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## Part II

### Department of Health and Human Services

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Secretarial Review and Publication of the Annual Report to Congress  
Submitted by the Contracted Consensus-Based Entity Regarding  
Performance Measurement; Notice

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### Secretarial Review and Publication of the Annual Report to Congress Submitted by the Contracted Consensus-Based Entity Regarding Performance Measurement

**AGENCY:** Office of the Secretary of Health and Human Services, HHS.

**ACTION:** Notice.

**SUMMARY:** This notice acknowledges the Secretary of the Department of Health and Human Services' (HHS) receipt and review of the Annual Report submitted to the Secretary and Congress by the contracted consensus-based entity (CBE) as mandated by section 1890(b)(5) of the Social Security Act, as created by section 183 of the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) and amended by section 3014 of the Affordable Care Act of 2010. The statute requires the Secretary to review and publish the report in the **Federal Register** together with any comments of the Secretary on the report not later than six months after receiving the report. This notice fulfills those requirements.

**FOR FURTHER INFORMATION CONTACT:** Ann Page (202) 260-6473.

#### I. Background

Rising health care costs coupled with the growing concern over the level of and variation in quality and efficiency in the provision of health care raise important challenges for the United States. Section 183 of MIPPA created Section 1890 of the Social Security Act, which requires the Secretary of the Department of Health and Human Services (HHS) to contract with a consensus-based entity to perform multiple duties pertaining to health care performance measurement. These activities support HHS's efforts to promote high-quality, patient-centered, and financially sustainable health care. The statute mandates that the contract be competitively awarded for a period of four years and may be renewed under a subsequent bidding process.

In January, 2009, a competitive contract was awarded by HHS to the National Quality Forum (NQF) for a four-year period. The contract specified that the CBE should conduct its business in an open and transparent manner, provide the opportunity for public comment and ensure that membership fees do not pose a barrier to participation in the scope of HHS's contract activities, if applicable.

The HHS four-year contract includes the following major tasks:

*Priority Setting Process: Formulation of a National Strategy and Priorities for Health Care Performance*—The CBE shall synthesize evidence and convene key stakeholders to make recommendations on an integrated national strategy and priorities for health care performance measurement in all applicable settings. The CBE shall give priority to measures that: Address the health care provided to patients with prevalent, high-cost chronic diseases; provide the greatest potential for improving quality, efficiency and patient-centered health care; and may be implemented rapidly due to existing evidence, standards of care or other reasons. Additionally, the CBE shall take into account measures that: May assist consumers and patients in making informed health care decisions; address health disparities across groups and areas; and address the continuum of care across multiple providers, practitioners and settings.

*Endorsement of Measures: Implementation of a Consensus Process for Endorsement of Health Care Quality Measures*—The CBE shall provide for the endorsement of standardized health care performance measures. This process shall consider whether measures are evidence-based, reliable, valid, verifiable, relevant to enhanced health outcomes, actionable at the caregiver level, feasible to collect and report, and responsive to variations in patient characteristics such as health status, language capabilities, race or ethnicity, and income level and is consistent across types of health care providers including hospitals and physicians.

*Maintenance of Consensus Endorsed Measures*—The CBE shall establish and implement a process to ensure that endorsed measures are updated (or retired if obsolete) as new evidence is developed.

*Promotion of the Development of Electronic Health Records*—The CBE shall promote the development and use of electronic health records that contain the functionality for automated collection, aggregation, and transmission of performance measurement information. However, in January of 2013, this task was repealed and, as a result, removed from the CBE's statutory duties by the American Taxpayer Relief Act (*Pub. L. 112-240, Title VI, § 609(a)(2)*).

*Convening Multi-Stakeholder Groups*—The CBE shall convene multi-stakeholder groups to provide input into the selection of certain categories of quality and efficiency measures, including measures for use in certain specific Medicare programs, for use in

programs that report performance information to the public, and for use in health care programs that are not included under the Social Security Act. The multi-stakeholder groups consider measures to be implemented through the federal rulemaking process for various federal health care quality reporting and quality improvement programs including those that address certain Medicare services provided through hospices, hospital inpatient and outpatient facilities, physician offices, cancer hospitals, end stage renal disease (ESRD) facilities, inpatient rehabilitation facilities, long-term care hospitals, and psychiatric hospitals and home health care programs.

*Annual Report to Congress and the Secretary*—Under section 1890(b)(5)(A) of the Act, by not later than March 1 of each year (beginning with 2009) the CBE shall submit to Congress and the Secretary of HHS an annual report. The report shall contain a description of:

(i) The implementation of quality and efficiency measurement initiatives and the coordination of such initiatives with quality and efficiency initiatives implemented by other payers;

(ii) recommendations on an integrated national strategy and priorities for health care performance measurement;

(iii) performance of its duties required under its contract with HHS;

(iv) gaps in endorsed quality and efficiency measures, which shall include measures that are within priority areas identified by the Secretary under the National Quality Strategy established under section 399HH of the Public Health Service Act (National Quality Strategy), and where quality and efficiency measures are unavailable or inadequate to identify or address such gaps;

(v) 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; and

(vi) the convening of multi-stakeholder groups to provide input on: (1) The selection of quality and efficiency measures from among such measures that have been endorsed by the CBE and such measures that have not been considered for endorsement by the CBE but are used or proposed to be used by the Secretary for the collection or reporting of quality and efficiency measures; and (2) national priorities for improvement in population health and the delivery of health care services for consideration under the National Quality Strategy.

Section 1890(b)(5)(B) of the Social Security Act requires Secretarial review and publication of this report in the **Federal Register**, together with any comments of the Secretary on the report not later than 6 months after receiving the report.

The first annual report covered the performance period of January 14, 2009 to February 28, 2009 or the first six weeks post contract award. In March 2009, NQF submitted the first annual report to Congress and the Secretary of HHS. Given the short timeframe between award and the statutory requirement for the submission of the first annual report, this first report provided a brief summary of future plans. The Secretary published a notice in the **Federal Register** in compliance with the statutory mandate for review and publication of the annual report on September 10, 2009 (74 FR 46594).

In March 2010, NQF submitted to Congress and the Secretary the second annual report covering the period of performance of March 1, 2009 through February 28, 2010. The second annual report was published in the **Federal Register** on October 22, 2010 (75 FR 65340) to comply with the statutorily required Secretarial review and publication.

In March 2011, NQF submitted the third annual report to Congress and Secretary of HHS. The third annual report, which covers March 1, 2010 through February 28, 2011, was published in the **Federal Register** on September 7, 2011 (76 FR 55474).

In March 2012, NQF submitted its fourth annual report to Congress and the Secretary. The report covers the period of performance of January 14, 2011 through January 13, 2012. The fourth annual report was published in the **Federal Register** on September 14, 2012 (77 FR 56920).

In March 2013, NQF submitted its fifth annual report to Congress and the Secretary. The report covers the period of performance of January 14, 2012 through December 31, 2012. Because the first annual report covered only six weeks, there have been five annual reports under this four-year contract. This notice complies with the statutory requirement for Secretarial review and publication of the fifth NQF annual report.

## II. March 2013—Consensus-Based Entity Report to Congress and the HHS Secretary

Submitted in March 2013, the fifth annual report to Congress and the Secretary spans the period of January 14, 2012 through December 31, 2012.

A copy of NQF's submission of the March 2013 annual report to Congress and the Secretary of HHS can be found at: [http://www.qualityforum.org/Publications/2013/03/2013\\_NQF\\_Report\\_to\\_Congress.aspx](http://www.qualityforum.org/Publications/2013/03/2013_NQF_Report_to_Congress.aspx). The fifth NQF annual report is reproduced in section III of this notice.

