

2024 MIPS Peer-Reviewed Journal Article Requirement Template

Section 101(c)(1) of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) requires submission of new measures for publication in applicable specialty-appropriate, peer-reviewed journals prior to implementing in the Merit-based Incentive Payment System (MIPS). Such measures will be submitted by the Centers for Medicare & Medicaid Services (CMS), to a journal(s), before including any new measure on the MIPS Quality Measures List. The measure submitter shall provide the required information for article submission under the MACRA per the MIPS Annual Call for Quality Measures submission process.

Interested parties submitting measures for consideration through the MIPS Annual Call for Quality Measures must complete the required information by the CMS Annual Call for Measures deadline (8 p.m. ET on May 10, 2024). Some of the information requested below may be listed in specific fields in the CMS Measures Under Consideration (MUC) Entry/Review Information Tool (MERIT); however, to ensure that CMS has all of the necessary information and avoid delays in the evaluation of your submission, please fully complete this form as an attached Word document. The information in MERIT must be consistent with the information below, including the following, but not limited to:

- **Screening for Abnormal Glucose Metabolism in Patients at Risk of Developing Diabetes**
- **Wellness and Prevention**

Measure Steward: American Medical Association (AMA)

Measure Developer: American Medical Association (AMA)

Description: Percentage of adult patients with risk factors for type 2 diabetes who are due for glycemic screening for whom the screening process was initiated during the measurement period

I. Statement

- Background (Why is this measure important?).

This measure is critical to identifying patients with prediabetes who may benefit from interventions to prevent type 2 diabetes and to identify patients with undiagnosed type 2 diabetes. The Centers for Disease Control and Prevention (CDC) estimates that approximately 96 million American adults have prediabetes [CDC, 2022]. They note that more than 80% of adults with prediabetes are not aware that they have the condition. Regular glycemic screening is a critical first step to identifying patients with prediabetes and helping patients avoid the disability and costs associated with progression to type 2 diabetes.

Additionally, both USPSTF and ADA call for screening for prediabetes and undiagnosed diabetes (USPSTF, 2021, ADA, 2022).

If implemented, this measure would address a recommendation from the National Clinical Care Commission (NCCC) to Congress and the Secretary of Health and Human Services (HHS), which called for adopting the screening measure developed by the American Medical Association as part of a strategy to prevent diabetes among high-risk individuals [NCCC, 2021].

References:

Prevalence of prediabetes among adults. Centers for Disease Control and Prevention, 30 Sept. 2022, <https://www.cdc.gov/diabetes/data/statistics-report/prevalence-of-prediabetes.html>. Accessed 14 Nov. 2022.

US Preventive Services Task Force. Screening for Prediabetes and Type 2 Diabetes: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2021;326(8):736–743. doi:[10.1001/jama.2021.12531](https://doi.org/10.1001/jama.2021.12531)

American Diabetes Association Professional Practice Committee; 2. Classification and Diagnosis of Diabetes: Standards of Medical Care in Diabetes—2022. *Diabetes Care*. 1 January 2022; 45 (Supplement_1): S17–S38. <https://doi.org/10.2337/dc22-S002>

Report to Congress on Leveraging Federal Programs to Prevent and Control Diabetes and Its Complications. National Clinical Care Commission, 2021, <https://health.gov/about-odphp/committees-workgroups/national-clinical-care-commission/report-congress>.

- Environmental scan (Are there existing measures in this area?).
- The American Medical Association completed a search of the current list of quality measures finalized for the Merit-based Incentive Payment System (MIPS), the Quality Positioning System of the National Quality Forum (QPS), and the CMS Measures Inventory Tool and did not find any related or competing measures that examine the rate of screening for abnormal glucose metabolism in patients at risk of developing diabetes.

II. Gap Analysis

- Provide evidence for the measure (What are the gaps and opportunities to improve care?).

The measure indicates that there is substantial room for improvement in providing glycemic screening at least once every three years to patients with risk factors for diabetes. The mean individual clinician score was 45.9% of eligible patients who were screened. There was also wide variation in scores across 48 clinicians in two practices ranging from 18.97% to 87.7%.

- Expected outcome (patient care/patient health improvements, cost savings).

This measure examines whether patients at risk of developing diabetes are screened for abnormal glucose metabolism, and as a result, assists in the prevention of type 2 diabetes and identification of patients with undiagnosed type 2 diabetes.

- Recommendation for the measure (Is it based on a study, consensus opinion, USPSTF recommendation etc.?).

