

Measure Developer Guidebook for Submitting Measures to NQF

VERSION 6.5

Last updated: July 2022

Contents

Introduction.....	3
National Quality Forum.....	3
NQF’s Portfolio of Endorsed Measures.....	5
Quality Positioning System.....	5
Consensus Development Process.....	5
Ongoing Enhancements to the Endorsement Process.....	6
Consensus Development Process.....	9
Submitting Measures to NQF.....	22
Intent to Submit.....	22
Online Submission.....	22
Submission of eCQMs.....	23
Adjustment for Social Risk Factors.....	24
Harmonization.....	32
ICD-10.....	32
Measure Submission Completeness Checklist.....	34
Technical Assistance.....	35
How to Create a Good Submission.....	35
Additional Developer Resources.....	35
Maintenance of Endorsement.....	36
Annual Updates.....	36
Early Maintenance Review.....	36
Appendix A: NQF’s Measure Evaluation Criteria.....	39
Appendix B: Intent to Submit Checklist and Guidance.....	41
Intent to Submit Overview.....	41
Required Sections.....	41
General Considerations.....	42
Additional Considerations by Measure Type.....	43
Next Steps.....	44
Appendix C: Measure Steward Agreement.....	45
Appendix D: Addendum of the Measure Steward Agreement – New Measures.....	51
Appendix E: Guidance to Make Submissions 508 Compliant (required).....	53

Introduction

The *Measure Developer Guidebook for Submitting Measures to NQF (Guidebook)* is a resource for measure stewards, measure developers, and organizations submitting measures to the National Quality Forum (NQF) for potential endorsement. This updated edition of the Guidebook has been revised to provide additional information about the Intent to Submit process, the process for early maintenance review (formerly referred to as ad-hoc review), and discussion and potential revote for measures rated as low or insufficient for reliability or validity by staff or the Scientific Methods Panel (SMP), update the Consensus Standards Approval Committee (CSAC) criteria for decision making, provide updated guidance for submission of electronic clinical quality measures (eCQMs), and provide guidance for making submission materials 508 compliant.

The Guidebook is organized to provide an overview of NQF goals, priorities, and resources; to guide measure developers and stewards through the six steps of the Consensus Development Process (CDP); and to provide tips for submitting proposed consensus standards (e.g., measures). The Guidebook aims to do the following:

- Explain the measure submission and evaluation processes
- Describe the expectations for measure developers and stewards as participants in the process
- Serve as the main resource for NQF CDP-related processes and policies for measure developers and stewards.

The Guidebook will be updated on a timely basis to maintain a current reference to assist measure developers and stewards in navigating the CDP.

National Quality Forum

Despite the hard work of many, there is broad recognition that our healthcare system can do a better job on quality, safety, and affordability. NQF is an organization that is honored to be recognized and funded in part by Congress and entrusted with the important public service responsibility of bringing together various public- and private-sector organizations to reach consensus on how to measure healthcare performance as the nation works to make it better, safer, and more affordable. NQF was established in 1999 and is a nonprofit, nonpartisan, membership-based organization.

NQF has more than 400 organizational members who give generously of their time and expertise. In 2020, more than 650 individuals volunteered on 30 NQF-convened Committees, working groups, and partnerships. The NQF Board of Directors, which is composed of key public- and private-sector leaders who represent major stakeholders in America's healthcare system, governs the organization. Consumers and those who purchase healthcare hold a simple majority of the at-large seats.

In 2002, working with all major healthcare stakeholders, NQF endorsed its first voluntary, national consensus performance measures to answer the call for standardized measurement of healthcare services. Over the years, this collaboration across stakeholder groups has resulted in a portfolio of more than 550 NQF-endorsed measures—most of which are in use by both private and public sectors—and an enormous

body of knowledge about measure development, use, and quality improvement. The majority of measures endorsed by NQF provide information about the quality of care delivered, typically defined as “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge ([Institute of Medicine, Medicare: A Strategy for Quality Assurance, Volume I 1990](#), p.21).”

Historically, NQF has played a key role in our national health and healthcare improvement priorities. For example, in 2010, NQF convened the [National Priorities Partnership](#) (NPP) to provide input on the first National Quality Strategy (NQS) in 2010. The Department of Health and Human Services (HHS) released the first **NQS** in 2011. This marked a significant step forward in the effort to align a very fragmented healthcare system. The NQS’ aims and goals set forth a unified vision of the healthcare system that was understandable and applicable to all stakeholders at every level—local, state, and national. More specifically, the NQS laid out a series of six priorities for focusing the nation on how best and most rapidly to improve our health and healthcare. NQF has carefully aligned its work with these goals, using them as a roadmap for much of its work.

The NPP has evolved to become the [National Quality Partners™](#), an alliance of our members that provides opportunities to address complex problems in settings that encourage collaboration, learning, and action.

NQF also provides public input to the federal government and the private sector on optimal, aligned measure use via its convening of the [Measure Applications Partnership \(MAP\)](#). MAP was created under the statutory authority of the Affordable Care Act (ACA). It is a public-private partnership of healthcare stakeholders, convened by NQF, that provides input to the Department of Health and Human Services (HHS) on the selection and alignment of performance measures for public reporting and performance-based payment programs. More than 150 healthcare leaders from 90 organizations who regularly use measures and measurement information serve on MAP and participate in its discussions.

Lastly, NQF also has advanced measurement science by focusing on topics such as inclusion of social risk factors in risk adjustment approaches, attribution, and measure variation. More recent measurement science activities have included a focus on population-based trauma outcomes, healthcare system readiness, patient safety in the ambulatory care setting, and addressing chief complaints through quality measurement.

Standardized healthcare performance measures help clinicians and other healthcare providers understand whether the care they offered their patients was optimal and appropriate, and if not, where to focus their efforts to improve the care they deliver. Measures also are used by all types of public and private payers for a variety of accountability purposes, including public reporting and pay for performance. Measures are an essential part of making healthcare more transparent to all, most importantly for those who receive care or help make care decisions for loved ones. Use of standardized healthcare performance measures allows for comparison across clinicians, hospitals, health plans, and other providers.

You can only improve what you measure, so measurement plays a central role in current healthcare quality improvement efforts. NQF endorses measures that are intended for use in *accountability applications* as well as quality improvement. Accountability applications are uses of performance results about identifiable,

accountable entities to make judgments and decisions as a consequence of performance, such as reward, recognition, punishment, payment, or selection (e.g., public reporting, accreditation, licensure, professional certification, health information technology incentives, performance-based payment, and network inclusion/exclusion). *Selection* is the use of performance results to make or affirm choices regarding providers of healthcare or health plans.

NQF works closely with measure developers to evaluate measures that meet NQF's evaluation criteria. NQF's criteria have evolved over time to reflect the input of a wide variety of stakeholders and the needs those stakeholders have voiced regarding which measures will be used to improve the health of patients and hold providers accountable for the care that they deliver. The standard evaluation criteria foster consistency and predictability for measure developers and for those using NQF-endorsed measures.

NQF's Portfolio of Endorsed Measures

NQF organizes measures by topic area, and each topic area has a multistakeholder Standing Committee that oversees the portfolio of measures for the topic. Currently, these topic areas include All-Cause Admissions and Readmissions, Behavioral Health and Substance Use, Cancer, Cardiovascular, Cost and Efficiency, Geriatrics and Palliative Care, Neurology, Patient Experience and Function, Patient Safety, Perinatal and Women's Health, Prevention and Population Health, Primary Care and Chronic Illness, Renal, and Surgery.

NQF-endorsed measures undergo maintenance of endorsement evaluations approximately every three years. A priority is placed on evaluating related and competing measures at the same time to foster harmonization of endorsed measures.

NQF is looking to work more closely with developers as measures become fully developed and ready for submission. NQF asks developers to share any information on measures that will be ready for submission within 12 months and inform the organization of any endorsed measures that will be retired. An ongoing dialogue between developers and NQF facilitates planning the various CDP projects and bringing measures into the process as quickly as possible. **NOTE: As part of the changes to the endorsement process implemented in Fall 2017, NQF now requires developers to notify NQF of their "intent to submit" any new or maintenance measure at least three months prior the measure submission deadline.**

Quality Positioning System

The [Quality Positioning System](#) (QPS) is a web-based public-facing tool that helps users find NQF-endorsed measures. This system allows users to search by measure title or number, along with by condition, care setting, or measure steward, as well as by several other characteristics. QPS also allows users to provide feedback at any time about the use and usefulness of. QPS also can be used to learn from other measure users about how they select and use measures in their quality improvement programs.

Consensus Development Process

NQF uses its formal [CDP](#) to evaluate and endorse consensus standards, including performance measures, best practices, frameworks, and reporting guidelines. The CDP is designed to call for input and carefully

consider the interests of stakeholder groups from across the healthcare industry. Because NQF uses this formal Consensus Development Process, it is recognized as a voluntary consensus standards-setting organization as defined by the [National Technology Transfer and Advancement Act of 1995](#) and [Office of Management and Budget Circular A-119](#).

NQF's CDP considers both newly submitted measures for initial endorsement as well as previously endorsed measures for maintenance of endorsement. NQF endorsement projects have increased in number and complexity, while stakeholder expectations for the timeliness and effectiveness of the entire measure development, testing, and endorsement enterprise have intensified. To be endorsed, a measure submitted to NQF must satisfy four major criteria—Importance to Measure and Report (must-pass), Scientific Acceptability of the Measure Properties (must-pass), Feasibility to Implement, and Usability and Use of the Measure Results (“Use” is must-pass for maintenance measures), as well as be considered in relation to related or competing measures. Over the past decade, the procedures that form NQF's CDP and its implementation have evolved to ensure that evaluation of candidate consensus standards continues to follow best practices in performance measurement and standards-setting.

Ongoing Enhancements to the Endorsement Process

Since 2000, when NQF first laid out the requirements of measure endorsement into the multistep CDP, NQF has refined the process to address the needs of NQF members and, more broadly, the needs of the healthcare industry. These refinements have targeted the need for new measures; for maintenance of the measure portfolios (e.g., competing and related measure assessments); and for increased efficiency of the CDP (e.g., shorter cycle time from submission to endorsement and more opportunities for evaluation).

These changes are themselves part of a broader process of continuous improvement in the structure and governance of NQF. They reflect what NQF has learned as the organization has grown. These changes also respond to the needs of NQF members and, more broadly, to NQF's multistakeholder constituencies—hospitals, physicians and other clinicians, consumers, purchasers, health plans, government organizations and agencies, suppliers and health industry companies, and quality improvement organizations.

Prior to 2010, NQF conducted maintenance evaluations of already-endorsed measures on an ad hoc basis, through topic-specific consensus standards maintenance committees and existing projects. As the number of NQF-endorsed measures grew, the need for a more predictable schedule for maintaining the endorsement of NQF-endorsed measures became apparent, in order for NQF to ensure its portfolio remained current. Keeping the NQF portfolio current refers to whether measures (1) are appropriately based on current evidence, (2) have scientifically and clinically appropriate specifications, (3) have harmonized specifications, and (4) represent the “best-in-class” measure for the issue addressed.

To accomplish this goal, in May 2010, the NQF Board of Directors approved a process redesign for measure maintenance and endorsement cycles, according to measure topic. Specifically, at the three-year cycle review for a topic area, topic/condition-specific Committees consider measure endorsement for existing measures, along with newly submitted measures in the same topic area. In addition, NQF put into place processes to ensure that each measure is based on current science, and its accompanying specifications are updated through the annual updates and ad hoc reviews. NQF also implemented a revised process to address harmonization of measures.

The evaluation of the timeliness, efficiency, and effectiveness of the CDP has been an ongoing effort since then. As part of the CDP redesign work, NQF has hosted two comprehensive Kaizen improvement events that have focused on the entire CDP. The first was a four-day event, held in September 2013, that focused on measure development and measure endorsement. The second was a two-day event, held in May 2017, that focused on measure endorsement. The purpose of these events was to explore ways to provide better and timelier multistakeholder input into the measure development and endorsement lifecycle. A key goal of both efforts was to reduce the waste and delays across the spectrum—from the measure concept through testing to endorsement—to ensure that the measures most likely to drive improvements in healthcare are available and endorsed as soon as possible. Various recommendations from the Kaizen events have been incorporated into the workflows of the various steps of the CDP. Major efforts to improve the CDP process are described more fully below.

Re-examining the Consensus Process

The 2012 hospital-wide readmissions endorsement project raised questions about NQF's process for making endorsement decisions, and more specifically, about how NQF determines that consensus has been achieved. To address these concerns, NQF's Board of Directors created a Consensus Task Force. The charge of this Task Force was to review and recommend enhancements for NQF's CDP. After considering alternatives to reaching consensus and improving the CDP, the Consensus Task Force elected in 2013 to proceed with process changes related to efficiency of the process and with incremental efforts to achieve consensus.

Some of the Task Force recommendations were straightforward improvements to the endorsement process that provide greater transparency and consistency in the process. For example, the Task Force suggested that NQF provide Committee members and the public with plain language measure summary documents, develop more detailed educational materials for standing committee members, and limit the exceptions that are made to the submission and evaluation processes.

Revising the Maintenance Process

To streamline and improve the periodic evaluation of currently endorsed measures, in 2015, NQF updated its process for the evaluation of measures for maintenance of endorsement. Under the new approach, there is a shift in emphasis for selected criteria for evaluation of currently endorsed measures. Refer to [Appendix A](#) for details regarding this change in process.

Revising the Ratification and Appeals Processes

Based on comments received from various stakeholders, NQF recognized the need to revise the ratification and appeals procedures of the CDP to eliminate redundant decision making, prevent relitigation of issues already considered, and reinforce the finality of decisions once appeals are adjudicated. On November 4, 2015, the NQF Board of Directors approved changes to the CDP ratification and appeals process. The most significant changes to the process include the following:

- The CSAC will make final measure endorsement decisions, without ratification by another body (i.e., NQF's Board of Directors).
- An Appeals Board will decide measure appeals rather than the NQF Board of Directors.

- Appeals of a measure endorsement decision will go directly to the Appeals Board without a review by the CSAC.

Most Recent Changes to the CDP

Beginning in Fall 2017, NQF operationalized key changes to the CDP based on recommendations made during the May 2017 Kaizen event. These changes are described briefly below. A full [report](#) of the event, including the objectives and all recommendations, is available on NQF's website.

Increased Opportunities for Measure Submission: Scheduling/Frequency

In order to reduce the wait time between evaluation cycles and provide developers more opportunities to submit measures, NQF now offers two measure submission opportunities (cycles) for each topic area, each year, instead of one opportunity for a select few topic areas each year per the prior CDP schedule. Due to the increased opportunities for measure submission, NQF has consolidated the measure evaluation topical areas from 22 to 14 topical areas.

NQF will limit the number of measures evaluated by the Standing Committees in each cycle to a maximum of 12 (up to eight measures undergoing maintenance evaluation and up to four new measures). NQF will use its discretion to determine whether to assign two to three additional measures to a topic for a given cycle. NQF will consider this option if there is a legislative mandate (e.g., measures in federal programs or proposed for federal programs); related and competing measure concerns; and/or additional measures that address prioritized gap areas.