## III. NQF Report of 2012 Activities to Congress and the Secretary of the Department of Health and Human Services

This report was funded by the U.S. Department of Health and Human Services under contract number: HHSM-500-2009-00010C.

### 1. Executive Summary

In the last six years, Congress passed statutes 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. **Note:** The relevant statutory language appears in italicized text throughout this report. 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 and was passed under President Bush. The second statute is the 2010 Patient Protection and Affordable Care Act (ACA) (Pub. L. 111-148), which modified and added to the consensus-based entity's responsibilities, and was passed under President Obama. The 2013 American Taxpayer Relief Act (Pub. L. 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 the statute to the National Quality Forum (NQF). 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 on an integrated national strategy and priorities for healthcare performance measurement in all applicable settings; (3) NQF's performance of the duties required under its contract with HHS; (4) gaps in endorsed measures that NQF has identified, including measures that are within priority areas identified by the Secretary under HHS' national strategy; (5) areas NQF has identified 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). To address the last item, the report will cover the new multi-stakeholder group input duties for the consensus-based entity as outlined in section 3014(a), which created section 1890(b)(7) and (8) of the Act. The first of these duties includes providing multi-stakeholder input on the selection of quality and efficiency measures both endorsed and those not endorsed by the entity, that are used or proposed to be used by the Secretary for collection or reporting of quality and efficiency measures. The second duty requires that the consensus-based entity provide multi-stakeholder group input on national priorities for improvement in population health and in the delivery of healthcare services for consideration under the National Quality Strategy.

This fourth Annual Report highlights NQF's work conducted between January 14, 2012 and December 31, 2012 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 2012 are referenced throughout this report, and a full list is included in Appendix A.

### Facilitating Coordinated Action To Achieve the National Quality Strategy

*Section 1890(b)(1) of the Social Security Act mandates that the entity 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 health care 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.

Under section 1890(b)(5)(A)(ii) of the Social Security Act, the entity is mandated to include in the annual report a description of the recommendations it has made, with respect to activities conducted under the Social Security Act, on an integrated national strategy, and priorities for healthcare performance measurement in all applicable settings.

Since 2009, the NQF-convened National Priorities Partnership (NPP) has helped to provide multi-stakeholder input into the selection of high-impact goals, related priorities, and subsequent strategies that constitute the first-ever National Strategy for Quality Improvement in Healthcare (NQS). Released in 2011, the NQS outlines three specific aims for the U.S. healthcare system—better care, healthy people and communities, and affordable care. To achieve these aims, the NQS established six priorities to help the healthcare community focus their efforts, including:

- Making care safer by reducing harm caused in the delivery of care;
- Ensuring that each person and family are engaged as partners in their care;
- Promoting effective communication and coordination of care;
- Promoting the most effective prevention and treatment practices for the leading causes of mortality, starting with cardiovascular disease;
- Working with communities to promote wide use of best practices to enable healthy living; and
- Making quality care more affordable for individuals, families, employers, and governments by developing and spreading new healthcare delivery models.

The NPP is a collaborative public-private partnership of more than 50 organizations that have a shared stake in how healthcare is delivered, received, and paid for. NPP continues to advise HHS on how to evolve the NQS' three aims, and its counsel was well reflected in HHS's 2012 *National Strategy for Quality Improvement in Healthcare*, an annual NQS progress report required by Congress.

Beyond forging agreement at the strategic goal level, it is challenging to get leaders to implement agreed-upon strategies at the care delivery and community level, given limited time and resources. In 2012, NPP focused on how to advance patient safety by aligning its work with HHS' "Partnership for Patients" effort. Through a series of web-based and in-person meetings that NPP hosted throughout 2012, nearly 2,700 participants from multiple sectors were able to learn about and share new improvement approaches, information, tools, and professional connections to accelerate their individual contributions to achieving safety related improvements. At a more detailed level, NPP developed action plans to focus a range of national and local organizations in diverse sectors on how to align efforts to reduce preventable readmissions and improve maternity care, relying on proven interventions. NPP also created a web-based system or "action registry" to track related commitments to improvement activities focused on readmissions and maternity care to enable learning across participants. Launched in the fourth quarter of 2012, the registry now houses over 50 actions by 30 different organizations.

Endorsing and Maintaining Measures, Related Tools, and Information

*Under section 1890(b)(2) of the Social Security Act, the entity must provide for the endorsement of standardized healthcare performance measures. As part of the endorsement process, NQF is required to 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, under section 1890(b)(3), the NQF must maintain endorsed measures, by establishing and implementing a process to ensure that endorsed measures are retired if obsolete or brought up to date as new evidence is developed.*

NQF strategically manages its portfolio of 700-plus endorsed measures to increase impact and decrease burden, growing the portfolio in some areas and shrinking it in others. More specifically, it replaces existing measures with those that are better, reflect new medical evidence, or are more relevant; removes measures that are no longer effective or where the evidence base has evolved; and expands the portfolio to address well-recognized measurement gaps.

The NQS priorities guide the management of the measure portfolio by NQF expert committees. In addition to concentrating on endorsing measures suitable for public reporting, performance-based payment, and other accountability purposes, NQF evolves its portfolio so that the measures are also clinically relevant and actionable for providers. Payers and patients are interested in measures that they can use to compare and select providers; clinicians and hospitals seek clinically relevant measures to benchmark themselves against so they have the information they need to focus their improvement efforts for the benefit of their patients. A mix of measures is essential to creating and continuously evolving a portfolio that meets the needs of diverse stakeholders.

In 2012, NQF completed 16 endorsement projects—reviewing 430 submitted measures and endorsing 301 measures, or 70 percent. This set included 81 new measures and 220 measures that maintained their endorsement after being considered in light of new evidence and/or against new competing measures submitted to NQF for consideration. The newly endorsed measures align with needs identified in the NQS and address several critical areas, including patient outcomes, underserved populations, healthcare disparities, and hospital readmissions.

In comparison, NQF completed 11 projects and endorsed 170 measures in 2011. This increased productivity can be attributed to efforts to make the review process more efficient—the average measure review time decreased from 12 months to 7 months during 2012—as well as to other enhancements to the endorsement process. Specifically, as part of the Consensus Development Process pilot program, NQF provided earlier, more detailed feedback to measure developers about a first-order criterion (i.e., importance to measure) to further the goal that development dollars are spent on measures that are viewed as consequential by the field. Furthermore, when a measure is re-evaluated for continued endorsement, NQF now requires committees to consider the measure's use and whether such use has resulted in improvement or has led to unintended consequences, ensuring that committee members are informed about the measure's impact.

*Under section 1890(b)(4) of the Social Security Act, the entity has been responsible for promoting the development and use of electronic health records (EHRs) that contain the functionality for automated collection,*

aggregation, and transmission of performance measurement information.

In an effort to move beyond measures that rely on administrative data or that are collected from paper-based medical records, NQF continued its work in 2012 to facilitate the development and reporting of electronic measures, or eMeasures, that can help accelerate the adoption of electronic health records (EHRs). Such efforts include work at the granular level (e.g., standardizing data elements so they can be collected from varied EHRs to build eMeasures) and at the more conceptual level (e.g., the NQF-convened eMeasure Learning Collaborative). Created by NQF at the behest of measure developers, EHR vendors, HHS, and clinicians, the eMeasure Learning Collaborative is a forum for sharing best practices and tackling issues that are barriers to developing and implementing eMeasures, such as figuring out how to enhance “upstream” communication between measure developers and other stakeholders so that affected parties have the opportunity to collaborate on data requested and its representation in eMeasure logic during the measure development process. In 2012, NQF also launched the Health IT Knowledge Base and glossary to facilitate a unified understanding of terms and measurement approaches used in EHRs and more broadly, health IT, and to disseminate best practices, among other projects.

