



NATIONAL
QUALITY FORUM

MEASURE APPLICATIONS PARTNERSHIP

Maximizing the Value of Measurement: MAP 2017 Guidance

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Contents

- Background and Context..... 3
- Opportunities to Maximize Value 4
 - Understand the Impact of Measures **Error! Bookmark not defined.**
 - Assess How Measures Are Performing..... **Error! Bookmark not defined.**
 - Develop and Implement High-Value Measures..... 6
- Ensure a Person-Centered Approach to Measurement 7
 - Encourage shared accountability 7
 - Develop Patient-Reported Outcomes 7
 - Develop Ways to Increase Information for All Consumers 8
- Advance Measurement Science 8
 - Improve Attribution Models..... 8
 - Understand the role of social risk..... 9
- Conclusion 10

The Measure Applications Partnership (MAP) recommends performance measures for use in 16 federal healthcare quality initiative programs. The MAP pre-rulemaking process is a unique multistakeholder dialogue about the priorities for measurement in these programs. MAP allows private-sector stakeholders across the care continuum, including patients, clinicians, providers, purchasers, and payers, the opportunity to identify and recommend the highest-value measures for each program as well as to provide strategic guidance across all programs. Throughout its six years of annual review, MAP has worked toward the goal of lowering costs while improving quality and ensuring that patients and consumers get the information they need to support their healthcare decision making.

In its 2016-2017 pre-rulemaking work, MAP emphasized maximizing the value measurement brings to healthcare improvement while ensuring a person-centered approach to healthcare delivery. New this year, MAP also provided guidance on the future removal of measures from federal programs to reduce the measurement burden on clinician and providers. Other important themes discussed by MAP included better understanding the impact of measurement to maximize its value to improve healthcare, assessing how measures are performing once they are implemented, and exploring how best to ensure the use of high-value measures. MAP also emphasized the importance of a person-centered approach to measurement by encouraging shared accountability for a patient's outcomes, developing patient-reported outcome (PRO) based performance measures, and determining ways to increase the information available about healthcare quality for all consumers. Finally, MAP noted the need to ensure that measures used in accountability programs are fair and accurate.

MAP encouraged stakeholders to advance measurement science in areas such as improving models used to attribute patient episodes appropriately to providers and determining the impact of patients' social risk factors to their healthcare outcomes.

Background and Context

The Patient Protection and Affordable Care Act (ACA) of 2010 established a requirement that the U.S. Department of Health and Human Services (HHS) implement an annual, federal pre-rulemaking process to provide private-sector input and consensus on the quality and efficiency measures being considered for federal public-reporting and performance-based payment programs. The National Quality Forum (NQF) first convened MAP, in 2011 as a multistakeholder entity to provide recommendations on the measures under consideration for use by HHS.

As detailed in the [Process and Approach for MAP Pre-Rulemaking Deliberations, 2016-2017](#) MAP used a four-step process to analyze and select measures.

1. **Provide program overview.** Using CMS critical program objectives and the [MAP Measure Selection Criteria](#), NQF staff developed a framework for each program measure set in order to organize each program's current measure set.
2. **Review current measures.** MAP used the program measure set frameworks to better understand the current measures in the program, identify important gaps in measurement,

and surface other areas of need. MAP reviewed the current measures to help determine how well the measures under consideration might fit into the program.

3. **Evaluate measures under consideration.** MAP used the Measure Selection Criteria and a MAP-approved preliminary analysis algorithm to determine whether the measures under consideration would enhance the program measure sets. Staff performed a preliminary analysis on each measure under consideration using the preliminary analysis algorithm. The MAP workgroups made their recommendations for each measure under consideration during December in-person meetings. The MAP Coordinating Committee finalized the recommendations for all measures under consideration at their January in-person meeting.
4. **Provide feedback on current program measure sets.** MAP reviewed the current measure sets to offer input on how to strengthen them, address gaps, and make recommendations for future removal of measures.