The following evidence statements are quoted verbatim from the clinical guidelines:

Evidence Supporting Denominator Criteria:

Inclusion Criteria

The USPSTF recommends screening for prediabetes and type 2 diabetes in adults aged 35 to 70 years who have overweight or obesity. Clinicians should offer or refer patients with prediabetes to effective preventive interventions (Grade B - Table 2) (Davidson, 2021).

Exclusion Criteria

Evidence on the optimal screening interval for adults with an initial normal glucose test result is limited. Cohort and modeling studies suggest that screening every 3 years may be a reasonable approach for adults with normal blood glucose levels (Davidson, 2021).

Evidence Supporting Numerator Criteria:

Prediabetes and type 2 diabetes can be detected by measuring fasting plasma glucose or HbA1c level, or with an oral glucose tolerance test. A fasting plasma glucose level of 126 mg/dL (6.99 mmol/L) or greater, an HbA1c level of 6.5% or greater, or a 2-hour postload glucose level of 200 mg/dL (11.1 mmol/L) or greater are consistent with the diagnosis of type 2 diabetes. A fasting plasma glucose level of 100 to 125 mg/dL (5.55-6.94 mmol/L), an HbA1c level of 5.7% to 6.4%, or a 2-hour postload glucose level of 140 to 199 mg/dL (7.77-11.04 mmol/L) are consistent with prediabetes (Davidson, 2021).

Reference:

- Davidson KW, Barry MJ, Mangione CM, et al. Screening for Prediabetes and Type 2 Diabetes: US Preventive Services Task Force Recommendation Statement. *Jama*. 2021;326(8):736-743.

III. Reliability/Validity

- What testing has been performed at the level of implementation? (MIPS requires full measure testing at the individual clinician level (and may also need to be tested at the group level) for MIPS Clinical Quality Measures (CQMs) and Electronic Clinical Quality Measures (eCQMs) collection types. Administrative claims measures tested at the group level require a reliability threshold to be implemented at the group level.)

Please provide testing results including the N value, Bonnie test case results, correlation coefficient and any other pertinent information or values to be considered.

- Reliability Testing Results at the accountable entity level

Measure score reliability testing using signal-to-noise testing was completed across 48 clinicians at two practices using data from calendar year 2021. The total number of patients included in the analysis was 4,530. The results demonstrate a sufficient level of reliability to detect real differences in performance scores. A median reliability of 0.91 across the 48 clinicians with 20 or more eligible cases suggests good reliability; a reliability > 0.70 is generally considered adequate reliability.

- Face Validity Testing Results, Clinician Sites

Face validity testing for the measure was assessed across 11 individuals on the Technical Expert Panel (TEP). The TEP was comprised of clinicians and two patients/caregivers. Ten out of the 11 members voted 'Yes' when asked "Do you agree that the performance scores resulting from the Screening for Abnormal Glucose Metabolism measure can be used to distinguish good from poor clinician-level performance?" Both patient/caregiver members unanimously voted in favor of the measures. The measure developer followed up with the one opposing vote, but the member did not provide a rationale for voting 'no'.

- Empiric Validity Testing Results at the accountable entity level

Empiric validity testing could not be completed at this time given the lack of available measures against which comparisons could be made.

- Data Element/Patient Encounter Level Testing

This measure was updated to address comments received during the previous MAP review. While the AMA has not yet validated 4 data elements, previous testing of a similar

eCQM provides information on the other critical data elements used in this measure. Parallel forms testing comparing an automated report to a manual abstractor completed at two sites. Site 1 had a sample size of 100, site 2 had a sample size of 75. Five data elements were tested at site 1, 7 data elements were tested at site 2, with a common overlap of 5 data elements. Results include observation count, agreement %, kappa test result and 95% CI. Note: when a row or column is all zero within a comparison matrix, a high agreement rate can paradoxically lead to a kappa score of 0. This is because the kappa calculation is expecting positive values in all cells.

	Site 1					Site 2				
Data Element Tested	Count	Agreement	Kappa	95% LI	95% UI	Count	Agreement	Kappa	95% LI	95% UI
Is the patient 18 years of age or older before the start or during the measurement period?	100	100.0%	1.00	1.00	1.00	75	100.0%	1.00	1.00	1.00
Does the medical record indicate an Encounter, Performed: Office Visit during the measurement period? [Office Visit]	100	100.0%	1.00	1.00	1.00	75	100.0%	1.00	1.00	1.00
Does the medical record indicate at least two [Office Visits] OR at least one [Preventive Visit] during the measurement period? (The same [Office Visit] twice does count)	Blank	Blank				69	100.0%	1.00	1.00	1.00
Is the patient >=43 years of age or older before the start or during the measurement period?	100	100.0%	1.00	1.00	1.00	68	100.0%	1.00	1.00	1.00
Does the Medical Record Indicated a BMI Greater Than or Equal to 25 at Encounter During Measurement Period	99	97.0%	0.91	0.82	1.00	56	96.4%	0.00	0.00	0.00
Does the medical record indicate a Diagnosis: Active Diabetes with an Encounter such that the diagnosis overlaps after the encounter?	Blank	Blank				36	88.9%	0.00	0.00	0.00
Does the medical record indicate a "Laboratory Test, Performed": "HbA1c Laboratory Test" during or 3 years before the measurement period?	86	100.0%	1.00	1.00	1.00	23	100.0%	1.00	1.00	1.00