#### Aligning Accountability Measures To Enhance Value

*Under section 1890(b)(1) of the Social Security Act, the entity shall synthesize evidence and convene key stakeholders to make recommendations and priorities for healthcare performance measurement in all applicable settings.*

*Under section 1890(b)(5)(A)(i) of the Social Security Act, the entity must report on the implementation of quality and efficiency measurement initiatives under the Social Security Act and the coordination of these initiatives with quality and efficiency initiatives implemented by other payers.*

*Under section 1890(b)(7) of the Social Security Act, NQF is specifically responsible for convening multi-stakeholder groups to provide input to the Secretary of HHS on the selection of certain categories of NQF-endorsed and non-endorsed quality and efficiency measures (measures NQF has not considered for endorsement but the Secretary uses or is proposing to use for the collection or reporting of quality and efficiency measures). Beginning in 2012, NQF has been required to transmit the input of the multi-stakeholder groups to*

*the Secretary not later than February 1st of each year. Under section 1890(a)(5), the Secretary must consider multi-stakeholder input as part of a pre-rulemaking process the Secretary must complete prior to the adoption of measures during the Federal rulemaking process. NQF provides this multi-stakeholder input through its Measure Applications Partnership (MAP).*

Agreement about how to define quality, safety, and costs in a portfolio of endorsed measures is an important first step toward measure alignment, which then needs to be followed by consensus across stakeholder groups about the use of endorsed measures.

The NQF-convened MAP—which comprises stakeholders from a wide array of healthcare sectors and 10 federal agencies, as well as 110 subject matter experts—focuses on recommending measures for federal public reporting, payment, and other programs to enhance healthcare value. As part of its mission, MAP also strives for alignment with the private sector on the use of such measures. In February 2012, MAP provided multi-stakeholder input to HHS about the considered use of measures in over 17 different federal Medicare benefit programs and the Electronic Health Record (EHR) Incentive Program as a part of its first annual pre-rulemaking report required by statute. This input was well-heeded, as evidenced by a degree of concordance—or agreement between MAP’s recommendations and the Centers for Medicare & Medicaid Services (CMS) final rules for quality reporting, public reporting, and value-based purchasing programs issued in 2012—which averaged 70 percent concordance across programs.<sup>1</sup> Where discordance exists, it appears to be due to timing. For example, in some cases, such as the Physician Quality Reporting System (PQRS), CMS is moving measures rapidly into a program to encourage clinician participation and concurrently encouraging that these measures be reviewed by NQF for possible endorsement.

To help guide future measure development related to the NQS and to inform use of measures in value-based programs going forward (including future annual pre-rulemaking reports to HHS), MAP released a Strategic Plan for Measurement in October 2012. A key part of the plan focuses on defining the concept of “families of measures” in high-impact areas, some of which cross conditions and settings. The objective of these families, or sets of measures, is to knit together related measures currently found in different programs, care settings, levels of analysis, and

populations to drive improvement and reduce measurement burden. In addition, the plan calls for further engagement of stakeholders to glean additional feedback about measure use and usefulness.

At the same time, MAP released its Families of Measures report, which defines measure families in four key areas—safety, care coordination, cardiovascular, and diabetes care—with the goal of promoting more cohesion and integration of care regardless of setting, provider, level of intensity, or timing. An additional and equally important goal is reducing measurement and reporting burden through alignment for hospitals, physicians, and other providers as it relates to these four areas.

A 2012 NQF analysis (conducted outside of the federal contract) of NQF-endorsed measures in use shows that about 29 percent of measures are being used by two or more key stakeholders simultaneously, including the federal government, private payers, states, communities, and other users. Given its size and reach, the federal government is an important driver, using more than half of NQF’s measure portfolio in its various pay-for-reporting and pay-for-performance programs, followed by private payers and states using 41 percent and 28 percent, respectively. Further, NQF’s analysis shows that alignment in use of the same measures increased across these key sectors between 2011 and 2012.<sup>2,3</sup> A 2011 RAND study of 75 organizations revealed a strong preference for NQF-endorsed measures where they exist because they are vetted, evidence-based, and known to be more credible with providers.<sup>4</sup>

#### Filling Measurement Gaps

*Under section 1890(b)(5)(A)(iv) of the Social Security Act, the entity is required to report on 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 Social Security Act, NQF is also required to report on 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.*

The science of performance measurement continues to evolve in response to the needs and preferences of

various stakeholders, new and updated data platforms, the capacity of providers to collect and report measures, and other factors. In 2012, NQF conducted an extensive analysis of its current measures portfolio against both the National Quality Strategy priority areas and high-impact conditions to meet requirements under section 1890(b)(5)(A)(iv) of the Social Security Act. This analysis provides a more in-depth understanding of what NQF-endorsed measures exist against key strategic frameworks, which of these measures are being used in the field, and where gaps persist—either because the measures have not yet been developed or they are in existence but are not being used.

The extent to which each NQS priority at the goal level has NQF-endorsed measures available to drive change is varied but generally promising. For example, a large part (40%) of the NQF portfolio addresses the important area of patient safety which includes healthcare acquired conditions and hospital readmissions. Fewer measures (7 percent) address patient and family engagement. Overall, measures for specific goals—including shared decision-making, patient navigation and self-management, shared accountability, healthy lifestyle behaviors, community interventions to improve health, and access, cost, and resource use—are less prevalent.

Looking across both the NQS priority areas and high-impact Medicare and child health conditions, the analysis found gaps in measures of preventive care, patient-reported outcomes (particularly quality of life and functional status), appropriateness (particularly for specialty care), access to timely palliative care, and health and healthcare disparities. Additionally, the analysis revealed the need for better population-level measures to assess improvements in health and healthcare. An assessment of the NQF portfolio of endorsed measures revealed that while certain high-impact conditions have an abundance of measures—e.g., cardiovascular disease, end-stage renal disease, and diabetes—many of the high-impact childhood conditions have few or no NQF-endorsed measures. Finally, all but one of the 92 NQF-endorsed measures in use in federal and at least two other non-federal programs address a specific NQS goal or a high-impact condition.

While certainly there is room for improvement, the analysis suggests that the existing portfolio generally addresses agreed upon frameworks and that there is alignment in use of such measures across various sectors. Going

forward, resources should be dedicated to delving more deeply into the identified gap areas to prioritize measure development and endorsement efforts so that the most needed measurement gaps are addressed first.

Furthermore, NQF's efforts are focused on furthering alignment as it relates to measurement strategies to enhance healthcare value through its public-private partnerships and its evidence-based, consensus-driven method for reviewing and endorsing measures. Ultimately, however, for the U.S. healthcare system to be transformed, measurement-driven efforts will need to be mutually reinforced with changes to current payment and delivery systems that drive the system toward greater integration and accountability. Only then will we be able to put the U.S. healthcare system on the path to achieving the NQS' three, interconnected, and ambitious aims.

## 2. Facilitating Coordinated Action To Achieve the National Quality Strategy

*Section 1890(b)(1) of the Social Security Act mandates that the entity 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 have 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.*

The National Quality Strategy (NQS), released in March 2011, set forth a cohesive roadmap for achieving patient-centered, affordable care that promotes healthy people and communities (see pages 3–4 for a more detailed explanation). Upon its release, its authors emphasized that the national quality strategy requires the active engagement and support of healthcare stakeholders across the country for quality improvements and success.