As previously noted in its [2016 guidance](#), MAP aims to provide guidance on the selection, use, and reduction of performance measures on multiple levels. MAP considers the value an individual measure under consideration may add to a program by carefully balancing the opportunity for improvement with the potential for negative consequences and the burden on provider to report on the measure. Secondly, MAP evaluates a program's measure set as a whole. MAP also provides guidance on prioritizing gaps for measure endorsement and development. New to its pre-rulemaking work, MAP identifies measures that potentially could be removed from a program measure set because they may be redundant or less useful. Finally, MAP looks across the various quality initiative programs to identify ways measurement can drive improvement and maximize value across the healthcare system.

Opportunities to Maximize Value in Healthcare through Measurement

In its 2016-2017 pre-rulemaking deliberations MAP identified a number of ways to improve measurement to increase the value of healthcare. MAP underscored the need to ensure measures are person-centered and have a meaningful and intended impact as well as the need to improve measurement science as a whole.

Reducing Measurement Burden

Understanding Measure Performance and Impact

MAP emphasized the need to better understand the impact of measures used in the federal quality initiatives. The burden of measurement on providers, including data collection, must be reduced while quality and patient outcomes are improved. To help achieve these goals, MAP called for better feedback from frontline providers to ensure measures are driving improvement and not causing negative, unintended consequences.

In the 2016-2017 pre-rulemaking process MAP reviewed the measure sets currently in use in addition to focusing on new measures under consideration to better understand how the measure sets would work in totality. This change in the process allowed MAP members to suggest ways to strengthen the current measure sets, including making recommendations about measures that could potentially be removed.

There are currently 634 measures used in the programs MAP reviews. Overall MAP recommended the removal of 86 measures from the programs. However, MIPS has the largest measure set of any of the programs (273 measures). MAP recognized that physician-level programs include a large number of measures across a wide range of specialties with limited physician participation makes it challenging to streamline those sets. Excluding MIPS, MAP reviewed 361 current measures and recommended removal of 24% of them.

The main reasons MAP suggested removal of these measures were a lack of NQF-endorsement and a lack evidence that the measures are addressing a leading measure gap. MAP noted the largest number of measures affected by its recommendation could be measures used in mature federal quality programs with larger measure sets, such as the Hospital Inpatient Quality Reporting Program, the Hospital Outpatient Quality Reporting Program, and the Home Health Quality Reporting Program. MAP urges that federal programs should strive for a limited set of high- impact measures to reduce measurement burden on providers while promoting improvements in healthcare quality.

Table 1: MAP Removal Suggestions by Program

Program	Number of Measures Suggested for Removal	Total Number of Current Measures	Percent Suggested for Removal
ESRD Quality Incentive Program	7	18	39%
PPS-Exempt Cancer Hospital Quality Reporting Program	3	17	18%
Ambulatory Surgery Center Quality Reporting Program	8	15	53%
Inpatient Psychiatric Facility Quality Reporting Program	10	18	55%
Outpatient Quality Reporting Program	16	31	52%
Inpatient Quality Reporting Program	22	63	35%
Home Health Quality Reporting Program	20	80	25%

MAP emphasized removing measures that are no longer driving improvements in patient care. For example, MAP recommended that measures with overall high performance with limited variation among providers, i.e., “topped-out measures,” should be removed from federal programs. However, MAP cautioned that the removal of topped-out measures must be balanced with the need to ensure quality performance that does not slip.

MAP reiterated the crucial role NQF measure endorsement plays in ensuring measures are evidence-based, reliable and valid, usable, and feasible. MAP stressed that measures used in public-reporting and value-based purchasing programs should be NQF-endorsed. MAP’s guidance is that HHS should remove measures from federal programs that have failed NQF’s endorsement review and measures that have been in a program for multiple years but have not been submitted for NQF endorsement.

MAP identified a number of additional ways to reduce the burden of measurement. MAP urged CMS to explore the possibility of implementing composite measures that combine two or more individual

measures in a single measure that results in a single score. MAP also encouraged alignment across programs when relevant and possible. MAP recognized that aligning measures can help consumers and purchasers compare healthcare performance across settings as well as reduce the burden on providers that are required to report for multiple programs.

MAP acknowledged the need for better data to evaluate the current measures and noted that a focus of NQF’s strategic plan is to better understanding the impact of NQF-endorsed measures. MAP supported NQF’s plan to work with its member organizations to gather feedback on the measures. MAP encouraged organizations affected by measurement to work with NQF to submit better data on the current measures. MAP also encouraged measure users to participate in greater data sharing with CMS so MAP and others can better understand how measures are performing. MAP stressed the need for a systematic, data-driven process that incorporates both qualitative and quantitative feedback from organizations and providers who implement and use measures.