Intent to Submit

To submit a measure for an initial endorsement evaluation or a maintenance of endorsement evaluation, a measure steward must complete or update certain portions of the online measure submission form and notify NQF of its intent to submit. To plan appropriately for new measure submissions, NQF will now require stewards/developers to complete the *Intent to Submit* process ([Appendix B](#)). Measure stewards/developers will need to notify NQF, via the Intent to Submit process, at least three months prior to the measure submission deadline to prepare for the committee's evaluation in the upcoming cycle. As part of the Intent to Submit process, stewards/developers must submit **full measure specifications** and testing information to NQF, along with other information as needed (e.g., a feasibility scorecard for eQMs). Information on how to complete the Intent to Submit Process is described in [Appendix B](#).

Creation of the Scientific Methods Panel

To reduce the review burden on Committee members and promote consistency across standing committees, NQF's Scientific Methods Panel conducts evaluation of new complex measures for the criterion of *Scientific Acceptability*. The Panel also conducts this evaluation for previously endorsed complex measures if testing has been updated, and for other measures at the discretion of NQF staff. The following types of measures are considered complex and therefore may be evaluated by the Scientific Methods Panel:

- Outcome measures, including intermediate clinical outcomes
- Instrument-based measures (e.g., PRO-PMs)
- Cost/resource use measures

- Efficiency measures (those combining concepts of resource use and quality)
- Composite measures

Continuous Public Commenting Period With Member Expression of Support

Rather than opening two separate public commenting periods (14-day pre-meeting commenting and 30-day post-meeting commenting), NQF operates one continuous public commenting period. This commenting period will span at least 16 weeks to allow adequate time for the public and NQF member commenting. It will open approximately ten weeks prior to the committee evaluation meeting and close 30 days after NQF posts the draft technical report on the NQF website.

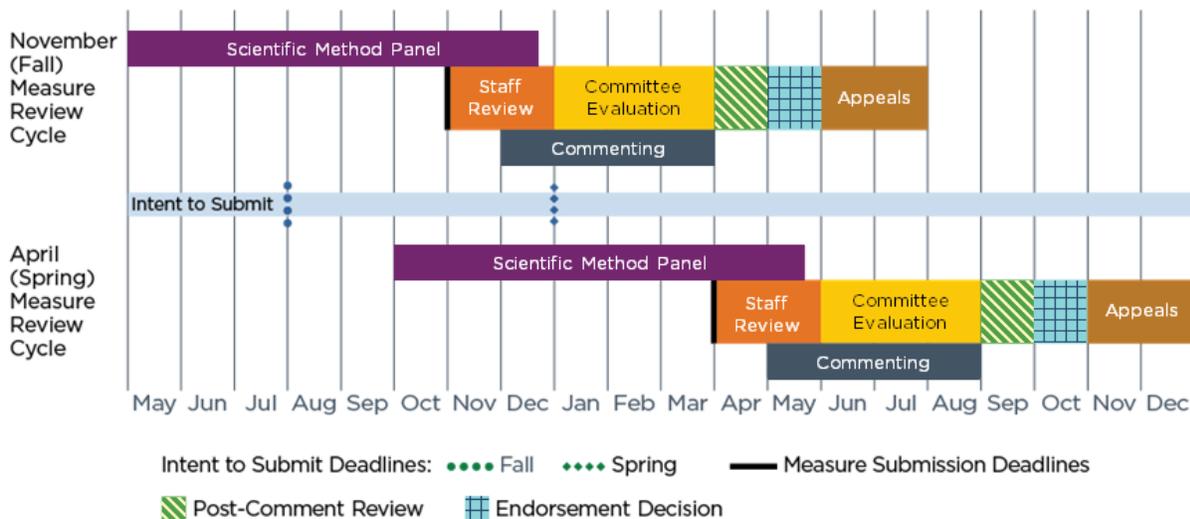
NQF membership voting will no longer be accomplished through a 15-day voting period following public comment. Instead, NQF members will have the opportunity to express their support (“Support” or “Do Not Support”) for each measure during the aforementioned continuous commenting period.

The following section describes the steps of the CDP in more detail.

Consensus Development Process

NQF’s CDP involves the following steps to endorse consensus standards (see diagram below): intent to submit, call for nominations, candidate consensus standard review, public comment with member support, CSAC endorsement, and appeals.

**Consensus Development Process:
Two Cycles Every Contract Year**



Call for Nominations—Standing Committees

NQF strives to continually improve its measure endorsement process to remain responsive to its stakeholders’ needs. Volunteer, multistakeholder Committees are the central component to this process, and the success of NQF’s projects is due in large part to the participation of its Standing Committee members.

Prior to the HHS contract that started in 2009, NQF operated with much uncertainty regarding resources for proposed projects. Consequently, work was organized on a project-by-project basis with no comprehensive schedule. Beginning in 2010, NQF established a three-year schedule for endorsement maintenance projects across 20 cross-cutting and condition-specific areas. As part of this new process, NQF appointed project-specific Steering Committees, with the nominations process commencing when project funding was secured.

Since 2014, NQF has seated Standing Committees for various project topic areas. These Committees are responsible for handling endorsement for new and maintenance measures, as well as other project work in their designated areas. Beginning in 2017, NQF instituted an annual Call for Nominations for all CDP Standing Committees to help fill any vacated seats.

Other groups serve as an important adjunct to NQF's Standing Committees by helping to ensure broad representation on the standing committee and providing specific technical expertise when needed. Additional detail about these other groups is included at the end of this section.

Standing Committee Application Process

NQF invites nominations for Standing Committees on an annual basis. NQF staff will publicize details regarding the desired perspectives or expertise for new Committee members at that time. Self-nominations are welcome. Third-party nominations must indicate that the individual has been contacted and is willing to serve. All nominations remain active for one year. To be considered for appointment to the Standing Committee, nominees should provide the following information:

- a completed online nomination form, including:
 - a brief statement of interest
 - a brief description of expertise highlighting relevant experience to the Committee
 - a short biography (maximum 750 characters), highlighting experience/knowledge relevant to the expertise described above and involvement in candidate measure development
 - curriculum vitae or list of relevant experience (e.g., publications) up to 20 pages
- a completed disclosure of interest form. This will be requested upon submission of a nomination form for Committees actively seeking nominees.
- confirmation of availability to participate in currently scheduled calls and meeting dates.

Standing Committee Composition

Topical standing committees include 20 to 25 individuals representing a variety of stakeholders, including consumers, purchasers, providers, health professionals, health plans, suppliers and industry, community and public health, and healthcare quality experts. Because NQF attempts to represent a diversity of stakeholder perspectives on Committees, a limited number of individuals from each of these stakeholder groups can be seated onto a Committee. For larger topic areas that include multiple conditions or cross-cutting areas, NQF will utilize technical expertise and/or expert reviewers for specific areas as needed (described more at the end of this section). Standing Committees are composed of individual members, rather than organizational members. Therefore, "substitutions" of other individuals from an organization

during committee meetings are not permitted. However, Committee members are encouraged to engage colleagues and solicit input from colleagues throughout the process.

Standing Committee Terms

New Standing Committee members are appointed to a three-year term with the ability to extend for one additional term of two years. After two consecutive terms, Committee members must step down for a full term (three years) before becoming eligible for reappointment. NQF reserves the right to make an exception to the policy above if one-third or more of Standing Committee members are scheduled to roll off at the same time. A Standing Committee member's term begins on January 1st after selection, following the close of the roster commenting period. Standing Committee co-chairs are appointed to a three-year term with an option to extend for two additional two-year terms.

Standing Committee Expectations and Time Commitment

Participation on a Standing Committee requires a significant time commitment. Committee members are expected to participate in all currently scheduled calls/meetings. Over the course of the Committee member's term, additional meetings will be scheduled, or meetings may be rescheduled; new dates are set based on the availability of the majority of the Committee.

The times estimated below may vary depending on the number and complexity of the measures being evaluated, as well as the complexity of the topic and multistakeholder consensus process. Committee participation includes:

- Review all measure submission forms (approximately two hours per measure)
- Participate in the scheduled orientation call (two hours)
- Complete all surveys and evaluations
- Attend scheduled evaluation meetings. These may be in-person meetings (one to two full days in Washington, D.C.) or a series of webinars (typically two hours each)
- Complete measure evaluation by reviewing the comments received on the draft report and then participating on the post-comment web meeting (two hours)
- Complete additional measure evaluations via webinar or conference call if needed
- Participate in additional calls as necessary
- Present measures and lead discussions for the committee on conference calls, webinars, and other meetings

If a member has poor attendance or participation:

- NQF staff will contact the member and ask if he/she would like to resign from the committee
- NQF staff reserves the right to remove any member from the Standing Committee for persistent poor attendance or lack of participation.

If a member is unable to fulfill his/her term (for any reason):

- NQF will identify a replacement through the pool of expert reviewers. If a replacement cannot be identified from the expert reviewer pool, NQF staff will review the nominations received during the most recent call for nominations.

- NQF staff will contact the potential replacement.
- Upon acceptance of Committee appointment, the new member would complete the term of the individual who was replaced.
- The outgoing member may not select a substitute to carry out the remainder of the term.

Disclosures of Interest

Per the [NQF Conflict of Interest Policy for CDP Standing Committees](#), all nominees will be asked to complete a general disclosure of interest (DOI) form for each Committee to which they have applied, prior to being seated. The DOI form for each nominee is reviewed in the context of the topic area in which the Committee will be reviewing measures. This form must be completed annually in order to participate in measure evaluation.

Once nominees have been selected to serve on the Committee, a measure-specific DOI form will be distributed near the beginning of each evaluation cycle. This measure-specific DOI is used to determine whether any members will be required to recuse themselves from discussion of one or more measures under review based on prior involvement or relationships to entities relevant to the topic area. Because Standing Committee members are asked to review various types of measures throughout their term of service, NQF asks Committee members to complete the measure-specific DOI for all measures being evaluated each cycle, as well as any measures that are related to, or competing with, measures being evaluated to ensure any potential conflicts or biases have been identified.

Additional Expertise

As noted earlier, other groups of experts serve as an important adjunct to NQF's Standing Committees as needed. These groups include a pool of expert reviewers, Technical Advisory Panels, and the Scientific Methods Panel.

EXPERT REVIEWERS

NQF's pool of expert reviewers are "on call" for the explicit use of CDP Standing Committees. An expert reviewer cannot serve on any other type of committee without entering the nomination process. All expert reviewers will adhere to the [Standing Committee Policy](#) (e.g., terms, conflict of interest, etc.) and are required to disclose any conflicts of interests, similar to the requirements of the members of the Standing Committee. Expert reviewers can remain in the pool until their term expires. Expert reviewers will only be required to fill out a measure-specific DOI if they are seated on the Standing Committee for a particular cycle.

NQF anticipates the role of the expert reviewer to evolve over time. Currently, expert reviewers may provide expertise (as needed) to evaluate the measures submitted for endorsement consideration; provide comments and feedback on the measures throughout the measure review process; and provide input on strategic discussions in their topic areas.

TECHNICAL ADVISORY PANELS

Based upon the expertise present on a Standing Committee and through the pool of expert reviewers, a Technical Advisory Panel may also be seated to provide needed expertise for the endorsement process. Members of a Technical Advisory Panel are experts in their field. They provide guidance to a Standing

Committee around specific technical issues related to some or all of the consensus standards being evaluated. At the direction of the Standing Committee, members of a Technical Advisory Panel may be charged with reviewing the evidence supporting candidate consensus standards and/or completing other reviews requiring technical expertise. Members of a Technical Advisory Panel are selected primarily for their content expertise and experience. Members are also selected based upon their potential contribution to the project and the need for input from a particular stakeholder perspective. NQF members and the public will be given an opportunity to comment on Technical Advisory Panel rosters.

SCIENTIFIC METHODS PANEL

As described earlier, the Scientific Methods Panel conducts evaluation of new complex measures for the criterion of *Scientific Acceptability* (i.e., the reliability and validity subcriteria). Panel members are appointed to an initial two- or three-year term, with an optional two-year term to follow. In 2019, NQF expanded the size of the panel by adding an additional eight members. Going forward, NQF will issue an annual Call for Nominations for the Scientific Methods Panel in order to fill vacated seats.

Solicitation of Measures

Intent to Submit

Measure stewards will need to notify NQF of their “intent to submit” measures for endorsement consideration at ***least three months prior to the measure submission deadline***. This notification signals the measure steward’s or developer’s readiness for endorsement consideration and allows adequate opportunity for technical assistance prior to submitting measures for evaluation. NQF encourages measure stewards/developers to take advantage of technical assistance during this time.

As part of the Intent to Submit process, stewards or developers will submit **full measure specifications and testing information**, along with other information as needed (e.g., a feasibility assessment for eCQMs).

NOTE: This information must include the final measure specifications and testing data to be considered during the evaluation of the measure; ***developers cannot submit different specifications or testing information at the time of the full submission deadline***. If specifications or testing is not complete and finalized as of the Intent to Submit deadline, then the developer should wait to signal their intent to submit (e.g., the next cycle when specifications and testing are final). The Intent to Submit process is initiated through the measure dashboard (see [Appendix B](#)).

Measure Submission Deadlines

There will be two opportunities to submit measures each year, regardless of topic area. NQF will announce staggered measure submission deadlines twice per year (i.e., for each evaluation cycle, typically in November and April). ***An intent to submit and associated submission materials must be submitted at least three months prior to the submission deadline to be considered for that cycle***. Thus, for each submission cycle, there are two submission deadlines: the Intent to Submit deadline and the measure submission deadline. Full and complete measure specifications and testing information are required at the Intent to Submit deadline, while the remainder of the submission is due at the measure submission deadline.

To submit the measure for an initial endorsement evaluation or a maintenance-of-endorsement evaluation, a measure steward must complete and submit required information about the measure through the NQF

website by the measure submission deadline. This step can require significant support from NQF staff, who will provide technical assistance and follow-up with stewards and developers.

In addition to new measures, previously endorsed measures are evaluated approximately every three years for maintenance of endorsement. The NQF maintenance team works closely with developers to advise on the timing of submission for measures undergoing maintenance evaluation. NQF also will schedule maintenance evaluations of related and competing measures whenever possible. This may require changes to the three-year maintenance review schedule, but developers will not be expected to submit for maintenance any sooner than 24 months after the prior submission. For questions about the timing of measure maintenance review, please contact the measure maintenance team at measuremaintenance@qualityforum.org.

The Standing Committee will evaluate the measure(s) based primarily on the information submitted by the deadline. NQF staff will prepare a preliminary analysis for each measure based on submitted information. NQF staff will provide this preliminary analysis to the developer for review. Developers will have at least 48 hours to review the preliminary analysis for factual accuracy. To ensure transparency, any additional information submitted after the deadline will be submitted via public comment.

[How to Create a Good Submission](#) in the guidebook provides information on creating a good submission and other developer resources.

Measure Steward Agreement

Each candidate measure or set of measures has a *measure steward* who assumes responsibility for the submission of the measure to NQF for potential endorsement. The measure steward is responsible for making necessary updates to the measure and informing NQF about any changes made to the measure on an annual basis. In addition, the measure steward is responsible for providing the required measure information during the measure maintenance process.

- The measure steward organization is required to identify a single point of contact who will be notified of any upcoming maintenance deadlines or requirements related to the endorsed measure(s).
- Stewards may be contacted by NQF members or other members of the public with inquiries about specifications, updates, and implementation of the endorsed measure(s).
- Stewards are also responsible for maintaining measure details and specifications on any publicly available website.

