smoking cessation. This involves a combination of counseling (including both behavior modification strategies and social support) and pharmacotherapy, including varenicline, bupropion, nortriptyline and nicotine replacement therapy (GOLD, 2025). Clinicians should engage in disease-specific self-management education with all patients, including recognizing environmental pollutants and developing exacerbation action plans. In many cases resistance and aerobic training and pulmonary rehabilitation may be relevant as well. Patients should also receive appropriate vaccinations to prevent respiratory infections that may contribute to COPD exacerbations, including influenza, pneumococcal, COVID-19, respiratory syncytial virus (for those over 60), tetanus, diphtheria and acellular pertussis and zoster (for those over 50) (GOLD, 2025).

Initial pharmacologic therapy is guided by the results of the initial assessment and should account for comorbidities and patient preferences. Asthma comorbidities are particularly critical to consider, as pharmacologic therapy for combined COPD/asthma presentations should be based on clinical guidelines for asthma rather than COPD. Non-asthmatic COPD patients in Group A of the GOLD ABE tool should receive a long-acting muscarinic antagonist (LAMA) or long-acting beta-agonists (LABA); however, a LAMA is preferred as monotherapy. Non-asthmatic COPD patients in Group B or E present more significant symptoms or exacerbation risk and should receive a combination of LABA and LAMA therapeutics. In some cases, Group E patients with elevated blood eosinophil counts can receive inhaled corticosteroids (ICS) in addition to a LABA and LAMA; however, guidelines recommend withdrawing ICS in patients experiencing no response, significant side effects, or severe or recurrent pneumonia. All non-asthmatic COPD patients may also receive a short-acting beta agonist for acute symptom relief (VA/DOD, 2021; Ejike et al., 2021). Maintenance oral corticosteroids are not recommended as a routine therapeutic for any COPD patient due to lack of benefit and potential harm (Mannino et al., 2024). Oxygen

therapy is reserved for patients with documented hypoxemia, and treatment plans should be regularly reassessed to ensure optimal outcomes (GOLD, 2025; Machado et al., 2023; Mannino et al., 2024).

Follow-Up treatment

Follow-up care for COPD is essential for optimizing long-term outcomes and minimizing exacerbations. Follow-ups should be tailored to disease severity, with more frequent evaluations for patients in GOLD 3 (severe COPD) or GOLD 4 (very severe COPD) and less frequent evaluations for patients in GOLD 1 (mild COPD) or GOLD 2 (moderate COPD) (USPSTF, n.d.). After any exacerbation, a timely follow-up visit is recommended to reassess symptoms, evaluate treatment response and adjust the care plan as needed (Machado et al., 2023). As with initial treatment, individuals with asthma and COPD should receive follow-up pharmacologic treatment based on clinical guidelines for asthma rather than COPD.

A comprehensive follow-up includes reassessing symptoms and exacerbation history using the GOLD ABE tool, evaluating inhaler technique and adherence and adjusting pharmacologic therapy accordingly (USPSTF, n.d.). If symptoms or exacerbations do not improve with a long-acting bronchodilator (LABA or LAMA) monotherapy, escalation to dual therapy (LABA + LAMA) is advised. For patients with persistent symptoms or exacerbations despite dual therapy, treatment should be guided by blood eosinophil counts. If eosinophils are ≥100 cells/µL, escalation to triple therapy (LABA + LAMA + ICS) is appropriate. If eosinophils are <100 cells/µL, clinicians may consider adding azithromycin (especially in non-smokers) or roflumilast (in patients with FEV_1 <50%, chronic bronchitis and prior severe exacerbations) to the existing dual therapy. In cases where triple therapy (LABA + LAMA + ICS) fail to improve symptoms or exacerbations, clinicians may consider adding dupilumab, azithromycin or roflumilast based on patient profiles (GOLD, 2025). In cases where patients experience improvements in symptoms or fewer exacerbations under ICS therapy, clinicians should consider if and when ICS therapy can be discontinued to prevent adverse effects.

In addition to refining pharmacologic therapies, follow-up care should continue to encourage smoking cessation, provide patient education and promote physical activity. Spirometry and vaccinations should be repeated annually. Additional assessments may include evaluating the need for pulmonary rehabilitation, long-term oxygen therapy (for severe resting hypoxemia), or non-invasive ventilation (for chronic hypercapnia with a history of acute respiratory failure). Palliative care, lung volume reduction and advanced imaging may be appropriate for patients with persistent symptoms or advanced disease (GOLD, 2025).

