



NQF Report of 2013 Activities to Congress and the Secretary of the Department of Health and Human Services

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Report on 2013 Activities to Congress and the Secretary of the Department of Health and Human Services

I. Executive Summary

Over the last six years Congress has passed two statutes (and extended one) that call upon HHS to work with a consensus-based entity (the “Entity”) to facilitate multi-stakeholder input into (1) setting national priorities for improvement in quality, and (2) recommending use of performance measures in federal programs to achieve these priorities. The statutes also call upon a consensus-based entity to review and endorse a portfolio of standardized performance measures to be used by stakeholders in public and private quality improvement and accountability programs. The first of these statutes is the 2008 Medicare Improvements for Patients and Providers Act (MIPPA) (PL 110-275), which established the responsibilities of the consensus-based entity by creating section 1890 of the Social Security Act. The second statute is the 2010 Patient Protection and Affordable Care Act (ACA) (PL 111-148), which modified and added to the consensus-based entity’s responsibilities. The 2013 American Taxpayer Relief Act (PL 112-240) extended funding under the MIPPA statute to the consensus-based entity through fiscal year 2013. HHS awarded contracts related to the consensus-based entity identified in these statutes to the National Quality Forum (NQF).

These laws specifically charge the Entity to report annually on its work. As amended by the above laws, the Social Security Act (the Act)—specifically section 1890(b)(5)(A)—also mandates that the entity report to Congress and the Secretary of the Department of Health and Human Services (HHS) no later than March 1st of each year. The report must include descriptions of: 1) how NQF has implemented quality and efficiency measurement initiatives under the Act and coordinated these initiatives with those implemented by other payers; 2) NQF’s recommendations with respect to activities conducted under the Act ; 3) NQF’s performance of the duties required under its contract with HHS; 4) gaps in endorsed quality and efficiency measures that NQF has identified, including measures that are within priority areas identified by the Secretary under HHS’ national strategy; 5) areas in which evidence is insufficient to support endorsement of measures in priority areas identified by the National Quality Strategy, and where targeted research may address such gaps, and 6) the matters described in clauses (i) and (ii) of paragraph (7)(A) of section 1890(b).¹

This fifth Annual Report highlight’s NQF’s work conducted between January 14, 2013 and December 31, 2013 related to these statutes and conducted under a federal contract with the U.S. Department of Health and Human Services. The deliverables produced under contract in 2013 are referenced throughout this report, and a full list is included in Appendix A.

Recommendations on the National Quality Strategy and Priorities

Section 1890(b)(1) of the Social Security Act (the Act), mandates that the consensus-based entity (CBE) also required under section 1890 of the Act shall “synthesize evidence and convene key stakeholders to make recommendations . . . on an integrated national strategy and priorities for healthcare performance measurement in all applicable settings.” In making such recommendations, the entity shall

ensure that priority is given to measures that address the healthcare provided to patients with prevalent, high-cost chronic diseases, that focus on the greatest potential for improving the quality, efficiency, and patient-centeredness of healthcare, and that may be implemented rapidly due to existing evidence and standards of care. In addition, the entity will take into account measures that may assist consumers and patients in making informed healthcare decisions, address health disparities across groups and areas, and address the continuum of care a patient receives, including services furnished by multiple healthcare providers or practitioners and across multiple settings.

In 2010, at the request of HHS, the NQF-convened National Priorities Partnership (NPP) provided input that helped shape the initial version of the National Quality Strategy (NQS).² The NQS was released in March 2011, setting forth a cohesive roadmap for achieving better, more affordable care, and better health. Upon the release of the NQS, HHS accentuated the word ‘national’ in its title, emphasizing that healthcare stakeholders across the country, both public and private, all play a role in making the NQS a success.

NQF has continued to further the NQS by convening diverse stakeholder groups to reach consensus on key strategies for improvement. In 2013, NQF began work in several emerging areas of importance that address the National Quality Strategy, such as how to improve population health within communities; how consumers can leverage quality information to make informed healthcare coverage decisions; and how to dramatically improve patient safety in high-priority areas.

Quality and Efficiency Measurement Initiatives (Performance Measures)

Under section 1890(b)(2) and (3) of the Act, the entity must provide for the endorsement of standardized healthcare performance measures. The endorsement process shall consider whether measures are evidence-based, reliable, valid, verifiable, relevant to enhanced health outcomes, actionable at the caregiver level, feasible for collecting and reporting data, responsive to variations in patient characteristics, and consistent across healthcare providers. In addition, the entity must maintain endorsed measures, including retiring obsolete measures and bringing other measures up to date.

Since its inception in 1999, NQF has developed a portfolio of approximately 700 NQF-endorsed measures which are in widespread use across an array of settings. In concert with others, the work of NQF has contributed to a more information-rich healthcare system, and demonstrated that measures—particularly in tandem with delivery changes and payment reform—can lead to improvement in performance.

Over the past several years, NQF, working in partnership with HHS and others, has worked to evolve the science of performance measurement through more rigorous evaluation criteria. This effort has included placing greater emphasis on evidence and a clear link to outcomes; a greater focus on addressing key gaps in care, including care coordination and patient experience; and a requirement that testing of measures demonstrates their reliability and validity. NQF also has laid the foundation for the next generation of measures by providing guidance on composite measurement; patient-reported outcome measures; electronic, or eMeasures; and measures that evaluate complex but important areas such as resource use and population health.

Across six HHS-funded projects in 2013, NQF added 27 measures to its portfolio. During 2013, NQF also removed 95 measures from its portfolio for a variety of reasons: measures no longer met endorsement criteria; measures were harmonized with other similar, competing measures; measure developers chose to retire measures they no longer wished to maintain; or measures “topped out,” by consistently performing at the highest level.

Since September 2013, HHS has awarded to NQF 11 additional measure endorsement projects, touching on topics such as admissions and readmissions, cost and resource use, endocrine, cardiovascular, care coordination, and person- and family-centered care, among others. NQF has begun seating expert steering committees for each project, as well as issuing calls for measures to be reviewed and considered for endorsement.

Stakeholder Recommendations on Quality and Efficiency Measures and National Priorities

Under section 1890A of the Act, HHS is required to establish a pre-rulemaking process under which a consensus-based entity (currently NQF) would convene multi-stakeholder groups to provide input to the Secretary on the selection of quality and efficiency measures for use in certain federal programs. The list of quality and efficiency measures HHS is considering for selection is to be publicly published no later than December 1 of each year. No later than February 1 of each year, NQF is to report the input of the multi-stakeholder groups, which will be considered by HHS in the selection of quality and efficiency measures.

The Measure Applications Partnership (MAP) is a public-private partnership convened by NQF and created to provide input to HHS on the selection of performance measures for more than twenty federal public reporting and performance-based payment programs. The MAP provides a unique opportunity for public- and private-sector leaders to develop and then seek broad review and comment on a future-focused performance measurement strategy, as well as provide shorter-term recommendations for that strategy on an annual basis. The MAP strives to offer recommendations that apply to and are coordinated across settings of care; federal, state, and private programs; levels of attribution and measurement analysis; payer type; and points in time.

In 2013, HHS requested that MAP focus on an array of projects including recommending measures for federal public reporting and payment programs, developing “families of measures” (groups of measures selected to work together across settings of care in pursuit of specific healthcare improvement goals) for high-priority areas, and providing input on measures for vulnerable populations, including Medicare-Medicaid enrollees and adults enrolled in Medicaid.

Gaps in Endorsed Quality and Efficiency Measures and Evidence and Targeted Research Needs

Under section 1890(b)(5)(iv) of the Act, the entity is required to describe gaps in endorsed quality and efficiency measures, including measures within priority areas identified by HHS under the agency’s National Quality Strategy, and where quality and efficiency measures are unavailable or inadequate to identify or address such gaps. Under section 1890(b)(5)(v) of the Act, the entity is also required to

describe areas in which evidence is insufficient to support endorsement of quality and efficiency measures in priority areas identified by the Secretary under the National Quality Strategy and where targeted research may address such gaps.

NQF continued in 2013 to address the need to fill measurement gaps by building on and supplementing the analytic work that informed a 2012 Measure Gap Analysis Report. Through both the MAP and its expert committees convened to assess measures for endorsement, NQF took initial steps to encourage gap-filling by moving toward prioritization of gap areas, offering more detailed suggestions for measure development, and involving measure developers in discussions about gaps.