Each steward who submits a fully specified and tested measure to NQF must submit a completed and signed [Measure Steward Agreement \(MSA\)](#) on or before the project's measure submission deadline in order for the measure to be considered by the Committee. The agreement is between NQF and the measure steward and only shared between these parties.

- For new measure stewards, the MSA should be accompanied by the completed addendum, in which the steward must list all the measures (NQF measure number and measure title) being submitted for review.

- For existing measure stewards, only a signed addendum is needed and will be appended to the existing MSA; a new MSA is not required. Contact NQF project staff to obtain the addendum.

Only one MSA is necessary per measure steward. If the steward is a governmental organization, an MSA is not required.

See [Appendix C](#) for an example of the MSA and [Appendix D](#) for an example of the addendum.

Candidate Consensus Standard (or Measure) Review

During each evaluation cycle, the relevant topical area Standing Committee will conduct a detailed evaluation of all submitted measures. NQF may use technical experts to provide specific technical advice to the standing committee if needed, as described earlier in this document. NQF also may use the content expertise of other convened Standing Committees or expert reviewers for technical expertise in clinical or cross-cutting areas. While a significant amount of preparatory work, including Committee training, occurs via teleconference or webinar, Standing Committees will typically convene during an in-person meeting or a series of webinars for measure evaluation, consideration of harmonization concerns, and discussion of measure gaps.

Call for Comments

NQF accepts comments on how NQF-endorsed measures are being used in the field to inform the committee for evaluation of the *Usability and Use* criterion. Comments may be submitted at any time through QPS or through the NQF project webpage. In addition, NQF also solicits comments from both NQF members and the public during each evaluation cycle via one continuous public commenting period. All comments received through these mechanisms at least four weeks prior to the measure evaluation meeting will be provided to the standing committee for consideration during the meeting. NQF will ensure the measure steward/developer also receives the submitted comments in a timely manner to prepare for the measure evaluation meeting. Measure stewards/developers are not required to provide written responses to the pre-evaluation comments received prior to the measure evaluation meeting.

Technical Evaluation by NQF and the Scientific Methods Panel (SMP)

Prior to release of measure submission materials to standing committees, NQF staff will conduct a preliminary analysis of each measure and assign a preliminary rating for the major evaluation criteria/subcriteria. For new complex measures and complex measures with updated testing information, the SMP will evaluate reliability and validity (i.e., the *Scientific Acceptability* criterion) and provide a preliminary rating to NQF staff and the standing committee. Complex measures include outcome measures; instrument-based measures (e.g., patient-reported outcomes); cost/resource use measures; risk-adjusted measures, and composite measures. For noncomplex measures, NQF staff will complete the preliminary analysis for all measure evaluation criteria, including the *Scientific Acceptability* criterion (although staff may request evaluation of this criterion by the SMP at will).

The purpose of the preliminary analysis is to summarize the salient points of the submission in light of the evaluation criteria, to help committee members navigate the submission form, and to provide additional interpretation and feedback (e.g., regarding the criteria, statistical testing, etc.) as appropriate. The staff's preliminary ratings are not binding on the Committee and are meant to serve as input for Committee

discussion. For both complex and noncomplex measures, when the preliminary analysis is complete, NQF staff will send the preliminary analysis to developers, to allow for a review of factual accuracy. Typically, NQF will provide ten business days for this review. NQF staff will then finalize the preliminary analysis and send the final submission materials to the standing committee for evaluation.

Measures rated by NQF staff or the SMP as “**Low**” or “**Insufficient**” for reliability or validity will be eligible for discussion by the Standing Committee, if “pulled” by the committee for discussion prior to the evaluation meeting. However, such measures may or may not be eligible for a revote by the Standing Committee. Eligibility for revote will be determined by NQF Staff and Committee co-chairs. Measures rated as “**Low**” or “**Insufficient**” for reliability or validity by staff or the SMP will **not** be eligible for revote if any of the following circumstances apply:

- Inappropriate methodology or testing approach applied to demonstrate reliability or validity
- Incorrect calculations or formulas used for testing
- Description of specifications, testing approach, results, or data is insufficient for staff or the Scientific Methods Panel to apply the criteria
- Appropriate levels of testing not provided or otherwise did not meet NQF’s minimum evaluation requirements

For measures eligible for revote by the Standing Committee, a quorum of the full Committee will be required to vote on whether or not to uphold the staff/SMP rating. If the Committee votes to uphold the staff/SMP rating, there will be no further discussion of the measure. If the Committee does not vote to uphold the staff/SMP rating, discussion can continue prior to a final vote on the subcriterion (i.e., reliability or validity). If the Committee votes to recommend endorsement of a measure in spite of staff/SMP ratings of “**Low**” or “**Insufficient**”, it must provide a detailed rationale for its decision.

Meeting Agendas

The agendas for meetings for standing committee evaluation of measures will be organized, when possible, to discuss related and competing measures and issues around harmonization. Developers should put meeting dates on their calendars as soon as they are announced and plan to attend.

Standing Committee Meetings

During the evaluation meeting(s), developers will be given an opportunity to speak briefly about their measures that are under review. Each measure developer will be given two to three minutes to introduce their measure(s). They should focus their remarks on the rationale/intent behind the submitted measure(s), the approach to measure development and testing, lessons learned from use of the measure, and any unique issues.

The Standing Committee will then determine the extent to which NQF’s standard evaluation criteria are met for each measure and whether to recommend measures for endorsement. To facilitate dialogue, two to three Standing Committee members will be designated as the initial discussants for each measure.

- Voting by the Standing Committee during the in-person or webinar evaluation meeting: A measure is recommended for endorsement by the Standing Committee when the vote margin on all must-

pass criteria (e.g., Importance, Scientific Acceptability, Use [for maintenance measures]) and overall is greater than 60 percent of voting members in favor of endorsement. A measure is not recommended for endorsement when the vote margin on any must-pass criterion or overall is less than 40 percent of voting members in favor of endorsement. An exception is if a measure passes every criterion but performance gap. In this case, the Standing Committee may choose to recommend the measure for inactive endorsement with reserve status. The Standing Committee has *not reached consensus* if the vote margin on any major criterion or overall is between 40 percent and 60 percent, inclusive, in favor of endorsement.

- Staff will summarize the Standing Committee discussions, ratings, and recommendations in a draft technical report. Measures for which the Standing Committee did not reach consensus in the committee recommendation for endorsement will be labeled as “consensus not reached”. Comments are then specifically solicited on these measures in the cover memo to the draft report. When consensus is not reached, the Committee may request additional information from the developers to address the issues with the measure, to be submitted during the comment period. All evaluated measures (recommended, not recommended, and consensus not reached) are subject to public and NQF member comment (see [below](#) for more information about this comment period). The Standing Committee will consider the comments and revote on the relevant criteria of measures where consensus was not reached. The Committee will revote on any must-pass criteria that had not previously passed by 60 percent. If all must-pass criteria are passed, a vote will be taken on the overall recommendation for endorsement. Members also are welcome to revote on any other criteria if they would like to do so.

Developer Request for Reconsideration of a Measure That Is Not Recommended

What is a reconsideration?

A reconsideration request is applicable only for measure(s) that are not recommended by the Committee during the measure evaluation meeting, either by failing to pass a “must-pass” criterion or not passing the final, overall vote to recommend for endorsement. The following situations are NOT reconsiderations:

- **Consensus Not Reached (CNR)** – The Committee will revote on any measure for which consensus was not reached (“CNR measures”). The revote IS NOT a reconsideration: It is part of the CNR process.
- **Measures Recommended for Inactive Endorsement with Reserve Status** – These measures are recommended to maintain endorsement. This does not constitute not recommending a measure.
- **Deferred/additional information requested/conditional voting** – Those measures that may have failed one or more “must-pass” criteria (evidence, gap, reliability, validity, use), but there is documented discussion between the Committee and developer, with agreement to revisit some aspect of the measure, typically after additional information is provided by the developer during the public comment period. This IS NOT a reconsideration: It is a continuation of the original evaluation process.

What are the allowable reasons for a developer to request a reconsideration?

The following process for reconsideration will be used to promote consistency, transparency, fairness, and completion of the CDP within project timelines. There are two reasons that may justify a request to reconsider a measure that is not recommended for endorsement:

- REASON 1: NQF's measure evaluation criteria were not applied appropriately
- REASON 2: NQF's CDP was not followed appropriately

What is the process for requesting a reconsideration?

REASON 1: NQF's measure evaluation criteria were not applied appropriately .

- Requests for reconsideration related to inappropriate application of the criteria are submitted **to the Standing Committee** during the public and member comment time frame. The request must cite the specific evaluation criteria or subcriteria that the developer thinks was not applied properly to the specific information as originally submitted and evaluated by the standing committee.
- The Standing Committee will review the reconsideration request and rationale, and re-review the cited information and the criteria under question during the post-comment web meeting.
- The co-chairs, with the assistance of NQF staff, will direct the committee discussion to ensure attention to the reconsideration information only. They will specifically elicit an explanation on how the Committee arrived at their original determination in order to assess if the criteria were applied appropriately.
- The Committee then has two options:
 - 1) It could agree with the developer and trigger a revote for the failed criterion. If the measure passes that criterion, additional discussion and votes on remaining criteria will be conducted.
 - 2) It could uphold its original vote and document/explain how the criteria was applied appropriately.

As with all measures, the CSAC will determine whether to uphold the Committee's endorsement recommendations.

REASON 2: NQF's Consensus Development Process (CDP) was not followed appropriately .

If a request for reconsideration is based on a question of whether the CDP was followed appropriately, a written request for reconsideration must be sent **to the CSAC co-chairs**. This must be done at least two weeks prior to the CSAC call/meeting that grants endorsement. The process for reconsideration when NQF's Consensus Development Process (CDP) was not followed is [outlined here](#).

Public Commenting With Member Support

As previously mentioned, NQF posts all measures on the NQF website for public and member comment regardless of the Committee's recommendation (recommended, not recommended, and consensus not reached) for at least the continuous commenting period. NQF members will have the opportunity to express their support ("Support" or "Do Not Support") for each measure during this comment period. The Standing Committee, with support from NQF staff, considers all comments received.

When the draft report is released, staff will post a notification on the NQF website, the NQF event calendar, and on the specific topic area page on the website. NQF staff also sends out an email notification to NQF members and members of the public who have signed up for these notifications.

During the post-comment web meeting, the Standing Committee will review all comments they have not already considered. These comments will receive written responses from the standing committee, measure stewards/developers, and/or NQF, as appropriate. At the end of the commenting period, NQF staff will forward comments to measure stewards/developers, as appropriate, when the comment raises questions about the measure specifications or when the comment would otherwise benefit from a response from the developer. Because of timeline constraints, NQF typically can allow only five to seven days for the developer to provide a response to the comments. Staff will then compile all of the comments, the developer responses, and other responses and provide those to the Standing Committee for consideration during the post-comment web meeting. The responses to the comments will also be posted to the topical area webpage.

Standing Committee's Consideration of Submitted Comments

During the post-comment web meeting, the Standing Committee will review relevant submitted comments (and developer responses when applicable).

NQF asks that developers attend this post-comment web meeting, which is held a few weeks after the comment period closes. The web meeting is generally one to two hours in length, and developers should be prepared to answer any questions from the Committee or public commenters.

After review and discussion of the submitted comments, the Standing Committee may reconsider their recommendation for (or against) endorsement and/or revise the draft report in direct response to submitted comments. The Standing Committee is required to revote on any measures where consensus was not reached and is welcome to revote on any of the criteria for these or other measures, if they choose.

A revised draft report will reflect the Standing Committee discussion of the comments and all revisions to endorsement recommendations. Should the Standing Committee determine its revisions to be substantial, a revised version of the draft report may be recirculated for a second comment period for NQF members and the public. If a revised version of the draft report is recirculated for a second comment period, the review will follow the same process as the initial review and comment period.

Endorsement Decision by the Consensus Standards Approval Committee (CSAC)

The [CSAC](#), an advisory Standing Committee appointed by the NQF Board of Directors, is the governing body that has the most direct responsibility for overseeing the implementation of NQF's CDP. The CSAC has a simple majority of consumers and purchasers drawn from a diverse set of healthcare stakeholders. Its members possess specific expertise in measure development, application, and reporting. The work of the CSAC focuses on NQF's evaluation criteria, endorsement of proposed consensus standards, and the ongoing enhancement of the CDP. The CSAC also serves in an advisory capacity to the Board of Directors and NQF management for emerging issues in performance measurement.

The CSAC makes the final measure endorsement decision, without ratification by another body. Following the commenting period and the committee post-comment web meeting, the CSAC will review the recommendations of the Committee, the comments received, and the NQF member support results. If there is a lack of consensus, the CSAC may seek further input from stakeholder leaders.

The CSAC holds two in-person meetings annually (typically in June and October) and convenes monthly by conference call. All measure evaluation meetings are open to NQF members and the public, and audience members have the opportunity to comment on the measures under consideration. NQF staff will notify developers of the date that the CSAC will review the measures and will provide developers with the materials for the CSAC call (agenda with dial-in information, CSAC memo, etc.). Information about each CSAC meeting is also available on the NQF website, including the meeting agenda and materials and the physical location or dial-in information.

The CSAC also works with staff when there is a request for reconsideration of any measure. In this case, staff will act as a liaison between the CSAC, the Standing Committee, and the measure developer/steward, ensuring communication and cooperation and coordinating activities to complete the project efficiently.

CSAC Criteria for Decision Making

To ensure a consistent approach to endorsement decisions, the CSAC identified the following overarching guidance and criteria to guide its decision making:

OVERARCHING GUIDANCE

To ensure a consistent approach to endorsement decisions, the CSAC identified the following criteria to guide its decision making. As a general principle, the CSAC should not re-adjudicate or overturn a Standing Committee's endorsement recommendation, but rather determine if there is consistency in the rationale used by Standing Committees when recommending measures. The CSAC, however, may send a measure back to a Standing Committee for reconsideration if there are concerns with any of the rationale/criteria below. These concerns will be documented and communicated to the Standing Committee and the public.

DECISION MAKING CRITERIA

- **Strategic importance of the measure.** The CSAC will consider the value-add of a measure, such as the strategic importance to measure and report on a measure and assess whether a measure would add significant value to the overall NQF portfolio. To assess additive value and importance, the CSAC should consider NQF's measure selection attributes, including outcome-focused, high opportunity for improvement, patient and caregiver focus, support integrated view of care, reasonable data collection burden, impact/prevalent condition.
- **Cross-cutting issues concerning measure properties.** The CSAC will consider whether criteria concerning measure properties are consistently and appropriately applied across the entire portfolio.
- **Consensus development process concerns.** The CSAC will consider all concerns raised during the CDP by all stakeholders, such as sufficient attention to member and public comment. CSAC may conclude that additional efforts should be made to address these concerns before making an endorsement decision on the measure (e.g., returning a measure to the Standing Committee for reconsideration).

CSAC Voting

Greater than 60 percent approval for endorsement of a measure by voting CSAC members is required to grant endorsement. The CSAC does not have a consensus not reached threshold.