Gaps in care

Several systemic and clinical challenges hinder the effective diagnosis and management of COPD. One of the most pressing issues is underdiagnosis and misdiagnosis, which often result from limited access to spirometry, the gold standard for diagnosing COPD. Early spirometry has been shown to decrease mortality risk by 34% for COPD patients and is associated with lower SABA use over the course of their care (Gaffney et al., 2022). Without spirometry testing, symptoms such as chronic cough, dyspnea or activity limitations can be misattributed to physical fitness challenges, upper respiratory infections, comorbid cardiovascular diseases or lung cancer. Because spirometry provides the only clear avenue for COPD identification and treatment, gaps in access can postpone appropriate treatment and worsen patient outcomes (USPSTF, 2022; Machado et al., 2023).

The presence of disparities, particularly among underserved populations, further exacerbates these diagnostic challenges. These disparities may stem from socioeconomic barriers, geographic limitations or health care system inefficiencies

(Department of Veterans Affairs & Department of Defense, 2021). Additionally, disparities in exposure to risk factors such as air pollution, occupational hazards and tobacco use contribute to unequal disease burden and outcomes (Department of Veterans Affairs & Department of Defense, 2021).

The consequences of these diagnostic issues are significant. Patients may receive no treatment due to a missed diagnosis or incorrect treatment due to misdiagnosis, both of which can lead to disease progression, increased exacerbations and reduced quality of life (GOLD, 2025). Addressing these issues requires system-level improvements in access to diagnostic tools, clinician education and equitable health care delivery.

Health care disparities

While the prevalence of COPD is higher among non-Hispanic White individuals, people of color can often face additional barriers to accessing quality COPD therapies. Systemic barriers and historical mistrust in medical systems often lead to reduced engagement with health care providers, especially among Black and Hispanic patients (Ejike et al., 2021). These challenges are often compounded in rural communities where minority populations, low-income and under/uninsured individuals face the most significant obstacles for diagnoses and care (Gaffney et al., 2022).

Rural communities often face higher rates of COPD, hospitalizations and mortality due to common but complex influences. There are often higher levels of exposure to cigarette smoke, lung irritants from farming, mining or manufacturing occupations and fewer opportunities to access preventive or specialized care (Moore et al., 2019). These exposures can further exacerbate disparities in COPD outcomes in Black and Hispanic patients (Ejike et al., 2021). Rural care providers may have limited skill sets or resources, hindering their ability to deliver high-quality COPD care or education, such as tobacco cessation programs, to mitigate ongoing risk factors (Moore et al., 2019). Rural health care providers are encouraged to engage with their patients to understand occupational risk factor exposure in order to recommend appropriate screening and treatment pathways (Gandhi et al., 2023).

Additionally, occupational environments are a contributor to the health disparities in diagnosing, treating and maintaining respiratory health. Black and Hispanic individuals often make up larger proportions of low wage, high risk and increased manual labor roles in the workforce. These roles often increase exposure to high risk factors that contribute to asthma and COPD development (Gandhi et al., 2023). Individuals in these occupations may not be offered comprehensive health insurance which limits access to high-quality primary care. In addition, symptom flare-ups and exacerbations can lead to missed work and lower work productivity, which, if not salaried, can impact their financial wellbeing (Gandhi et al., 2023).

Digital Considerations

As part of NCQA's strategic transition to a fully digital quality measurement portfolio, we conduct a feasibility assessment to inform eventual digital measure implementation. The assessment evaluates the measure's intent and associated clinical concepts within a digital framework.

The updates being considered for this measure reevaluation do not impact digital feasibility. Therefore, an assessment is not included.

References

Agarwal, A. K., et al. (2023). *Chronic obstructive pulmonary disease.* StatPearls Publishing.