In an effort to get more specific and detailed guidance to measure developers with respect to key measurement gap areas, HHS requested in 2013 that NQF recommend priorities for performance measurement development across five topics areas specified by HHS, including:

- **Adult Immunization**—identifying critical areas for performance measurement to optimize vaccination rates and outcomes across adult populations;
- **Alzheimer’s Disease and Related Dementias**—targeting a high-impact condition with complex medical and social implications that impact patients, their families, and their caregivers;
- **Care Coordination**—focusing on team-based care and coordination between providers of primary care and community-based services in the context of the “health neighborhood”;
- **Health Workforce**—emphasizing the role of the workforce in prevention and care coordination, linkages between healthcare and community-based services, and workforce deployment; and
- **Person-Centered Care and Outcomes**—considering measures that are most important to patients—particularly patient-reported outcomes—and how to advance them through health information technology.

II. Recommendations on the National Quality Strategy and Priorities

Section 1890(b)(1) of the Social Security Act (the Act), mandates that the consensus-based entity (CBE) also required under section 1890 of the Act shall “synthesize evidence and convene key stakeholders to make recommendations . . . on an integrated national strategy and priorities for healthcare performance measurement in all applicable settings.” In making such recommendations, the entity shall ensure that priority is given to measures that address the healthcare provided to patients with prevalent, high-cost chronic diseases, that focus on the greatest potential for improving the quality, efficiency, and patient-centeredness of healthcare, and that may be implemented rapidly due to existing evidence and standards of care. In addition, the entity will take into account measures that may assist consumers and patients in making informed healthcare decisions, address health disparities across groups and areas, and address the continuum of care a patient receives, including services furnished by multiple healthcare providers or practitioners and across multiple settings.

In 2010, at the request of HHS, the NQF-convened National Priorities Partnership (NPP) provided input that helped shape the initial version of the National Quality Strategy (NQS).³ The NQS was released in March 2011, setting forth a cohesive roadmap for achieving better, more affordable care, and better

health. Upon the release of the NQS, HHS accentuated the word 'national' in its title, emphasizing that healthcare stakeholders across the country, both public and private, all play a role in making the NQS a success.

NQF has continued to further the NQS by convening diverse stakeholder groups to reach consensus on key strategies for improvement. In 2013, NQF began work in several emerging areas of importance that address the National Quality Strategy, such as how to improve population health within communities; how consumers can leverage quality information to make informed healthcare coverage decisions; and how to dramatically improve patient safety in high-priority areas. Activities in these areas are discussed below.

Improving Population Health within Communities

The National Quality Strategy's population health aim focuses on:

“Improv[ing] the health of the U.S. population by supporting proven interventions to address behavioral, social, and environmental determinants of health in addition to delivering higher-quality care.”

One of the NQS' six priorities specifically emphasizes:

“Working with communities to promote wide use of best practices to enable healthy living.”

With the expansion of coverage due to the ACA, the Federal government has an opportunity to meaningfully coordinate its improvement efforts with those of local communities in order to better integrate and align medical care and population health. If such efforts are effective, the nation's health will be improved and costs will be lowered. To support these efforts, NQF conducted an environmental scan of frameworks, initiatives, tools, data, and measures that can provide the foundation for developing an evidence-based framework to be used by communities to improve population health. This framework is intended to provide guidance in answering questions such as:

- How can multi-stakeholder groups come together to address community health improvement?
- Which individuals and organizations should be at the table?
- What processes and methods should communities use to assess their health?
- What data are available to assess, analyze, and address community health needs, and measure improvement?
- What incentives exist that can drive alignment and coordination to improve community health?
- How can communities advance more affordable care by achieving greater alignment, efficiency, and cost savings?

This framework will also identify key drivers of population health across communities; opportunities to align public- and private-sector programs as well as federal programs to reduce measurement burden; and measures to drive improvement in health.

The project's Steering Committee met in January 2014 to discuss the results of the environmental scan and how it can be leveraged to develop a framework. This initial work is part of a three-year effort that ultimately will result in an action-oriented guide that communities can use to implement the framework and improve population health.

Health Insurance Exchange Quality Rating System

Under the statutory provision that the consensus-based entity will “take into account measures that may assist consumers and patients in making informed healthcare decisions,” HHS directed NQF to convene multi-stakeholder groups to provide input and comment on the hierarchical structure and organization of a Quality Rating System (QRS), as well as proposed quality and efficiency measures that will form a core measure set for the QRS. The measures—which will be publicly reported beginning in 2016—will help consumers select plans through the new Health Insurance Exchanges established by the Affordable Care Act.

The review and provision of input on the proposed core measures and organization of information for the QRS is being carried out by NQF's Measure Applications Partnership (MAP). The MAP is made up of stakeholders from a wide array of healthcare sectors and 10 federal agencies, as well as 110 subject matter experts, tasked with recommending measures for federal public reporting, payment, and other programs to enhance healthcare value. The MAP convened the QRS Task Force in November 2013 to finalize the task force's decision-making framework, provide input on the proposed measures for the family and child measure core sets, and comment on the structure of the QRS. The task force also discussed the highest leverage opportunities for measurement within the health insurance exchange marketplaces and developed an ideal organization of measures to best support consumer decision-making. The task force met again in December 2013 and finalized recommendations to the MAP Coordinating Committee on the proposed structure and measures for the QRS for submission in January 2014.⁴

Supporting HHS' Partnership for Patients

Finally, NQF is leveraging its membership and relationships with key stakeholders across the healthcare field to further mobilize private sector action in support of HHS' Partnership for Patients⁵, an initiative started in spring 2011 to improve patient safety across the country. Specifically, in 2013 NQF formed three Action Teams—established teams tasked with developing and acting on specific goals aligned with the NQS safety priority—to address high-priority areas for improvement, including maternity care, patient and family engagement, and readmissions. The Action Teams largely comprise diverse national organizations that have members or chapters in communities across the country. Through coordination at the national level, Action Teams spur changes to the delivery system at the local level. Previous Action Teams formed by NQF have worked on improving maternity care and reducing readmissions, but in late 2013, these Teams committed to focusing on specific goals, including:

- Reducing early elective deliveries;
- Reducing readmissions for complex and vulnerable populations; and
- Engaging patients and families in health systems improvement.

In partnership with the Action Teams, NQF will hold four quarterly meetings and develop four impact reports in 2014 that call out innovative ideas and best practices that have the potential to accelerate change.

III. Quality and Efficiency Measurement Initiatives (Performance Measures)

Under section 1890(b)(2) and (3) of the Act, the entity must provide for the endorsement of standardized health care performance measures. The endorsement process shall consider whether measures are evidence-based, reliable, valid, verifiable, relevant to enhanced health outcomes, actionable at the caregiver level, feasible for collecting and reporting data, responsive to variations in patient characteristics, and consistent across healthcare providers. In addition, the entity must maintain endorsed measures, including retiring obsolete measures and bringing other measures up to date.

Standardized healthcare performance measures are used by a range of healthcare stakeholders for a variety of purposes. Measures help clinicians, hospitals, and other providers understand whether the care they provide their patients is optimal and appropriate, and if not, where to focus their efforts to improve. Public and private payers also use measures for feedback and benchmarking purposes, public reporting, and incentive-based payment. Lastly, measures are an essential part of making the cost and quality of healthcare more transparent to all, particularly for those who receive care or help make care decisions for loved ones.

Working with a variety of stakeholders to build consensus, NQF reviews and endorses healthcare performance measures that underpin federal and private-sector initiatives focused on enhancing the value of healthcare services. Since its inception in 1999, NQF has developed a portfolio of approximately 700 NQF-endorsed measures which are in widespread use across an array of settings. In concert with others, the work of NQF has contributed to a more information-rich healthcare system, and demonstrated that measures—particularly in tandem with delivery changes and payment reform—can lead to improvement in performance.

Over the past several years, NQF, in concert with HHS and others, has worked to evolve the science of performance measurement through more rigorous evaluation criteria. This effort has included placing greater emphasis on evidence and a clear link to outcomes; a greater focus on addressing key gaps in care, including care coordination and patient experience; and a requirement that testing of measures demonstrates their reliability and validity. NQF also has laid the foundation for the next generation of measures by providing guidance on composite measurement, patient-reported outcome measures, electronic or eMeasures, and measures that evaluate complex but important areas such as resource use and population health.

Current State of NQF Measures Portfolio: Constricting and Expanding to Meet Evolving Needs

NQF's measure "maintenance" process—where endorsed measures are re-evaluated against current criteria and reviewed alongside newly submitted but not yet endorsed measures—ensures that the measure portfolio contains "best-in class" measures across a variety of clinical and cross-cutting topic

areas. Working with expert committees,⁶ NQF undertakes three essential actions to keep its endorsed measure portfolio relevant. First, the expert committees review both previously endorsed and new measures in a particular topic area to determine which measures deserve to be endorsed or re-endorsed. In addition, as the expert committees review measures for endorsement, they also recommend removing from the portfolio—or putting into “reserve status”⁷—measures that consistently show improvement at the highest levels or “top out.” This culling of measures ensures that time is spent measuring concepts in need of improvement rather than measuring concepts where widespread success has already been achieved.