Developer Request for Reconsideration of a Measure That Is Not Recommended

If a request for reconsideration is based on a **question of whether the CDP was followed appropriately**:

- Developers must send a written request for reconsideration to the CSAC co-chairs at least two weeks prior to the CSAC call/meeting that grants endorsement, citing the issues within a specific CDP process step, how it was not followed properly, and how it resulted in the specific measure not being recommended.
- Staff will prepare a summary of the CDP process for the measure(s), with special attention to the issues raised and Committee's discussion and explanation, in the reconsideration request.
- The CSAC co-chairs may:
 - uphold the Standing Committee's final recommendation if the process was followed;
 - ask for input from the CSAC, particularly if co-chairs think there is merit to the assertion of not following the CDP;
 - request additional expert input; or
 - if a breach in the CDP was identified, determine if it may have adversely affected the outcome for the specific measure.
- If the CSAC co-chairs determine that a breach in the CDP occurred that may have adversely affected the outcome of the specific measure, then the entire CSAC will evaluate the circumstances and determine a course of action on a case-by-case basis.

Appeals

After a measure has been formally endorsed by the CSAC, it enters a 30-day Appeals period. Any party may request an appeal of a CSAC decision to endorse or not endorse a measure, except in the case where a Standing Committee does not recommend a measure for endorsement and the CSAC concurs. CSAC decisions to endorse a measure with reserve status or approve a measure for trial use are not appealable. The [NQF Appeals Board](#), composed of NQF Board members and former CSAC and/or Committee members, will adjudicate appeals to measure endorsement decisions without a review by the CSAC. The decision of the Appeals Board will be final. An appeal of an endorsed measure must be filed within 30 days of the endorsement decision. This can be done by going to the topical area webpage or the searchable list of all NQF-endorsed national voluntary consensus standards. An appeal request can also be sent to the [appeals email address](#). Grounds for an appeal include the following:

- Procedural errors reasonably likely to affect the outcome of the original endorsement decision, such as a failure to follow NQF's Consensus Development Process (CDP)
- New information or evidence, unavailable at the time the CSAC made its endorsement decision, that is reasonably likely to affect the outcome of the original endorsement decision

For an appeal to be considered by NQF, the appeal must include written evidence that the appellant's interests are directly and materially affected by the measure recently endorsed by NQF, and that NQF's endorsement of this measure has had, or will have, an adverse effect on those interests.

Staff will compile the appeals for review by the Appeals Board, which will evaluate the concern(s) raised and determine if the appeal should warrant overturning the endorsement decision. All appeals, along with the decision regarding the appeal, will be published on NQF's website.

Throughout the process, project staff will serve as liaisons between the CSAC, the Appeals Board, the Committee, developers/stewards, and the appellant(s) to ensure the communication, cooperation, and appropriate coordination to complete the project efficiently. Project staff will notify developers when the Appeals period will open and close. At the close of the appeals period, staff will notify developers if any appeals were submitted on their measure(s). If an appeal was submitted, staff may request that developers (if necessary) provide a written response to the issues outlined in the letter of appeal. The letter of appeal will be discussed at the next Appeals Board meeting. The Appeals Board will review and discuss the letter of appeal and the developer's written response. The appellant will be asked to speak to their concerns, and the developer will be provided an opportunity to respond. The developer will be asked to attend the Appeals Board call (about one to two hours in duration) and to answer any questions from the Appeals Board. Following the Appeals Board call, staff will notify the developer of the Appeals Board's decision.

Submitting Measures to NQF

NQF endorses performance measures as voluntary consensus standards. Interested stewards and/or developers of performance measures may submit their candidate standards for consideration by NQF. To submit a performance measure, a steward must complete and electronically submit the online measure submission form for each measure that it wishes to submit to NQF for consideration.

Note that NQF differentiates between deferring endorsement recommendations, rescheduling endorsement evaluations, and withdrawing measures from endorsement consideration (see NQF's official [policy](#) on these three activities). Requests for rescheduling an endorsement evaluation should be addressed to NQF's Maintenance staff (measuremaintenance@qualityforum.org) prior to the Intent to Submit deadline of the relevant evaluation cycle.

Intent to Submit

Measure stewards will need to notify NQF, via the Intent to Submit process, at least three months prior to the measure submission deadline of their readiness to submit measures for endorsement consideration. This process is initiated through the measure dashboard.

For all measures, stewards/developers must submit measure full specifications and finalized testing information. Other information may also be required (e.g., a feasibility assessment for eCQMs).

Online Submission

To submit a measure for review, a measure steward must complete and submit the online form through the NQF website prior to the project's measure submission deadline. **The questions in the online**

submission request the information needed by the Standing Committee to evaluate the measure against the criteria. NQF has many resources to describe the background and rationale of the measure evaluation criteria. Developers should familiarize themselves with these documents to present their measures in the best light.

The online submission form includes a variety of features and allows the users to:

- Gain secure access to the submission form from any location with an internet connection
- Save a draft version of the form and return to complete it at their convenience
- Print a hard copy of the submission form for reference

More information about the measure submission forms and submission process is available on the [submitting standards webpage](#).

Submission of eCQMs

The [2021 Measure Evaluation Criteria and Guidance](#) requires that eCQMs meet all of the existing endorsement criteria.

The following clarifications that are specific to eCQMs:

- A new eCQM version of an endorsed measure is not considered an endorsed measure until it has been specifically evaluated and endorsed by NQF. An eCQM should be submitted as a separate measure even if the same or a similar measure exists.
- Measure specifications should use latest accepted versions of the following industry eCQM technical specifications: Health Quality Measure Format (HQMF), Quality Data Model (QDM), and Clinical Quality Language (CQL). Use of the CMS Measure Authoring Tool (MAT) ensures that the measure uses these technical specifications; however, the MAT is not required to produce HQMF.
- eCQM developers must use value sets that are published through the National Library of Medicine's Value Set Authority Center (VSAC). This helps reduce implementation issues related to value sets and code system validation and encourages the use of harmonized value sets. If an eCQM does not have a published value set, then the measure developer must look to see if there is a published value set that aligns with the proposed value set within its measure. If such a published value set does not exist, then the measure developer must demonstrate that the value set is in draft form and is awaiting publication to VSAC.
- The Feasibility assessment must include assessment of the eCQMs measure logic using a simulated data set. Simulated data set results should demonstrate a test case each branch of the measure logic to ensure the logic can be processed technically by other eCQM-capable reporting tools.
- Documentation of testing on more than one electronic health record (EHR) system from more than one EHR vendor is required to establish Scientific Acceptability, indicating that the measure data elements are valid and that the measure score can be accurately calculated.
- Submissions will require a feasibility assessment, including the [NQF Feasibility Scorecard](#). This assessment identifies data elements feasibility issues. Simulated data set results allow assessment

of each branch of the measure logic to ensure the logic can be processed technically by other eCQM-capable reporting tools.

- As of summer 2019, demonstration of data element reliability will be required for unstructured data fields and data element validation will be required for all eCQMs. If data element testing is not possible, justification is required and must be accepted by the Standing Committee.

eCQM Approval for Trial Use

Developers have indicated that it can be challenging to test eCQMs to the extent necessary to meet NQF endorsement criteria until they have been more widely implemented. At the same time, there is interest in developing eCQMs for use in federal programs and obtaining NQF endorsement for those eCQMs. NQF endorsement may provide the impetus to implement measures; however, if a submitted measure with very limited testing does not meet NQF endorsement criteria, it could be prematurely abandoned.

In 2014, NQF piloted *Approval for Trial Use* for eCQMs that were ready for implementation but could not be adequately tested to meet NQF endorsement criteria. NQF used the multistakeholder consensus development process to evaluate and approve for trial use several eCQMs that addressed important areas for performance measurement and quality improvement, although they did not have the requisite testing needed for NQF endorsement. Those eCQMs were assessed to be technically acceptable for implementation. The goal for approving eCQMs for trial use was to promote implementation and facilitate the conduct of more robust reliability and validity testing that can take advantage of clinical data in EHRs.

In April 2015, the CSAC agreed to make the Trial Use program available for all eCQM submitted to NQF for which requisite testing has not been completed. Approved for Trial Use carries no endorsement label but may be considered a pathway for measures to prepare for endorsement. eCQMs that are Approved for Trial Use are indexed in [QPS](#) and are indicated as part of the Approval for Trial Use program.

Adjustment for Social Risk Factors

In 2014, the NQF Board of Directors approved a two-year trial period to allow for inclusion of social risk factors in risk adjustment approaches, prior to making it a permanent change in NQF policy. Beginning in April 2015, and throughout the duration of the trial period, the NQF policy that prohibited use of social risk factors in risk adjustment approaches was suspended, and NQF implemented several of the [Risk Adjustment Expert Panel's recommendations](#). That trial concluded in spring 2017. However, NQF began a second trial period in the fall of 2017 that will run until 2021. During this trial, ***use of social risk factors in risk adjustment approaches is allowed***. Additional details about the ongoing trial are available on NQF's [Social Risk Trial](#) webpage.

Instructions for Providing Required Information on Inclusion of Social Risk Factors in Risk Adjustment

These instructions are ***applicable to all*** cost/resource use measures, health outcome measures, patient-reported outcome-based performance measures [PRO-PMs], and intermediate outcome measures, and potentially applicable to some process measures.

- Enter patient-level social risk variables that were available and analyzed during measure development in the **Scientific Acceptability: Reliability Testing** section of the measure submission form. These variables could include:
 - Patient-reported data (e.g., income, education, and language)
 - Proxy variables when social risk data are not collected from each patient (e.g., based on patient address and use of census tract data to assign individual patients to a category of income, education, etc.) and conceptual rationale for use
 - Patient community characteristics (e.g., crime rate, percent vacant housing, smoking rate, level of uninsurance) assigned to individual patients for the specific community where they live (not in the community in which the healthcare unit is located) [NOTE that these do not have to be a proxy for patient-level data.]
- If you ARE risk-adjusting your measure, in addition to the conceptual/clinical and statistical methods and criteria used to select patient risk factors, describe the conceptual description (logical rationale or theory informed by literature and content experts) of the pathway between the patient social risk factors, patient clinical factors, quality of care, and outcome in the **Scientific Acceptability: Validity – Other Threats to Validity (Exclusions, Risk Adjustment)** section of the measure submission form. In this same section, indicate how the conceptual model was developed.
- If you are NOT risk-adjusting your measure, include discussion of, and data for, social risk factors as part of the rationale and analysis included in the **Scientific Acceptability: Validity – Other Threats to Validity (Exclusions, Risk Adjustment)** section of the measure submission form.
- Enter the analyses and interpretation resulting in the decision to include or not include social risk factors in the **Scientific Acceptability: Validity – Other Threats to Validity (Exclusions, Risk Adjustment)** section of the measure submission form. This analysis could include:
 - Variation in prevalence of the factor across measured entities
 - Empirical association with the outcome (univariate)
 - Contribution of unique variation in the outcome in a multivariable model
 - Assessment of between-unit effects vs. within-unit effects to evaluate potential clustering of disadvantaged patients in lower quality units
 - Impact of adjusting for social risk (or not) on providers at high or low extremes of social risk
- Enter reliability and validity testing for the measure as specified in the **Scientific Acceptability: Reliability - Testing** and the **Scientific Acceptability: Validity - Testing** sections of the measure submission form.
 - If changing from a risk adjustment model that did not include social risk factors to one that does include social risk factors, then updated reliability and validity testing is required and must be entered into the Scientific Acceptability: Reliability - Testing and the Scientific Acceptability: Validity - Testing sections of the measure submission form.
- Enter a comparison of performance scores with and without social risk factors in the risk adjustment model in the **Scientific Acceptability: Validity - Threats to Validity (Statistically Significant Differences, Multiple Data Sources, Missing Data)** section of the Measure Submission Form.

Enter the method of testing conducted to compare performance scores with and without social risk factors in the risk adjustment model for the same entities. Describe the steps and the statistical approach used.

Enter the statistical results from testing the differences in the performance scores with and without social risk factors in the risk adjustment model. (e.g., correlation, rank order)

Provide an interpretation of your results in terms of the differences in performance scores with and without social risk factors in the risk adjustment model for the same entities. What do the results mean, and what are the norms for the test conducted?

NOTE: If the measure has more than one set of specifications/instructions (e.g., one for medical record abstraction and one for claims data), then section Scientific Acceptability: Validity - Threats to Validity (Statistically Significant Differences, Multiple Data Sources, Missing Data) must also be used to demonstrate comparability of the performance scores.

- If a performance measure includes social risk variables in its risk adjustment model, the measure developer must provide the information required to stratify a clinically-adjusted only version of the measure results for those social risk variables in the specifications section of the Measure Submission Form. This information should *include the stratification variables, definitions, specific data collection items/responses, code/value sets, and the risk-model covariates and coefficients for the clinically-adjusted version of the measure when appropriate.*
- Enter the details of the final statistical risk model and variables in the **Scientific Acceptability: Validity - Other Threats to Validity (Exclusions, Risk Adjustment)** section of the Measure Submission Form.

Frequently Asked Questions about Adjustment for Social Risk

What are social risk factors?

Social risk factors include a variety of demographic (e.g., age, primary language, household income, zip code) and socioeconomic factors (e.g., income, education, occupation).

What is risk adjustment?

Risk adjustment is a statistical approach that allows patient-related factors (e.g., comorbidity and illness severity) to be taken into account when computing performance measure scores for the purpose of comparing healthcare providers (e.g., hospitals and clinicians). Because patient-related factors can have an important influence on patient outcomes, risk adjustment can improve the ability to make accurate and fair conclusions about the quality of care patients receive.

What is a conceptual relationship? What factors are necessary for a committee to consider adjustment for social risk?

A conceptual relationship refers to a logical theory or rationale that explains the association between a social risk factor(s) and the outcome of interest. The conceptual basis may be informed by prior research and/or healthcare experience related to the measure focus, but a direct causal relationship is not required (i.e., it could be a direct cause, an indirect cause, or serve as a surrogate for a cause for which data are lacking).

Assessment of the conceptual relationship between a social risk factor and a measure's focus includes a consideration of whether the effect of the social risk factor is primarily mediated by the quality of care delivered (i.e., does the social risk factor affect the outcome independent of the quality of care delivered? Or does the social risk factor lead to the delivery of inferior care processes, which in turn affects the outcome?) For example, while a patient's income level may affect his or her ability to use post-acute care

services, and therefore might potentially be considered in the risk adjustment approach for a readmissions measure, a patient's income level is unlikely to affect his or her likelihood of experiencing a complication during hospitalization, so it would be inappropriate to include income as a factor in the risk adjustment approach for a hospital-acquired infection measure.

If a conceptual relationship exists between a social risk factor and the measure focus, empirical testing should be conducted to confirm that relationship. The empirical analyses should include the details of the final risk adjustment approach.

How will measures be evaluated for adjustment for social risk?

With the restriction against adjustment for social risk factors lifted, Standing Committees and other stakeholders will be able to raise questions about social risk factors in their evaluation of performance measures submitted to NQF for initial or continued endorsement. Where there is a potential conceptual basis for social risk adjustment, the Standing Committee will evaluate whether the developer assessed social risk factors according to the [guidelines for selecting risk factors](#) recognized by the NQF Expert Panel. In addition, the Standing Committee will consider the utility of the social risk factors that are available, the developer's analyses and interpretation regarding the importance of social risk factors in their risk adjustment model, and comparison of performance scores with and without social risk adjustment.

Can lack of social risk adjustment affect the decision regarding endorsement?

Yes. If a Standing Committee determines that risk adjustment for social risk factors is both conceptually and empirically appropriate for a particular measure, lack of that adjustment can be grounds for not recommending the measure for endorsement. This applies to both new and previously endorsed measures evaluated in regular projects as well as to measures considered through the ad hoc evaluation process.