American Lung Association. (n.d.). *COPD trends brief: Burden.* https://www.lung.org/research/trends-in-lung-disease/copd-trends-brief/copd-burden

Centers for Disease Control and Prevention. (2024, June 3). *Chronic obstructive pulmonary disease (COPD).* U.S. Department of Health & Human Services. https://www.cdc.gov/cdi/indicator-definitions/chronic-obstructive-pulmonary-disease.html

Davidson, S. R., et al. (2024). Race adjustment of pulmonary function tests in the diagnosis and management of COPD: A scoping review. *International Journal of Chronic Obstructive Pulmonary Disease, 19*, 969–980. https://doi.org/10.2147/COPD.S430249

Department of Veterans Affairs & Department of Defense. (2021). *VA/DoD clinical practice guideline for the management of chronic obstructive pulmonary disease.* https://www.healthquality.va.gov/guidelines/CD/copd/VADODCOPDCPGFinal508.pdf

Easter, M., Bollenbecker, S., Barnes, J. W., & Krick, S. (2020). Targeting aging pathways in chronic obstructive pulmonary disease. *International Journal of Molecular Sciences, 21*(18), 6924. https://doi.org/10.3390/ijms21186924

Ejike, C. O., et al. (2021). Contribution of individual and neighborhood factors to racial disparities in respiratory outcomes. *American Journal of Respiratory and Critical Care Medicine, 203*(8), 987–997. https://doi.org/10.1164/rccm.202002-0253OC

Forno, E., et al. (2023). Asthma and chronic obstructive pulmonary disease. *Clinics in Chest Medicine, 44*(3), 519–530. https://doi.org/10.1016/j.ccm.2023.03.008

Gaffney, A. W., et al. (2022). Health care disparities across the urban-rural divide: A national study of individuals with COPD. *The Journal of Rural Health, 38*, 207–216. https://doi.org/10.1111/jrh.12525

Gandhi, S. A., Heinzerling, A., Flattery, J., & Cummings, K. J. (2023). Occupational contributions to respiratory health disparities. *Clinics in Chest Medicine, 44*(3), 635–649. https://doi.org/10.1016/j.ccm.2023.03.016

Global Initiative for Chronic Obstructive Lung Disease. (2025). *Global strategy for the prevention, diagnosis and management of COPD: 2025 report.* https://goldcopd.org/2025-gold-report/

Liu, Y., Carlson, S. A., Watson, K. B., Xu, F., & Greenlund, K. J. (2023). Trends in the prevalence of chronic obstructive pulmonary disease among adults aged ≥18 years—United States, 2011–2021. *MMWR Morbidity and Mortality Weekly Report, 72*, 1250–1256. https://doi.org/10.15585/mmwr.mm7246a1

Machado, A., et al. (2023). Impact of acute exacerbations of COPD on patients' health status beyond pulmonary function: A scoping review. *Pulmonology, 29*(6), 518–534. https://doi.org/10.1016/j.pulmoe.2022.04.004

Mannino, D. M., et al. (2024). National and local direct medical cost burden of COPD in the United States from 2016 to 2019 and projections through 2029. *Chest, 165*(5), 1093–1106. https://doi.org/10.1016/j.chest.2023.11.040

Moore, P., et al. (2019). COPD and rural health: A dialogue on the National Action Plan. *The Journal of Rural Health, 35*(4), 424–428. https://doi.org/10.1111/jrh.12346

Nici, L., et al. (2020). Pharmacologic management of chronic obstructive pulmonary disease: An official American Thoracic Society clinical practice guideline. *American Journal of Respiratory and Critical Care Medicine, 201*(9), e56–e69. https://doi.org/10.1164/rccm.202003-0625ST

O'Toole, J., et al. (2022). Understanding barriers to and strategies for medication adherence in COPD: A qualitative study. *BMC Pulmonary Medicine, 22*, 98. https://doi.org/10.1186/s12890-022-01892-5

Stevermer, J. J., et al. (2021). Pharmacologic management of COPD exacerbations: A clinical practice guideline from the AAFP. *American Family Physician, 104*(1), Online.

U.S. Preventive Services Task Force. (2022). *Screening for chronic obstructive pulmonary disease.* https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/chronic-obstructive-pulmonary-disease-screening#fullrecommendationstart

Wang, J. Z., et al. (2024). Race-based pulmonary function testing correction in COPD inhaler therapy trials: A systematic review. *International Journal of Chronic Obstructive Pulmonary Disease, 19*, 2285–2297. https://doi.org/10.2147/COPD.S475875

Yawn, B. P., Mintz, M. L., & Doherty, D. E. (2021). GOLD in practice: COPD treatment and management in the primary care setting. *International Journal of Chronic Obstructive Pulmonary Disease, 16*, 289–299. https://doi.org/10.2147/COPD.S222664