Finally, NQF also works with stewards and developers who create measures, in order to “harmonize” related or near-identical measures and eliminate nuanced differences. Harmonization is critical to reducing measurement burden for providers, who may be inundated with various misaligned measurement requests. Successful harmonization may result in fewer endorsed measures for providers to report and for payers and consumers to interpret. Where appropriate, NQF works with measure developers to replace existing process measures with more meaningful outcome measures.

Across six HHS-funded projects in 2013, NQF added 27 measures to its portfolio. This contrasts to 301 measures endorsed in 2012 across 16 HHS-funded projects. The significant difference in endorsed measures between 2012 and 2013 can be attributed to the fact that the 2013 work was primarily conducted within a contract that was nearing completion. New measure endorsement projects were awarded under a new contracting vehicle in September 2013. During 2013, NQF also removed 95 measures from its portfolio for a variety of reasons: measures no longer met endorsement criteria; measures were harmonized with other similar, competing measures; measure developers chose to retire measures they no longer wished to maintain; or measures “topped out,” by consistently performing at the highest level.

While NQF pursues strategies to make its measure portfolio appropriately lean, it also aggressively seeks measures from the field that will help to fill known measure gaps and to align with the NQS goals. Several important factors motivate NQF to expand its portfolio, including the need for eMeasures; measures that are applicable to multiple clinical specialties and settings of care; measures which assist in the evaluation of new payment models (e.g., bundled payment); and the need for more advanced measures that help close cross-cutting gaps in areas such as care coordination and patient-reported outcomes. The measure portfolio reflects the combined “dynamic yet static” effect of these strategies: although the portfolio frequently changes due to new measures cycling in and older measures cycling out, the relative number of endorsed measures remained steady in 2013.

Furthermore, a diverse set of measure developers, ranging from medical specialty societies to hospital systems to government agencies, have had measures endorsed through NQF’s consensus development process. While 69 developers have made significant contributions to the portfolio, seven measure developers account for 64 percent of NQF’s portfolio:

Top Developers of Endorsed Measures

Measure Steward/Developer	Number of measures	Percent of Total Portfolio
1. Centers for Medicare & Medicaid Services	117	17%
2. National Committee for Quality Assurance (NCQA)	104	15%
3. Physician Consortium for Performance Improvement (PCPI)	94	14%
4. Agency for Healthcare Research and Quality (AHRQ)	56	8%
5. Resolution Health, Inc.	23	3%
6. The Joint Commission	22	3%
7. ActiveHealth Management	22	3%

Measure Endorsement Accomplishments

In 2013, NQF completed work on six HHS-funded measure endorsement projects—endorsing 27 total measures. These measures included 11 new measures and 16 measures that the NQF expert committees concluded could maintain their previous endorsement after being reviewed against the NQF measure evaluation criteria and compared to new evidence or competing measures.

The measures endorsed by NQF in 2013 align with needs prioritized in the NQS and address several critical areas, including pulmonary and critical care, infectious disease, neurology, and patient safety.

Measure highlights include the following:

Pulmonary and critical care measures. Lung disease – including asthma, chronic obstructive pulmonary disease (COPD), and pneumonia – affects some 33 million Americans and is the third leading cause of death in the United States.⁸ Critical care units often bear the burden of treating people with these and other conditions. Each year, more than five million people are admitted to intensive care units (ICUs) suffering from respiratory distress or failure, sepsis, and heart disease or failure. In 2013, NQF endorsed a measure addressing mortality rates for patients hospitalized with chronic obstructive pulmonary disease (COPD), as well as two measures focused on readmission rates for patients hospitalized with COPD and pneumonia.

Neurology measures. Neurological conditions and injuries affect millions of Americans each year, taking a tremendous toll on patients, families, and caregivers, and costing billions of dollars in treatment, rehabilitation, and lost or reduced earnings. An estimated 5.4 million Americans have Alzheimer’s disease, accounting for 70 percent of the cases of dementia in the country and \$130 billion in Medicare and Medicaid spending in 2011.^{9,10,11} Furthermore, epilepsy and Parkinson’s disease together affect three million Americans and cost \$15.5 billion and \$25 billion in healthcare costs each year, respectively.^{12,13} In 2013, NQF endorsed five measures related to diagnostic imaging and care for dementia and epilepsy.

Infectious disease measures. Many infectious diseases have been controlled or eradicated through the use of vaccines and advanced medicine, yet many others are still responsible for widespread morbidity

and mortality as well as rising healthcare costs. In fact, hospital charges for infectious disease averaged \$96 billion per year with an average 4.5 million hospital days per year in 2008.¹⁴ In 2013, NQF endorsed 16 infectious disease measures focused on an array of conditions, including sepsis and septic shock, appropriate treatment for upper respiratory infections, screening for tuberculosis and sexually transmitted infections in HIV/AIDS patients, and vaccination and treatment for hepatitis C.

Patient safety measures. The Centers for Disease Control and Prevention estimates that healthcare-acquired infections potentially cost U.S. hospitals more than \$31 billion per year.¹⁵ These costs are passed on in a number of ways, including insurance premiums, taxes, or lost work wages. Proactively addressing medical errors and unsafe care will help protect patients from harm, lead to more effective and equitable care, and can help reduce costs. In 2013, through its patient safety complications endorsement project, NQF endorsed two measures related to patient falls, including fall rates and falls that resulted in injury.

Advancing Measurement Science

NQF was also asked to provide guidance to the field on emerging areas of importance, and as a result completed two reports—Composite Performance Measure Evaluation Guidance¹⁶ and eMeasure Feasibility Assessment,¹⁷ described below.

Evaluating composite measures. NQF undertook an HHS-funded project focused on providing guidance about composite measures—which combine information on multiple individual performance measures into one summary measure. Such measures can provide a way for payers and patients to get a high-level, comprehensive sense of performance in a given area, while giving providers a look at the strengths and weaknesses of the care they are providing. However, composite measures are complex, and the methods used to construct such measures affect the reliability, validity, and usefulness of the measure and require some unique considerations for testing and analysis. Accordingly, NQF convened a Technical Expert Panel that produced a final report offering guidance to Steering Committees tasked with evaluating composite measures. The primary recommendations that came out of the report indicate that while composite measures may be evaluated against current NQF measure evaluation criteria, they must also be subject to two additional sub-criteria addressing evidence and reliability and validity (further explanation can be found in Table 1 of the final report¹⁸). NQF did not endorse any composite measures in 2013.

eMeasure feasibility assessment. As quality measurement shifts to using measures derived from electronic health records (EHRs), there is a need for more clarity about the testing required to assure that eMeasures can be used for a range of accountability applications. In response, a report from NQF identified a set of principles and criteria to ensure adequate feasibility testing for new and retooled eMeasures moving forward. This final report provides important guidance that can shape future eMeasure development, as well as product development and certification requirements. Specifically, the report included seven feasibility recommendations, including the need to:

1. Assess feasibility throughout eMeasure development
2. Develop a framework for feasibility assessment

3. Validate data element feasibility scoring
4. Create a data element feasibility repository
5. Use results of feasibility assessment to inform NQF evaluation for endorsement
6. Use NQF composite performance measurement guidance to inform eMeasure developers
7. Promote greater collaboration between eMeasure developers and implementers

A complete listing of measurement projects undertaken by NQF in 2013 under contract with HHS is available in Appendix A, including the 11 new endorsement projects that were awarded in fall 2013. Individual measures may be found on the NQF website using the [Quality Positioning System \(QPS\)](#)¹⁹, NQF's search tool for endorsed measures. Please note that no eMeasures were endorsed in 2013.

New Endorsement Work Ahead

Since September 2013, HHS has awarded to NQF several additional measure endorsement projects, touching on topics such as admissions and readmissions, cost and resource use, endocrine, cardiovascular, care coordination, and person- and family-centered care, among others. NQF has begun seating expert steering committees for each project, as well as issuing calls for measures to be reviewed and considered for endorsement.

In addition, NQF has begun work on two other measure-related projects. One focuses on episode groupers, which create condition-specific episodes of care from administration claims data, which can be useful in deciding how best to group costs per episode. In turn, these groupers can help the healthcare community make meaningful assessments and comparisons about the cost and amount of healthcare resources used.