What impact will inclusion of social risk factors in risk adjustment approaches have on payment and provider behavior?

Questions that require the use of measures adjusted for social risk cannot be answered in a relatively short time period. Information on the impact of adjusting for social risk on payment and provider behavior will be available only after adjusted measures are implemented and the resulting data are collected and reported over time.

Table 1: PROs and CONs for selected Social Risk Factors

(Excerpted from the NQF Technical Report: [Risk-Adjustment for Socioeconomic Status or Other Sociodemographic Factors](#))

Factors that should be considered, depending on data availability and the specific outcome or process:

Factors/Concepts (specific variables)	PROs	CONs	Caveats
Income	<ul style="list-style-type: none"> • Allows for use of various ranges 	<ul style="list-style-type: none"> • Hard to collect privately (e.g., in clinician office) • Not easily collected with a single question • May not be an acceptable question to all patients • Meaning is not geographically consistent due to difference in costs of living 	<ul style="list-style-type: none"> • For national performance measures, need to consider standardization to account for area wage and cost of living differences
Income in relation to federal poverty level	<ul style="list-style-type: none"> • Definition is standard • Being used under ACA • Researchers are used to using it 	<ul style="list-style-type: none"> • Does not include receipt of other benefits (e.g., food stamps) • Does not account for cost of living or community offsets 	-
Household income	<ul style="list-style-type: none"> • May be more meaningful than individual income 	<ul style="list-style-type: none"> • Requires assessment of household size 	-
Medicaid status as proxy	<ul style="list-style-type: none"> • Relatively easy to collect in claims data 	<ul style="list-style-type: none"> • Eligibility not consistent across states 	<ul style="list-style-type: none"> • Potentially becomes more useful as more states expand Medicaid to 138% federal poverty level
Social Security Supplemental Income (SSI)	-	<ul style="list-style-type: none"> • Correlated with Medicaid status, but not consistently across states 	<ul style="list-style-type: none"> • In many states, receipt of SSI automatically makes one eligible for Medicaid

Factors/Concepts (specific variables)	PROs	CONS	Caveats
Education	<ul style="list-style-type: none"> • Perceived to be valid (i.e., less misreporting than for income) • Definitions fairly consistent across various subgroups (e.g., answers from immigrants comparable to those from others) • Fairly stable across time, at least after a certain age 	<ul style="list-style-type: none"> • Not widely collected by healthcare units • If collected (e.g., in EHR text fields) may not be easily retrievable 	-
Homelessness	<ul style="list-style-type: none"> • Strongly associated with health outcomes • Measures something "beyond" income • Current Housing and Urban Development (HUD) definition 	<ul style="list-style-type: none"> • Multiple other definitions • Data often not collected • Status can change 	<ul style="list-style-type: none"> • Prevalence tends to cluster among safety net healthcare units
Housing instability	<ul style="list-style-type: none"> • May be better indicator than homelessness which can change 	<ul style="list-style-type: none"> • More difficult to define than homelessness 	-
English proficiency	<ul style="list-style-type: none"> • Standard definition exists • Tied to need for translation services/other resource needs and therefore should be collected • Increasingly being collected (required by "Meaningful Use" and some states) 	-	-

Factors/Concepts (specific variables)	PROs	CONS	Caveats
Insurance status	<ul style="list-style-type: none"> • Readily available • Some indication of access and resources • Benefit coverage strongly related to affordability 	<ul style="list-style-type: none"> • Wide variability in insurance coverage • Data for underinsurance not widely collected 	-
Medicaid status	<ul style="list-style-type: none"> • Readily available • Some indication of limited income and resources 	<ul style="list-style-type: none"> • Not consistent across states 	-
No insurance	<ul style="list-style-type: none"> • Readily available • Standard meaning 	-	<ul style="list-style-type: none"> • Difficult to capture information about these patients (particularly if using claims data)
Community/neighborhood-level data used as proxy for individual data or as contextual variable	<p>Many variables available from Census data</p> <ul style="list-style-type: none"> • Income • Education • Immigration status • Language • Unemployment • Home ownership • Single parents • Others 	<ul style="list-style-type: none"> • Census data do not include all potentially important variables • Residential heterogeneity will affect whether it is a good proxy for data about individuals. • Heterogeneity may differ based on levels of socioeconomic segregation and potentially population density. • Requires geocoding for Census Tract and smaller areas. 	-
Contextual–proportion vacant housing	<ul style="list-style-type: none"> • Seen as indicator for other related issues such as poverty, crime, lack of resources 	-	-
Contextual–crime rate	<ul style="list-style-type: none"> • May be an indicator for other related issues such as poverty, lack of resources 	-	-

Cells marked by a dash (-) are intentionally left blank.

Other factors that could be considered:

Factors/Concepts (specific variables)	PROs	CONS	Caveats
Social Support	<ul style="list-style-type: none"> • Some brief items have been used in previous research • Captures something that other variables do not 	<ul style="list-style-type: none"> • Multidimensional construct that typically requires multiple questions • Lack of agreement about how to measure • Not consistently measured 	-
Living alone	<ul style="list-style-type: none"> • Available in OASIS data for home health 	<ul style="list-style-type: none"> • Directionality may not be consistent. In some situations, such as frailty or impairment, it could be a risk factor. In other situations, it might be an indicator of ability to live alone due to good health and function. 	-
Marital status	<ul style="list-style-type: none"> • Often collected 	-	-
Occupation	<ul style="list-style-type: none"> • May capture other concepts (e.g., environmental exposures) 	<ul style="list-style-type: none"> • Multiple definitions • Potentially large data collection burden due to the complexity of the concept • Marginal value (i.e., over and above that contributed through use of other variables) may be limited • Unclear how to handle certain population subgroups (e.g., retirees, students, homemakers) 	-
Employment status	<ul style="list-style-type: none"> • Often collected 	<ul style="list-style-type: none"> • Employment status does not reflect income or availability of insurance • Simple yes/no does not reflect desire/happiness with situation (e.g., retirees may be happy to be unemployed) • Subject to change requiring continuous updating 	-

Factors/Concepts (specific variables)	PROs	CONs	Caveats
Literacy	<ul style="list-style-type: none"> This concept may also be able to partially capture health literacy 	<ul style="list-style-type: none"> No standardized definitions May be easy to game 	<ul style="list-style-type: none"> If the correlation with education is high, then education could be used.
Health literacy	<ul style="list-style-type: none"> Potentially more relevant to healthcare Three-item and single-item validated questions exist 	<ul style="list-style-type: none"> Not consistently collected/available 	-
Local/state funding for safety net providers (e.g., tax base)	<ul style="list-style-type: none"> Affect resources available to safety net providers beyond insurance 	<ul style="list-style-type: none"> Data not easily collected/available 	<ul style="list-style-type: none"> Not a patient characteristic Risk for unintended consequences (setting a lower standard for poorly supported institutions might send the wrong messages to taxpayers)
Race/ethnicity	<ul style="list-style-type: none"> Correlated with SES and may be more available than other variables 	<ul style="list-style-type: none"> May be more correlated with bias 	<ul style="list-style-type: none"> Should not generally be used as proxy for SES

Cells marked by a dash (-) are intentionally left blank.

Harmonization

The current quality landscape contains a proliferation of measures, including some that could be considered duplicative or overlapping and others that measure similar but nonidentical concepts and/or define patient populations somewhat differently. Such duplicative measures and/or those with similar but not identical specifications may increase data collection burden and create confusion or inaccuracy in interpreting performance results for those who implement and use performance measures.

Resolving issues around harmonizing measures and handling competing measures remains one of the key challenges in NQF measure endorsement projects. Our process for implementing NQF's Harmonization and Competing Measures process is described in the [Information for Measure Developers report of January 2013](#). Developers must respond to the questions about harmonization in their measure submission.

ICD-10

HHS implemented conversion to ICD-10 coding on **October 1, 2015**. Further details explaining the changes can be accessed at <http://www.cms.gov/Medicare/Coding/ICD10/index.html?redirect=/icd10>.

NQF requires ICD-10 codes to replace any ICD-9-CM codes for all new submissions, measures undergoing endorsement maintenance, and measures due for annual update.

ICD-10 Requirements

If a new measure is developed and tested using ICD-10 codes, the following **does not apply**.

For measures that previously included ICD-9 codes (i.e., those that have converted from ICD-9 to ICD-10 codes), please include in your submission:

- Requirement 1. A statement of intent for the selection of ICD-10 codes, chosen from the following:
Goal was to convert this measure to a new code set, fully consistent with the intent of the original measure.
Goal was to take advantage of the more specific code set to form a new version of the measure, but fully consistent with the original intent of the measure.
The intent of the measure has changed.
- Requirement 2. Excel spreadsheet, including:
Full listing of ICD-9 and ICD-10 codes, with code definitions
The conversion table (if there is one)
- Requirement 3. Description of the process used to identify ICD-10 codes, including:
Names and credentials of any experts who assisted in the process
Name of the tool used to identify/map to ICD-10 codes
Summary of stakeholder comments received

Include ICD-10 codes in Numerator Details, Denominator Details, and/or Exclusion Details as appropriate.

- **Requirement 1** is satisfied by including one of the sentences in the documentation of Requirement 3 (applies to new measures and measures undergoing maintenance).
- **Requirement 2** is satisfied by attaching Excel files at data field in the Specifications section.
- **Requirement 3** can be documented in the Validity section. If ICD-10 testing results are available, enter those into the Validity section and, if necessary, document a webpage URL or attach a Word or PDF file in the data field as a supplemental material.

For submissions in 2019 and beyond: All measure information, including testing, must be based on the ICD-10 specified measure. If this is not possible, please contact NQF for a *potential*, short-term waiver of this requirement. If granted, pre-2019 requirements for testing will apply (see Criteria and Guidance document).

Guidance

Best practices for ICD-10 coding (see [full recommendations report](#))

- Use team of clinical and coding experts to "identify specific areas where questions of clinical comparability exist, evaluate consistency of clinical concepts, and ensure appropriate conversion"
- Determine intent

- Use appropriate conversion tool (not required, but also not sufficient by itself; if using conversion tool, consider both forward and backward mapping)
- Assess for material change (For existing measures undergoing coding updates and maintenance, the extent to which the population identified with the new code set overlaps with that identified in the old code set should be assessed, if possible. Measure sponsors also should assess, if possible, whether the conversion results in rates that are similar within defined tolerances.). Options include:
 - Test using dual-coded data if possible, OR
 - Face validity (using the above code-conversion process, including use of clinical/coding experts), OR
 - Criterion validity (if dual-coded data not available), OR
 - Consistency across time (pre/post conversion)
- Solicit stakeholder comments

Measure Submission Completeness Checklist

Developers are also encouraged to follow the checklist below to ensure the measure submission is complete and responsive prior to Standing Committee consideration.

- Measure steward agreement or concept agreement is completed, signed, and attached to the submission.
- Conditions for submission are addressed.
- There are responses in all fields on measure submission form (MSF).
- Testing should be conducted for the data source(s) and level(s) of analysis for which the measure is specified; information for data source and level of analysis should be consistent across the specifications and testing items.
- Attachments include eQIM specifications and data dictionary/code lists.
- All URLs are active and accurate.
- Harmonization/competing measures: Did you present a plan for harmonization of the related/competing measures identified by staff during early identification/triage (see [Harmonization process](#))?
- Paired measures should be submitted on separate forms.
- An eQIM must be submitted using eQIM industry technical specifications including HQMF, QDM, and CQL.
- Composite measures (which contain individual measures with a single score or are all-or-none measures) are submitted on a composite form and responses to the composite measure questions are included.
- Both ICD-9 and ICD-10 codes included, if applicable.

Technical Assistance

NQF project staff will provide technical assistance to measure developers at any time before or during the measure submission process. Contact the project team with any questions about NQF's evaluation criteria, how to answer the questions in the form, any technical issues with the online submission process, or anything else.

How to Create a Good Submission

NQF has many resources for developers that provide helpful tips on creating a good submission:

- [***What Good Looks Like! - Measure Submission Examples \(2013\)***](#). For examples of the type of information NQF is seeking in the measure submission forms, review the *What Good Looks Like!* document on the [submitting standards webpage](#). NOTE: While this resource reflects an earlier version of our submission forms, the examples are still relevant.

Additional Developer Resources

The NQF website (<http://www.qualityforum.org>) has a number of resources for measure developers. To start, below are useful links:

Submitting Standards Webpage

This page contains information and resources for submitting your measure(s) to NQF.

http://www.qualityforum.org/Measuring_Performance/Submitting_Standards.aspx. This page also contains links (on the right-hand side of the page) to our reports, guidebooks, and policies related to the CDP.

Maintenance of Endorsement Webpage

This page contains information on [what happens after a measure is endorsed](#) by NQF.

Measure Developer Webinars

A monthly measure developer webinar is held on the third Monday of each month. Topic areas for these webinars include NQF's evaluation criteria, updates on policies and processes, and other subjects, as determined with input from measure developers. Each month, details of webinars are posted to NQF's web calendar. Developers may email measuremaintenance@qualityforum.org to be added to the distribution list for the measure developer webinar.

Topical Area Webpages

As each project begins, a webpage is created on the NQF website:

<http://www.qualityforum.org/Projects.aspx>. From your NQF dashboard, you can register to follow any project.

Alert Lists for CDP Projects

NQF has also created alert lists for our CDP projects. Sign up on the project page to receive an email notification of upcoming calls/meetings, deadlines, and the open and close date of each step. (These lists are intended for interested stakeholders (not developers) submitting measures to a particular project; each project has a developer-specific email list to receive project notifications.)

Measure Developer Advisory Panel

NQF has formed a Measure Developer Advisory Panel to solicit feedback and suggestions to improve our maintenance and endorsement activities. Members convene via conference call or webinar on a bimonthly basis. For more information about this group, contact measuremaintenance@qualityforum.org.

Maintenance of Endorsement

As an endorsing body, NQF is committed to ensuring that the NQF-endorsed performance measures continue to meet the rigorous NQF [measure evaluation criteria](#). Maintenance of endorsement encompasses several processes: (1) annual updates to measure specifications of endorsed measures, (2) CDP evaluations for endorsement maintenance (3) early maintenance reviews, (4) analysis and guidance for methodological and technical challenges, and (5) education and technical assistance to measure developers on endorsement maintenance activities. As the science of measurement and the uses of measures have evolved, NQF has worked continually to improve its evaluation and endorsement processes to meet the needs of stakeholders involved in performance measurement and improvement.

Annual Updates

Every year, when an endorsed measure is not being re-evaluated for continued endorsement, measure stewards have the option to submit a status report of the measure specifications to NQF. This report will either reaffirm that the measure specifications remain the same as those at the time of endorsement or last update or outline any changes or updates made to the endorsed measure.

If changes occur to a measure at any time in the three-year endorsement period, the measure steward is responsible for informing NQF immediately of the timing and purpose of the changes. An early maintenance review will be conducted if the changes materially affect the measure's original concept or logic (see below).

Early Maintenance Review

Definition

An early maintenance review is a formal measure evaluation and endorsement consideration that occurs prior to the previously scheduled maintenance of endorsement date. An early maintenance review will follow the same process as a maintenance of endorsement evaluation.