For the increasing number of stakeholders that have committed to

making the NQS a reality, the path and methods to achieve its aims are not always apparent. Additionally, as the hard work of achieving care of the highest value accelerates, stakeholders are increasingly recognizing that performance measurement and quality improvement are only achievable by working across sectors and organizations, and they seek effective and efficient ways to connect across the healthcare delivery system.

The NPP focused its 2012 efforts on bringing diverse people and organizations together in their pursuit of the NQS, and in conducting analyses and activities that helped to refine the next critical priorities of the healthcare community.

## Advising on the National Quality Strategy

NPP members called for the creation of the NQS and in 2012 continued to shape its direction by offering input to the HHS Secretary. In September 2011, HHS asked the NPP to recommend measures for evaluating progress in achieving the NQS. This input was integrated into the 2012 *National Strategy for Quality Improvement in Healthcare*, an annual NQS progress report required by Congress. The progress report reflected near-universal agreement with NPP recommendations. Multi-stakeholder input into the NQS and follow-on work to achieve its goals embody the spirit of alignment encouraged by the NQS authors, ensuring that the strategy is informed, embraced, and viewed as achievable by both public and private sectors. Without this shared vision, progress is likely to be marred by competing, unfocused, or discordant efforts.

## Identifying and Spreading Solutions To Achieve the National Quality Strategy

*Under section 1890(b)(5)(A)(i) of the Social Security Act, the entity is to provide a description of its implementation of quality and efficiency measurement initiatives under the Social Security Act and the coordination of those initiatives with those implemented by other payers.*

In addition to offering multi-stakeholder input on the NQS, the NPP focused on helping to disseminate proven and scalable solutions for its implementation; making connections across sectors and between organizations; and inspiring people to take highly focused, coordinated, and targeted action. Much of this work happened as part of the HHS Partnership for Patients patient safety effort, which has two ambitious and important goals: reducing hospital-

acquired conditions by 40 percent and preventable hospital readmissions by 20 percent by the end of 2013.

Establishing the “who, what, how, and when” of action is the first step in solving large-scale challenges that cut across organizations and sectors. To that end, NPP partners and an extended network of contributors (more than 750 in total) spent part of 2012 developing these problem-solving pathways—with an initial focus on fashioning shared solutions to improving maternity care and reducing preventable readmissions. The NPP selected these two areas for specific reasons. Current trends in maternity care and readmissions demonstrate an opportunity for improvement that can simultaneously reduce unnecessary patient harm and healthcare costs. Both areas also represent aspects of healthcare ripe for pooling and focusing the efforts of many—patients and families, providers, payers, and policymakers, to name a few.

For example, since 1979, the American Congress of Obstetricians and Gynecologists (ACOG) has advocated for the avoidance of elective deliveries before 39 completed weeks gestation, yet early elective inductions are common in the United States despite the known potential harms for mothers and babies.<sup>5</sup> Similarly, rates of cesarean section have risen in recent decades to nearly 32 percent despite potential harms, including greater likelihood of asthma for the child. In fact, the cesarean rate is rising fastest among women who are least likely to benefit—healthy women at low risk of labor and birth complications.<sup>6</sup> Studies reveal that

higher cesarean rates do not lead to improved outcomes, and rates above 15 percent may do more harm than good.<sup>7</sup> Furthermore, there is strong evidence to support the need to address avoidable admissions and readmissions. Almost one in five Medicare patients discharged from the hospital is readmitted within 30 days, putting patients at increased risk of complications or infections and accounting for approximately \$15 billion of excess Medicare spending each year.<sup>8,9,10</sup> While some admissions and readmissions are planned and appropriate, approximately 40 percent of hospital admissions among nursing home residents may be avoidable.<sup>11</sup>

In addition to these two specific areas of focus, NPP hosted several larger scale forums on behalf of the Partnership for Patients in 2012. NPP-hosted forums were designed to identify innovative ways to help multiple organizations meet Partnership for Patients’ safety goals and to help spread proven patient safety interventions. Without these exchanges, organizations often find themselves trying to improve in a vacuum, working with a limited number of ideas and/or interventions, or struggling to innovate given their human and financial resources. The structure of these forums, oriented around idea exchanges and sharing of case studies and examples, fostered efficient information sharing, so that those on the frontlines of improving patient safety were supported in their efforts and therefore could more readily effect change. More than 400 organizations that support the Partnership for Patients attended these events. The first three meetings were

focused on education regarding the National Quality Strategy and the importance of alignment between sectors; catalyzing action; and sharing success stories in achieving patient safety. The November 2012 NPP-Partnership for Patients event focused exclusively on how to achieve meaningful patient and family engagement, which is essential for solving all patient safety issues and achieving a patient-centered healthcare system. After the first meeting in January 2012, 100 percent of attendees felt the meeting enhanced their ability to contribute to public-private sector collaboration. NPP augmented the four in-person forums with online educational ‘webinars.’ In total, over the course of 2012, nearly 2,700 people from multiple sectors participated in NQF-hosted webinars and in-person events in support of the Partnership for Patients.

In 2012, NQF designed a web-based, interactive “registry” where organizations can share information about their own actions to advance the NQS; search data about the actions of others; find partners to work with; and learn from others. The registry, available on the NQF Web site, allowed for broader engagement, participation, and content that facilitates alignment around a focused set of patient safety activities and that clarifies who is doing what, when, with whom, and to what end. Launched in the fourth quarter of 2012, the registry now houses over 50 actions by 30 different organizations.

Deliverables Associated With These Activities

Description	Output	Status (as of 1/7/2013)	Notes/scheduled or actual completion date
NPP support for Partnership for Patients’ HHS initiative focused on patient safety.	4 quarterly convenings for 100+ people each, and 3 webinars reaching 550+.	Completed .....	Content of meetings and webinars were captured in individual summaries.
NPP support for Partnership for Patients’ HHS initiative focused on patient safety.	2 public web meetings reaching 500+ and 2 public conference calls, reaching 100+.	Completed .....	Content of meetings and calls were captured in individual summaries.
NPP support for Partnership for Patients’ HHS initiative focused on patient safety.	Formed two Action teams around Readmissions and Maternal Health. Early development of additional action teams around Million Hearts/ Cardiovascular Health and Patient & Family Engagement.	Completed .....	
NPP support for Partnership for Patients’ HHS initiative focused on patient safety.	Created the Action Registry, a virtual space for organizations to share their quality improvement activities—or “actions”—around the six priority areas of the National Quality Strategy and make connections with each other.	Completed .....	
NPP support for Partnership for Patients’ HHS initiative focused on patient safety.	Quarterly reports for HHS .....	Completed .....	

### 3. Supporting National Healthcare Measurement Needs

*Under section 1890(b)(2) of the Social Security 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, under section 1890(b)(3) of the Social Security Act, the NQF must maintain endorsed measures, including retiring obsolete measures and bringing other measures up to date.*

Standardized healthcare performance measures help clinicians understand whether the care they offered their patients was optimal and appropriate, and if not, where to focus their efforts to improve the care they deliver. Measures are also used by all types of public and private payers for a variety of accountability purposes, including feedback and benchmarking, public reporting, and incentive-based payment. Lastly, measures are an essential part of making healthcare more transparent to all, important 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.

Ten years ago, NQF endorsed its first voluntary, national consensus performance measures to answer the call for standardized measurement of healthcare services. These first measures were a stepping-stone for creating a consensus-driven effort that bridged nearly every interested party in healthcare. The 10-year result of this national experiment is a portfolio of more than 700 NQF-endorsed measures, most of which are in use; a more information-rich healthcare system; and a substantial emerging body of knowledge about measure development, use, and quality improvement.