○ Exclusion Frequency

The exclusions included in this measure are to account for the patients for whom glucose metabolism screening is not appropriate. The exclusions include patients with a medical condition (e.g., limited life expectancy) where screening would be inappropriate. The exclusions also include patients who already have a diagnosis of diabetes or prediabetes because this measure intends to identify those patients who have not already been identified with the diagnosis. It also excludes patients who already have a glycemic test result documented during the two-year look-back period. The acceptable timeframe to rescreen patients not diagnosed with diabetes or prediabetes is generally every 3 years; we do not want to encourage over screening.

Measure Criterion	Site #1	Site #2	Total
Met the denominator criteria of: <ul style="list-style-type: none"> A valid BMI in 2019 Cases with eligible encounters (1 preventive or 2 office visits with the same clinician) Age 35-70 at start of measurement period Most recent BMI during measurement period ≥ 25 (BMI ≥ 23 if Asian) 	3,845 (11%)	9,450 (22%)	13,295 (17%)
Not pregnant during measurement period	3,810 (11%)	9,438 (22%)	13,248 (17%)
Did not have advanced illness or limited life expectancy during measurement period	3,311 (10%)	9,111 (21%)	12,422 (16%)
Did not have diabetes or prediabetes during 2-year look-back period	2,651 (8%)	8,390 (19%)	11,041 (14%)
Did not have a glycemic test result during 2-year look-back period	1,318 (4%)	3,299 (8%)	4,617 (6%)

- What were the minimum sample sizes used for reliability results?

Clinicians with at least 20 eligible cases were included in performance score reliability testing and demonstrated a sufficient level of reliability to detect real differences in performance scores.

- Other Information

- Is it risk adjusted? If so, how?

This measure is not risk adjusted.

- What benchmarking information is available?

We have not yet studied or established any benchmarks for this measure.

- Collection Type: Specify the data collection type.

Electronic Clinical Quality Measure (eCQM)

- Specify measure stage of development.

Fully developed

- For Patient Reported Outcome Performance Measures:

- The survey or tool has been tested and doesn't require modifications based on results?
- Patient/encounter level testing for each critical data element doesn't require changes to the tool base on the results?

This measure is not a PRO-PM.

IV. Endorsement

- Provide the Consensus-Based Entity (CBE) (i.e., Partnership for Quality Measures (PQM)) endorsement status (and CBE ID) and/or other endorsing body. If the measure is only endorsed for paper records, please note endorsement for only the data source being submitted.

This measure has not yet been submitted to a consensus-based entity for review and endorsement.

V. Summary

- Alignment with CMS Meaningful Measures Initiative or MACRA (if applicable).

This measure falls into the domain of Wellness and Prevention.

- Relevance to MIPS or other CMS programs.

This measure will examine whether patients at risk of developing diabetes are screened for abnormal glucose metabolism, and as a result, assists in the prevention of type 2 diabetes and identification of patients with undiagnosed type 2 diabetes. It also seeks to address the lack of measures available in this area.

- Rationale: Use of measure for inclusion in program (specialty society, regional collaborative, other).

While this measure has not yet been implemented in an existing program, we believe that it assesses an important clinical process focused on preventive care and fills the current gap of measures on prediabetes screening available to report in MIPS.

- Public reporting (if applicable).

Because this measure has not been implemented yet, it is not publicly reported.

- Preferable relevant peer-reviewed journal for publication.

American Journal of Preventative Medicine

- Rationale as to how the measure correlates to existing cost measures and improvement activities, as applicable and feasible.

AMA was unable to identify any applicable cost measures. AMA believes that there are linkages to the following IAs: IA_PM_13, IA_PM_19, IA_PM_20, and IA_CC_9. These IAs could be used in conjunction with this measure to ensure that glycemic screening and referral services are implemented for at-risk individuals, processes are in place to create individual care plans, and preventive care is managed across a panel of patients.