In the episode grouper project, NQF seeks to:

- Define the characteristics of an episode grouper in comparison to other systems, including classification or risk adjustment systems;
- Review (and modify as needed) existing NQF endorsement criteria and guidance, and/or provide additional recommendations for episode grouper evaluation;
- Examine the necessary submission elements for the evaluation of an episode grouper; and
- Review best practices for the construction of an episode grouper.

NQF is working to seat an expert steering committee for this work, and will hold an in-person meeting in 2014.

Through the second measurement science project, NQF is bringing together expert stakeholders to develop a set of recommendations focused on risk adjustment for performance measures—the process of controlling for intrinsic patient factors that could influence outcomes. For example, risk adjustment allows for fair comparisons between two providers who treat elderly, sicker patients and younger, healthier patients, respectively. These recommendations will specifically address if, when, and how resource use performance measures should be adjusted for socioeconomic status (SES), race, and ethnicity. The recommendations will also address whether NQF's measure evaluation criteria—which currently indicate that such measures not be risk adjusted but instead stratified (i.e., split in a way that

shows differences between two or more groups) for factors related to disparities in care—should be revised. NQF finalized the composition of a steering committee to guide this project in December 2013.

Patient Safety Event Reporting

For more than ten years, both NQF and the Agency for Healthcare Research and Quality (AHRQ) have worked to find a standardized approach for reporting to enable shared learning across the country on how to reduce adverse events. NQF's list of Serious Reportable Events (SRE's) first published in 2002, has helped raise awareness and stimulate action around preventable adverse event that should be reported. The Patient Safety and Quality Improvement Act of 2005 advanced reporting further by authorizing the development of common and consistent definitions and standardized formats to collect, collate, and analyze patient safety events occurring within and across healthcare providers. AHRQ developed the Common Formats—a standardized method for collection and compilation of information about patient safety events occurring in the United States, including Serious Reportable Events—to operationalize those provisions of the Act.

To ensure the Common Formats are feasible for use in the field, AHRQ has contracted with NQF to implement a process that ensures broad stakeholder input on new Common Formats modules developed by AHRQ. Having collected comments in previous years, NQF is now tasked with collecting comments on methods for further refining the Common Formats. A commenting tool will be available to stakeholders in 2014 pending a launch date decision from AHRQ.

Work Related to Facilitating eMeasurement

Developed by NQF, the Quality Data Model (QDM) is an “information model” that provides a way to describe clinical concepts (for example, medications ordered or dispensed for patients with coronary artery disease) in a structured and standard format that can be interpreted by clinical information systems. The QDM is also a key component in the development of electronic clinical quality measures, in that it provides the basic logic to articulate quality measure criteria. For several years, NQF has worked with HHS to further develop and refine the QDM. NQF has now worked with QDM stakeholders to transition the development and maintenance of the QDM to a Federally Funded Research and Development Center (FFRDC). In preparation, NQF hosted four webinars that provided guidance and updates throughout the transition, which was completed in December 2013.

IV. Stakeholder Recommendations on Quality and Efficiency Measures and National Priorities

Measure Applications Partnership

Under section 1890A of the Act, HHS is required to establish a pre-rulemaking process under which a consensus-based entity (currently NQF) would convene multi-stakeholder groups to provide input to the Secretary on the selection of quality and efficiency measures for use in certain federal programs. The list of quality and efficiency measures HHS is considering for selection is to be publicly published no later than December 1 of each year. No later than February 1 of each year, NQF is to report the input of the

multi-stakeholder groups, which will be considered by HHS in the selection of quality and efficiency measures.

The Measure Applications Partnership (MAP) is a public-private partnership convened by NQF, as mandated by the ACA (PL 111-148, section 3014). The MAP was created to provide input to HHS on the selection of performance measures for more than twenty federal public reporting and performance-based payment programs. Launched in the spring of 2011, the MAP is composed of representatives from more than 60 major private-sector stakeholder organizations, nine federal agencies, and 40 individual technical experts. For detailed information regarding the MAP representatives, criteria for selection on the MAP and length of their service, please see the appendices.

The MAP is an innovation in the regulatory sphere; it provides a forum to get the private and public sectors on the same page with respect to use of measures to enhance healthcare value. In addition, the MAP is an interactive and inclusive vehicle by which the federal government can solicit critical feedback from stakeholders—particularly consumers and purchasers—regarding measures used in federal public reporting and payment programs. This approach augments traditional rulemaking, allowing the opportunity for substantive input to HHS in advance of rules being issued. Additionally, the MAP provides a unique opportunity for public- and private-sector leaders to develop and then broadly review and comment on a future-focused performance measurement strategy, as well as provide shorter-term recommendations for that strategy on an annual basis. The MAP strives to offer recommendations that apply to and are coordinated across settings of care; federal, state, and private programs; levels of attribution and measurement analysis; payer type; and points in time.

In 2013, the MAP took on several diverse tasks focused on recommending measures for federal public reporting and payment programs, developing “families of measures” (groups of measures selected to work together across settings of care in pursuit of specific healthcare improvement goals) for high-priority areas, and providing input on measures for vulnerable populations, including dual Medicare-Medicaid enrollees and adults enrolled in Medicaid. Specifically:

2013 Pre-Rulemaking Input

On December 1, 2012, the MAP received and began reviewing a list of more than 500 measures under consideration by HHS for use in more than twenty Medicare programs covering clinician, hospital, and post-acute care/long-term care settings. *The MAP Pre-Rulemaking Report: 2013 Recommendations on Measures Under Consideration by HHS*²⁰ represents the MAP’s second annual round of input regarding performance measures under consideration for use in federal programs.

In this pre-rulemaking [2013 report](#)²¹ the MAP recommended to HHS inclusion of 141 measures within 20-plus Medicare programs and supported the direction of another 166 measures. The MAP’s “support direction” recommendations are contingent on further development, testing, and/or endorsement. The MAP did not support 165 measures under consideration. Further, the MAP recommended phased removal of 64 measures, and retirement of an additional six measures.

The MAP Clinician and Hospital Workgroups developed guiding principles to facilitate their decisions about the application of measures to specific programs rather than offering recommendations on

individual measures. The guiding principles (included in the [appendix](#)²² of the final report) are not absolute rules, and are intended to complement statutory and regulatory requirements and the broader MAP Measure Selection Criteria. Workgroup members, including Centers for Medicare & Medicaid Services (CMS) representatives, found the principles to be valuable for thinking through measure selection for specific programs while also accounting for the inter-relationships among the programs.

In its 2013 pre-rulemaking report, the MAP noted several themes for future consideration that emerged across all 20 Medicare programs during the pre-rulemaking cycle including:

- System-level measurement (e.g., at the level of health plans, accountable care organizations, integrated delivery systems) can be a catalyst for comprehensively assessing care across settings and populations and addressing all aspects of the NQS three-part aim: Better Care; Healthy People/Healthy Communities; and Affordable Care.
- As program incentive structures evolve from pay-for-reporting to pay-for-performance, it is increasingly important that performance measures meet high standards for validity and reliability so that providers are not misclassified.
- Shared accountability for healthcare delivery and engagement of community and social supports systems is needed to address diverse needs and fragmented care, particularly of vulnerable populations.
- To capture the value of healthcare services provided, measures of clinical quality, particularly outcomes, should be linked to cost measures. All stakeholders should be cognizant of the costs of care.

2014 Pre-Rulemaking Input

The MAP also began work on the 2014 Pre-Rulemaking Report. In December 2013, the four MAP work groups—Clinician, Dual Eligible Beneficiaries, Hospital, and Post-Acute Care/Long-Term Care—met individually to review and provide input to the MAP Coordinating Committee on measure sets for use in federal programs addressing their respective populations. A final report and recommendations on measures will be issued in 2014.

Families of Measures: Affordability, Person- and Family-Centered Care, and Population Health

In 2013, HHS again tasked the MAP to identify new families of measures—groups of measures selected to work together across settings of care in pursuit of specific healthcare improvement goals—in three high-priority areas that relate to NQS priorities: affordability, person- and family-centered care, and population health. The Affordability Task Force has since been formed, and members are now working to develop consensus-based definitions of affordability. NQF also held a public comment period in November 2013 soliciting input on how to define affordability, as well as on what is most important to measure. In 2014, the MAP will finalize Task Forces for the Person- and Family-Centered Care and Population Health topics, and begin identifying appropriate measures.