Develop and Implement High-Value Measures

MAP called for the development and implementation of high-value measures in the federal healthcare quality initiative programs. MAP has defined high-value measures as “measures that will drive the health system to higher performance.” To make this guidance more concrete, MAP identified the following measure types as high-value:

- Outcome measures (e.g., mortality, adverse events, functional status, patient safety, complications, or intermediate outcomes)
- Patient-reported outcomes where the patient provides the data about the results of their treatment, level of function, and health status
- Measures addressing patient experience, care coordination, population health, quality of life, or impact on equity
- Appropriateness, overuse, efficiency, and cost-of-care measures
- Composite measures
- Process measures with a strong evidence-based link to patient outcomes

MAP has been encouraged that over the past six years more high-value measures have been submitted for consideration. In its 2016-2017 guidance, MAP emphasized the need to continue to shift the measures used in federal programs to high-value measures. Although the number of outcome measures under consideration were fewer from the 2015-2016 cycle, MAP was encouraged that 32 out of 71 measures under considerations were outcome, intermediate outcome, or patient-reported outcome measures. Table 1 provides a breakdown of the measures under consideration by measure type.

Table 1 Measures Under Consideration by Measure Type

Measure Type	Number of MUCs
Outcome	17
Intermediate Outcome	4
Patient-Reported Outcome	11
Process	41
Structure	1

MAP recognized that while process measures are needed, it recommended moving to composite measures when applicable. MAP noted that composite measures could help alleviate the burden on clinicians and providers while ensuring quality improvement on crucial processes.

MAP also noted that many measures used in the various programs are specified for a specific clinical condition. MAP recommended the inclusion of more measures that cut across conditions or settings could provide a broader picture of quality while minimizing the reporting burden on providers. MAP emphasize that this approach could be particularly useful for measures of harm and safety and underscored the need for measures that assess all causes of patient harm.

Ensure a Person-Centered Approach to Measurement

Encourage shared accountability

As new payment and care delivery models incentivize integration across the healthcare system. MAP recognized a need to ensure measurement approaches work to promote quality across the care continuum. MAP acknowledged the role that multi-disciplinary teams play in ensuring coordinated, patient-centered care. MAP reiterated the need to improve cooperation and communication across the healthcare system and underscored the role performance measurement can play in meeting these goals.

MAP previously noted that performance measures are needed across every site of care to assess the effectiveness of shared accountability.¹ Since MAP issued that guidance, legislation, such as the Improving Medicare Post-Acute Care Transformation Act of 2014 (IMPACT) and the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) have expanded quality measurement to additional settings and provider types. MAP emphasized the need to ensure that measures across the federal healthcare quality programs work together to bridge current silos and encourage shared accountability for patient outcomes.

Develop Patient-Reported Outcome Measures

Since its inception, MAP has called for greater use of patient-reported outcome based performance measures (PRO-PMs). MAP also has emphasized the need to ensure public- and private-sector quality initiatives address outcomes most important to patients. PRO-PMs present a unique opportunity to ensure the patient's voice is heard. MAP has repeatedly named PRO-PMs as a leading gap area across the federal programs on which it provides input.

During the 2016-2017 pre-rulemaking process, the MAP Clinician, Hospital, and Post-Acute Care/Long Term Care Workgroups discussed the PROMIS® (Patient-Reported Outcomes Measurement Information System). PROMIS® is a set of measures that evaluate and monitor physical, mental, and social health in adults and children. Overall, MAP was supportive of the use of measures from PROMIS and noted the tool has a great deal of potential. MAP members noted the use of the tool could improve care and increase patient and family engagement.

MAP members did raise a number of implementation concerns for PROMIS® measures and PRO-PMs. First, MAP recognized the potential challenge that facilities with budgetary restrictions could face when

implementing these measures. Next, MAP noted the need to use PRO-PMs judiciously to prevent burden on patients responding as well as clinicians trying to incorporate the information into clinical workflow. MAP emphasized the importance of considering the patient's perspective on whether the measure is meaningful, understandable, and achievable. MAP also stressed the potential for cultural and linguistic barriers to the implementation of PRO-PMs and recommended implementers be cognizant to ensure cultural competency. Finally, MAP expressed some concerns on how PRO-PMs based on PROMIS® would be standardized to allow for comparability and use in federal quality initiatives.