In the past five years, NQF, working in partnership with HHS and others, has focused more intensely on measures that add value and reduce burden for those who provide, pay for, and receive care. This movement has been facilitated through more stringent evaluation criteria that place greater emphasis on evidence and a clear link

to outcomes, demonstrable impact and gaps in care, and testing that demonstrates measures' reliability and validity. NQF also has laid the foundation for the next generation of measures, including guidance on composite measurement, patient-reported outcome measures, disparities-sensitive measures, electronic or eMeasures, and measures that evaluate complex but important areas such as resource use and population health. These activities are intended to inform the path toward targeted, prioritized measure development.

There is increasing evidence that NQF's stringent criteria, portfolio management strategies, and collaboration with developers are having the desired effect on the portfolio. For example, in 2012 we observed the following:

- Guidance that expressed NQF's strong preference for outcome measures and that required process measures to demonstrate a clear link to outcomes led to more endorsed outcome measures. At the end of 2012, 27 percent of the measures in NQF's portfolio were outcome measures, compared to 24 and 18 percent in 2011 and 2010, respectively.
- A focus on harmonization resulted in fewer duplicative measures, and steering committees selecting the best-in-class measure whenever possible.
- Developers submitted more tested measures—which are more reliable, valid, and likely to meet NQF endorsement criteria—given NQF's increased emphasis on requirements for measure testing. With fewer untested measures to evaluate, steering committees were able to focus more on evaluating “better” measures.

To apply the concept of constant improvement to its own work, NQF conducted in 2012 Lean improvement activities and other initiatives and/or projects intended to make the consensus development process more predictable, efficient, and navigable for those who develop and evaluate measures, while still maintaining the rigor of its multi-stakeholder process. Measure developers primarily seek an earlier window to get broad-based committee input on a measure concept they are considering investing in; those who use measures are interested in process changes that may further shrink review cycle time while maintaining rigor. All parties are focused on ways to make sure finite measure development resources are used to meet the greatest measurement needs.

To address these issues, NQF took steps to explore restructuring of its Consensus Development Process (CDP)

in order to provide early guidance to measure developers on whether a measure concept meets NQF's criterion for “importance to measure and report” before they invest time and resources to fully develop and test a measure. The results of the pilot project, often referred to as the “two-stage CDP,” will be available in 2013; results will be used to drive additional enhancements that meet the critical needs of measure developers.

NQF worked to enhance its approach to harmonization, specifically helping those who review measures to more consistently and adeptly recognize an opportunity for aligning measures. In 2012, NQF also conducted work to help committees evaluate measures for usability, a criterion for NQF endorsement with which steering committee members often struggle during deliberations.

Lastly, outside of the HHS process improvement activities around measure development, NQF created a new multi-stakeholder task force on consensus, which, working with NQF staff, led a series of focus groups and research exercises to determine a definition of consensus and how to establish consensus in rare instances when the NQF membership vote is split.

Results of NQF's Lean improvement work included reducing the *average* measure endorsement cycle time from 12 to 7 months, which is an important milestone to ensuring that the measures that matter most to our changing healthcare system are available for use as quickly as possible all without sacrificing the rigor of the endorsement process. Other results included the development of standard work for staff, developers, and committee members. This task force on consensus is slated to produce findings in early 2013.

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

NQF's measure portfolio includes more than 700 performance measures, covering a variety of different conditions and care settings. The portfolio is carefully managed in a variety of ways. First, working with various expert committees, NQF removes or puts into “reserve status” measures that consistently perform at the highest levels or “top out.” This step signals an improvement success and helps to ensure that time is spent instead measuring areas in need of improvement. Second, NQF works with those who create measures to “harmonize” related or near-identical measures to eliminate nuanced differences. Harmonization is critical to

reducing measurement burden for providers, who have been 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. Lastly, where appropriate, NQF works with measure developers to replace multiple process measures with more meaningful outcome metrics. In 2012, NQF removed 103 measures from its portfolio for a variety of reasons: Measures no longer met endorsement criteria; measures were harmonized with other similar, competing measures; or measure developers chose to retire measures they no longer wished to maintain.

While NQF pursues these proven trimming 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: (1) The need for eMeasures; (2) pressure for measures that are

applicable to multiple clinical specialties and settings of care; (3) national pursuit of new payment models such as bundled payment; and (4) the need for more advanced measures that help close cross-cutting gaps, such as care coordination and patient-reported outcomes. The measure portfolio reflects the combined “dynamic yet static” effect of these strategies:

Although the portfolio is constantly changing due to new measures cycling in and others cycling out, the relative number of endorsed measures remained steady in 2012. Specifically, 93 measures were added and 103 measures were removed from the portfolio.

The table below provides a snapshot of how the current NQF-endorsed measure portfolio aligns with the NQS, with the percentages reflecting the proportion of NQF-endorsed measures that support each of the six priorities. Some measures are counted in multiple priority areas. The table shows gaps in emerging measurement areas, including affordability, patient- and family-centered care, and community health

and individual well-being. Work conducted in 2012 helped to close these known measure gaps and to pave the way for innovative measure development by the healthcare field.

#### Measures Compared to NQS Priority Areas

NQS Priority area	Percentage of measures in the NQF portfolio
Safety .....	27
Person- and Family-Centered Care .....	5
Prevention and Treatment Practices for Cardiovascular Diseases ..	15
Communication and Care Coordination .....	30
Health and Well-Being ....	15
Affordability .....	8
NQF Portfolio .....	100

Furthermore, seven measure developers account for 64 percent of NQF's portfolio:

Measure steward/developer	Number of measures	Percent of total portfolio
1. Centers for Medicare & Medicaid Services .....	123	17
2. National Committee for Quality Assurance (NCQA) .....	116	16
3. Physician Consortium for Performance Improvement (PCPI) .....	102	14
4. Agency for Healthcare Research and Quality (AHRQ) .....	56	8
5. Resolution Health, Inc. ....	24	3
6. The Joint Commission .....	24	3
7. ActiveHealth Management .....	23	3

#### Specific Measure Endorsement Accomplishments

In 2012, NQF completed 16 measure endorsement projects—reviewing 430 submitted measures and endorsing 301. These endorsed measures include 81 new measures and 220 measures that NQF expert committees concluded could maintain their previous endorsement after being reviewed against NQF's criteria and compared to new evidence or competing measures. Overall, measures undergoing maintenance were endorsed at a rate of 55 percent, and new measures submitted for endorsement were endorsed at a rate of 89 percent.

Case in point: In the last year clinical projects with a large number of *process measures* had markedly lower endorsement rates for maintenance measures (e.g., perinatal care, 44 percent; pulmonary, 44 percent; and renal disease, 36 percent). Newer measurement areas that are highly valued by clinicians and patients had higher endorsement rates, including disparities measures at 75 percent and

palliative care at 64 percent. The disparities measures were primarily outcome measures, while the palliative measures were primarily process measures.

The measures endorsed by NQF in 2012 align with needs called out in the NQS and address several critical areas including patient outcomes, hospital readmissions, underserved populations, and healthcare disparities. A complete listing on measures and measurement frameworks endorsed by NQF in 2012 under contract with HHS is available in Appendix A. Highlights include the following:

Patient-reported experience measures. The healthcare community is working toward a more patient-driven system, in which individual needs and preferences are incorporated into care decisions. Measures that address patient experience, coupled with clinical measures, allow for a more comprehensive view of patient care. For example, coupling a measure that assesses whether post-surgical instructions for care were clear to the

patient and his or her caregiver with measures that assess hip surgery complication rates creates a more complete picture of a patient's experience.