Family of Measures for Dual Eligible Beneficiaries: Preliminary Findings from the MAP Dual Eligible Beneficiaries Workgroup

Efforts to better integrate care for Medicare-Medicaid enrollees have gained significant momentum since the Secretary established the Federal Coordinated Health Care Office (Medicare-Medicaid Coordination Office) as required by the Affordable Care Act. Generally, Medicare-Medicaid enrollees are people who are enrolled in both Medicare and Medicaid and are sometimes referred to as “dual eligibles.” The selection and use of appropriate measures are critical to satisfy the need for information about beneficiary experience for this group. Beginning in 2011, HHS charged the MAP with providing input on the use of performance measures to assess and improve the quality of care delivered to Medicare-Medicaid enrollees. The MAP has continued to explore this topic and has completed a series of reports to HHS that present sets of available measures appropriate for use in this population.

In July 2013, the MAP issued a report that recommended a family of measures for Medicare-Medicaid enrollees and included a discussion of the issues in quality measurement for individuals with behavioral health conditions. Both public and private sector measure users could reference and implement this family, leading to more consistent information that helps healthcare performance measure to be more transparent and easier to interpret.

The MAP Dual Eligible Beneficiaries Workgroup considered the following properties when assessing an identified measure’s appropriateness for inclusion in the family.

- **NQF endorsement:** Include NQF-endorsed® measures because they have met criteria for importance, scientific rigor, feasibility, and usability.
- **Potential impact:** Include measures with the most power to improve health, such as outcome measures, composite measures, and cross-cutting measures broadly defined to include a large denominator population.
- **Improvability:** Include measures that target areas in which quality improvement would be expected to have a substantial effect or address health risks and conditions known to have disparities in care.
- **Relevance:** Include measures that address health risks and conditions that are highly prevalent, severe, costly, or otherwise particularly burdensome for the dual eligible population.
- **Person-centeredness:** Include measures that are meaningful and important to consumers, such as those that focus on engagement, experience, or other individually-reported outcomes. Person-centered care emphasizes access, choice, self-determination, and community integration.
- **Alignment:** Include measures already reported for existing measurement programs to minimize participants’ data collection and reporting burden. Consistent use of measures helps to synchronize public- and private-sector programs around the National Quality Strategy and to amplify the quality signal.
- **Reach:** Include measures relevant to a range of care settings, provider types, and levels of analysis.

A measure did not need to fulfill all of the properties to be selected. However, to be considered comprehensive, the family of measures should encompass all of these characteristics because they are particularly important for achieving good results within the Medicare-Medicaid enrollee population. Stakeholders planning quality measurement programs can apply the properties to other measure sets to evaluate whether a measure would be appropriate for their use and general alignment with MAP principles.

To compile the family of measures, the workgroup considered the universe of measures previously identified by the MAP for use in the general Medicare-Medicaid enrollee population or one of its high-need subgroups. The Workgroup also reviewed a small number of newly developed measures not previously selected. From a starting point of 97 possible measures, the Workgroup conducted multiple rounds of prioritization and ultimately selected 55 measures for inclusion in the family. Of these measures, 51 are currently endorsed by NQF and four have been submitted for endorsement in NQF's current consensus development project for behavioral health.

Identification of Quality Measures for Medicare-Medicaid Enrollees and Adults Enrolled in Medicaid

HHS also asked NQF to convene a multi-stakeholder group via the MAP to continue addressing measurement topics related to Medicare-Medicaid enrollees and make annual refinements to the previously published Family of Measures. NQF will also evaluate opportunities to improve alignment and reduce burden associated with overlapping state and federal measurement requirements.

In addition, HHS asked that the MAP provide annual input on the Initial Core Set of Health Care Quality Measures for Adults Enrolled in Medicaid. The first part of this work, completed in 2013, was informed by direct feedback from state Medicaid directors and other stakeholders. In October 2013, NQF submitted a final report to HHS which detailed the MAP's findings of an expedited review of the Initial Core Set of Measures as well as public comment on the findings.

Since these tasks were awarded, the MAP Dual Eligible Beneficiaries Workgroup has met to discuss measuring quality of life, and NQF has delivered the first of three quarterly memos to HHS focused on strategic issues. NQF staff have also been involved in convening activities across the other MAP Workgroups—Clinician, Hospital, and Post-Acute Care/Long-Term Care—during pre-rulemaking deliberations to ensure all activities related to these populations remain coordinated.

V. Gaps in Endorsed Quality and Efficiency Measures and Evidence and Targeted Research Needs

Under section 1890(b)(5)(iv) of the Act, the entity is required to describe gaps in endorsed quality and efficiency measures, including measures within priority areas identified by HHS under the agency's National Quality Strategy, and where quality and efficiency measures are unavailable or inadequate to identify or address such gaps. Under section 1890(b)(5)(v) of the Act, the entity is also required to describe areas in which evidence is insufficient to support endorsement of quality and efficiency

measures in priority areas identified by the Secretary under the National Quality Strategy and where targeted research may address such gaps.

Report from the National Quality Forum: 2012 NQF Measure Gap Analysis

In February of 2013, NQF completed the [2012 Measure Gap Analysis Report](#)²³ which aimed to provide guidance about where measures do and do not exist to help achieve the nation's quality goals. This report revealed that discussions of measure gaps remain at a high conceptual level, and that more specificity—ideally through a multi-stakeholder prioritization process—is needed. While measures currently used in the field may address high-priority gap areas, a full assessment of their applicability and appropriateness was beyond the scope of this project. Existing measures that address identified gaps should be brought forth for NQF endorsement to assess their importance, scientific reliability and validity, usability, and feasibility before any assessment of value or recommendations for use are made. The final report discusses in detail measure gaps identified, presented through the lens of the NQS triple aim: better care, healthy people/healthy communities, and accessible and affordable care. The identified gaps across these three aims were:

- **Better care:** patient-reported outcomes; patient-centered care and shared decision-making; care coordination and care transitions; and care for vulnerable populations;
- **Healthy people/healthy communities:** health and well-being; preventive care; and childhood measures; and
- **Accessible and affordable care:** access to care; healthcare affordability, and waste and overuse.

MAP Pre-Rulemaking Input Related to Gap Filling

NQF continued in 2013 to address the need to fill measurement gaps to build on and supplement the analytic work that informed the above 2012 Measure Gap Analysis Report. NQF, through both the MAP and its expert endorsement committees, took initial steps to encourage gap-filling by moving toward prioritization of gap areas, offering more detailed suggestions for measure development, and involving measure developers in discussions about gaps. However, much work remains to be done by measure developers, NQF and many other entities to accelerate closing the gaps.

During the MAP's pre-rulemaking review of proposed measures submitted by HHS in December of 2012, the areas on the MAP's list of previously identified gaps were validated with some additional detail and nuances. For instance, the Clinician Workgroup indicated that measures need to reflect a more diverse set of outpatient conditions; the group struggled to find available measures that adequately balance issues under the control of individual clinicians versus the larger health system. Public commenters generally agreed with the gap areas identified on the NQF list, including gaps in:

- **Safety:** healthcare-associated infections, medication safety, perioperative/procedural safety, pain management, venous thromboembolism, falls and mobility, and obstetric adverse events;
- **Patient and family engagement:** person-centered communication, shared decision making and care planning, advanced illness care, and patient-reported measures;
- **Healthy living;**

- **Care coordination:** communication, care transitions, system and infrastructure support, and avoidable admissions and readmissions;
- **Affordability;** and
- **Prevention and treatment of leading causes of mortality:** primary and secondary prevention, cancer, cardiovascular conditions, depression, diabetes, and musculoskeletal conditions.

Multiple organizations also conveyed a need for better measures on diverse topics including care coordination, functional status, medication management, and palliative care. Some public commenters offered specific recommendations for additional priority gap areas, such as prevention and treatment of osteoporosis, and made suggestions for updates to the list of previously identified gaps.

Despite the relatively large number of measures under consideration by the MAP, stakeholders indicated that many measure gaps remain. In general, the types of gaps raised were consistent with those that the MAP has previously identified, and include a need for more outcome measures; measures for discrete populations, such as children and the underserved; measures that are not specified at the desired level of analysis and/or setting²⁴; measures that go beyond a “checkbox” approach to assess whether high standards of care are being met; a lack of composite measures for multifaceted topics; and a relative dearth of measures addressing certain specialty areas, such as mental and behavioral health. Each of the NQS priority areas remains affected to some degree by persistent measure gaps.

MAP members expressed strong support for NQF playing a coordination role in gap-filling and working closely with measure developers early in the development process, rather than only as “referee” during endorsement, while guarding against involvement in measure development. One theme from MAP discussions identified a collective need to better understand the development pipeline and the cost of stewarding a measure to assess barriers to measure development. Subsequent discussion touched on the need to create a business case for measure development. Another theme was the lack of shared knowledge about which measure developers are already working on certain topics which can lead to duplicative efforts and inefficient use of resources.

