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 rowspan="2">18-64</td><td>InitialPopulation</td><td>For each Stratification</td></tr>
<tr><td>Exclusions</td><td>For each Stratification</td></tr>
<tr><td rowspan="2">NotType1</td><td rowspan="2">65-75</td><td>Denominator</td><td>For each Stratification</td></tr>
<tr><td>Numerator</td><td>For each Stratification</td></tr>
<tr><td>Total</td><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="10">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*

Recommendation		
2024	**2025**	**2026**
Initiation of CGM should be offered to people with type 1 diabetes. **(A)**		Diabetes devices should be offered to people with diabetes **(A)**
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]**)**	Recommend CGM for diabetes management to adults with diabetes on any type of insulin therapy. **(A** [real-time]**–B** [intermittently scanned]**)**	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)**
	Consider using CGM in adults with type 2 diabetes treated with glucose lowering medications other than insulin. **(B)**	

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