Develop Ways to Increase Information for All Consumers

MAP emphasized that the federal healthcare quality initiatives and the public-reporting of the results of these initiatives on CMS websites help consumers to make more informed choices about where to seek healthcare. While progress has been made since MAP began its work six years ago persistent measure gaps remain. MAP noted the need to provide information to support the healthcare decisions of all consumers and recommended that CMS continue to include in its federal programs measures that address broader populations. MAP stated its interest in additional measures that address care for younger populations. For example, MAP noted that persistent gaps remain around pediatrics and maternal health and recognized a number of public comments urging the adoption of measures on important quality issues such as rates of caesarian sections.

MAP recognized that data challenges may be responsible for some of these information gaps and that CMS data is often limited to Medicare beneficiaries. However, MAP encouraged CMS and other payers to find ways to progress toward the goal of reporting all-payer data so all consumers, in addition to Medicare beneficiaries can benefit from increased transparency and have information to support their healthcare-decision making

Advance Measurement Science

MAP underscored the importance of continuing to improve the basic science of health care performance measurement. MAP noted a need to better understand measure results in the context of care improvements and that better information is needed on how to set performance goals. For example, reducing readmissions is an important quality issue but setting a reasonable performance goal remains challenging. MAP also noted the need to continue to improve attribution models and to better understand how to address social risk factors in value-based payment.

Improve Attribution Models

The U.S. healthcare system continues to pursue value-based purchasing and alternative payment models to reduce healthcare costs while improving quality. Such payment models, which tie a provider's reimbursement to performance on cost and quality measures, require an accurate understanding of who is responsible for a patient's outcomes and costs. Attribution is defined as the methodology used to assign patients, and their quality outcomes, to providers or clinicians. However, this is increasingly challenging in a system moving to team-based care and shared accountability.

MAP discussions have frequently surfaced questions about attribution. MAP strived to recommend measures that will improve care for patients while accurately and fairly assessing a provider or clinician's

performance. This balance can be complicated when multiple entities may be involved in a person's care but a measure or program holds only one accountable.

NQF, with funding from HHS, [convened a multistakeholder committee to provide guidance](#) on selecting and implementing attribution models. MAP reviewed the committee's guidance and reflected on how it should consider attribution challenges, including those posed by some of the current measures in federal programs.

MAP acknowledged the need to ensure that how a measure is attributed reflects the original intent of the measure and its endorsement. MAP noted that some measure currently used in federal programs are endorsed for a different level of analysis than how they are being used. For example, MAP raised concerns that NQF #1789 Hospital-Wide All-Cause Unplanned Readmission Measure is currently used in the Physician Value-Based Modifier program and will be used in the Merit-Based Incentive Payment System (MIPS) for physician groups. The measure was endorsed for facility-level of analysis but is being used in clinician programs. MAP recommended that CMS submit NQF #1789 Hospital-Wide All-Cause Unplanned Readmission Measure for NQF review at the clinician group level. MAP also expressed concerns about the accuracy of the attribution methodology used to assign Medicare beneficiaries to clinicians and noted this could affect the reliability and validity of the measure.

MAP noted a number of attribution challenges and a need to balance a future state that is moving toward population-based payments with the current fee-for-service environment. MAP recognized that payers and purchasers may be interested in more global strategies to attribute patient outcomes and costs but stressed that much of the current measurement architecture addresses only one care setting. MAP recognized that the clinician or provider be able to influence the attributed outcomes and that attribution methodologies must support transparency, accountability, and improvement. MAP also noted a need to consider the role of clinicians like pharmacists, nurses, and physician assistants as well as the role of community partners and long-term social supports. Finally, MAP recognized that while greater flexibility in attribution methodologies can help to support innovative measurement, greater standardization could help to alleviate measurement burden on clinicians and providers and that both of these objectives need to be balanced.