In an effort to address these issues, NQF has launched a Measure Inventory Pipeline, which is a virtual space for developers to share information on measure development activities. The Pipeline can display data on current and planned measure development, and allows developers to share successes and challenges. The Pipeline can also help developers connect and collaborate with their peers on development ideas, which in turn will promote harmonization and alignment of measures. This Pipeline will supplement CMS’ existing Measure Pipeline and allow developers to more broadly share information with their peers across public and private supported development effort.

Public commenters broadly supported NQF’s initiatives to make progress on gap-filling. Some public commenters offered recommendations for new directions to take in measure development, such as making better use of alternate data sources and increasing research in important areas where evidence is limited. Several organizations stated an explicit desire to assist NQF in its ongoing efforts to address measure gaps.

With respect to MAP 2014 Pre-Rulemaking advice, early review and discussion by MAP committees of more than 230 proposed measures in December of 2013 showed that a significant proportion of measures under HHS consideration related to efficiency and cost reduction, corresponding to the NQS priority of making care more affordable. A relatively small number of measures under consideration addressed person- and family-centered experience and community/population health, essential priorities that are underrepresented in terms of quantity of current measures. In contrast, the greatest proportion of measures addresses the priority area of effective clinical care, which are the largest number of measures in NQF's portfolio.

Priority Setting for Health Care Performance Measurement: Addressing Performance Gaps in Priority Areas

In an effort to get more specific and detailed guidance to developers with respect to key measurement gap areas, HHS requested in 2013 that NQF recommend priorities for performance measurement development across five topics areas specified by HHS, including:

- **Adult Immunization**—identifying critical areas for performance measurement to optimize vaccination rates and outcomes across adult populations;
- **Alzheimer's Disease and Related Dementias**—targeting a high-impact condition with complex medical and social implications that impact patients, their families, and their caregivers;
- **Care Coordination**—focusing on team-based care and coordination between providers of primary care and community-based services in the context of the “health neighborhood”;
- **Health Workforce**—emphasizing the role of the workforce in prevention and care coordination, linkages between healthcare and community-based services, and workforce deployment; and
- **Person-Centered Care and Outcomes**—considering measures that are most important to patients—particularly patient-reported outcomes—and how to advance them through health information technology.

To-date, NQF has finalized topic-specific committees, who are tasked with reviewing the evidence base and existing measures to identify opportunities for using performance measurement to improve health and healthcare, and to reduce disparities, costs, and measurement burden. In December 2013, four of the five committees submitted draft conceptual frameworks and environmental scans of measures to HHS, which are described in more detail below.

Adult Immunization

The Adult Immunization committee—with the help of an advisory group—outlined a draft framework that builds on concepts identified by the Quality and Performance Measures Workgroup of the HHS Interagency Adult Immunization Task Force. The draft framework also seeks to illustrate measure gaps in specific age bands and special populations including young adults, pregnant women, the elderly and adults overall. During an October 2013 meeting, the committee made several suggestions for improving the framework, including the need to:

- Clarify all terms and include definitions;
- Include all special populations from the immunization schedule;

- Separate immunization of healthcare personnel from other populations;
- Include measures for Immunization Information systems (IIS); and
- Include measures from the Meaningful Use program.

The draft framework's accompanying environmental scan discovered 225 relevant measures addressing adult immunization, many of which are concentrated in a few areas, such as influenza and pneumococcal immunization. In addition, the majority of vaccine measures are process measures (69 percent), and outcome measures are primarily only at the population, not provider, level.

The committee will meet in early 2014 to provide further input into the conceptual framework, and again in March 2014 to develop recommendations on measures and measure concepts that can be further developed as performance measures. The committee will also be tasked with making recommendations that foster harmonization and alignment of measures.

Care Coordination

The Care Coordination committee developed a draft conceptual framework that builds on work from the Agency for Healthcare Research and Quality's *Care Coordination Measures Atlas* and their Clinical-Community Relationship Measurement concept. The draft framework's accompanying environmental scan identified a total of 363 measures related to care coordination. While the scan produced a significant number of measures relating to the general concept of care coordination, very few describe ongoing interactions between primary care and community-based service providers to support improved health and quality of life. In general, currently available measures are either too narrowly or too broadly designed to be actionable by providers of primary care. Further, no available measures directly apply to providers of community services.

This committee will meet in early 2014 to further refine the conceptual framework, and consider options for addressing measure gaps that draw on promising practices for care coordination with respect to the following questions:

- What are the most important care coordination measurement domains at the interest of primary care and community services?
- How much reliance is appropriate to place on care recipients and caregivers to serve as the coordinators between the medical and non-medical systems?
- Should shared decision-making be added as a domain in the care coordination framework and if so how does this relate to care planning?
- What are direct outcomes of care coordination (e.g., improved patient/family experience)?
- To what other outcomes does care coordination contribute (e.g., improved health status, progress toward the NQS)?

Health Workforce

Achieving the National Quality Strategy's aims of better care, affordable care, and healthy people/healthy communities will require an adequate supply and distribution of a well-trained workforce. Therefore, in consultation with HHS and with input from advisory members, NQF developed a draft conceptual framework for measurement that captures elements necessary for successful and

measurable workforce deployment. The draft framework builds on existing resources and frameworks, including NQF's *Multiple Chronic Condition Framework*, the Agency for Healthcare Research and Quality's (AHRQ) *Clinical-Community Relationships Measures Atlas* and *Care Coordination Measures Atlas*, and the Institute of Medicine's (IOM) *Health Professions Education: A Bridge to Quality*. It also includes definitions of key importance to this work, including workforce, primary care, care coordination, and health. Furthermore, the framework seeks to encompass measurement across the life-span and for measurement opportunities beyond clinical settings.

More than 200 measures were identified in the environmental scan as potential health workforce measures. Large sets of measures were found related to training and development, mostly related to professional educational programs and the number of graduates in specific health professions. Although many measures of patient and family experience of care related to workforce performance were identified, few measures capturing workforce experience were found. Workforce capacity and productivity measures proved to have a substantial presence, especially those related to geographical distribution and skill mix. A significant number of measures related to infrastructure were also identified, a majority of which were specifically focused on the ability to use HIT to provide care and patient access to primary prevention services.

The health workforce committee will meet again in early 2014 to further refine the framework, consider high-priority opportunities for measure development and endorsement, and discuss promising measures, measure concepts and remaining gaps in critical measurement areas.

Person-Centered Care and Outcomes

The Person-Centered Care and Outcomes committee also outlined a draft conceptual framework that offered a definition for and core concepts of person- and family-centered care that was influenced by previous work from the Institute for Patient- and Family-Centered Care and the Institute of Medicine:

Patient- and family-centered care is an approach to the planning, delivery, and evaluation of health care that is grounded in mutually beneficial partnerships among health care providers, patients, and families. The core concepts include respect and dignity, information sharing, participation, and collaboration.

The project's environmental scan identified 803 measures as broadly relevant, touching on topics such as patient experience with care, health-related quality of life, and symptom and symptom burden. The majority of measures fell under the domain of patient experience, covering a variety of care settings and types of care, as well as disease-specific populations. Many of the health related quality of life and symptom and symptom burden measures identified may be better classified as indicators of treatment effectiveness, which the committee will consider when they meet again in early 2014. The committee will also develop a vision of the ideal state or "North Star" of person-centered care, and identify how best to measure performance and progress in the delivery of person-centered care against this vision.

Alzheimer's Disease and Related Dementias

HHS requested that the Alzheimer's disease and Related Dementias committee begin work on a draft conceptual framework and environmental scan after the previously mentioned committees—especially

the care coordination and person-centered care and outcomes committees—compiled their findings. This request was made so that the Alzheimer’s disease and Related Dementias committee could incorporate the findings from these two committees into their own work product. As a result, a draft conceptual framework and environmental scan will be completed in February 2014.

Identifying Other Measure Gaps

NQF identified additional high-priority measure gaps through other work by MAP and NQF’s endorsement and maintenance work. More specifically, the Dual Eligible Beneficiaries Workgroup providing greater specificity to measure developers and funders, and identified the following list of gaps:

- Goal-directed, person-centered care planning and implementation
- Shared decision-making
- Systems to coordinate healthcare with non-medical community resources and service providers
- Beneficiary sense of control/autonomy/self-determination
- Psychosocial needs
- Community integration/inclusion and participation
- Optimal functioning (e.g., improving when possible, maintaining, managing decline)

Importantly, this list reflects the MAP’s vision for high-quality care for Medicare-Medicaid enrollees, which has been articulated in previous reports. Identification of these gaps supports a philosophy about health that broadly accounts for individuals’ health outcomes, personal wellness, social determinants (e.g., housing, transportation, access to community resources), and desire for a more cohesive system of care delivery. Many gaps are long-standing, which underscores both the importance of non-medical supports and services in contributing to improved healthcare quality and the difficulty of quantifying and measuring these factors as indicators of performance.