In 2012, NQF endorsed several measures addressing patient experience in various care settings. For example, a measure from the American College of Surgeons evaluates patient satisfaction during hospitalization for surgical procedures. A measure from the Agency for Healthcare Research and Quality focuses on effective provider communication with patients regarding disease management, medication adherence, and test results. The American Medical Association developed seven measures that were endorsed; these measures address concerns such as individual health literacy, availability of language services, and patient engagement with providers in clinician offices and acute care facilities. Finally, measures from the Center for Gerontology and Health Care Research and the *PROMISE* Center evaluate how bereaved family members

perceive the quality of care provided to loved ones in hospices, nursing home facilities, and hospitals.

NQF also convened two expert workshops to explore how patient-reported outcomes (PROs) can be effectively used in performance measurement. Defined as a patient's health status as reported by the patient, PROs are seen as the next step forward in building a patient-centered healthcare system. In the surgical example, a PRO might be information gleaned from a patient about when she could resume basic activities of daily living, start exercising, or return to work. The NQF portfolio already contains some patient-reported outcome measures. For example, patient reports are the basis of an NQF-endorsed measure of depression remission six months after treatment developed by Minnesota Community Measurement. Experiences by community coalitions, physician practices, and others implementing PROs helped inform NQF expert committees over the past year as they figured out how to overcome data, reporting, and methodological barriers to developing and using PRO-based performance measures.

Readmissions measures. About one in five Medicare beneficiaries who leaves a hospital is readmitted within 30 days. Such unplanned readmissions—many of which are potentially preventable—take a significant toll on patients and their families, often resulting in prolonged illness or pain, emotional distress, and days of lost work. These readmissions also cost Medicare about \$15 billion annually.<sup>12</sup> Although Medicare beneficiaries are more likely to be rehospitalized, the private sector also spends billions of dollars each year on patients who have an unplanned readmission to the hospital within a month of an initial stay.

NQF endorsed two hospital-wide, all-cause readmission measures and three condition-specific readmission measures that can help the healthcare community better understand and appropriately reduce hospital readmission rates. These measures align with major safety and affordability issues. However, as performance measures are increasingly used in pay-for-performance programs, concerns about the potential for unintended consequences, such as a negative impact on providers that care for vulnerable populations, have increased. These issues were prominent considerations during the 2012 endorsement deliberations over the hospital-wide, all-cause readmission measure (NQF measure #1789), which was ultimately endorsed. To address multiple

stakeholders' needs and concerns about the newly endorsed readmissions measures, the NQF Board of Directors issued guidance regarding the use of hospital-wide measures as it ratified the measure:

Multiple factors affect readmission rates and other measures including the complexity of the medical condition and associated therapies; effectiveness of inpatient treatment and care transitions; patient understanding of and adherence to treatment plans; patient health literacy and language barriers; and the availability and quality of post-acute and community-based services, particularly for patients with low incomes. Readmission measurement should reinforce national efforts to focus all stakeholders' attention and collaboration on this important issue.

In response to continued concerns about the use of the new hospital-wide, all-cause readmission measure (#1789), NQF proposed a series of steps to take place after endorsement of that particular measure, including monitoring implementation; employing an expert multi-stakeholder group to review "dry run" data provided by CMS regarding measure #1789; evaluating new readmission measures for new conditions; and establishing ongoing monitoring approaches that ensure that more systematic feedback from measure users is integrated into endorsement deliberations. NQF also reviewed updates to the readmission measures to remove planned readmissions from the condition-specific measures that are generally not considered signals of quality, and is continuing efforts to harmonize hospital and health plan all-cause readmission measures.

Patient safety measures. Americans are exposed to more preventable medical errors than patients in other industrialized nations, costing the United States close to \$29 billion per year in additional healthcare expenses, lost worker productivity, and disability.<sup>13</sup> These costs are passed on in a number of ways, including higher insurance premiums and taxes and lost wages. Proactively addressing medical errors and unsafe care will help to protect patients from harm, lead to more effective and equitable care, and appropriately reduce costs.

NQF endorsed 32 patient safety measures in 2012, focusing on complications such as healthcare-associated infections, falls, medication safety, and pressure ulcers. These measures closely align with goals of the Partnership for Patients to make care safer.

Resource use measures. Healthcare expenditures in the United States are unmatched by any other country. This spending, however, has not resulted in better health for Americans. In general, the United States lags behind other countries in terms of mortality, patient satisfaction, access to care, or quality of care within the healthcare system.<sup>14 15 16</sup> Patients, insurers, state and regional leaders, federal policymakers, employers, and providers are all attuned to affordability and increasingly focused on how we can measure and reduce healthcare expenditures without harming patients.

NQF endorsed its first set of resource use measures—designed to understand how healthcare resources are being used—in January 2012, and it endorsed an additional set in April 2012. These measures will offer a more complete picture of what drives healthcare costs from several perspectives. For example, one endorsed measure evaluates a primary care provider's risk-adjusted frequency and intensity of all services used to manage patients—including inpatient/outpatient, pharmacy, laboratory, radiology, and behavioral health services—using standardized prices. Another measure evaluates a primary care provider's risk-adjusted cost effectiveness at managing his patient population using actual prices paid by health plans. Similar measures also evaluate total resources used by individual patients with specific conditions, such as asthma and chronic obstructive pulmonary disease, over the course of a measurement year. And other measures evaluate total costs over an episode of care, such as costs associated with hip/knee replacement, from diagnosis to treatment to rehabilitation. Used in concert with quality measures, these resource use measures will enable stakeholders to identify opportunities for creating a higher value healthcare system.

Harmonized behavioral health measures. In 2012, NQF endorsed 10 measures related to mental health and substance abuse, including measures of treatment for individuals experiencing alcohol or drug dependent episodes; diabetes and cardiovascular health screening for people with schizophrenia or bipolar disorder; and post-care follow-up rates for hospitalized individuals with mental illness. As a part of this process, NQF also brought together CMS and NCQA to harmonize two related measures into one measure addressing antipsychotic medication adherence in patients with schizophrenia.

A multiple chronic conditions measurement framework. People with

multiple chronic conditions (MCCs) now comprise more than 25 percent of the U.S. population<sup>17 18</sup> and this number is expected to grow. This population is more likely to see multiple clinicians, take five or more medications, and receive care that is fragmented, incomplete, inefficient, and ineffective.<sup>19 20 21 22 23</sup> They are at significantly higher risk of adverse outcomes and complications.

Despite the growing prevalence of people with MCCs, existing quality measures typically do not address issues associated with the care for individuals with MCCs, largely because of data sharing challenges and because measures are typically limited to addressing a singular disease and/or specific setting. As a result, NQF endorsed a measurement framework that establishes a shared vision for effectively measuring the quality of care for individuals with MCCs. Measure developers can use this framework to more quickly create measures for this population, filling a current measurement gap.

**Healthcare disparities measures.** Research from the Institute of Medicine shows that racial and ethnic minorities often receive lower quality care than their white counterparts, even after controlling for factors such as insurance coverage, socioeconomic status, and comorbidities.<sup>24</sup> Such disparities are exacerbated by additional factors, including that racial and ethnic minorities have poorer health status in general, face more barriers to care, and are more likely to have poor health literacy.

With funding from the Robert Wood Johnson Foundation, NQF established a more detailed picture of how to approach measurement of healthcare disparities across settings and populations, beginning with a commissioned paper outlining methodological concerns. To ensure that disparities in care can be addressed most effectively, NQF developed an approach to identify measures that are more sensitive to disparities and, as such, should be stratified. From there, NQF endorsed 12 performance measures that focused on patient-provider communication, cultural competence, and language services, among other issues. Now that these measures are endorsed, HHS has more opportunity to include these kinds of measures, which address a key NQS measurement priority, in federal programs.