Early Maintenance Triggers

An early maintenance review is triggered by a variety of ways:

- 1) Directive by the Standing Committee or the Consensus Standards Approval Committee (CSAC) to review the measure sooner than the scheduled maintenance of endorsement evaluation. The rationale for the request should include new information that could potentially impact evaluation of one or more measure evaluation criteria.
- 2) Request by a developer or third party. An early maintenance review can be requested by any party, if there is adequate, high quality, and consistent evidence to justify the review. The request may be submitted via the Quality Positioning System (QPS) or via email at

measuremaintenance@qualityforum.org.

- 3) A material change to an endorsed measure is submitted by a measure developer during an annual update. A material change is defined as any significant modification to the measure specifications that significantly affects the measure results such as:
 - a. changes to the population being measured (e.g., changes in age inclusions, changes in diagnoses or other inclusion criteria, changes in excluded populations, from one type of insured population to all-payer population);
 - b. changes to what is being measured (e.g., changes in target values like blood pressure or lipid values);
 - c. inclusion of new data source(s); or
 - d. expansion of the level or changing unit of analysis or care setting(s) (e.g., adding clinician-level to a measure that is endorsed at practice-level).

Examples below provide a non-exhaustive list of what is and is not considered a material change.

What is considered material change:

- Adding a new variable or deleting an element/component of the numerator/denominator or inclusion/exclusion specifications.
- Change in the time frame of the measure (e.g., all patients last year versus all patients this year and last year).
- Significant change to the age groups in the measured population (e.g., measure developed for Medicare population to include 18 and 64 years old).
- The addition or deletion of a diagnostic code that is not merely an update but that represents a different or new classification/category.
- A change in the risk adjustment approach (e.g., from risk-stratification to a model-based approach) or the addition or deletion of a variable in the risk adjustment approach (e.g., inclusion of a new SDS factor).

What is not considered material change:

- Updating codes to reflect current coding nomenclature for a specific condition, disease, procedure, test, or drug.
- Adding a new drug to a family of drugs already specified in the measure.
- A change in the risk adjustment involving a modification to the value of a coefficient (i.e., the statistical model remains the same, but new data updates the relationships among the variables so that the estimates of the coefficients change).
- Clarifying or adding a clarifying detail to a numerator or denominator, inclusions or exclusions, or other specification elements that does not change the measure result.
- Documenting an exclusion that already existed in the measure's algorithm, even if not previously documented as an exclusion.

When submitting revisions to measure specifications during annual updates, developers must provide a response to the following questions in the release notes:

- a. Why was the change in specifications made?
- b. How does the change in specifications affect the measure results?

If a material change in the specifications is identified, data from retesting of the measure with the new specifications is required for the early maintenance review.

Early Maintenance Review Process

1. Early Maintenance Review begins when the NQF Measure Maintenance team receives a request for early review of a measure. The Measure Maintenance team will review each request against the trigger criteria.
 - a. If a request does not meet the criteria for early maintenance review, the Measure Maintenance team will notify the requestor that the measure will not undergo early maintenance review (process stops here).
 - b. If a request meets the criteria for early review, the measure will enter the early maintenance review process (continue to step 2).
2. The Measure Maintenance team will initiate the early maintenance review process by notifying the measure steward, measure developer, and relevant project team. The Measure Maintenance team will work with these stakeholders to schedule the early maintenance review during an upcoming review cycle.
3. Once assigned to a measure review cycle, the measure undergoing early maintenance review will follow the consensus development process for its assigned cycle. Measures undergoing early maintenance review will be fully evaluated against all measure evaluation criteria. If a measure remains endorsed after an early maintenance review, it is subject to maintenance of endorsement in approximately three years.

Appendix A: NQF's Measure Evaluation Criteria

NQF endorses performance measures that are suitable for both accountability applications (e.g., public reporting, accreditation, performance-based payment, network inclusion/exclusion, etc.) as well as internal quality improvement efforts. NQF's *measure evaluation criteria and subcriteria* are used to determine the suitability of measures for use in these activities. Because endorsement initiates processes and infrastructure to collect data, compute performance results, report performance results, and improve and sustain performance, NQF endorsement is intended to identify those performance measures that are most likely to facilitate achievement of high quality, efficient healthcare for patients. The criteria and subcriteria also relate to the concept of "fitness for purpose." For example, the clinical evidence should support use of a measure with a specific target patient population (e.g., foot care for patients with diabetes), and testing of the measure as specified indicates under what circumstances reliable and valid results may be obtained (i.e., using the measure with a specified data source and for the accountable entity for which performance is being measured).

Throughout the various iterations of the NQF measure evaluation criteria, many of the basic concepts and criteria have remained largely unchanged, although there have been additions (and a few deletions) from the criteria. However, the measure evaluation guidance—which focuses on the specificity and rigor with which the criteria are applied—has become more comprehensive and more specific over time. The guidance on measure evaluation is intended first for Standing Committees that evaluate performance measures and make recommendations for NQF endorsement, as well as the NQF project staff who assist them. Second, the guidance informs measure developers about how to demonstrate that a measure meets the criteria. Third, the guidance informs NQF members and the public about how measures are evaluated and informs those who use NQF-endorsed performance measures about what endorsement means.

Maintenance Process

Under the revised approach to the evaluation of currently endorsed measures, there is a shift in emphasis for several of the evaluation criteria/subcriteria, as follows:

- **Evidence:** If the developer attests that the evidence for a measure has not changed since its previous endorsement evaluation, there is a decreased emphasis on evidence, meaning that the Committee may accept the prior evaluation of this criterion without further discussion or need for a vote. This applies only to measures that previously passed the evidence criterion without an exception. If a measure was granted an evidence exception, the evidence for that measure must be revisited.
- **Opportunity for Improvement (Gap):** For re-evaluation of endorsed measures, there is increased emphasis on current performance and opportunity for improvement. Endorsed measures that are "topped out" with little opportunity for further improvement are eligible for *Inactive Endorsement With Reserve Status*.
- **Reliability**

Specifications: There is no change in the evaluation of the current specifications.

Testing: If the developer has not presented additional testing information, the Committee may accept the prior evaluation of the testing results without further discussion or need for a vote, assuming the testing continues to meet current requirements.

- **Validity:** There is less emphasis on this criterion if the developer has not presented additional testing information, and the Committee may accept the prior evaluation of this subcriterion without further discussion and vote, assuming the testing continues to meet current requirements. For outcome measures, the Committee discusses questions related to adjustment for social risk factors, even if no change in testing is presented.
- **Feasibility:** The emphasis on this criterion is the same for both new and previously endorsed measures, as feasibility issues might have arisen for endorsed measures that have been implemented.
- **Usability and Use:** For re-evaluation of endorsed measures, there is increased emphasis on the use of the measure, especially use for accountability purposes. There also is an increased emphasis on improvement in results over time and on unexpected findings, both positive and negative. For maintenance measures, subcriterion 4a (Use) is now must-pass.

Other Guidance Resources

Other guidance documents include:

[eMeasure Feasibility Assessment report](#) (2013)

[Composite Measure Evaluation Guidance Report](#) (2013)

[Patient Reported Outcomes Report](#) (2012)

[Usability Report](#) (2012)

[Harmonization Guidance and Definitions](#) (2013)

[Reserve Status Policy](#) (2014)

For a historical view of NQF's measure evaluation criteria and guidance, please see the following reports:

[Review and Update of Guidance for Evaluating Evidence and Measure Testing: A Technical Report \(2013\)](#)

[Evidence Task Force Report](#) (2011)

[Measure Testing Task Force Report](#) (2011)

[Competing Measures Report](#) (2011)

[Measure Harmonization Report](#) (2011)

[Draft eMeasure Testing Guidance](#) (2012)

[CSAC Guidance on Quality Performance Measure Construction](#) (2011)

Appendix B: Intent to Submit Checklist and Guidance

National Quality Forum (NQF) prepared this checklist and guidance to assist measure developers and stewards with the intent to submit (ITS) process through the [Measure Information Management System \(MIMS\)](#). The ITS step is required for all measures each cycle. The ITS requirements described below apply to all measures submitted for endorsement consideration in each cycle and must be completed by the ITS deadline.

Intent to Submit Overview

The purpose of the ITS process is for measure developers and stewards to notify NQF of their readiness to submit a measure for endorsement review and for NQF to provide proactive technical assistance prior to full measure submission. Measure developers and stewards need to submit complete measure specifications and scientific acceptability testing by the ITS deadline. The ITS deadline is approximately three months before the full measure submission deadline. For spring cycles, the ITS deadline is 11:59 pm ET on January 5, and for fall cycles, the deadline is 11:59 pm ET on August 1. If these dates fall on a weekend, the deadline is 11:59 pm ET on the next business day.

Required Sections

Within the measure submission form of MIMS, the following sections are required at the ITS deadline and noted with two red plus signs (++). MIMS will not allow a measure to be submitted as part of the ITS process if any of the required sections are incomplete or the deadline has passed. After completing the ITS process, measure stewards and developers can continue working towards the full measure submission but will not be able to edit ITS sections unless requested to do so by NQF staff. Additional information about submitting measures and the NQF Consensus Development Process (CDP) can be found in the [NQF Measure Developer Guidebook](#).

- Previous Submission Information
- NQF Conditions
- Specifications: Maintenance Update (*for measures that are returning for endorsement maintenance*)
- Measure Specifications
 - Description of the measure (including numerator and denominator statements)
 - Level of analysis and care settings
 - Data dictionary and/or Health Quality Measure Format (HQMF) specifications
 - Type of measure score and appropriate interpretation
 - Description and copy of the instrument (if an instrument-based measure)
 - Data sources
 - Component measures and composite construction (if a composite measure)
- Construction Logic (*if a cost/resource use measure*)
- Clinical Logic (*if a cost/resource use measure*)
- Adjustments for Comparability and Reporting Guidelines
- Scientific Acceptability:
 - Maintenance (*for measures that are returning for endorsement maintenance*)
 - Reliability – Testing

- Validity – Testing
- Validity – Threats to Validity (Statistically Significant Differences, Multiple Data Sources, Missing Data)
- Validity – Other Threats to Validity (Exclusions, Risk Adjustment)
- Empirical Analysis to Support Composite Construction Approach (if a composite measure)

General Considerations

Listed below are general requirements for sections required at ITS. This checklist can be used to track your progress while completing your ITS submission. Some types of measures may require additional items which have been described under [Additional Considerations by Measure Type](#).

- ICD coding, and respective data dictionary, use ICD-10 data.
- Care setting(s) selected in sp. 08 matches what is tested and specified throughout the submission.
- Level of testing matches what is required for the measure type (see [Additional Considerations by Measure Type](#)).
- Testing information is provided for each level of analysis selected in sp.07.
- Appropriate validity testing is presented:
 - For initial endorsement consideration (i.e., a new measure submission), at a minimum face validity is presented. Note: Face validity is acceptable as a substitute for empirical validity testing **only** for initial endorsement consideration.
 - For maintenance of endorsement, empirical validity testing is provided. Note: Empirical validity testing requirements by measure type can be found in the [Additional Considerations by Measure Type](#) section.
- For person or encounter level testing (previously known as data element testing), methodology is clearly described including what data elements are tested. All critical data elements are included in testing. At a minimum, the numerator, denominator, and exclusions are assessed. Something more than percent agreement statistics is provided.
- For accountable or reporting entity level testing (previously known as performance score level testing), the methodology is clearly described, and all results are interpreted.
- For risk adjustment, a conceptual rationale (e.g., logic model, flow chart, and summary of the literature) for risk factors (e.g., clinical, social), and their relationship with the outcome is provided.
- Risk adjustment methodology, specifications (including all data sources, factors tested, and factors included in the final model), and statistics are clearly described and interpreted.
- Exclusions are addressed.
- Missing data are tested for significance and addressed.
- Full and thorough responses are provided for all required sections.

- The measure steward and developer organizations are listed, primary contacts are provided, and all contact information is up to date.

Additional Considerations by Measure Type

This section provides measure-specific requirements that must be addressed in addition to the general requirements listed in the previous section.

Composite Measure

- Reliability testing: accountable/reporting entity level testing of the composite measure score is provided.
- Validity testing: accountable/reporting entity level testing of the composite measure score is provided.

For initial endorsement consideration only, empirical or face validity testing of the components, or face validity of the composite score is acceptable.

Cost and Resource Use Measure

- Reliability testing: either person/encounter level or accountable/reporting entity level testing is provided.
- Validity is considered in the context of measure intent and threats to validity based on these cost measure-specific components:
 - Attribution approach
 - Cost categories
 - Approach to outliers
 - Impact of carve outs.
- Validity testing: either person/encounter level or accountable/reporting entity level testing is provided. Note: Face validity will not be accepted for maintenance measures unless justification is provided/accepted. Examples of rationale for not conducting empirical validity testing may include but are not limited to ethical concerns around withholding treatment or unavoidable interruption in operations at the test site(s).

Electronic Clinical Quality Measure (eCQM)

- Tested using the HQMF specifications, which should also use the Quality Data Model (QDM) and value sets published through Value Set Authority Center (VSAC).
- HTML output is provided (zip file).
- Utilizes data from structured data fields; otherwise, unstructured data is shown to be both reliable and valid. Testing for elements that are not included in structured data fields are tested at the person/encounter level.
- Empirical validity testing is provided.
- Data element validation is provided or acceptable justification.

- Simulated testing attachment is provided to confirm that the HTML output from Bonnie testing (or testing of some other simulated data set) includes 100 percent coverage of measured patient population testing, with pass/fail test cases for each subpopulation. NQF could accept this in the form of a screenshot(s).
- Feasibility scorecard is complete and submitted.

Instrument-based Measure

- Reliability testing: Both person/encounter level and accountable/reporting entity level testing are provided.
- Validity testing: Both person/encounter level and accountable/reporting entity level testing are provided.

All Other Measures

This includes process, appropriate use, structure, efficiency, outcome, intermediate clinical outcome, and access measures. If person/encounter level validity is demonstrated, additional reliability testing is not required.

- Reliability testing: Either person/encounter level or accountable/reporting entity level testing is provided.
- Validity testing: Either person/encounter level or accountable/reporting entity level testing is provided.
Note: Face validity will not be accepted for maintenance measures unless justification is provided/accepted. Examples of rationale for not conducting empirical validity testing may include but are not limited to ethical concerns around withholding treatment, or unavoidable interruption in operations at the test site(s).

Next Steps

After the ITS deadline passes, measure developers and stewards will not be able to edit these fields. Other fields of the measure submission form will remain open for edits. NQF staff will perform a review to confirm the submission is complete and meets the criteria described above. If revisions or further clarification are needed, staff will send comments in MIMS and reopen select fields for editing. Measure developers and stewards can continue to work on the full measure submission throughout this time. Measures that have not successfully completed the ITS process will not be considered for the corresponding review cycle.

Appendix C: Measure Steward Agreement

MEASURE STEWARD AGREEMENT

BETWEEN
NATIONAL QUALITY FORUM
AND

This **MEASURE STEWARD AGREEMENT** (the “Agreement”) is entered into by and between National Quality Forum (“NQF”) and _____ (“Steward”), effective upon NQF’s acceptance of the Agreement.