Specifically, the MAP recommends for future measure development continuing a focus on topics that are meaningful to consumers, such as individual engagement, experience, and outcomes. In addition, the MAP emphasizes the need for cross-cutting measures that apply to care and supports at all levels to promote shared accountability and collaboration. Measures should incorporate information from patients receiving services, providers, health plans, other accountable entities, and/or states. Several measure gap areas are prioritized here for the first time, including psychosocial needs, shared decision-making, and community integration/inclusion and participation. The MAP will continue to communicate with measure developers and other stakeholders positioned to help fill measurement gaps.

Although the MAP’s work to-date on measure gaps—including the pre-rulemaking efforts and input from specific workgroups—is starting to bear fruit, persistent gaps across sectors, such as care coordination and patient experience, continue to frustrate measurement efforts. Many factors contribute to influence these gaps which are outside of the MAP’s control, such as the lack of an information technology structure to facilitate care coordination, and challenges associated with collecting patient experience data at the clinician level. However, the MAP, in coordination with NQF’s larger initiatives, will continue to try and influence ongoing progress in filling measure gaps through its specific recommendations and by enhanced collaboration with other stakeholders.

Gaps are also routinely identified as an outgrowth of NQF's annual endorsement and maintenance process. Specific measure gaps identified through 2013 work, by topic area, include:

Infectious disease

- Measures addressing patient outcomes;
- Additional measures dealing with HIV/AIDS, including testing for individuals ages 13-64; colposcopy screening for HIV-positive women who have abnormal Pap test results; resistance testing for persons newly enrolled in HIV care with viral loads greater than 1000; and HIV testing for pregnant women on initial visits;
- Process and outcome measures that evaluate improvements in device-associated infections in hospital settings, particularly for catheter-associated urinary tract infections;
- Outcome measures that include follow-up for screening tests; and
- Screening for additional sexually transmitted infections, including human papillomavirus (HPV).

Neurology

- Palliative and end-of-life care measures for stroke patients;
- Functional status outcome measures, especially related to stroke severity;
- Measures that focus on patients with health disparities and disabilities;
- Pre-hospital care and emergency response measures; and
- Post-acute care and rehabilitation care measures.

Patient safety

- Wound care measures, such as vascular screening for patients with leg ulcers, or adequate support surface for patients with stage III-IV pressure ulcers;
- Obstetric measures, such as induction and augmentation of labor, or outcomes of neonatal birth injury;
- Infection measures, such as vascular catheter infections;
- Equipment-related injury measures, such as monitoring of product-related events;
- Information technology measures, such as EHR programming related events;
- Physical mobility expectation measures for hospitalized adults;
- Measures that extend to settings outside of the hospital, such as nursing homes;
- Measures addressing falls across the care continuum and take into account patient assessments, plans of care, interventions, and outcomes; and
- Measures focused on complications linked to surgical site infections, including cesarean sections and outcomes.

Pulmonary/critical care

- Measures focused on in-hospital, severity adjusted, high mortality conditions such as 30-day mortality rates, readmissions, sepsis and acute respiratory distress syndrome (ARDS);
- Measures for earlier identification of sepsis at the compensated stage before it becomes decompensated septic shock and appropriate resuscitative measures;
- Measures of efficiency and overutilization;
- Measures that focus on palliative care for patients with end-stage pulmonary conditions;

- Better measures of comprehensive asthma education; e.g., instruction related to the appropriate application of handheld inhalers prior to discharge and demonstration of use;
- Measures of unplanned pediatric extubations;
- Measures for effectiveness and outcomes of post-acute care for COPD patients;
- Measures of functional status;
- Measures for quality of spirometries in relation to meeting the American Thoracic Society (ATS) standards for pediatric and adult patients; and
- More outpatient composite measures targeted for consumer use.

VI. Conclusion

NQF has evolved in the dozen plus years it has been in existence and since it endorsed its first performance measures more than a decade ago. While its focus on improving quality, enhancing safety, and reducing costs by endorsing performance measures has remained a constant, NQF recognizes the importance of getting the various stakeholder groups to align with respect to their use of performance measures and related improvement efforts. Experience has made it clear that sector-by-sector approaches to enhancing healthcare performance are ineffective in our decentralized and complex healthcare system. They waste precious healthcare resources introduce wasteful redundancy and reporting burden and may even do harm.

With funding from HHS, NQF tackled several critical issues affecting healthcare quality and safety in 2013 that helped advance the aims and priorities of the National Quality Strategy. New projects explored how to improve population health within communities; how consumers can leverage quality information to make informed healthcare coverage decisions; and how to dramatically improve patient safety in high-priority areas.

In addition, NQF laid the foundation for the next generation of measures by providing guidance on composite measurement; patient-reported outcome measures; electronic, or eMeasures; and measures that evaluate complex but important areas such as resource use and population health.

Finally, the NQF-convened MAP focused on an array of projects, including recommending measures for federal public reporting and payment programs, developing “families of measures” (groups of measures selected to work together across settings of care in pursuit of specific healthcare improvement goals) for high-priority areas, and providing input on measures for vulnerable populations, including Medicare-Medicaid enrollees and adults enrolled in Medicaid.

NQF will build on this work in the year ahead to help build a measure portfolio that drives the healthcare system to both delivering higher value healthcare at lower cost while incorporating the needs and preferences of patients, payers, and purchasers and ultimately improving patient and community health.

Appendix A: 2013 Activities Performed Under Contract with HHS

Description	Output	Status (as of 12/31/2013)	Notes/Scheduled or Actual Completion Date
1. Recommendations on the National Quality Strategy and Priorities			
Multi-stakeholder input on a National Priority: Improving Population Health by Working with Communities	A common framework that offers guidance on strategies for improving population health within communities.	In progress	
Multi-stakeholder input into the Quality Rating System	Review and input into core measures and organization of information for the Health Insurance Exchange Quality Rating System.	In progress	
Multi-stakeholder Action Pathway Model in Support of the Partnership for Patients (P4P) Initiative	Quarterly reports and meetings detailing progress of three action teams addressing maternity care, readmissions, and patient and family engagement.	In progress	
2. Quality and Efficiency Measurement Initiatives			
Pulmonary/critical care measures and maintenance review	Project to endorse new pulmonary/critical-care measures, and conduct maintenance on existing NQF-endorsed measures.	Completed	36 total measures endorsed by March 2013.
Patient safety measures	Set of endorsed measures for patient safety	Completed	Phase 2 endorsed two measures in January 2013.
Behavioral health measures and maintenance review	Set of endorsed measures for behavioral health	Phase 2 in progress	Phase 2 is considering 24 measures for endorsement in January 2014
Neurology measures and maintenance review	Set of endorsed measures for neurology	Completed	Phase 2 endorsed five measures addressing stroke treatment in March 2013.
Infectious disease measures and maintenance review	Set of endorsed infectious disease measures	Completed	16 measures endorsed by March 2013.

Description	Output	Status (as of 12/31/2013)	Notes/Scheduled or Actual Completion Date
Review of time-limited endorsement measures	Fully endorsed measures after completed testing results are reviewed	Completed	Four measures were fully endorsed in April 2013.
Measure maintenance	Review of endorsed measures every three years against newly submitted measures.	Ongoing	
eMeasure feasibility testing	Review the current state of feasibility assessment for eMeasures and identify a set of principles, recommendations, and criteria for adequate feasibility assessment.	Completed	Final report completed April 2013.
Composite evaluation guidance	Reassess NQF's existing guidance for evaluating composites, with particular consideration of recent changes in composite measure development and related methodology.	Completed	Final report completed April 2013.
Readmissions and all-cause admissions and readmissions measures and maintenance review	Set of endorsed measures for admissions and readmissions	In progress	
Cost and resource use measures	Set of endorsed measures for cost and resource use	In progress	Phase 1 endorsed 1 new measure in December 2013.
Cardiovascular measures and maintenance review	Set of endorsed measures for cardiovascular conditions	In progress	
Behavioral health	Set of endorsed measures for behavioral health	In progress	
Endocrine measures and maintenance review	Set of endorsed measures for endocrine conditions	In progress	
Health and well-being measures and maintenance review	Set of endorsed measures for health and well-being	In progress	
Patient safety measures and maintenance review	Set of endorsed measures for patient safety	In progress	
Care coordination measures and maintenance review	Set of endorsed measures for care coordination	In progress	