Appendix A: Nationally Used Health Care Quality Measures Relevant to COPD Prevention, Care and Outcomes

Measure Focus	Measure Name	Steward	CBE Endorsed?	Level of Analysis
Diagnosis	COPD: Spirometry Evaluation	American Thoracic Society	Yes	Clinician: Group/Practice
	COPD: Assessment of Oxygen Saturation	Physician Consortium for Performance Improvement	Endorsement removed	Clinicians: Individual
	Use of Spirometry Testing in the Assessment and Diagnosis of COPD	National Committee for Quality Assurance	Yes	Health Plan (retired)
Pharmacological treatment	COPD: Inhaled Bronchodilator Therapy	American Thoracic Society	Yes	Clinician: Group/Practice
	COPD w/Exacerbations: Use of LABA Therapy	ActiveHealth Management	No	Any/all
	Management of Poorly Controlled COPD	ActiveHealth Management	Endorsement removed	Health Plan; Population
	COPD Treatment Ratio	Pharmacy Quality Alliance	No	Clinician: Group/Practice and Individual
	Adherence to LABAs in COPD Patients	Pharmacy Quality Alliance	No	Clinician: Group/Practice and Individual
	Pharmacotherapy Management of COPD Exacerbation	National Committee for Quality Assurance	Yes	Health Plan
Outcomes	30-Day All-Cause Risk-Standardized Readmission Rate Following COPD Hospitalization	Centers for Medicare & Medicaid Services	Yes	Facility
	30-Day All-Cause Risk-Standardized Mortality Rate Following COPD Hospitalization	Centers for Medicare & Medicaid Services	Yes	Facility
	Improvement in Dyspnea	Centers for Medicare & Medicaid Services	No	Facility
	COPD/Asthma in Older Adults Admission Rate	Agency for Healthcare Research and Quality	Endorsement removed	Facility
	Health-Related Quality of Life in COPD Patients Before and After Pulmonary Rehabilitation	American Association of Cardiovascular and Pulmonary Rehabilitation	Endorsement removed	Clinician: Group/Practice
	Functional Capacity in COPD Patients Before and After Pulmonary Rehabilitation	American Association of Cardiovascular and Pulmonary Rehabilitation	Endorsement removed	Clinician: Group/Practice and Individual; Facility

HEDIS Health Plan Performance Rates: Pharmacotherapy Management of COPD Exacerbations (PCE)

BRONCHODILATOR INDICATOR

Table 1. HEDIS PCE Measure Performance—Medicaid Plans

Measurement Year	Total Number of Plans (N)	Number of Plans Reporting (N (%))	Performance Rates (%)						
			Mean	Standard Deviation	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
2024*	276	219 (79.4)	82.1	8.7	70.9	78.9	84.4	87.5	91.0
2023	278	214 (77.0)	81.3	9.5	67.2	78.8	83.6	87.9	90.0
2022	272	208 (76.5)	83.0	8.6	72.9	80.5	85.2	87.7	90.5

*For 2024, the average denominator across Medicaid plans was 641.0 episodes, with a standard deviation of 658.3.

Table 2. HEDIS PCE Measure Performance—Commercial Plans

Measurement Year	Total Number of Plans (N)	Number of Plans Reporting (N (%))	Performance Rates (%)						
			Mean	Standard Deviation	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
2024*	398	201 (50.5)	82.4	7.0	74.4	78.8	82.4	86.5	90.9
2023	420	204 (48.6)	82.4	9.1	75.0	78.6	82.8	87.1	91.3
2022	417	187 (44.8)	81.8	10.6	74.4	79.5	83.1	87.7	90.3

*For 2024, the average denominator across commercial plans was 124.4 episodes, with a standard deviation of 134.7.

Table 3. HEDIS PCE Measure Performance—Medicare Plans

Measurement Year	Total Number of Plans (N)	Number of Plans Reporting (N (%))	Performance Rates (%)						
			Mean	Standard Deviation	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
2024*	700	467 (66.7)	84.1	6.6	75.8	80.8	84.9	88.4	91.3
2023	760	469 (61.7)	83.2	7.9	75.7	80.0	84.2	87.9	90.8
2022	750	477 (63.6)	83.6	6.9	75.0	80.1	84.3	88.2	91.3

*For 2024, the average denominator across Medicare plans was 755.9 episodes, with a standard deviation of 2,190.6.