#### Streamlining Measure Information

Various healthcare entities gather, store, and need to access information about performance measures. Over the

years, different measure information systems have been built, each with differing purposes, structure, and content. This diversity of places and approaches to storing such information confounds the ability to find and coordinate pieces of information about a given measure, such as a specific version, unique identifying number or name, specifications, purpose and context, and benchmarking results.

HHS asked NQF to use its role as a neutral convener to work with a variety of public- and private-sector organizations to conduct a “Registry Needs Assessment.” The assessment was geared toward understanding how various stakeholders currently approach gathering and storing performance measure information; assessing the desirability of a different approach including but not limited to a single “measure registry” system; and identifying the barriers to achieving more aligned and definitive ways to store and access consistent and comprehensive information about measures. The findings included recommendations for first steps such as developing shared definitions of measure “metadata” and versioning standards to enable alignment of measure information.

#### The Global to the Granular: NQF’s Role in Accelerating the Adoption of eMeasures

*Under section 1890(b)(4) of the Social Security Act, the entity was tasked with promoting the development and use of electronic health records that contain the functionality for automated collection, aggregation, and transmission of performance measurement information.*

Currently, healthcare data largely live within system silos and on paper rather than in electronic form, which makes it nearly impossible for data to follow patients through various settings in which they receive care. Healthcare is safer and better coordinated when electronic health records (EHRs) and other clinical information technology systems reliably capture and share data across providers and patients to facilitate care—and as a byproduct of the clinical process—generate performance measurement information. Wide adoption of this kind of electronic infrastructure will spur implementation of the NQS, but has been hampered by a variety of issues.

NQF’s health IT work in 2012 focused on pulling together disparate organizations that play a role in moving quality from a paper-based world to one facilitated by technology. The faster we reach consensus on approaches to this

new world, the faster we may achieve the goal of a fully empowered and connected electronic information system designed with the patient in mind.

At the global level, NQF launched a series of activities designed to promote shared understanding among those involved in advancing electronic measurement and data infrastructure. It convened the eMeasure Learning Collaborative, a new environment for promoting best practices related to development and implementation of measures applied to electronic data sources (i.e., eMeasures). eMeasures are an innovation in advancing quality measurement, but significant barriers hamper their wider scale creation, adoption, and use. Through two in-person meetings and other virtual convenings, NQF brought together hundreds of stakeholders including government representatives, EHR vendors, measure developers, clinicians, and hospitals—creating a unique forum for these parties to work together on new eMeasurement approaches.

Specific eMeasure best practices emerged from this Learning Collaborative, particularly in three areas: Organizational leadership, data representation and clinical workflow, and learning health systems. For example, regarding data representation, all participants identified the need for measure developers and other stakeholders to communicate earlier in the eMeasurement process, particularly when measure developers are selecting data and representing data in eMeasure logic. For this best practice to become a reality, a national structure and process must exist to enable this level of dialogue. With respect to organizational leadership, participants suggested that provider organizations create inter-professional, physician-led teams focused on an integrated approach to eMeasure adoption, including data capture, reporting, workflow, clinical decision support, and evidence-based practice.

Several of NQF’s 2012 projects sought to facilitate a unified understanding of terms and measurement approaches used in the health IT field, so that measure developers and implementers, health IT vendors, standards organizations, and other users of eMeasures and tools work with a similar lexicon. For example, NQF launched the Health IT Knowledge Base, providing answers to some of the most common technical questions about NQF’s related initiatives. Since August 2012, NQF added more than 70 new entries to the frequently asked questions section, stemming from its interactions with

eMeasure users and developers. NQF also added a glossary with more than 150 terms and definitions. As a complement to the Knowledge Base, NQF provided opportunities for stakeholders to learn about best practices in eMeasurement through a series of NQF-hosted health IT webinars that reached more than 1,400 people during the past 12 months.

As quality measurement shifts to an electronic platform, additional clarity is needed regarding the testing that assures that eMeasures can be used for a range of accountability applications, which require both precision and reliable and valid results. NQF worked with CMS and the Office of the National Coordinator for Health Information Technology (ONC) to ensure that the data capture for eMeasures is feasible without impeding clinical workflow. NQF's health IT initiatives in 2012 scaled down to the granular level as well, to help standardize the efforts of the creators and users of eMeasures. Developed by NQF, the Quality Data Model (QDM) is an "information model" that defines concepts used in quality measures and clinical care in a way that allows the information to be collected automatically from data already stored in an EHR.

An example illustrates how the QDM can simplify and standardize the electronic collection and reporting of quality measures. If a physician's office wants to use its EHR to report on a measure that assesses the percentage of patients with a diagnosis of coronary

artery disease (CAD) who were prescribed a lipid-lowering therapy, the EHR must first identify the patients with CAD within the physician's practice and then determine whether the patients had the therapy. If the physician's performance is going to be compared to her peers, then her EHR must define these elements in exactly the same way as every other EHR. The QDM supports this type of query regardless of the type of EHR by defining the necessary standard data elements (e.g., active diagnosis, active medication administered/ordered/dispensed) and the type of coding that the EHR may use to express the result (e.g., ICD-9 code for diagnosis; RxNorm for medication, etc.). When all measure specifications are written in a common way, EHR vendors can more easily ensure that their EHRs can support quality measurement, and the validity of electronic-based reporting programs will likely increase. NQF released an updated version of the QDM in December 2012, which focused on simplifying and standardizing QDM measure logic to support implementation of the federal Meaningful Use regulations. NQF also regularly receives ongoing feedback and insights into best practices from a User Group of measure developers, physicians, hospitals, and EHR vendors who are currently actively involved in eMeasure use.

NQF's work in standardizing eMeasurement extends to measure development. NQF partnered with a

software developer to develop the Measure Authoring Tool (MAT), which is a publicly available, free, web-based tool designed to allow measure developers to create eMeasures using the aforementioned QDM, without needing to write programming code. At the end of 2012, NQF prepared to transition the day-to-day operation of the MAT to HHS, giving HHS the opportunity to better position the MAT and eMeasures in federal programs using EHR-based performance measurement, and to support the MAT's evolution.

Also in 2012, NQF completed the *Critical Paths for Creating Data Platforms* project. This effort helped assess the readiness of electronic data to support innovative measurement concepts and recommended steps to address data and infrastructure gaps and barriers in two high-priority domains: care coordination and patient safety. The care coordination report focused on transitions of care and communication of the patient plan of care. The patient safety report focused on effective use of infusion devices (e.g., giving medication through an IV) in acute care settings. The ability to capture data across settings is fundamental to gauging, for example, the degree of care coordination in a healthcare system. The final reports from these projects delineated specific steps that the government and private sector can take to enable electronic measurement in these areas.