WHEREAS, NQF is a nonprofit organization whose mission is the improvement of the quality of American healthcare; and

WHEREAS, the evaluation of healthcare performance measures through an endorsement process is part of that mission; and

WHEREAS, Steward wishes certain healthcare performance measures to be considered for endorsement; and

WHEREAS, NQF and Steward (collectively, the “Parties”) wish to acknowledge and agree upon the terms for bringing forward such healthcare performance measures for endorsement consideration;

NOW, THEREFORE, in consideration of the foregoing, NQF and Steward agree as follows:

I. **Definitions**

A. **“Measure”** means a healthcare performance measure submitted by Steward for endorsement. Any reference in this Agreement to “Measure” means each healthcare performance measure submitted by the Steward for consideration for endorsement by NQF.

B. **“Fee-Based Measure”** means a Measure that requires the use of a grouper, risk adjustment, other methodology or any component that is not publicly available or free of charge and is essential to calculating the Measure.

C. **“Permitted Use”** means the use of a Measure for any of the following purposes:

1. calculating, reporting, or displaying of Measure results to:
 - a. the public, free of charge; or
 - b. public and private purchasers of, and payers for, healthcare related service and products; or
 - c. federal, state, or local regulatory programs and regulators.
2. improving or auditing the internal performance of an organization or individual where the improvement or audit is performed by such organization or individual.

II. **Submission of Measure**

A. Steward submits Measure for endorsement on a voluntary basis and agrees to comply with NQF’s processes for Measure submission and endorsement, as may be amended from time to time.

B. Steward will submit the Measure(s) that are subject to this Agreement according to a process prescribed by NQF, including but not limited to an electronic method. Any such measures are incorporated by reference into this Agreement.

III. **NQF Review of Measure**

A. NQF will review Measure in accordance with its Measure endorsement process and criteria. Steward acknowledges that NQF’s process and criteria for Measure endorsement may change over time. Steward acknowledges that NQF’s endorsement decision depends upon Steward’s full disclosure of information about the Measure.

B. If NQF proposes changes to a Measure prior to initial endorsement, NQF shall notify the Steward of the proposed changes, and the Steward shall have the right to accept such changes or reject the changes and withdraw the Measure from consideration for initial endorsement. If NQF proposes changes to a Measure during maintenance review, NQF shall notify the Steward of the proposed changes, and the Steward shall have the right to accept such changes or reject the changes and NQF may remove endorsement of the Measure undergoing maintenance review. If Steward withdraws the Measure from consideration for initial endorsement or maintenance review for any reason, NQF shall have no right to endorse the original or modified Measure unless Steward elects to re-submit the original or modified Measure.

C. NQF, in its sole discretion, determines whether to endorse a Measure. Steward or a third party may appeal a decision to endorse a Measure through NQF’s appeals process. The result of an appeal of a Measure endorsement decision is final.

D. In order to maintain endorsement, Steward must cooperate with the measure maintenance process, which occurs approximately every three (3) years.

IV. **Disclosure of Measure Details**

A. *Measure Disclosure Prior to Endorsement.* Measure disclosure to NQF prior to endorsement means disclosure of complete information regarding the Measure to NQF's staff, directors, committee members, its agents, and the public for the purpose of evaluation, analysis, or display of the Measure in connection with NQF endorsement, including but not limited to:

1. detailed measure specifications, including codes with descriptors, algorithms/measure logic, and risk adjustment model;
2. information supporting the usability and use of the measure;
3. information supporting the feasibility of the measure;
4. evidence supporting the measure focus;
5. data and results generated from testing the measure; and
6. for a Fee-Based Measure, the proposed price structure for the grouper, risk adjustment, other methodology or component that is essential to calculating the Fee-Based Measure.

B. *Measure Disclosure Following Endorsement Decision.*

1. *Endorsed Measure.* If the Measure is endorsed, NQF may disclose, display publicly and make available in any format it chooses:

- a. complete information regarding the Measure, including all information disclosed by the Steward under Section IV.A;
- b. the Measure Submission Form;
- c. all updates to the Measure; and
- d. a link from NQF's website to the Steward's website.

2. *Rejected or Withdrawn Measure.* If the Measure is not endorsed, or the Steward withdraws an unendorsed Measure from the evaluation process, NQF may disclose, display publicly and make available in any format it chooses:

- a. complete information regarding the Measure, including all information disclosed by the Steward under Section IV.A;
- b. the Measure Submission Form; and
- c. the reason why the Measure was not endorsed.

3. *Measure Endorsement Removed.* If NQF removes Measure endorsement or the Steward withdraws an already-endorsed Measure, NQF may disclose, display publicly and make available in any format it chooses:

- a. complete information regarding the Measure, including all information disclosed by the Steward under Section IV.A;
- b. the Measure Submission Form; and
- c. the reason why Measure endorsement was removed, or the Measure withdrawn.

4. *Survival.* This Section IV.B. shall survive the expiration or termination of this Agreement.

V. Conditions of Endorsement

A. Steward must make the Measure specifications generally available for Permitted Uses, free of charge and on a non-discriminatory basis. Steward must make a Fee-Based Measure available for Permitted Uses according to the pricing structure submitted as part of the endorsement process and shall notify NQF if the Steward imposes a fee or charge that is inconsistent with the pricing structure submitted at the time of endorsement. In connection with a Fee-Based Measure only, Steward may require a user to enter into a no-cost non-disclosure or licensing agreement in order to use the Fee-Based Measure for a Permitted Use.

B. Steward must maintain the Measure throughout the period of endorsement. Steward's failure to maintain the Measure may result in the removal of endorsement.

C. If Steward changes a Measure following endorsement, Steward must notify NQF of the changes as soon as practicable and make them available to the public free of charge. A change to a grouper, risk adjustment, other methodology or similar component in a Fee-Based Measure must be made available to the public and any charge for such component must be reasonable.

D. Steward agrees to cooperate with ad hoc reviews. Triggers for ad hoc reviews include, but are not limited to, a material change in a Measure or a change in evidence supporting the Measure.

E. Steward may refer to a currently endorsed Measure as "NQF-endorsed." Steward agrees to comply with guidelines that NQF may issue in connection with publicizing the status of the endorsed measure.

VI. Term and Termination.

A. This Agreement is effective as of the date above written and shall have a term, with respect to each Measure brought forward for endorsement under this Agreement, from the date of submission for endorsement until a given Measure is up for maintenance, unless this Agreement is otherwise terminated.

B. NQF may terminate this Agreement with respect to a given Measure upon ten (10) days written notice of its decision to remove endorsement of such Measure. NQF shall notify Steward of the reasons for removing endorsement and provide Steward with a reasonable opportunity to address the reasons for removing endorsement. The determination of whether Steward has sufficiently addressed such reasons, as well as the determination to remove endorsement, shall be made in NQF's sole discretion.

C. If Steward requests that NQF remove endorsement of a Measure or the Steward withdraws an unendorsed Measure from the evaluation process, this Agreement will terminate with respect to that Measure upon the effective date of endorsement removal or the date the unendorsed Measure is removed from the evaluation process.

D. If Steward does not wish to continue as Steward of a Measure, Steward must provide written notice to NQF as soon as practicable following such decision and such Measure will be handled in one of the following ways:

a. Steward may request removal of endorsement from the Measure as described in Subsection C of this Section VI;

b. Steward may transfer stewardship of the Measure to an identified organization according to NQF process and the Steward will have no responsibility for such Measure;

c. Steward may authorize NQF to search for a replacement steward; or

d. NQF may remove Measure endorsement.

E. If Steward does not maintain the Measure and does not respond to NQF's inquiries regarding the Measure, NQF may, in its discretion, search for a replacement steward or remove endorsement from the Measure.

VII. *Indemnification and Liability.*

A. Steward shall hold NQF harmless and indemnify NQF for any and all costs, damages, and expenses, including reasonable attorneys' fees, incurred by NQF and arising out of: (i) any claim, action, suit or allegation that the Measure or use thereof infringes or constitutes a misappropriation of any trademark, patent, copyright, trade secret, proprietary right or similar property right, or (ii) any claim, action, suit, or allegation that is based on Steward's negligence or willful misconduct related to the Measure.

B. Steward waives any claim against NQF and releases NQF from any liability arising from a decision to endorse, decline to endorse, or remove endorsement of a Measure.

C. Steward acknowledges that information regarding Steward's Measure(s) and displayed by NQF is only as accurate as the information provided by Steward. Steward waives any claim against NQF and releases NQF from any liability resulting from inaccurate display of information regarding Steward's Measure(s) unless such inaccuracy is a result of NQF's gross negligence or willful misconduct. Any such damages shall be limited to actual damages.

D. This Section VII shall survive the expiration or termination of this Agreement.

VIII. *Miscellaneous.*

A. Any notice or other communications under this Agreement must be in writing and will be considered given on the date delivered to the other party through a method capable of tracking. Notices shall be sent to:

National Quality Forum
1030 15th Street, NW
Suite 800
Washington, DC 20005
ATTN: Office of General Counsel

B. This Agreement may only be amended in writing through a document signed by both Parties.

C. The Parties will attempt to resolve any disputes between them through negotiation or other informal means. In the event that a dispute cannot be resolved in this manner, the Parties will submit to binding arbitration in accordance with the rules of the American Arbitration Association. This subsection shall survive the expiration or termination of this Agreement.

D. This Agreement will be governed by and construed in accordance with the laws of the District of Columbia, without reference to conflicts of law provisions. This subsection shall survive the expiration or termination of this Agreement.

E. The undersigned each respectively represents that each party is authorized to sign this Agreement on behalf of the Parties to this Agreement.

IN WITNESS WHEREOF, the Parties sign below to indicate their acceptance of this Agreement.

NATIONAL QUALITY FORUM

_____	_____
Signature of Authorized Representative	Signature of Authorized Representative
_____	_____
Name of Authorized Representative	Name of Authorized Representative
_____	_____
Title of Authorized Representative	Title of Authorized Representative
_____/_____/_____	_____/_____/_____
Date	Date

MSA completion tips.

- The Steward’s name must appear in the first paragraph next to the phrase — “The Steward,” which appears in parentheses after the Steward’s name.
- The Steward’s name MUST match the Steward’s name on the underlying MSA. The individual signing the Addendum on behalf of the Steward need not be the same individual who signed the MSA.
- The document must be signed and dated by the steward. Digital signatures are acceptable. Electronic “signatures” in cursive font do not constitute a digital signature.

Appendix D: Addendum of the Measure Steward Agreement – New Measures

**ADDITION OF MEASURES FOR
 CONSIDERATION FOR ENDORSEMENT
 ADDENDUM TO MEASURE STEWARD AGREEMENT
 BETWEEN
 NATIONAL QUALITY FORUM
 AND**

This Addendum to the **MEASURE STEWARD AGREEMENT** (the “Agreement”), which was entered into on ____/____/____ by and between National Quality Forum (“NQF”) and _____ (“Steward”), is effective upon acceptance by NQF.

WHEREAS, Steward has entered into the Agreement and wishes to submit additional Measures for consideration for endorsement;

NOW, THEREFORE, in consideration of the foregoing, NQF and Steward agree as follows:

I. List of Measures. Steward lists below additional Measures for consideration for endorsement by NQF:

Measure #	Measure Title	Steward
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Cells marked by a dash (-) are intentionally left blank.

II. Miscellaneous.

A. All capitalized terms in this addendum have the same meaning as those in the Agreement.

B. This Addendum is incorporated by reference into the Agreement. All other provisions of the Agreement remain unchanged.

IN WITNESS WHEREOF, the Parties sign below to indicate their acceptance of this Addendum.

NATIONAL QUALITY FORUM

Signature of Authorized Representative

Signature of Authorized Representative

Name of Authorized Representative

Name of Authorized Representative

Title of Authorized Representative

Title of Authorized Representative

_____/_____/_____
Date

_____/_____/_____
Date

Appendix E: Guidance to Make Submissions 508 Compliant (required)

A contractual obligation requires all CDP materials to be fully accessible to persons with disabilities. Please follow the guidance on required best practices provided here to assure accessibility.

Caution: Very Important

Never include an image of a table in place of an actual table.

Never include an image of a block of narrative text in place of actual text.

Do not underline text for emphasis – use bold, italic, or bold italic fonts. Underlining is reserved for hyperlinks.

Any use of text with strikethrough formatting is prohibited. This includes a prohibition on any use of tracked changes.

Use of Color

- Maintain a high level of contrast between text and its background.
- The minimum contrast required for text with respect to its background is a ratio of 4.5 to 1.

Minimum contrast can be verified by using a free color contrast checker application such as Colour Contrast Analyser.

- Avoid using color or formatting ALONE to convey meaning. When using color to convey meaning, always use a second, accessible means of conveying the same meaning to screen reader users. For example:

Alternative Text for Graphics and Formulas

Provide alternative text for each image or other graphic that conveys meaning.

- Alternative text is a brief written description of a graphic.
- This text should present the meaning conveyed by the graphic.
- Alternative text may range in length from a phrase to a brief sentence or two but needs to fully represent the meaning conveyed by a visual element. For some graphics, alternative text must be longer to convey the meaning.
- Alternative text *does not display* in the document; instead, it is assigned to the corresponding graphic as metadata and is used by screen reader software to read electronic documents to those with visual impairment.

Formulas also require alternative text explanations. Note: Formulas created with Word or MIMS' equation editors do not require alt text. Example of formula alt-text: "Pearson r used to determine correlation between variable X and variable Y."

Add alternative text to a graphic in **Microsoft Word 2016**

1. Right-click on a graphic.
2. Select **Format picture**.



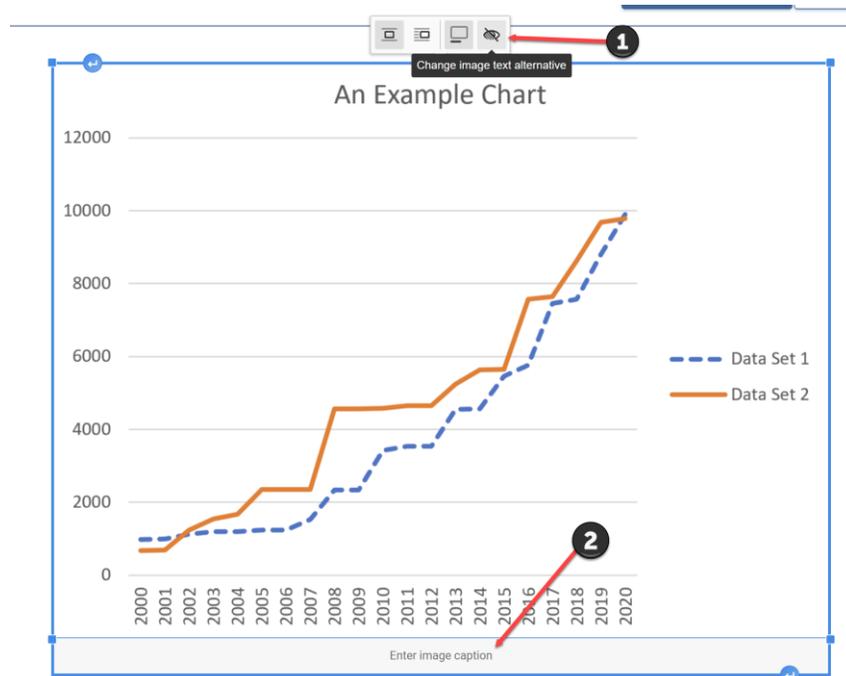
3. Click the **Layout & Properties** button:
4. Select the **Alt Text** option.
5. Type alternative text in the **Description** field for the targeted graphic (not the Title field).