SYSTEMIC CORTICOSTEROID INDICATOR

Table 4. HEDIS PCE Measure Performance—Medicaid Plans

Measurement Year	Total Number of Plans (N)	Number of Plans Reporting (N (%))	Performance Rates (%)						
			Mean	Standard Deviation	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
2024*	276	219 (79.4)	69.7	10.4	55.5	63.2	70.9	76.7	81.8
2023	278	214 (77.0)	69.8	10.8	55.3	63.5	71.4	77.4	82.9
2022	272	208 (76.5)	70.8	10.1	56.0	65.6	72.5	77.7	82.4

*For 2024, the average denominator across Medicaid plans was 641.0 episodes, with a standard deviation of 658.3.

Table 5. HEDIS PCE Measure Performance—Commercial Plans

Measurement Year	Total Number of Plans (N)	Number of Plans Reporting (N (%))	Performance Rates (%)						
			Mean	Standard Deviation	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
2024*	398	201 (50.5)	76.3	8.0	66.7	71.9	76.7	80.6	86.8
2023	420	204 (48.6)	76.4	9.5	67.3	72.9	77.1	81.4	87.1
2022	417	187 (44.8)	75.5	11.4	65.8	71.9	77.2	82.6	84.7

*For 2024, the average denominator across plans was 124.4 episodes, with a standard deviation of 134.7.

Table 6. HEDIS PCE Measure Performance—Medicare Plans

Measurement Year	Total Number of Plans (N)	Number of Plans Reporting (N (%))	Performance Rates (%)						
			Mean	Standard Deviation	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
2024*	700	467 (66.7)	74.4	8.2	64.7	70.3	75.5	79.3	83.9
2023	760	469 (61.7)	74.3	8.7	65.4	70.2	74.7	79.2	84.1
2022	750	477 (63.6)	74.3	8.2	64.7	70.3	75.1	79.5	83.3

*For 2024, the average denominator across Medicare plans was 755.9 episodes, with a standard deviation of 2,190.6.

Notification of Changes for HEDIS®[1]

NCQA does not seek comment on the following changes.

Release of Volume 2: Technical Specifications

The ***HEDIS Measurement Year 2026 Volume 2: Technical Update*** will be released on **March 31** as a full-text publication that includes direct edits. Changes in the Technical Update are required for HEDIS Measurement Year (MY) 2026 reporting.

NCQA will release *HEDIS Measurement Year 2027 Volume 2: Technical Specifications for Health Plans* and *HEDIS Measurement Year 2027 LTSS: Technical Specifications for Long-Term Services and Supports Measures* on August 3, 2026.

Measure Changes for HEDIS MY 2026 Technical Update

***Cervical Cancer Screening* (CCS-E):** The HEDIS MY 2026 Technical Update will expand the existing *High Risk HPV Lab Test Value Set* to include self-collected vaginal samples by adding LOINC codes.

> *Rationale:* Updated cervical cancer screening guidelines from the American Cancer Society include self-collected vaginal samples for HPV testing as acceptable for average-risk individuals.

Social Need Screening and Intervention* (SNS-E)*: The HEDIS MY 2026 Technical Update will remove HCPCS code G0136 from the measure's screening numerators and remove ICD-10 Z codes from the measure's intervention denominators.

> *Rationale:* In the Calendar Year 2026 Medicare Physician Fee Schedule Final Rule, the G0136 reimbursement code was changed from provider assessment of social determinants of health (SDOH) to assessment of physical activity and nutrition. Given this change, the G0136 code no longer aligns with activities for the SNS-E measure. The measure will continue to rely on LOINC codes for documentation of standard screenings and positive screening results. Additionally, NCQA will update some intervention procedure value sets to align with current code lists.

ECDS Reporting Changes for HEDIS MY 2027 and Beyond

NCQA has released an updated timeline for the removal of the Hybrid Reporting Method.

> *Rationale:* In 2024, NCQA announced a proposed timeline to remove the Hybrid Method by MY 2029. The MY 2029 endpoint remains unchanged and NCQA will continue to introduce ECDS reporting as part of this transition. While some measures are proceeding as originally planned, others reflect updated, measure-specific pathways and timelines due to realignment efforts and the need for additional measure testing. The current timeline is available on the Digital Quality Hub.

