



# Primary Care and Chronic Illness, Spring 2020 Cycle: CDP Report

**TECHNICAL REPORT  
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## Executive Summary

The National Quality Forum (NQF) has a body of endorsed measures related to the provision of primary care and the management of chronic disease, which is overseen by the Primary Care and Chronic Illness Standing Committee. This Committee is convened with the recognition that the most common contact point for many people within the United States (U.S.) healthcare system is their primary care provider. As such, primary care has a central role in improving the health of people and populations. Primary care practitioners work with each patient to manage the health of that individual. In the primary care setting, the diagnosis and treatment of the patient focus on the health of the entire patient and not a single disease. The review and evaluation of measures affecting primary care and dealing with chronic illness have long been a priority of NQF, with endorsement for such measures going back to NQF's inception. At present, there are 47 NQF-endorsed Primary Care and Chronic Illness (PCCI) measures. The background and description of NQF's most recent PCCI Standing Committee meeting, as well as previous meetings, are available on NQF's project [webpage](#). This Committee oversees the measurement portfolio used to advance accountability and quality in the delivery of primary care services.

During the spring 2020 measure review cycle, the Committee reviewed measures associated with appropriate management of prediabetes by primary care providers. For this project, the Standing Committee evaluated three newly submitted measures against NQF's standard evaluation criteria. During the measure evaluation meeting, the Committee did not recommend one measure for endorsement (NQF #3570e) and did not reach consensus on two measures during the measure evaluation meeting (NQF #3569e and NQF #3571e).

The Committee did not recommend the following measures and the Consensus Standards Approval Committee (CSAC) upheld the Committee's recommendation:

- **NQF #3569e** Prediabetes: Screening for Abnormal Blood Glucose (American Medical Association)
- **NQF #3570e** Intervention for Prediabetes (American Medical Association)
- **NQF #3571e** Retesting of Abnormal Blood Glucose in Patients With Prediabetes (American Medical Association)

Brief summaries of the measures are included in the body of the report; detailed summaries of the Committee's discussion and ratings of the criteria for each measure are in [Appendix A](#).

## Introduction

Primary care providers serve as the most common contact point for many people within the US healthcare system. As such, primary care has a central role in improving the health of people and populations. Chronic illnesses are long-lasting or persistent health conditions or diseases that patients and providers must manage on an ongoing basis. The incidence, impact, and cost of chronic disease is increasing in the US. For example, more than 30 million Americans (9.4 percent) are living with diabetes, and in 2017, the US spent \$237 billion on diabetes care, making it one of the most expensive health conditions.<sup>1,2</sup> In addition, studies have estimated the yearly costs for glaucoma, rheumatoid arthritis, and hepatitis C at \$5.8 billion, \$19.3 billion, and \$6.5 billion, respectively.<sup>3–5</sup> The net economic burden for medication nonadherence—a common issue with primary care patients—has been estimated at nearly \$300 billion per year.<sup>6</sup>

Over the last 15 years, NQF has endorsed dozens of measures addressing improvements in primary care and chronic illnesses. These measures are used in many national and state-level public reporting and accountability programs, as well as for quality improvement. With the formation of the Primary Care and Chronic Illness Standing Committee in 2017, NQF was able to consolidate and streamline the measure maintenance and endorsement process for a broad set of measures related to primary care and chronic illness.

High quality performance measurement that captures the complexity of primary care and chronic illnesses is essential to improve diagnosis, treatment, and management of conditions. NQF reviews measures in these important healthcare areas under a consolidated measure portfolio that reflects the importance of caring for chronic illness in primary care settings. Measures may focus on nonsurgical eyes or ears, nose, and throat conditions; diabetes care; osteoporosis; HIV; rheumatoid arthritis; gout; back pain; asthma; chronic obstructive pulmonary disease (COPD); and acute bronchitis.

The NQF Primary Care and Chronic Illness portfolio of measures includes several measures related to diabetes mellitus but no measures associated with prediabetes. Prediabetes has been increasingly recognized as an important metabolic state, characterized by intermediate hyperglycemia with glucose levels above the normal range but below diagnostic levels for diabetes. Studies have suggested that individuals with prediabetes have a higher probability of future progression to diabetes, as well as increased risk of developing many of the associated pathologies, such as diabetic retinopathy, neuropathy, nephropathy, and macrovascular complications.<sup>7</sup> Prediabetes is a common condition affecting approximately 88 million American adults.<sup>8</sup> It has been noted to have an especially high prevalence among US youth, where about one of five adolescents and one of four young adults have prediabetes and an accompanying, unfavorable cardiometabolic risk profile.<sup>9</sup>

## NQF Portfolio of Performance Measures for Primary Care and Chronic Illness Conditions

The Primary Care and Chronic Illness Standing Committee ([Appendix C](#)) oversees NQF's portfolio of Primary Care and Chronic Illness measures ([Appendix B](#)), which includes 48 measures: 41 process

measures, two outcome measures, four intermediate outcome measures, and one composite measure (see Table 1 below).

**Table 1. NQF Primary Care and Chronic Illness Portfolio of Measures**

	Process	Outcome	Intermediate Outcome	Composite
<b>Ears, Nose, Throat (ENT), Eye Care</b>	12	0	0	0
<b>Endocrine</b>	8	0	2	1
<b>Infectious Disease</b>	8	2	1	0
<b>Musculoskeletal</b>	7	0	0	0
<b>Pulmonary</b>	5	0	0	0
<b>Other</b>	1	0	1	0
<b>Total</b>	41	2	4	1

Other measures related to primary care and chronic illness have been assigned to other portfolios. These include functional status measures (Patient Experience and Function), opioid use measures (Patient Safety and Behavioral Health and Substance Abuse), diabetes-related admission rate measures (Prevention and Population Health), and a variety of condition- or population-specific measures (Cardiovascular, Pediatric, Geriatrics and Palliative Care, etc.).

## Primary Care and Chronic Illness Measure Evaluation

On June 25, June 26, and July 7, the Primary Care and Chronic Illness Standing Committee evaluated three new measures against NQF's [standard measure evaluation criteria](#).

**Table 2. Primary Care and Chronic Illness Measure Evaluation Summary**

	Maintenance	New	Total
Measures under review	0	3	3
Measures not endorsed	0	3	3

## Comments Received Prior to Committee Evaluation

NQF accepts comments on endorsed measures on an ongoing basis through the [Quality Positioning System \(QPS\)](#). In addition, NQF solicits comments for a continuous period during each evaluation cycle via an online tool located on the project webpage. For this evaluation cycle, the commenting period opened on May 1, 2020, and closed on September 3, 2020. No comments were submitted.

## Comments Received After Committee Evaluation

The continuous public commenting period with NQF member support closed on August 5, 2020. Following the Committee's evaluation of the measures under review, NQF received 34 comments from

12 organizations (including one member organization) and individuals pertaining to the draft report and to the measures under review. All comments for each measure under review have been summarized in [Appendix A](#).

Throughout the continuous public commenting period, NQF members had the opportunity to express their support (either *support* or *do not support*) for each measure submitted for endorsement consideration to inform the Committee's recommendations. No NQF members provided their expression of support.

## Overarching Issue

During the Standing Committee's discussion of the measures, an overarching issue emerged that was factored into the Committee's ratings and recommendations for multiple measures and is not repeated in detail with each individual measure.

### *Accuracy Issues in Data Capture for eCQMs*

Each of the measures evaluated this cycle was an electronic clinical quality measure (eCQM). NQF requires measure developers to complete a [feasibility scorecard](#) for eCQMs that explores the ability of a given electronic health record (EHR) to capture the data fields necessary to calculate the measure according to the measure specifications. NQF has emphasized the need to move toward reducing the burden associated with quality measurement, with electronic measures that use data that occur as part of documentation of normal care delivery within structured EHR fields as an important alternative to the more cumbersome measures that draw from medical chart abstraction. Nonetheless, many EHRs were not originally designed to serve as data sources for quality measurement, and this can be problematic in calculating eCQMs. Moreover, the structured fields that would be useful to populate a measure are often not present even in more advanced EHRs. This creates tension in the measure evaluation process when eCQMs do not exhibit high accuracy during feasibility scorecard testing. There has been concern that providers could be prospectively held accountable for eCQMs that do not display reliable calculation based on accuracy issues during the feasibility scorecard testing. Developers often address those concerns by citing EHR vendor commitment to the implementation of structured fields for capture of data critical to eCQM calculation if and when those measures are required (e.g., as part of reporting eCQMs within federal quality programs).