Description	Output	Status (as of 12/31/2013)	Notes/Scheduled or Actual Completion Date
Musculoskeletal measures and maintenance review	Set of endorsed measures for musculoskeletal conditions	In progress	
Person- and family-centered care measures and maintenance review	Set of endorsed measures for person- and family-centered care	In progress	
Surgery measures and maintenance review	Set of endorsed measures for surgery	In progress	
Episode grouper criteria	Report examining necessary submission elements for evaluation, as well as best practices for episode grouper construction	In progress	
Common formats for patient safety data	A set of comments and advice for further refining additional modules for the Common Formats, an AHRQ-based initiative that helps standardize electronic reporting of patient safety event data.	In progress	
Transition of the Quality Data Model (QDM)	Successfully transition the QDM maintenance to MITRE Corporation.	Completed	Federally-funded research development center now fully responsible for the QDM.
3. Stakeholder Recommendations on Quality and Efficiency Measures and National Priorities			
Recommendations for measures to be implemented through the federal rulemaking process for public reporting and payment	Measure Applications Partnership Pre-Rulemaking Report: Input on Measures Under Consideration by HHS for 2013 Rulemaking	Completed	Completed February 2013.
Recommendations for measures to be implemented through the federal rulemaking process for public reporting and payment	Measure Applications Partnership Pre-Rulemaking Report: Input on Measures Under Consideration by HHS for 2014 Rulemaking	In progress	
Synthesizing Evidence and Convening Key Stakeholders to Make Recommendations on Families of Measures and Risk Adjustment	New families of measures covering affordability, population health, and person- and family-centered care. Also a final set of recommendations focused on risk adjustment for resource use performance measures.	In progress	
Identification of Quality Measures for Dual-Eligible Medicare-Medicaid Enrollees and Adults Enrolled in Medicaid	Annual input on the Initial Core Set of Health Care Quality Measures for Adults Enrolled in Medicaid, and additional refinements to previously published Families of Measures.	In progress	
4. Gaps in Endorsed Quality and Efficiency Measures			
Gaps report	A report identifying gaps in endorsed quality measures, including measures within the National Quality Strategy priority areas.	Completed	Final report completed February 2013.
5. Gaps in Evidence and Targeted Research Needs			

Description	Output	Status (as of 12/31/2013)	Notes/Scheduled or Actual Completion Date
Priority Setting for Health Care Performance Measurement: Addressing Performance Measure Gaps in Priority Areas	Recommended sets of priorities for performance improvement in five topic areas: adult immunizations; Alzheimer’s disease and related dementias; care coordination; health workforce; and person-centered care and outcomes.	In progress	
Gaps report	A report identifying gaps in endorsed quality measures, including measures within the National Quality Strategy priority areas.	Completed	Final report completed March 2013.

Appendix B: Measure Evaluation Criteria

Measures are evaluated for their suitability based on standardized criteria in the following order:

1. Importance to Measure and Report:
http://www.qualityforum.org/docs/measure_evaluation_criteria.aspx#importance
2. Scientific Acceptability of Measure Properties:
http://www.qualityforum.org/docs/measure_evaluation_criteria.aspx#scientific
3. Feasibility: http://www.qualityforum.org/docs/measure_evaluation_criteria.aspx#feasibility
4. Usability and Use:
http://www.qualityforum.org/docs/measure_evaluation_criteria.aspx#usability
5. Related and Competing Measures:
http://www.qualityforum.org/docs/measure_evaluation_criteria.aspx#comparison

More information is available on the NQF website at:

http://www.qualityforum.org/docs/measure_evaluation_criteria.aspx#1_2.

Appendix C: Federal Public Reporting and Performance-Based Payment Programs Considered by MAP

End Stage Renal Disease Quality Improvement Program
Home Health Quality Reporting
Hospice Quality Reporting
Inpatient Rehabilitation Facility Quality Reporting
Long-Term Care Hospital Quality Reporting
Ambulatory Surgical Center Quality Reporting
Hospital Acquired Condition Payment Reduction (ACA 3008)
Hospital Inpatient Quality Reporting
Hospital Outpatient Quality Reporting
Hospital Readmission Reduction Program
Hospital Value-Based Purchasing
Inpatient Psychiatric Facility Quality Reporting
Prospective Payment System (PPS) Exempt Cancer Hospital Quality Reporting
Medicare and Medicaid EHR Incentive Program for Hospitals and CAHs
Medicare and Medicaid EHR Incentive Program for Eligible Professionals
Medicare Shared Savings Program
Medicare Physician Quality Reporting System (PQRS)
Physician Feedback/Quality and Resource Utilization Reports
Physician Value Based Payment Modifier
Physician Compare

Appendix D: MAP Structure, Members, and Criteria for Service

The MAP operates through a two-tiered structure. Guided by the priorities and goals of HHS's National Quality Strategy, the MAP Coordinating Committee provides direction and direct input to HHS. MAP's workgroups advise the Coordinating Committee on measures needed for specific care settings, care providers, and patient populations. Time-limited task forces charged with developing "families of measures"—related measures that cross settings and populations— provide further information to the MAP Coordinating Committee and workgroups. Each multi-stakeholder group includes individuals with content expertise and organizations particularly affected by the work.

The MAP's members are selected based on NQF Board-adopted selection criteria, through an annual nominations process and an open public commenting period. Balance among stakeholder groups is paramount. Due to the complexity of MAP's tasks, individual subject matter experts are included in the groups. Federal government *ex officio* members are non-voting because federal officials cannot advise themselves. MAP members serve staggered three-year terms.

MAP members

- Coordinating Committee:
<http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=49410>
- Clinician Workgroup:
<http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=56141>
- Dual Eligible Beneficiaries Workgroup:
<http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=56142>
- Hospital Workgroup:
<http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=56143>
- Post-Acute Care/Long-Term Care Workgroup:
<http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=56140>

¹ Throughout this report, the relevant statutory language appears in italicized text.

² <http://www.ahrq.gov/workingforquality/nqs/nqs2011annlrpt.pdf>

³ <http://www.ahrq.gov/workingforquality/nqs/nqs2011annlrpt.pdf>

⁴ <http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=74553>

⁵ <http://partnershipforpatients.cms.gov/>

⁶ NQF steering committees are comparable to the expert advisory committees typically convened by federal agencies.

⁷ Reserve status measures are reliable, valid measures that have overall high levels of performance with little variability and retain endorsement, so that performance may be monitored in the future to ensure performance does not decline.

⁸ American Lung Association. Available at http://www.lungusa.org/assets/documents/publications/lung-disease-data/solddc_2010.pdf. Last accessed October 2011.

⁹ Centers for Disease Control. Available at <http://www.cdc.gov/aging/aginginfo/alzheimers.htm>. Last accessed February 2012.

¹⁰ American Health Assistance Foundation. Available at <http://www.ahaf.org/alzheimers/about/understanding/facts.html>. Last accessed February 2012.

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- ¹¹ Centers for Disease Control. Available at <http://www.cdc.gov/aging/aginginfo/alzheimers.htm>. Last accessed February 2012.
- ¹² Centers for Disease Control. Available at www.cdc.gov/epilepsy/basics/fast_facts.htm. Last accessed February 2012.
- ¹³ Parkinson's Disease Foundation. Available at www.pdf.org/en/parkinson_statistics. Last accessed February 2012.
- ¹⁴ Christensen KL, Holman RC, Steiner CA, et al. Infectious disease hospitalizations in the United States. *Clin Infect Dis*, 2009;49(7):1025-1035.
- ¹⁵ Scott RD, The Direct Medical Costs of Healthcare-Associated Infections in U.S. Hospitals and the Benefits of Prevention, Division of Healthcare Quality Promotion, National Center for Preparedness, Detection, and Control of Infectious Diseases; Coordinating Center for Infectious Diseases, Centers for Disease Control and Prevention; March 2009.
- ¹⁶ <http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=73046>
- ¹⁷ <http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=73039>
- ¹⁸ <http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=73046>
- ¹⁹ <http://www.qualityforum.org/Qps/QpsTool.aspx>
- ²⁰ <http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=72738>
- ²¹ http://www.qualityforum.org/Publications/2013/02/MAP_Pre-Rulemaking_Report_-_February_2013.aspx
- ²² http://www.qualityforum.org/Publications/2013/02/MAP_Pre-Rulemaking_Report_-_February_2013.aspx
- ²³ http://www.qualityforum.org/Publications/2013/03/2012_NQF_Measure_Gap_Analysis.aspx
- ²⁴ e.g., Hospital Consumer Assessment of Healthcare Providers and Systems [HCAHPS] being tested only in the hospital inpatient setting, creating a gap in patient experience measurement in the hospital outpatient, ambulatory surgical center, and long-term care hospital settings.