Add alternative text to a graphic in Microsoft Word 365

1. Right-click on a graphic.
2. Select the **Edit Alt Text** option from the drop-down menu.
3. Type alternative text into the **Alt text** field on the right side of your screen.

Add alternative text to a graphic in Measure Information Management System (MIMS)

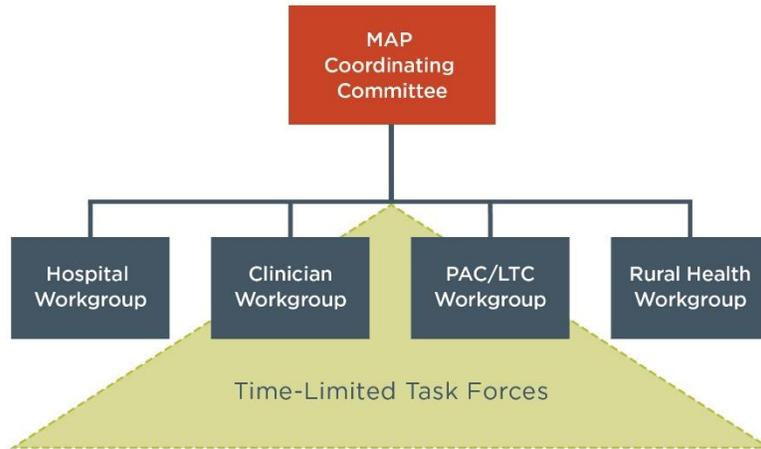
1. Click on the image and then select the icon (1)
2. Input the text alternative
3. To add an image caption, click on the image and then click on the text “Enter image caption.” (2)



Examples of Alt Text

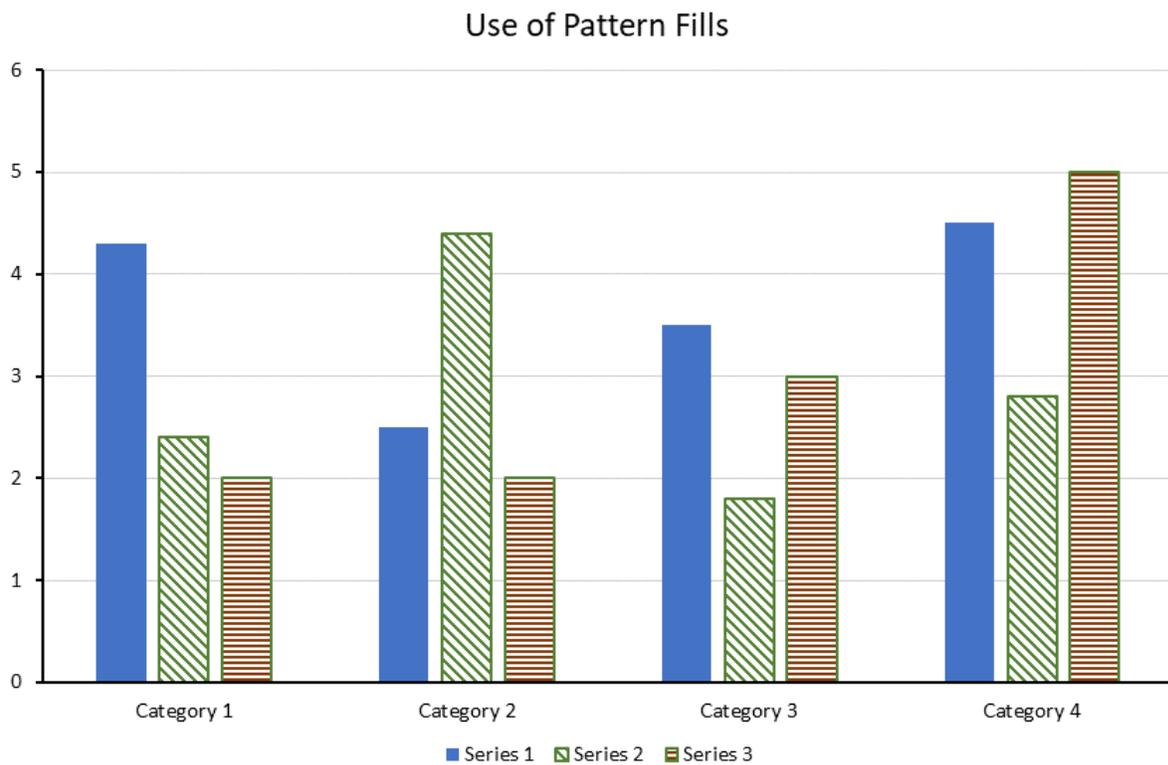
To view the alt text for each graphic below, hover your mouse pointer over it or right-click and choose Edit Alt Text from the drop-down menu, viewing the alt text in the box on the right side of your screen.

Figure 1. Structure of the Measure Applications Partnership



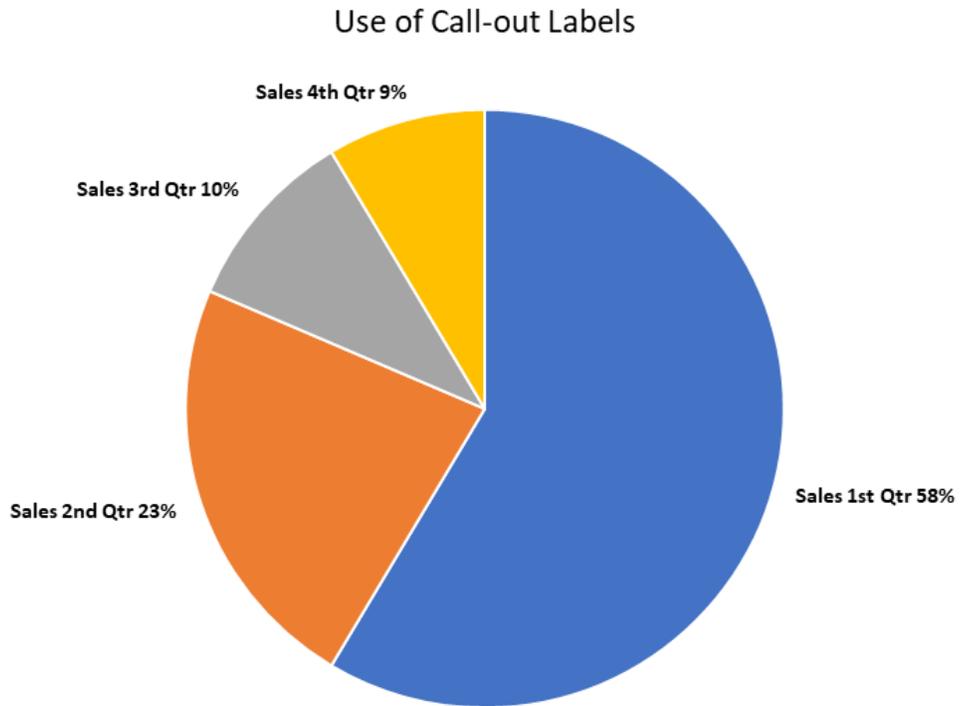
Use of pattern fills in figures

Use a pattern fill for complex figures to identify each section of the figure, eliminating data set identification solely based on the legend colors.



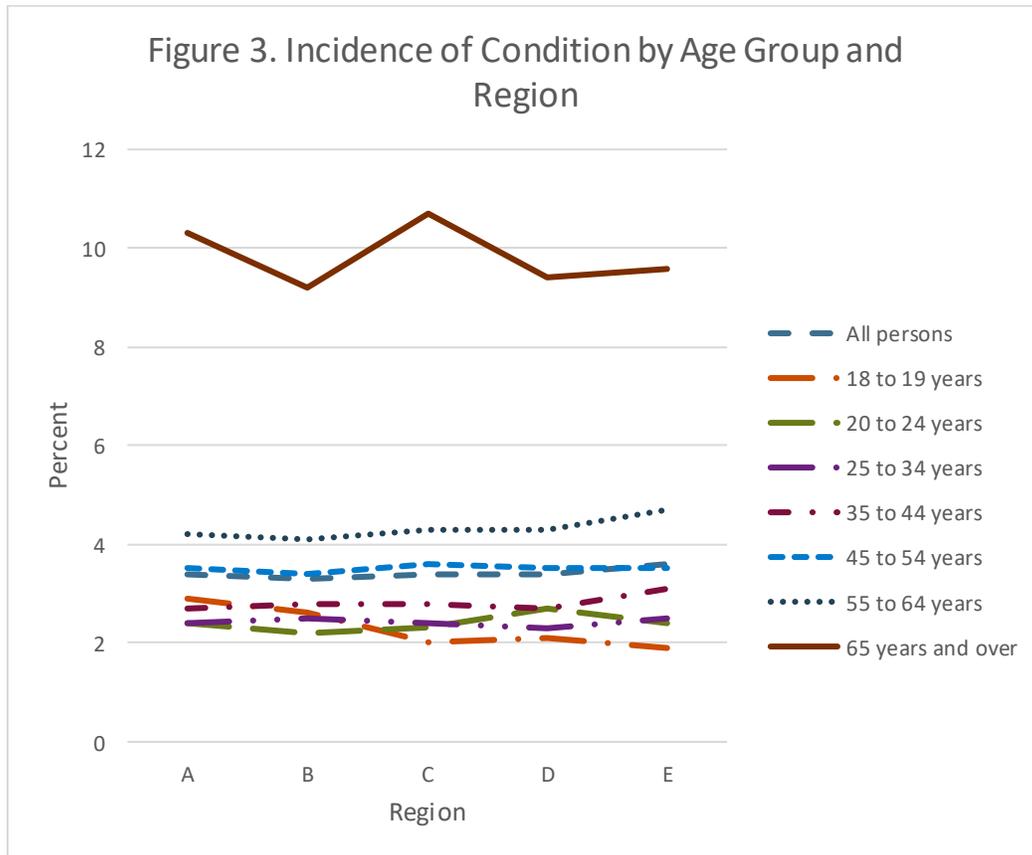
Use of call-out labels in figures

Use data call-out labels to identify figure sections, eliminating dependence solely on color. The labels should replace the legend entries and provide the data for each element.



Use of data tables for figures with large amounts of data

For data graphics based on more extensive data, you can provide the underlying data in an accessible table.



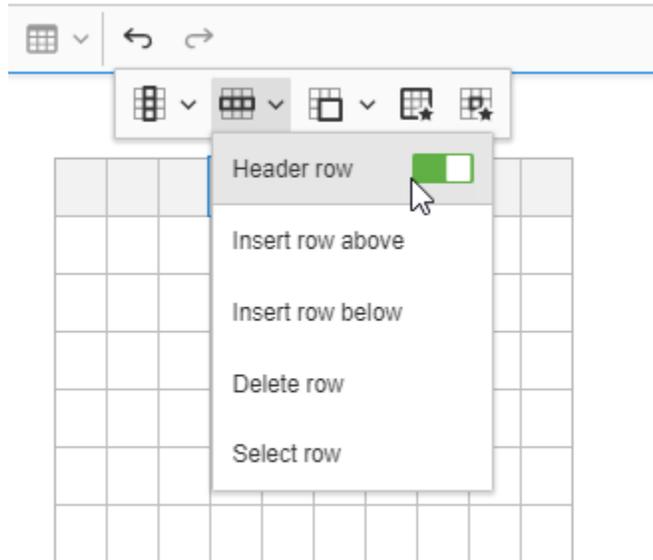
Region	All persons	18 to 19 years	20 to 24 years	25 to 34 years	35 to 44 years	45 to 54 years	55 to 64 years	65 years and over
A	3.4	2.9	2.4	2.4	2.7	3.5	4.2	10.3
B	3.3	2.6	2.2	2.5	2.8	3.4	4.1	9.2
C	3.4	2.0	2.3	2.4	2.8	3.6	4.3	10.7
D	3.4	2.1	2.7	2.3	2.7	3.5	4.3	9.4
E	3.6	1.9	2.4	2.5	3.1	3.5	4.7	9.6

Use your best judgment when deciding whether to use a table as a secondary means of presenting data in a graphic image. This approach should be used when it is not possible to write an alt text description for the graphic that conveys comparable meaning to readers who rely on screen reader software, due to a visual disability, for reading electronic documents.

Tables

- **Never include an image such as a png or jpg of a table in place of an actual table.**
- The title for a table should be in the paragraph that precedes the table, not inside the table.
- A source or notes pertaining to a table should be in a paragraph immediately following the table, not inside the table.

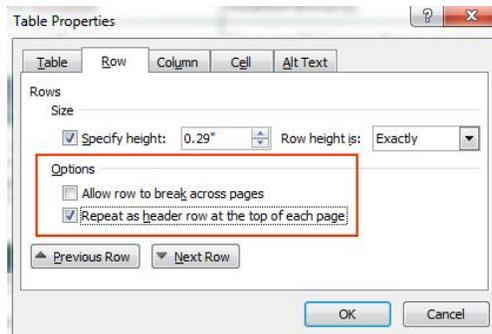
- Table columns should have descriptive header labels in the first cell of each one. To designate a table header row in MIMS, click on the table, select the row icon, then move the Header row slider to the 'on' position.



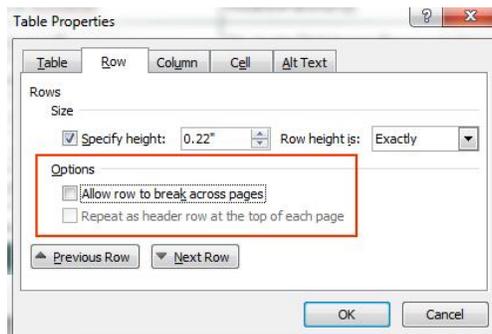
- Do not merge or split cells in tables. Repeat the column and row heads to avoid merging cells. Turning off or changing border color to match the background can be used to give the illusion of a merged cell.

Quarter	Month	2017	2017	2018	2018
		Program A	Program B	Program A	Program B
First Quarter	January	12,022	13,212	9,987	10,333
	February	11,222	12,022	10,333	11,222
	March	10,333	11,917	11,222	9,987
Second Quarter	April	12,022	11,222	9,987	13,212
	May	13,212	13,212	10,333	11,222
	June	9,987	11,222	12,298	9,987
Third Quarter	July	12,298	12,298	13,212	12,022
	August	10,333	12,022	10,333	10,333
	September	13,212	12,298	11,222	13,212
Fourth Quarter	October	12,022	13,212	9,987	12,022
	November	9,987	10,333	12,022	13,212
	December	13,212	9,987	13,212	10,333

- Set a table row containing column headings to “Repeat as header row at the top of each page” to make the row a header row. Do this even if the entire table appears on a single page.
 1. Select table row containing table column headings.
 2. Right click on selected row.
 3. Select Table properties.
 4. Select Row tab.
 5. Check “Repeat as header row at the top of each page.”



- Avoid splitting a single table row across pages: UNCHECK “Allow row to break across pages.”
 1. Select an entire table.
 2. Right click on the table.
 3. Select Table properties.
 4. Select Row tab.
 5. Uncheck “Allow row to break across pages.”



- Use tables to present data that need to be displayed in rows and columns. (Never use tab characters or spaces to simulate the appearance of a table.)
- Avoid using tables to position content on a page.
- Consider using multiple, small, simply structured tables instead of using a large complex table.
- Never include empty rows or columns in a table.
- Empty cells should contain a character like * and this note under the table: “*This cell intentionally left empty” to avoid confusion.
- Never nest a table inside of another table.