The NQF Primary Care and Chronic Illness Committee noted that the measure developer tested the three eCQMs evaluated during this cycle within Epic and Cerner. These are the two largest EHR vendors and widely regarded as among the most advanced. The Committee expressed concerns that strong accuracy was not reflected in the feasibility scorecard testing. This was especially true of data elements related to the focus of the measure, such as the capture of fasting blood glucose testing for NQF #3569e *Prediabetes: Screening for Abnormal Blood Glucose*. The Committee expressed concerns that the clinician could order such a test for patients who would fall within the denominator of the measure; such a test could be performed and documented, but the test is not accurately captured by the measure. The Committee considered accuracy issues in feasibility scorecard testing for the eCQMs to be threats to both the validity and feasibility of the measures.

## Summary of Measure Evaluation

The following brief summaries of the measure evaluation highlight the major issues that the Committee considered. Details of the Committee's discussion and ratings of the criteria for each measure are included in [Appendix A](#). During the measure evaluation meeting, quorum was maintained.

### **#3569e Prediabetes: Screening for Abnormal Blood Glucose (American Medical Association): Not Endorsed**

**Description:** Percentage of patients aged 40 years and older with a BMI greater than or equal to 25 who are seen for at least two office visits or at least one preventive visit during the 12-month period who were screened for abnormal blood glucose at least once in the last 3 years; **Measure Type:** Process; **Level of Analysis:** Clinician: Group/Practice, Clinician: Individual; **Setting of Care:** Outpatient Services; **Data Source:** Electronic Health Records

The Standing Committee did not recommend this measure for endorsement.

The Committee noted this is a new process measure that assesses the percentage of patients ages 40 years and older with a BMI greater than or equal to 25 who are seen for at least two office visits or at least one preventive visit during the 12-month period who were screened for abnormal blood glucose at least once in the last three years. The Committee indicated support of measures that address prediabetes, acknowledging a gap in NQF-endorsed measures that specifically address prediabetes. Concerning the evidence criterion, Committee members agreed this is an important area of measurement and determined that the evidence submitted generally supports the measure. The Committee noted that the developer cited guidelines from the American Diabetes Association (ADA) as well as from the United States Preventative Services Task Force (USPSTF). The Committee questioned why the measure does not have an age upper limit, noting the USPSTF guidance related to screening for diabetes for patients with high BMI between 40-70. The Committee agreed a performance gap exists based on the literature, despite the lack of actual data on patient care. During the discussion around reliability, Committee members raised concerns that while it does conform to the NQF evaluation criteria requiring it to be tested in more than one EHR, this measure was not tested in an EHR system less robust than Epic or Cerner. The Committee was concerned with the eQM feasibility scorecard for Epic and Cerner, noting that the accuracy results were not clear and that there may be poorer results in smaller EHR systems. The Committee passed the measure on reliability. Regarding validity testing, the Committee raised several concerns. The Committee noted that several of the data elements had accuracy issues and could present challenges with acquiring data across different providers. In particular, the Committee reviewed accuracy issues in the feasibility scorecard for eQMs for fields related to fasting plasma glucose lab testing, glucose in serum plasma lab testing, and exclusions related to intervention orders for comfort care. The Committee expressed concern that since the focus of the measure is determining whether an appropriate test has been conducted, the measure should be especially accurate in detecting when such a test has occurred for patients in the denominator of the measure. Consensus was not reached on the validity of this measure. The measure was not regarded as feasible by Committee members, citing the fact that fasting plasma glucose is not routinely captured during care and that the exclusion of comfort measures is not easily captured in EHR software. The Committee did not express any concerns with use and usability.

NQF #3569e did not achieve consensus on validity during the initial measure evaluation meeting. In the discussion of comments received related to NQF #3569e, the Committee first turned to the measure developer, the American Medical Association (AMA), to ask for a summary of their responses to the comments. In response to the comment that suggested the term “prediabetes” was inappropriate because it confers the suggestion of a disease and expressed a preference for the term “abnormal blood glucose”, the developer first acknowledged that the measure title itself includes reference to abnormal glucose and that they have noted the input point. The developer also responded to comments related to the fact that this measure does not include an upper age limit exclusion, noting that this point was debated within their own Technical Expert Panel (TEP), resulting in an unreach consensus vote that further resulted in not including an upper age limit. The developer stated that not including an upper age limit is aligned with the recommendation from American Diabetes Association (ADA) guidelines. The developer also alluded to evidence that suggested that an upper age limit for the measure is not appropriate given that older patients have been shown to benefit from screening as well. The requirement of confirmation of results was noted by AMA’s TEP as non-pragmatic and unaligned with USPSTF guidelines. The comments also reflected previous Committee discussion about validity concerns expressed during the initial July measure evaluation meeting. At that time, several Committee members had expressed reservations associated with the accuracy domain of the feasibility scorecard for data elements related to fasting glucose tests. The developer noted that the parallel forms of validity testing they performed resolved initial concerns related to the calculation of the measure as suggested in the feasibility scorecard, noting moderate to excellent crude agreement and kappa statistics between abstractors and calculations from the eCQM. The developer emphasized that the fasting glucose data element that had accuracy concerns was directly addressed through the feasibility testing. The developer was questioned about their assertion that the overwhelming majority of records were HbA1c data elements and was asked what percentage of data elements pulled were fasting blood glucose. The developer indicated that the fasting blood glucose accounted for less than 10 percent of the data.

Several Committee members disagreed with the developer on not including an upper age limit, viewing the lack of the upper age limit as a threat to the validity of the measure. The Committee asked the developer to highlight the evidence that older patients benefit from such interventions. The developer reviewed their references included in responses to comments with the Committee, including ADA guideline screening recommendations, a smaller study by Kramer et al, and evidence from the National Diabetes Prevention Program. AMA also noted that their TEP felt that having measure exclusions for patients with limited functional status or limited life expectancy was sufficient to identify those who should not be screened. One member agreed with the developer in that not having an upper age limit was appropriate based on experiences with managing lifestyle change programs. Another member noted this but added that they were concerned that during an appointment with especially older patients, a clinician may be required to perform a screening that they did not consider appropriate or face being penalized on their measure performance. Other members pointed out that the developer could simply adopt the 40-to-70-year-old age group suggested by the comments from the American Academy of Family Physicians (AAFP) and American Geriatrics Society (AGS). This solution would not prohibit clinicians from still screening patients who were older but rather provide a known and supported age span for the purposes of accountability, allowing for a consistent measure denominator. The developer responded, stating that the expectation for performance on the measure is not to



achieve perfection and that performance cut points can be used to account for instances in which clinicians may determine that it may not be appropriate for certain patients to be screened.

The Committee asked if age range concerns were appropriate to consider within a validity discussion, noting reservations around supporting the measure with the current age limits. NQF staff reaffirmed that if the Committee felt that the definitions used to capture the patient population within the measure do not align with clinical recommendations, it has a direct bearing on the question of whether the metric does, in fact, measure what it purports to measure, which is the central question of validity.

The Committee did not support the measure on validity, a must-pass criterion. The Committee did not recommend the measure for endorsement.

#### REQUEST FOR CONSIDERATION

The developer submitted a letter to CSAC to request reconsideration of their measures, citing breeches in the [NQF Standing Committee CDP](#). The developer highlighted two areas of concern in its letter relating to the review of the measures: (1) general inconsistency in Committee deliberations and process and (2) misrepresentation of public comments in presentation slides. Related to general inconsistency, the developer asserted that concise statements outlining why a measure did not pass were not provided in the deliberations nor the report generated by NQF staff. The developer further asserted that the Standing Committee was inconsistent in their recommendations. The developer also expressed concerns that the Standing Committee did not allocate sufficient time to the discussion of their request for reconsideration. The developer also suggested that the presentation slides did not appropriately represent the 34 comments received by NQF from the public regarding the measures, focusing only on concerns that were expressed by the comments and potentially imposing a bias.