Hybrid Transition Updates:

- *Glycemic Status Assessment for Patients With Diabetes* (GSD)*:* As originally planned, NCQA will allow optional ECDS reporting in MY 2027. NCQA proposes to remove the Hybrid Method from the measure and transition to ECDS-only reporting by MY 2029. An ECDS version will be introduced alongside the Hybrid version in MY 2027, followed by a two-year transition period before the Hybrid version is retired.
- *Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents* (WCC)*:* Instead of transitioning to administrative-only reporting in MY 2027, NCQA is prioritizing measure retirement in MY 2029. In parallel, NCQA intends to develop a replacement measure.

[1]HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

- *Prenatal and Postpartum Care* (PPC)*:* Instead of moving to administrative-only reporting in MY 2028, NCQA is focusing on the development of a new ECDS and risk-based replacement measure by MY 2028, with retirement of the Hybrid version occurring concurrently.
- *Transitions of Care* (TRC) and *Care for Older Adults* (COA)*:* NCQA will delay introducing the new ECDS versions until MY 2028. Both measures will be optionally reported until the Hybrid Method is removed in MY 2029.

Refer to http://www.ncqa.org/ecds for updates on ECDS reporting.

HEDIS LTSS MY 2027 Measure Template

NCQA will update the HEDIS LTSS measure template formatting to align with FHIR® standards and enable interoperability of HEDIS LTSS measures across systems. Updating the publication format supports the transition to digital HEDIS measurement. All the information needed to calculate a HEDIS LTSS measure will remain and the transition to a new format will not change measure intent, data collection requirements or calculations.

Advance Notice of Changes for HEDIS MY 2028

NCQA will update the measure specifications for MY 2028.

Rationale: For MY 2028, NCQA will be updating the specifications for new measures or existing measures undergoing reevaluation to provide more specificity on data source identification and timing of measure requirements. Advance preview of specification changes will be forthcoming.

NCQA will remove the exclusion of denied claims from 21 measures for MY 2028.

Rationale: Excluding denied claims may artificially improve measure performance and does not reflect the care delivered. This cross-cutting update reflects NCQA's commitment to patient-centered care, as patients bear the financial burden when their claims are denied. In addition, this change aligns with the transition to digital measurement by streamlining allowed data sources across all measure domains. The measures impacted by this change are listed below:

- **Overuse/Appropriateness Measures** (The change impacts only numerator identification; denied claims were already counted as part of the eligible population, denominator and exclusion identification):
  - *Non-Recommended PSA-Based Screening in Older Men* (PSA)
  - *Appropriate Treatment for Upper Respiratory Infection* (URI)
  - *Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis* (AAB)
  - *Use of Imaging Studies for Low Back Pain* (LBP)
  - *Potential Harmful Drug-Disease Interactions in Older Adults* (DDE)
  - *Use of High-Risk Medications in Older Adults* (DAE)
- **Overuse/Appropriateness Measures** (The change impacts the numerator, eligible population and denominator identification; denied claims were already counted as part of the exclusion identification):
  - *Deprescribing of Benzodiazepines in Older Adults* (DBO)
  - *Use of Opioids at High Dosage* (HDO)
  - *Use of Opioids from Multiple Providers* (UOP)
  - *Risk of Continued Opioid Use* (COU)

- **Utilization Measure** (The change impacts the numerator, eligible population and denominator identification; denied claims were already counted as part of the exclusion identification):
  - *Antibiotic Utilization for Respiratory Conditions* (AXR)
- **Risk-Adjusted Utilization Measures** (The change impacts the identification of events; denied claims were already counted when applying risk adjustment and as part of the exclusion identification):
  - *Plan All-Cause Readmissions* (PCR)
  - *Hospitalization Following Discharge From a Skilled Nursing Facility* (HFS)
  - *Acute Hospitalizations Following Outpatient Colonoscopy* (HFC)
  - *Acute Hospitalizations Following Outpatient General Surgery* (HFG)
  - *Acute Hospitalizations Following Outpatient Orthopedic Surgery* (HFO)
  - *Acute Hospitalizations Following Outpatient Urologic Surgery* (HFU)
  - *Acute Hospital Utilization* (AHU)
  - *Emergency Department Utilization* (EDU)
  - *Hospitalization for Potentially Preventable Complications* (HPC)
  - *Emergency Department Visits for Hypoglycemia in Older Adults With Diabetes* (EDH)