Understand the role of social risk

There is increasing evidence that social risk factors, such as socioeconomic status (SES), race and ethnicity, and residential and community context, can impact a person's health and can make it more difficult to help them achieve optimal health outcomes. Simultaneously, the shift to value-based purchasing increasingly ties provider payment to patient outcomes. These factors have led to important conversations about how to reduce healthcare disparities and improve quality for all while ensuring that providers and clinicians caring for the most vulnerable are not unfairly penalized because of the populations they serve.

The question of whether or not measures under consideration should include social risk factors in their risk adjustment models has been a challenging one for MAP. While committed to reducing disparities and promoting high quality care for all Americans, MAP recognized the need to be fair to clinicians and

providers and ensure that performance measurement results accurately reflect the quality of care they provide.

MAP received an update on a number of advancements around measuring and accounting for social risk factors. The Office of the Assistant Secretary for Planning and Evaluation (ASPE) presented findings from a study mandated by the IMPACT Act to analyze the impact of SES on quality and resource use in Medicare using existing SES data. ASPE's work had two main findings: 1) that Medicare beneficiaries with social risk factors had worse outcomes on quality measures regardless of the provider they saw and 2) that providers that disproportionately served Medicare beneficiaries with social risk factors tended to perform worse on quality measures, even after adjusting for the proportion of beneficiaries with social risk factors. ASPE reviewed a number of potential policy solutions to account for social risk in Medicare value-based purchasing programs.

In addition, CMS provided MAP with an update on refinements to the Hospital Readmission Reduction Program (HRRP) required by the 21st Century Cures Act. The measures in the HRRP are not currently risk adjusted for socioeconomic status. The Cures Act updates the payment approach used by the HRRP to compare hospitals of the same type to their peers, rather than all hospitals. Specifically, the Cures Act changes HRRP to stratify hospitals by the proportion of patients who are fully eligible to participate in Medicare and Medicaid with similar proportions of dually eligible patients for the purpose of assessing incentives or penalties for hospital performance. CMS noted that the Act says that CMS also can consider the ASPE recommendations regarding risk adjustment of the measures but that the first step is hospital stratification in terms of assessing penalties.

Finally, NQF shared an update on its trial period for SES risk adjustment. The NQF Board approved the two-year trial period in 2014 to allow for measures to be risk adjusted for SES as part of the endorsement evaluation process. The results of the trial period will inform a future NQF decision about permanently changing NQF policy. During the trial period, NQF requires that measure developers show both a conceptual and empirical basis to risk adjust for SES. The NQF trial period has demonstrated the challenges in getting adequate data on social risk factors. A number of measures, including measures of cost and resource use and readmissions, have come forward with a conceptual basis for adjustment but empirical analyses using available data did not support inclusion of those factors.

MAP recognized the need for additional research to better understand the role of social risk factors. MAP noted the need to ensure high quality care for all and the importance of better support and resources for facilities and clinicians caring for the most vulnerable. MAP looks to the work of the NQF Disparities Standing Committee to help develop a plan for equity measurement and to provide guidance on ensuring value-based purchasing drives quality improvement for all while not worsening access challenges for people with social risk factors.

Conclusion

Quality measurement and healthcare payment have changed significantly since the inception of MAP six years ago. The healthcare system continues to look to performance measurement to support new payment and care delivery models. In its role, MAP continues to strive to recommend measures that will

lower costs while improving the quality of care. At the same time, MAP attempts to reduce the burden of measurement on clinicians and providers by recommending aligned measures across federal program and by promoting the use of high-value measures. In its 2016-2017 pre-rulemaking work, MAP aimed to maximize the value of measurement to improve healthcare by better understanding the impact of measurement, ensuring a person-centered approach, and improving measurement science.

MAP will continue to improve the pre-rulemaking process to ensure its recommendations address the most important quality issues while minimizing undue measurement burden. MAP also will continue to build partnerships with CMS and others to better understand how measures are performing and recommend ways that current measure sets used in federal programs could be improved, with a push toward further reductions in measure burden. Finally, MAP will continue to push for the development and implementation of high-value measures. By carefully considering the impact of each measure in a program and thoughtfully weighing the potential input of a measure under consideration, MAP aims to maximize the value of measurement to improve healthcare.

¹ MAP Families of Measures: Safety, Care Coordination, Cardiovascular Conditions, Diabetes. NQF. 2012.