The PCCI Co-Chairs, Dale Bratzler and Adam Thompson, acknowledged the perspectives of the developer related to the evaluation of the three prediabetes measures; however, they reaffirmed that the Standing Committee remained focused on the criteria in which consensus was not reached or a recommendation was not given for endorsement and provided clear rationales for why the Standing Committee did not consider the measures to meet NQF criteria. Dr. Bratzler and Mr. Thompson observed that the issues identified by the Standing Committee were different across the measures and suggested that the issue AMA identified of applying criteria correctly does not align with the concerns raised by the Standing Committee. The PCCI Co-Chairs stressed that all written public comments and developer responses were provided to the Standing Committee in advance of the meeting and that they did not consider the presentation of concerns needed to be resolved to have unduly bias from the Committee.

For NQF #3569e, the PCCI Co-Chairs noted that the Standing Committee's focus on validity concern pointed to the lack of an upper age limit for the measure. The PCCI Standing Committee provided several recommendations to the developer regarding approaches to address this concern (these approaches are captured in the [Meeting Summary](#)). CSAC members noted sincere concerns on the part of the PCCI Committee related to unresolved issues that were specific to the measure and voted to both deny AMA's reconsideration request and uphold the PCCI Committee's recommendation.

### #3570e Intervention for Prediabetes (American Medical Association): Not Endorsed

**Description:** Percentage of patients aged 18 years and older with identified abnormal lab result in the range of prediabetes during the 12-month measurement period who were provided an intervention;

**Measure Type:** Process; **Level of Analysis:** Clinician: Group/Practice, Clinician : Individual; **Setting of Care:** Outpatient Services; **Data Source:** Electronic Health Records

The Standing Committee did not recommend the measure for endorsement. This is a new process measure that assesses the percentage of patients ages 18 years and older with identified an abnormal lab result in the range of prediabetes during the 12-month measurement period who were provided an intervention. Overall, the Committee noted that there was good evidence for this measure and passed on this criterion. The Committee also noted that this measure could be an outcome measure but recognized that providers may not have the processes in place to achieve those outcomes; therefore, a process measure is still useful. The Committee had no concerns about performance gap. In terms of reliability, the Committee raised concerns about sampling methodology. The Committee noted that convenience sampling did not necessarily indicate systematic bias. The Committee passed this measure on reliability. The Committee passed the measure on validity but noted that the measure had concerns associated with the feasibility scorecard in that the accuracy of the data elements was questionable. The Committee did not pass the measure on feasibility, raising concerns that the fields needed to collect this measure are not present in the EHR. The Committee acknowledged that the missing data will most likely be able to be captured in the future but noted that currently, this measure presents too great of a burden for implementation as manual review would be needed to confirm accuracy. The Committee did not have any concerns regarding use. For usability, the Committee noted there are potential issues with lack of discrete fields to document both the referral and the patient lacking access to a diabetes prevention program because their insurance does not cover it. The Committee passed this measure on usability. The Committee observed that there are no related and competing measures to discuss for this measure.

During the spring 2020 post-comment meeting, NQF staff summarized the comments received, noting that some commenters questioned the interventions contained within the measure specifications, namely referral to a CDC-recognized diabetes prevention program (DPP), referral to medical nutrition therapy with a registered dietitian, or the prescription of metformin. One commenter noted that intensive behavioral counseling or other interventions are not adequately represented in this measure, making the measure poorly aligned with current guidelines and best practices. Commenters noted that the options of prescribing metformin or referring patients to other providers will either be burdensome and drive up cost, or result in a narrow, specific pharmacotherapeutic option. It was also noted that DPPs are not widely available throughout the entire country. One Committee member noted that programs based on DPP protocols are well available throughout the country. Another member added that poor bandwidth is now the primary barrier; however, telehealth and virtual dashboards are beginning to address access challenges for rural areas, also noting that many health plans are covering the service. Another Committee member noted that he faced a challenge in accessing this service himself under his insurance carrier unless he was coded as diabetic. Another Committee member noted that there are provisions for Medicare beneficiaries that make DPP widely accessible. Other Committee members expressed concern that the measure equates the three interventions when evidence suggests

that behavioral interventions are stronger than metformin. Another Committee member expressed support for this remark and added that from a feasibility perspective, this sole fact creates a great deal of challenges. Committee members expressed concerns associated with the unintended consequences of driving a greater utilization of metformin.

#### REQUEST FOR CONSIDERATION

The Committee invited the measure developer to outline its rationale for its reconsideration request. The AMA noted that the measures were submitted according to NQF measure evaluation criteria with significant effort put into the development and testing of the measures. The AMA stated that they are concerned that the criteria for feasibility, scientific acceptability (particularly validity), and usability were not applied appropriately. Related to the feasibility and validity concerns, the developer stated that the results of the validity testing demonstrate that the results of the parallel forms tested resulted in kappa statistics indicating moderate to near-perfect agreement. AMA further acknowledged that not every data element was captured in the two EHR systems tested but noted that the validity testing showed that the results produced were acceptable. Moreover, AMA noted that EHR systems will improve to better capture the data elements needed as organizations begin working to implement and track these measures. AMA referred to previous dialogue related to fasting blood glucose, which was relevant for all three measures. The concern that this element was not captured in structured data fields was not found to be problematic within AMA's data element validity testing, with what AMA characterized as a nearly zero-percent occurrence. A representative endocrinologist from AMA's TEP added additional commentary that the measure does not say that the three interventions are equivalent, but there are different options. Further, she noted the Committee emphasized that within the DPP study, intensive lifestyle interventions were the most efficacious, but there are other studies concluding that metformin is equivalent for certain populations and certain conditions. It was also emphasized that comparative effectiveness studies of virtually delivered DPP interventions have shown similar weight loss outcomes.

One Committee member noted that the measure is not doing enough to improve patient outcomes, adding that while there are options, the measure does treat the three interventions as equivalent and that there may be unintended consequences associated with that. The member further suggested that if it were framed as all of these options being offered to the patient, then that would be different; as the measure is constructed, there is only one box that can be checked, and this will not necessarily lead to the same results.

During the measure evaluation meeting, the Committee did not pass the measure on feasibility nor did they recommend the measure for endorsement. During the post-comment meeting, the Committee did not approve this measure for reconsideration.

The developer presented a reconsideration request to CSAC related to this measure as well. For NQF #3570e, the Standing Committee was concerned that this measure has limited interventions available to meet the numerator, requiring clinicians to either prescribe metformin or refer the patient out to another service. This was noted to be burdensome to providers and patients, with feasibility concerns resulting in the measure not passing that criterion nor overall endorsement. CSAC members noted sincere concerns on the part of the PCCI Committee related to unresolved issues that were specific to

the measure and voted to both deny AMA's reconsideration request and uphold the PCCI Committee's recommendation.

### **#3571e Retesting of Abnormal Blood Glucose in Patients With Prediabetes (American Medical Association): Not Endorsed**

**Description:** Percentage of patients aged 18 years and older who had an abnormal fasting plasma glucose, oral glucose tolerance test, or hemoglobin A1c result in the range of prediabetes in the previous year who have a blood glucose test performed in the one-year measurement period; **Measure Type:** Process; **Level of Analysis:** Clinician : Group/Practice, Clinician: Individual; **Setting of Care:** Outpatient Services; **Data Source:** Electronic Health Records

The Standing Committee did not recommend the measure for endorsement.

This is a new process measure which assesses the percentage of patients age 18 years and older who had an abnormal fasting plasma glucose, oral glucose tolerance test, or hemoglobin A1c result in the range of prediabetes in the previous year who have a blood glucose test performed in the one-year measurement period. The Committee began the discussion with a review of the evidence. The Committee questioned whether there was evidence to suggest that testing within one year is the correct time frame. The developer noted the ADA recommended at least an annual retesting. Nonetheless, the Committee noted there may be unintended consequences associated with testing frequently, namely false positives in testing for diabetes, which will increase along with testing frequency. One Committee member noted this is a process measure with less evidence to support it and expressed concern that the quality measurement enterprise generally has sufficient process measures and not enough outcome measures. When voting on evidence, the Committee did not pass the measure. Since the evidence for this measure is based on expert opinion rather than randomized control trials, the Committee took a vote to grant an exception to evidence. Therefore, consensus was not reached on the vote to grant an exception to the evidence provided. The Committee observed the developer's review of the literature that suggests a gap in care, noting that the U.S. has 84 million adults with prediabetes, nine out of 10 patients who have prediabetes are not aware, and missed opportunities among primary care providers in diagnosing and managing patients with prediabetes represent a gap in care. In the discussion on validity, the Committee expressed some concern that the measure may not have had all data elements tested and the eCQM feasibility scorecard assessment suggested that many data elements had issues in the accuracy domain, indicating that these data elements may not be accurately captured. Therefore, the Committee did not achieve consensus on validity. In the review of the measure's feasibility, the Committee was also concerned that reporting the measure may be challenging since the accuracy of the data elements was not clear. Therefore, the Committee did not reach consensus for the measure on feasibility. In the discussion on use, the Committee noted that the measure has not been implemented, but the developer has the intention of submitting the measure to CMS for the MIPS program. During the discussion on usability, the Committee noted that diabetes testing is not completely harmless considering that going to a primary care provider for regular screening can be burdensome for patients due to peripheral costs and inconvenience. Ultimately, the Committee did not achieve consensus on usability.

NQF staff noted that the measure did not pass during the initial measure evaluation meeting and the developer had since provided a reconsideration request. Within that request, the developer suggested the Committee had been inconsistent in the application of NQF criteria and that they had conflated validity and feasibility. Moreover, the developer suggested that it was not clear as to why the measure passed on validity when the other two did not achieve consensus on validity nor pass on feasibility. The developer also noted that the measure passed all the must-pass criteria but did not receive overall endorsement.

During the spring 2020 post-comment meeting, NQF staff noted that consensus was not reached during the measure evaluation meeting for NQF #3571e on evidence and validity, both of which are must-pass criteria. The comments received reflected concerns associated with evidence on the screening interval of one year, meaning that exclusions for this measure differed from the other eCQMs submitted by AMA (e.g., comfort care was not included in this measure), and that testing should include a variety of tests, a specific time frame, and considerations associated with access. The developer responded to those concerns by noting that public comments were generally supportive of an exception to evidence and emphasized that their validity testing addressed many of the issues raised that were related to the accuracy of data elements.

The Committee began the discussion by reviewing a comment and response from AAFP both focused on the screening interval. AAFP asserted that a three-year interval would be more appropriate. In their response, the developer noted that a three-year interval is appropriate for normal glucose readings (USPSTF) but added that annual testing is appropriate if an abnormal glucose result is obtained (ADA). A Committee member suggested insufficient evidence exists to support the one-year rescreening interval because it has not been directly correlated with better outcomes, yet it is based on expert opinion. Another Committee member countered that the test itself is not overly burdensome and seems appropriate.

NQF staff reviewed the evidence discussion in the July measure evaluation meeting, noting that the developer cited the USPSTF and ADA guidelines as evidence for the measure. The developer noted that the annual testing recommendation came directly from the ADA guideline in which it was given an “E” grade, meaning that it is based on expert opinion. NQF staff then reviewed the NQF criteria for evidence submissions, including a detailed walkthrough of the evidence algorithm found in NQF’s 2019 measure evaluation criteria, highlighting the pathway of exception to evidence for measures rated as “insufficient” because they are based on expert opinion. The Committee asked the developer if there was a systematic review associated with the benefits and risks of the intervention as part of the expert opinion recommendations. The developer referred to the ADA guidelines and their own TEP review of the measure to indicate that a careful review of existing evidence was conducted prior to providing that expert opinion.

The developer was asked if patients who were prediabetic and found to be stable for a lengthy period of time would be excluded, but the developer noted that a ready approach to guide such an exclusion does not exist.

The Committee did not pass the measure on evidence, a must-pass criterion. Therefore, the Committee did not recommend the measure for endorsement.

#### REQUEST FOR CONSIDERATION

The developer presented a reconsideration request to CSAC related to this measure as well. For NQF #3571e, the Standing Committee noted that the recommendations to support the focus of this measure are based on expert opinion and expressed that such evidence was insufficient to warrant a national measure. CSAC members noted sincere concerns on the part of the PCCI Committee related to unresolved issues that were specific to the measure and voted to both deny AMA's reconsideration request and uphold the PCCI Committee's recommendation.

#### Measures Withdrawn From Consideration

There were no measures withdrawn from consideration during this cycle.

## References

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## Appendix A: Details of Measure Evaluation

*Vote totals may differ between measure criteria and between measures as Committee members often have to join calls late or leave calls early. NQF ensures that quorum is maintained for all live voting. All voting outcomes are calculated using the number of Committee members present for that vote as the denominator.*

**Rating Scale:** H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable

### Measures Not Endorsed

#3569e Prediabetes: Screening for Abnormal Blood Glucose
<a href="#">Submission</a>   <a href="#">Specifications</a>
<p><b>Description:</b> Percentage of patients aged 40 years and older with a BMI greater than or equal to 25 who are seen for at least two office visits or at least one preventive visit during the 12-month period who were screened for abnormal blood glucose at least once in the last 3 years</p> <p><b>Numerator Statement:</b> *Screening for abnormal blood glucose may include using a fasting plasma glucose, 2-h plasma glucose during a 75g oral glucose tolerance test, or A1C.</p> <p><b>Denominator Statement:</b> All patients aged 43 years and older with a BMI greater than or equal to 25 seen for at least two office visits or at least one preventive visit during the 12-month measurement period</p> <p><b>Exclusions:</b> Denominator Exclusions          "Patient is Pregnant at Encounter"          or "Patient Has Active Diabetes Diagnosis at Encounter"          or "Hospice During Measurement Period"          or "Palliative Care During Measurement Period"          or "Comfort Measures During Measurement Period"</p> <p><b>Adjustment/Stratification:</b> No risk adjustment or risk stratification</p> <p><b>Level of Analysis:</b> Clinician: Group/Practice, Clinician: Individual</p> <p><b>Setting of Care:</b> Outpatient Services</p> <p><b>Type of Measure:</b> Process</p> <p><b>Data Source:</b> Electronic Health Records</p> <p><b>Measure Steward:</b> American Medical Association</p>
<p><b>STANDING COMMITTEE MEETING 06/25/2020</b></p> <p><b>1. Importance to Measure and Report:</b> <u>The measure meets the Importance criteria.</u>          (1a. Evidence, 1b. Performance Gap)          1a. Evidence: <b>H-4; M-17; L-1; I-0</b>; 1b. Performance Gap: <b>H-5; M-17; L-0; I-0</b></p> <p><b>Rationale:</b></p> <ul style="list-style-type: none"> <li>The developer cited evidence found in guidelines from the United States Preventive Services Task Force (USPSTF) and the American Diabetes Association (ADA).             <ul style="list-style-type: none"> <li>The focus of the recommendations is lifestyle change.</li> <li>USPSTF incorporated this evidence into the updated recommendation regarding screening for abnormal glucose and type 2 diabetes.</li> <li>The grade B recommendation states that physicians should screen individuals for abnormal glucose if they are between the ages of 40 and 70 and are overweight or obese, or younger if they have additional risk factors.</li> <li>The ADA recommends screening patients who are overweight or obese with one risk factor, regardless of age. Additionally, those who have no risk factors should start screening at age 45.</li> </ul> </li> </ul>



### #3569e Prediabetes: Screening for Abnormal Blood Glucose

- The developer noted that the risk factors included in this measure unite both the USPSTF and ADA risk factors.
- Testing for prediabetes and risk for future diabetes in asymptomatic people should be considered in adults of any age who are overweight or obese (BMI  $\geq 25\text{kg/m}^2$  or  $\geq 23\text{kg/m}^2$  in Asian Americans) and who have one or more additional risk factors for diabetes. (ADA, 2018) (B Recommendation)
- A grade B recommendation denotes the following: "The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial."
- The Committee questioned the fact that the measure does not have an upper age limit, noting the USPSTF guidance related to screening for diabetes for patients with high BMI between the ages of 40 and 70.
- The developer provided a summary of the literature related to gaps in care. The developer stated that their review of the literature suggests that the uninsured are less likely to be screened; Black people and Hispanics are also more likely to be screened than White people.
- The Committee agreed that a gap exists based on the literature despite the lack of actual data of patient care.

#### **2. Scientific Acceptability of Measure Properties: The measure did not pass the Scientific Acceptability criteria.**

(2a. Reliability precise specifications, testing; 2b. Validity testing, threats to validity)

2a. Reliability: **H-1; M-16; L-5; I-0** 2b. Validity: **H-0; M-11; L-8; I-0**

##### Rationale:

- The developer used the same testing for both data element reliability and validity.
- The developer performed data element reliability/validity testing at two facilities on two common EHR systems, Epic and Cerner.
  - Test Site #1: This is an ambulatory facility in South Carolina, which is part of a larger health system composed of 8 inpatient hospitals and more than 100 outpatient facilities. This facility uses Epic EHR in their facility.
  - Test Site #2: This is an ambulatory facility in South Carolina, which is part of a larger system composed of a 1,600+ bed comprehensive integrated health system, serving 1 million patients. This facility uses Cerner EHR in their facility.
- The feasibility assessment indicated the following data elements had issues in the accuracy domain, further indicating that these data elements may be incorrect:
  - "Laboratory Test, Performed: Fasting Plasma Glucose Lab Test Mass Per Volume" (in Cerner and Epic) (measure developer noted that Fasting status of glucose testing is not captured in discrete fields in either EHR, however capturing A1C testing is feasible. To test for prediabetes, fasting plasma glucose, 2-h plasma glucose during 75-g oral glucose tolerance test, and A1C are equally appropriate)
  - "Intervention Order: Comfort Measures" (in Cerner) (measure developer noted that Comfort Care as an exclusion is standard in in NQF endocrine registry measures and it is expected that EMR developers to create a distinct field to collect this data in the future)
  - "Laboratory Test, Not Performed: Fasting glucose [Moles/volume] in Serum or Plasma" (in Cerner and Epic)
  - "Laboratory Test, Not Performed: Fasting Plasma Glucose Lab Test Mass Per Volume" (in Cerner and Epic)
  - "Laboratory Test, Not Performed: Glucose [Mass/volume] in Serum or Plasma --2 hours post 75 g glucose PO" (in Cerner)
  - "Laboratory Test, Not Performed: Glucose [Moles/volume] in Serum or Plasma --2 hours post 75 g glucose PO" (in Cerner)

## #3569e Prediabetes: Screening for Abnormal Blood Glucose

- "Laboratory Test, Performed: Fasting glucose [Moles/volume] in Serum or Plasma" (in Cerner and Epic)
- Data element reliability/validity testing was conducted utilizing the Parallel Forms Reliability Testing methodology to determine if data elements found through electronic data pulls could be confirmed by manual abstraction of the same data elements.
  - Verification of the data elements was obtained through automated data search strategies against a reference strategy, which is considered the gold standard for obtaining the data elements.
  - A manual review of the data elements was used as the reference strategy against which automated data search and extraction strategies were evaluated.
  - Inter-rater reliability (crude agreement and Cohen's Kappa) was used to assess the reliability of the measure based on results from two independent reviewers trained in the same way and reviewing the same patient record.
- Committee members raised concerns that this measure was only tested in two electronic health record (EHR) systems and was not tested with an EHR system less robust than Epic or Cerner.
- The Committee noted that the accuracy results were not clear and that there may be poorer results in smaller EHR systems.
- The Committee noted that several of the data elements had accuracy issues and could present challenges with acquiring data across different providers.
- The Committee expressed particular concern regarding the lack of upper limits for age on this measure.
- Two Committee members left the meeting following the validity vote.

### 3. Feasibility: H-0; M-5; L-14; I-1

*(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)*

#### Rationale:

- During the discussion of feasibility, the Committee raised concerns about the lack of fasting glucose being listed as such in the EMR and the fact that comfort measures are not necessarily standard.

### 4. Use and Usability

*4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)*

**4a. Use: Pass-17; No Pass-3 4b. Usability: H-0; M-18; L-1; I-1**

#### Rationale:

- The Committee did not express any concerns with use and usability.

### 5. Related and Competing Measures

- No related or competing measures were noted.

### Standing Committee Recommendation for Endorsement: N/A

- The Standing Committee did not vote on an endorsement recommendation because the measure did not pass the evidence criteria.
- During the post-comment meeting, the Standing Committee voted to not recommend the measure for endorsement.

### 6. Public and Member Comment

- Preferred "abnormal blood glucose" over "prediabetes", which is suggested to be a risk factor rather than a disease.
- Some commenters opposed the missing upper age limit (40-70 years) included in AAFP and USPSTF guidelines.
- One commenter suggested that confirmation of results should be included in this measure.

### #3569e Prediabetes: Screening for Abnormal Blood Glucose

- Several commenters had concerns with data capture, such as fasting glucose or exclusions absent from the EHR distinct field, and that the measure was only tested in EPIC and Cerner.

#### 7. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-10; No-1 (November 17, 2020: Not Endorsed)

- The developer submitted a reconsideration request for this measure. The CSAC voted to not reconsider this measure.
- The CSAC upheld the Standing Committee's decision not to recommend the measure for endorsement.

#### 8. Appeals

### #3570e Intervention for Prediabetes

#### [Submission](#) | [Specifications](#)

**Description:** Percentage of patients aged 18 years and older with identified abnormal lab result in the range of prediabetes during the 12-month measurement period who were provided an intervention\*

**Numerator Statement:** Patients who were provided an intervention\*

\*Intervention must include one of the following: referral to a CDC-recognized diabetes prevention program; referral to medical nutrition therapy with a registered dietitian; prescription of metformin.

**Denominator Statement:** All patients aged 18 years and older with identified abnormal lab result in the range of prediabetes during the 12-month measurement period

\*\*Abnormal lab result in the range of prediabetes includes a fasting plasma glucose level between 100 mg/dL (5.6 mmol/L) to 125 mg/dL (6.9 mmol/L) OR a 2-hour glucose during a 75g oral glucose tolerance test between 140 mg/dL (7.8 mmol/L) to 199 mg/dL (11.0 mmol/L) OR and A1C between 5.7-6.4% (39-47 mmol/mol).

**Exclusions:** Denominator Exclusions:

Exclude patients who are pregnant.

Exclude patients who have any existing diagnosis of diabetes (Type 1, Type 2, latent autoimmune diabetes of adults [LADA], monogenic diabetes [MODY]).

**Adjustment/Stratification:** No risk adjustment or risk stratification

**Level of Analysis:** Clinician: Group/Practice, Clinician: Individual

**Setting of Care:** Outpatient Services

**Type of Measure:** Process

**Data Source:** Electronic Health Records

**Measure Steward:** American Medical Association

#### STANDING COMMITTEE MEETING 06/25/2020

##### 1. Importance to Measure and Report: The measure meets the Importance criteria.

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-0; M-16; L-2; I-2**; 1b. Performance Gap: **H-2; M-16; L-1; I-1**

##### Rationale:

- The developer cited evidence primarily found in guidelines from the United States Preventive Services Task Force (USPSTF) and the American Diabetes Association (ADA).
  - USPSTF grade B recommendation states that adults aged 40 to 70 years of age who are overweight or obese should be screened for abnormal blood glucose as part of cardiovascular risk assessment.
  - Referral of patients with abnormal blood glucose to intensive behavioral counseling interventions is also recommended by the USPSTF (grade B recommendation).

### #3570e Intervention for Prediabetes

- The ADA recommends an intensive behavioral lifestyle intervention program modeled on the Diabetes Prevention Program for prediabetes patients (grade A recommendation).
- The developer cites ADA's grade A recommendation on Metformin therapy for preventing type 2 diabetes in individuals with prediabetes (<60 years, BMI ≥35 kg/m<sup>2</sup> and women with prior gestational diabetes mellitus).
- An individualized medical nutrition therapy is recommended by ADA for all those with type 1 or type 2 diabetes or gestational diabetes mellitus (grade A recommendation).
- The Committee noted that this measure could be specified as an outcome measure but acknowledged that providers may not yet have the processes in place to achieve outcomes.

#### **2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria.**

(2a. Reliability precise specifications, testing; 2b. Validity testing, threats to validity)

2a. Reliability: **H-0; M-16; L-3; I-0**; 2b. Validity: **H-0; M-13; L-3; I-3**

##### Rationale:

- The developer used the same testing for both data element reliability and validity.
- The developer performed data element reliability/validity testing at two facilities on two common EHR systems.
  - Test Site #1: This is an ambulatory facility in South Carolina, which is part of a larger health system composed of 8 inpatient hospitals and more than 100 outpatient facilities. This facility uses Epic EHR in their facility.
  - Test Site #2: This is an ambulatory facility in South Carolina, which is part of a larger system composed of a 1,600+ bed comprehensive integrated health system, serving 1 million patients. This facility uses Cerner EHR in their facility.
- Submission includes simulated data set results demonstrating unit testing that covers 100% of the measure logic.
- The feasibility assessment indicated the following data elements had issues in the accuracy domain, further indicating that these data elements may not be correct:
  - "Laboratory Test, Performed: Glucose [Mass/volume] in Serum or Plasma --2 hours post 75 g glucose PO", (Measure developer noted that fasting status of glucose testing is not captured in discrete fields in either EHR, however capturing A1C testing is feasible. To test for pre-diabetes, fasting plasma glucose, 2-h plasma glucose during 75-g oral glucose tolerance test, and A1C are equally appropriate (in Cerner and Epic)
  - "Laboratory Test, Performed: Fasting glucose [Moles/volume] in Serum or Plasma" (in Cerner and Epic)
  - "Intervention, Performed: Referral to Dietitian" (measure developer noted that It is expected that EMR developers to create a distinct field to collect this data in the future.) (in Cerner and Epic)
  - "Intervention, Performed: Referral to Diabetes Prevention Program" (measure developer noted that It is expected that EMR developers to create a distinct field to collect this data in the future) (in Cerner and Epic)
  - "Intervention, Not Performed: Referral to Diabetes Prevention Program" (in Cerner and Epic)
  - "Intervention, Not Performed: Referral to Dietitian" (in Cerner and Epic)
  - "Medication, Not Ordered: Metformin" (in Cerner)
  - "Diagnosis: Limited Life Expectancy" (in Cerner)
  - "Encounter, Performed: Nursing Facility Visit" (in Cerner)
- Data element reliability/validity testing was conducted utilizing the Parallel Forms Reliability Testing methodology to determine if data elements found through electronic data pulls could be confirmed by manual abstraction of the same data elements.
  - Verification of the data elements was obtained through automated data search strategies against a reference strategy, which is considered the gold standard for obtaining the data elements.

### #3570e Intervention for Prediabetes

- A manual review of the data elements was used as the reference strategy against which automated data search and extraction strategies were evaluated.
- Inter-rater reliability (crude agreement and Cohen's Kappa) was used to assess the reliability of the measure based on results from two independent reviewers trained in the same way and reviewing the same patient record.
- In terms of reliability, the Committee raised concerns around the sampling methodology. The Committee noted that convenience sampling did not necessarily indicate systematic bias.
- The Committee expressed concern that the measure may not have had all the data elements tested and that the eCQM feasibility scorecard assessment indicated that many data elements had issues in the accuracy domain, further indicating that these data elements may not be accurately captured.

#### 3. Feasibility: H-0; M-5; L-15; I-1

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

##### Rationale:

- The Committee raised concerns that the fields needed to collect this measure are not present in the EHR.

#### 4. Use and Usability

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

4a. Use: **Pass-18; No Pass-0** 4b. Usability: **H-0; M-10; L-6; I-2**

##### Rationale:

- For usability, the Committee noted that there are potential issues with lack of discrete fields to document the referral and patients lacking access to a diabetes prevention program because their insurance does not cover the services.

#### 5. Related and Competing Measures

- No related or competing measures were noted.

#### 6. Standing Committee Recommendation for Endorsement: Yes-5; No-13

- The developer submitted a reconsideration request for this measure. The Standing Committee voted to not reconsider this measure.

#### 7. Public and Member Comment

#### 8. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-10; No-1 (November 17, 2020: Not Endorsed)

- The developer submitted a reconsideration request for this measure. The CSAC voted to not reconsider this measure.
- The CSAC upheld the Standing Committee's decision not to recommend the measure for endorsement.

#### 9. Appeals

### #3571e Retesting of Abnormal Blood Glucose in Patients With Prediabetes

[Submission](#) | [Specifications](#)

**Description:** Percentage of patients aged 18 years and older who had an abnormal fasting plasma glucose, oral glucose tolerance test, or hemoglobin A1c result in the range of prediabetes in the previous year who have a blood glucose test performed in the one-year measurement period

**Numerator Statement:** Patients who had a blood glucose test performed

### #3571e Retesting of Abnormal Blood Glucose in Patients With Prediabetes

\*Retesting for abnormal blood glucose may include using a fasting plasma glucose, 2-h plasma glucose during a 75g oral glucose tolerance test, or A1C.

**Denominator Statement:** All patients aged 18 years and older who had an abnormal fasting plasma glucose, oral glucose tolerance test, or hemoglobin A1c result in the range of prediabetes in the year prior to the one-year measurement period

\*\*Abnormal lab result in the range of prediabetes includes a fasting plasma glucose level between 100 mg/dL (5.6 mmol/L) to 125 mg/dL (6.9 mmol/L) OR a 2-hour glucose during a 75g oral glucose tolerance test between 140 mg/dL (7.8 mmol/L) to 199 mg/dL (11.0 mmol/L) OR and A1C between 5.7-6.4% (39-47 mmol/mol).

**Exclusions:** Denominator Exclusions:

Exclude patients who are pregnant.

Exclude patients who have any existing diagnosis of diabetes (Type 1, Type 2, latent autoimmune diabetes of adults [LADA], monogenic diabetes [MODY]).

Exclude patients in palliative care/hospice.

**Adjustment/Stratification:** No risk adjustment or risk stratification

**Level of Analysis:** Clinician: Group/Practice, Clinician: Individual

**Setting of Care:** Outpatient Services

**Type of Measure:** Process

**Data Source:** Electronic Health Records

**Measure Steward:** American Medical Association

#### STANDING COMMITTEE MEETING 06/25/2020

##### 1. Importance to Measure and Report: The measure did not pass the Importance criteria.

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-0; M-7; L-7; I-4**; 1b. Performance Gap: **H-1; M-10; L-3; I-3**; Evidence Exception: **Yes-9; No-8**

##### Rationale:

- The developer cited evidence found in guidelines from the United States Preventive Services Task Force (USPSTF) and the American Diabetes Association (ADA).
  - At least annual monitoring for the development of diabetes in those with prediabetes is suggested. (ADA, 2018) (E Recommendation)
  - The developer provides evidence of disease prevalence and systematic misses of opportunities to intervene by clinicians.
  - The developer does not provide studies that offer evidence that annual monitoring is associated with positive outcomes.
- The Committee noted that there is a lack of evidence to support this measure.
- The Committee raised concern that the quality measurement enterprise generally has sufficient process measures but not enough outcome measures.
- The Committee observed the developer's review of the literature that suggests a gap in care, noting that the U.S. has 84 million adults with prediabetes, nine out of 10 patients who have prediabetes are not aware, and missed opportunities among primary care providers in diagnosing and managing patients with prediabetes represent a gap in care.

##### 2. Scientific Acceptability of Measure Properties: The measure did not achieve consensus on the Scientific Acceptability criteria.

(2a. Reliability precise specifications, testing; 2b. Validity testing, threats to validity)

2a. Reliability: **H-0; M-12; L-5; I-0**; 2b. Validity: **H-0; M-9; L-7; I-1**

##### Rationale:

- The developer used the same testing for both data element reliability and validity.
- The developer performed data element reliability/validity testing at two facilities on two common EHR systems.

### #3571e Retesting of Abnormal Blood Glucose in Patients With Prediabetes

- Test Site #1: This is an ambulatory facility in South Carolina, which is part of a larger health system composed of 8 inpatient hospitals and more than 100 outpatient facilities. This facility uses Epic EHR in their facility.
  - Test Site #2: This is an ambulatory facility in South Carolina, which is part of a larger system composed of a 1,600+ bed comprehensive integrated health system, serving 1 million patients. This facility uses Cerner EHR in their facility.
- Submission includes simulated data set results demonstrating unit testing that covers 100% of the measure logic.
- The feasibility assessment indicated the following data elements had issues in the accuracy domain, further indicating that these data elements may not be correct:
  - Laboratory Test, Performed: Fasting Plasma Glucose Lab Test Mass Per Volume" (The measure developer noted that fasting status of glucose testing is not captured in discrete fields in either EHR; however, capturing A1C testing is feasible. To test for prediabetes, fasting plasma glucose, 2-h plasma glucose during 75-g oral glucose tolerance test, and A1C are equally appropriate.) (in Cerner and Epic)
  - "Laboratory Test, Performed: Fasting glucose [Moles/volume] in Serum or Plasma" (in Cerner and Epic)
  - "Laboratory Test, Not Performed: Fasting glucose [Moles/volume] in Serum or Plasma" (in Cerner and Epic)
  - "Laboratory Test, Not Performed: Glucose [Moles/volume] in Serum or Plasma --2 hours post 75 g glucose PO" (in Cerner)
  - "Laboratory Test, Not Performed: Fasting Plasma Glucose Lab Test Mass Per Volume" (in Cerner and Epic)
  - "Laboratory Test, Not Performed: Glucose [Mass/volume] in Serum or Plasma --2 hours post 75 g glucose PO" (in Cerner)
  - "Intervention, Order: Comfort Measures" using "Comfort Measures (2.16.840.1.113883.17.4077.3.2030)" (The measure developer noted that Comfort Care as an exclusion is standard in NQF endocrine registry measures and it is expected that EMR developers create a distinct field to collect this data in the future.) (in Cerner)
- Data element reliability/validity testing was conducted utilizing Parallel Forms Reliability Testing methodology to determine if data elements found through electronic data pulls could be confirmed by manual abstraction of the same data elements.
  - Verification of the data elements was obtained through automated data search strategies against a reference strategy, which is considered the gold standard for obtaining the data elements.
  - A manual review of the data elements was used as the reference strategy against which automated data search and extraction strategies were evaluated.
  - Inter-rater reliability (crude agreement and Cohen's Kappa) was used to assess the reliability of the measure based on results from two independent reviewers trained in the same way and reviewing the same patient record.
- The Committee did not reach consensus on validity but noted that the measure had concerns associated with the feasibility scorecard in that the accuracy of the data elements was questionable.

#### 3. Feasibility: H-0; M-7; L-9; I-0

*(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)*

##### Rationale:

- In the review of the measure's feasibility, the Committee was concerned that reporting the measure may be challenging since the accuracy of the data elements was not clear.

#### 4. Use and Usability



### #3571e Retesting of Abnormal Blood Glucose in Patients With Prediabetes

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

4a. Use: **Pass-15; No Pass-2** 4b. Usability: **H-0; M-7; L-6; I-3**

#### Rationale:

- The Committee noted that the measure has not been implemented, but the developer has the intention of submitting the measure to CMS for the MIPS program.

#### **5. Related and Competing Measures**

- No related or competing measures were noted.

#### **6. Standing Committee Recommendation for Endorsement: N/A**

- The Standing Committee did not vote on an endorsement recommendation because the measure did not pass the scientific acceptability criteria.
- During the post-comment meeting, the Standing Committee voted to not recommend the measure for endorsement.

#### **7. Public and Member Comment**

- One commenter noted “There is limited evidence on the best rescreening intervals for adults with normal results; however, screening every 3 years is a reasonable option.” In contrast, this measure requires retesting at least annually.
- In addition, the exclusions for this measure are different from the others. Comfort care is not included in this measure.
- Other commenters agreed that retesting is needed but that the testing should include a variety of tests, a specific time frame, coverage by insurance, and ease of access to tests.

#### **8. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-10; No-1 (November 17, 2020: Not Endorsed)**

- The developer submitted a reconsideration request for this measure. The CSAC voted to not reconsider this measure.
- The CSAC upheld the Standing Committee’s decision not to recommend the measure for endorsement.

#### **9. Appeals**



## Appendix B: Primary Care and Chronic Illness Portfolio—Use in Federal Programs

NQF #	Title	Federal Programs: Implemented or Finalized as of February 4, 2021
0046	Screening for Osteoporosis for Women 65-85 Years of Age	Merit-Based Incentive Payment System (MIPS) Program (Implemented)
0053	Osteoporosis Management in Women Who Had a Fracture	MIPS Program (Implemented), Medicare Part C Star Rating (Implemented)
0054	Disease-Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis (ART)	Medicare Part C Star Rating (Implemented)
0055	Comprehensive Diabetes Care: Eye Exam (retinal) performed	Medicare Part C Star Rating (Implemented), MIPS Program (Implemented), Marketplace Quality Rating System (QRS) (Implemented)
0058	Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis (AAB)	MIPS Program (Implemented), Marketplace QRS (Implemented)
0059	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%)	Medicare Part C Star Rating (Implemented), Medicaid (Implemented), Medicare Shared Savings Program (Implemented), MIPS Program (Implemented)
0062	Comprehensive Diabetes Care: Medical Attention for Nephropathy	Medicare Part C Star Rating (Implemented), MIPS Program (Implemented), Marketplace QRS (Implemented)
0087	Age-Related Macular Degeneration: Dilated Macular Examination	MIPS Program (Finalized)
0089	Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care	MIPS Program (Implemented)
0409	HIV/AIDS: Sexually Transmitted Diseases – Screening for Chlamydia, Gonorrhea, and Syphilis	MIPS Program (Implemented)
0416	Diabetic Foot & Ankle Care, Ulcer Prevention – Evaluation of Footwear	MIPS Program (Implemented)
0417	Diabetic Foot & Ankle Care, Peripheral Neuropathy – Neurological Evaluation	MIPS Program (Implemented)
0541	Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category	Marketplace QRS (Implemented)
0575	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control (<8.0%)	Marketplace QRS (Implemented)

NQF #	Title	Federal Programs: Implemented or Finalized as of February 4, 2021
0654	Acute Otitis Externa: Systemic Antimicrobial Therapy – Avoidance of Inappropriate Use	MIPS Program (Implemented)
0657	Otitis Media with Effusion: Systemic antimicrobials – Avoidance of inappropriate use	MIPS Program (Implemented)
1800	Asthma Medication Ratio	Medicaid (Implemented), Marketplace QRS (Implemented)
2079	HIV medical visit frequency	MIPS Program (Implemented)
2082	HIV viral load suppression	Medicaid (Implemented), MIPS Program (Implemented)

## **Appendix C: Primary Care and Chronic Illness Standing Committee and NQF Staff**

### STANDING COMMITTEE

**Dale Bratzler, DO, MPH (Co-Chair)**

University of Oklahoma Health Sciences Center – College of Public Health  
Oklahoma City, OK

**Adam Thompson, BA (Co-Chair)**

Kennedy Health Alliance  
Berlin, NJ

**Robert A. Bailey, MD**

Janssen Scientific Affairs, LLC  
Titusville, NJ

**Lindsay Botsford, MD, MBA, MBA/FAAFP**

Physicians at Sugar Creek  
Sugar Land, TX

**Kathleen Brady, MD, MSCE**

Philadelphia Department of Public Health  
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## Appendix D: Measure Specifications

	<b>3569e Prediabetes: Screening for Abnormal Blood Glucose</b>
Steward	American Medical Association
Description	Percentage of patients aged 40 years and older with a BMI greater than or equal to 25 who are seen for at least two office visits or at least one preventive visit during the 12-month period who were screened for abnormal blood glucose at least once in the last 3 years
Type	Process
Data Source	Electronic Health Records Measure data elements will be collected through health care organization electronic health record query, electronic health data queries
Level	Clinician : Group/Practice, Clinician : Individual
Setting	Outpatient Services
Numerator Statement	*Screening for abnormal blood glucose may include using a fasting plasma glucose, 2-h plasma glucose during a 75g oral glucose tolerance test, or A1C.
Numerator Details	exists "A1c Test Performed Within Past 3 Years" or exists "Fasting Plasma Glucose Test Performed Within Past 3 Years" or exists "Two Hour Plasma Glucose During 75 Gram Oral Glucose Tolerance Test Performed Within Past 3 Years" See additional code sets and materials in attachments
Denominator Statement	All patients aged 43 years and older with a BMI greater than or equal to 25 seen for at least two office visits or at least one preventive visit during the 12-month measurement period
Denominator Details	Denominator "Initial Population" and exists ( ["Patient Characteristic Birthdate": "Birth date"] BirthDate where Global."CalendarAgeInYearsAt" ( BirthDate.birthDatetime, start of "Measurement Period" ) >= 43 ) and "Highest BMI Documented During Measurement Period is Greater Than or Equal to 25"  See attachment in human readable file in S.2a
Exclusions	Denominator Exclusions "Patient is Pregnant at Encounter" or "Patient Has Active Diabetes Diagnosis at Encounter" or "Hospice During Measurement Period" or "Palliative Care During Measurement Period" or "Comfort Measures During Measurement Period"
Exclusion details	See attachment in human readable file in S.2a
Risk Adjustment	No risk adjustment or risk stratification
Stratification	N/A
Type Score	Rate/proportion better quality = higher score
Algorithm	See attachment in human readable file in S.2a 151659
Copyright / Disclaimer	© 2018 American Medical Association. All Rights Reserved. Limited proprietary coding is contained in the Measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of

	<b>3569e Prediabetes: Screening for Abnormal Blood Glucose</b>
	<p>these code sets. The AMA disclaims all liability for use or accuracy of any Current Procedural Terminology (CPT®) or other coding contained in the specifications.</p> <p>CPT® contained in the Measures specifications is copyright 2004-2017 American Medical Association. LOINC® copyright 2004-2017 Regenstrief Institute, Inc. SNOMED CLINICAL TERMS (SNOMED CT®) copyright 2004-2017 The International Health Terminology Standards Development Organisation (IHTSDO). ICD-10 is copyright 2017 World Health Organization. All Rights Reserved.</p>

	<b>3570e Intervention for Prediabetes</b>
Steward	American Medical Association
Description	Percentage of patients aged 18 years and older with identified abnormal lab result in the range of prediabetes during the 12-month measurement period who were provided an intervention*
Type	Process
Data Source	Electronic Health Records Measure data elements will be collected through health care organization electronic health record query, electronic health data queries
Level	Clinician : Group/Practice, Clinician : Individual
Setting	Outpatient Services
Numerator Statement	<p>Patients who were provided an intervention*</p> <p>*Intervention must include one of the following: referral to a CDC-recognized diabetes prevention program; referral to medical nutrition therapy with a registered dietician; prescription of metformin.</p>
Numerator Details	Please see attachment in S.2a for all information required to calculate numerator
Denominator Statement	<p>All patients aged 18 years and older with identified abnormal lab result in the range of prediabetes during the 12-month measurement period</p> <p>**Abnormal lab result in the range of prediabetes includes a fasting plasma glucose level between 100 mg/dL (5.6 mmol/L) to 125 mg/dL (6.9 mmol/L) OR a 2-hour glucose during a 75g oral glucose tolerance test between 140 mg/dL (7.8 mmol/L) to 199 mg/dL (11.0 mmol/L) OR and A1C between 5.7-6.4% (39-47 mmol/mol).</p>
Denominator Details	Please see attachment in S.2a for all information required to calculate denominator
Exclusions	<p>Denominator Exclusions:</p> <p>Exclude patients who are pregnant.</p> <p>Exclude patients who have any existing diagnosis of diabetes (Type 1, Type 2, latent autoimmune diabetes of adults [LADA], monogenic diabetes [MODY])</p>
Exclusion details	Please see attachment in S.2a for all information required to calculate denominator exclusions
Risk Adjustment	No risk adjustment or risk stratification
Stratification	N/A
Type Score	Rate/proportion better quality = higher score
Algorithm	Please see attachment in S.2a for all information required to calculate measure 151659

	<b>3570e Intervention for Prediabetes</b>
Copyright / Disclaimer	<p>© 2018 American Medical Association. All Rights Reserved.</p> <p>Limited proprietary coding is contained in the Measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. The AMA disclaims all liability for use or accuracy of any Current Procedural Terminology (CPT®) or other coding contained in the specifications.</p> <p>CPT® contained in the Measures specifications is copyright 2004-2017 American Medical Association. LOINC® copyright 2004-2017 Regenstrief Institute, Inc. SNOMED CLINICAL TERMS (SNOMED CT®) copyright 2004-2017 The International Health Terminology Standards Development Organisation (IHTSDO). ICD-10 is copyright 2017 World Health Organization. All Rights Reserved.</p>

	<b>3571e Retesting of Abnormal Blood Glucose in Patients with Prediabetes</b>
Steward	American Medical Association
Description	Percentage of patients aged 18 years and older who had an abnormal fasting plasma glucose, oral glucose tolerance test, or hemoglobin A1c result in the range of prediabetes in the previous year who have a blood glucose test performed in the one-year measurement period
Type	Process
Data Source	Electronic Health Records Measure data elements will be collected through health care organization electronic health record query, electronic health data queries.
Level	Clinician: Group/Practice, Clinician : Individual
Setting	Outpatient Services
Numerator Statement	<p>Patients who had a blood glucose test performed</p> <p>*Retesting for abnormal blood glucose may include using a fasting plasma glucose, 2-h plasma glucose during a 75g oral glucose tolerance test, or A1C.</p>
Numerator Details	See attached file in S.2a and S.2b for information to calculate the numerator
Denominator Statement	<p>All patients aged 18 years and older who had an abnormal fasting plasma glucose, oral glucose tolerance test, or hemoglobin A1c result in the range of prediabetes in the year prior to the one-year measurement period</p> <p>**Abnormal lab result in the range of prediabetes includes a fasting plasma glucose level between 100 mg/dL (5.6 mmol/L) to 125 mg/dL (6.9 mmol/L) OR a 2-hour glucose during a 75g oral glucose tolerance test between 140 mg/dL (7.8 mmol/L) to 199 mg/dL (11.0 mmol/L) OR and A1C between 5.7-6.4% (39-47 mmol/mol).</p>
Denominator Details	See attached file in S.2a and S.2b for information to calculate the denominator
Exclusions	<p>Denominator Exclusions:</p> <p>Exclude patients who are pregnant.</p> <p>Exclude patients who have any existing diagnosis of diabetes (Type 1, Type 2, latent autoimmune diabetes of adults [LADA], monogenic diabetes [MODY]).</p> <p>Exclude patients in palliative care/hospice</p>
Exclusion details	See attached file in S.2a and S.2b for information to calculate the exclusions
Risk Adjustment	No risk adjustment or risk stratification
Stratification	n/a



	<b>3571e Retesting of Abnormal Blood Glucose in Patients with Prediabetes</b>
Type Score	Rate/proportion   better quality = higher score
Algorithm	See attached file in S.2a for information to calculate the measure logic 151659
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## **Appendix E: Related and Competing Measures**

There are no related or competing measures.

## Appendix F: Pre-Evaluation Comments

No comments were received.

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