#### DELIVERABLES ASSOCIATED WITH THESE ACTIVITIES

Description	Output	Status (as of 1/7/2013)	Notes/Scheduled or actual completion date
Surgery measures and maintenance review.	Two-phase project to endorse new surgery measures and conduct maintenance on existing NQF-endorsed measures.	Completed .....	Phase 1: 18 measures endorsed in December 2011. NQF Board endorsed 24 measures in Phase 2 in January 2012. Phase 2 addendum endorsed 9 measures in May 2012. 51 endorsed measures total, 42 maintenance.
Efficiency and resource-use measures.	Endorsed measures of imaging efficiency; white paper drafted; endorsed measures of healthcare efficiency.	Completed .....	Imaging Efficiency (Complete) —6 imaging efficiency measures endorsed in February 2011. —1 imaging efficiency measure was recommended to be combined with an existing NQF measure and was endorsed in April 2011. Efficiency—Resource Use (In Progress). Cycle 1: 4 measures endorsed in January 2012. Cycle 2: 4 measures endorsed in April 2012. —8 total measures endorsed, zero maintenance.
Cancer measures and maintenance review.	Project to endorse new cancer measures and conduct maintenance on existing NQF-endorsed measures.	Completed .....	Phase 1: 22 measures endorsed October 2012, 18 maintenance. Phase 2: 16 measures endorsed in October 2012, 10 maintenance

## DELIVERABLES ASSOCIATED WITH THESE ACTIVITIES—Continued

Description	Output	Status (as of 1/7/2013)	Notes/Scheduled or actual completion date
Perinatal measures and maintenance review.	Project to endorse new perinatal measures and conduct maintenance on existing NQF-endorsed measures.	Completed .....	14 perinatal measures endorsed April 2012, 12 maintenance.
Renal measures and maintenance review.	Project to endorse new renal measures and conduct maintenance on existing NQF-endorsed measures.	Completed .....	12 renal measures endorsed April 2012, nine maintenance.
Pulmonary/critical-care measures and maintenance review.	Project to endorse new pulmonary/critical-care measures, and conduct maintenance on existing NQF-endorsed measures.	In progress .....	19 pulmonary/critical-care measures endorsed July 2012, 16 maintenance. One additional measure endorsed in January 2013, with two final measures still under review.
Palliative and end-of-life care.	Project to endorse new palliative and end-of-life care measures and conduct maintenance on existing NQF-endorsed measures.	Completed .....	14 palliative and end-of-life care measures endorsed February 2012, 2 maintenance.
Care-coordination measures and maintenance review.	Set of endorsed care-coordination measures	Completed .....	12 care coordination measures endorsed August 2012, 12 maintenance.
Population Health Phase 1: Prevention measures and maintenance measures review.	Set of endorsed measures for preventative services.	Completed .....	19 population health measures endorsed May 2012, 17 maintenance.
Population health Phase 2: Population health measures.	Commissioned paper addressing population health measurement issues and set of endorsed population health measures, plus set of endorsed measures.	Completed .....	Five measures also endorsed in October 2012, 3 maintenance.
Behavioral health measures and maintenance review.	Set of endorsed measures for behavioral health.	Phase 1 completed, phase 2 slated for 2013.	Phase 1 endorsed 10 measures in October 2012, 4 maintenance.
All-cause readmissions (expedited Consensus Development Process [CDP] review).	Set of endorsed all-cause readmission measures.	Completed .....	2 all-cause readmissions measures endorsed June 2012, zero maintenance.
<i>Multiple Chronic Conditions Measurement Framework</i> report analyzing measures being used to gauge quality of care for people with multiple chronic conditions.	Work plan completed; interim report available for public comment.	Completed .....	May 2012.
Patient-reported outcomes (PROs) workshops addressing prerequisites for endorsed PRO measures.	Two workshops discussing commissioned papers addressing methodological prerequisites for NQF consideration of PRO measures for endorsement.	Completed .....	Final report completed December 2012.
Oral health .....	Report that catalogs oral health measures, measure concepts, priorities and gaps in measurement.	Completed .....	July 2012.
Rapid-cycle CDP improvement (measure-endorsement process).	Summary of process improvement approach, events, and metrics used to enhance the quality and efficiency of CDP process.	Completed .....	May 2012.
GI/GU Two-Stage CDP	Proposed two-stage pilot project designed to provide early guidance to measure developers on whether a measure concept meets NQF's criterion for importance to measure and report before they invest time and resources in specifying and testing a measure.	Stage 1 completed .....	12 measure concepts approved in December 2012.
Patient-safety-complications measures and maintenance review (Phase 1).	Set of endorsed measures on complications-related areas.	Completed .....	14 measures endorsed June 2012, 14 maintenance. 2 additional measures endorsed August 2012, 2 maintenance. 16 measures total, 16 maintenance.
Infectious disease measures and maintenance review.	Set of endorsed infectious disease measures	In progress .....	14 measures endorsed January 2013, 10 maintenance. Two measures still under review.

## DELIVERABLES ASSOCIATED WITH THESE ACTIVITIES—Continued

Description	Output	Status (as of 1/7/2013)	Notes/Scheduled or actual completion date
Regionalized Emergency Medical Care Services measure topic prioritization.	Provide guidance for measure development to ASPR's prioritized areas of (1) ED crowding, including a specific focus on boarding and diversion, (2) emergency preparedness, and (3) surge capacity.	Completed .....	
Registry Needs Assessment.	Hosted a public workshop that discussed measure information needs, requirements, and potential approaches to measure information management, as well as 2 webinars—focused on measure information management systems and a discussion on major findings of the workshop, respectively. Final report summarized major findings and included public feedback.	Completed .....	
Common formats for patient safety data.	Responsible—on behalf of AHRQ—for coordinating a process to obtain comments from stakeholders about the Common Formats authorized by the Patient Safety and Quality Improvement Act of 2005.	Completed .....	
QDM maintenance .....	Updated the QDM to incorporate additional types of measurement data needed to support emerging measures. The QDM June 2012 Update was released in summer for public comment. The QDM December 2012 was released in December based on feedback from the 2014 Clinical Quality Measure (CQM) development cycle for Meaningful Use Stage 2.	Updates to QDM are ongoing with input from NQF members, the QDM User Group and other interested stakeholders..	Each new version of the QDM will be published as needed. NQF will post a draft of modifications for each version.
MAT .....	Non-proprietary, web-based tool that allows performance-measure developers to specify, submit, and maintain electronic measures in a more streamlined, efficient, and highly structured way.	Completed .....	CMS assumed day-to-day responsibilities of the MAT as of January 2013.
Refinement of the eMeasure Process and Technical Assistance.	Provided education and outreach to both HHS and its contractors, and to the users of QDM, eMeasures, and the Measure Authoring Tool: measure developers, EHR vendors, and providers implementing measures. This education and outreach included both interactive teaching through webinars and live presentations, as well as development of technical information posted on NQF's Web site. Technical support was also provided to HHS/CMS/ONC as needed.	Ongoing .....	Launched and maintained the Health IT Knowledge Base which includes frequently asked questions (FAQs) from webinars, technical assistance log, user feedback, etc., a glossary of terms and links to Health IT reports. Updated and maintained the Measure Authoring Tool (MAT) User Guide. Provided technical assistance to HHS/ONC/CMS eMeasure contractors focusing on topics such as QDM and eMeasure logic in preparation for the release of MU2. Participated in eMeasure support calls and meeting as requested by ONC and CMS. Completed 6 public webinars with over 1850 total attendees, focusing on the Measure Authoring Tool (MAT), Quality Data Model (QDM) and eMeasures.
Commissioned paper on data sources and readiness of HIT systems to support care coordination.	Final report and commissioned paper .....	Completed .....	April 2012.
Critical Paths .....	Examine new measurement areas (e.g. care plans) to understand the feasibility of measuring such areas in an electronic environment.	Completed .....	Patient Safety and Care Coordination final reports completed in October and November 2012.
eMeasure Learning Collaborative.	Examining issues related to implementation of eMeasures with a multi-stakeholder group in order to define best practices and recommendations to the Office of the National Coordinator's Federal Advisory Committees.	Completed .....	Final report completed in December 2012.
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.	In progress .....	Draft guidance report will be finalized and released for public comment. Slated for completed by 4/5/13.

## DELIVERABLES ASSOCIATED WITH THESE ACTIVITIES—Continued

Description	Output	Status (as of 1/7/2013)	Notes/Scheduled or actual completion date
Composite evaluation guidance.	Reassess NQF's existing guidance for evaluating composites, with particular consideration of recent changes in composite measure development and related methodology.	In progress .....	Final report slated for completed by 4/5/13.

#### 4. Aligning Measure Use To Enhance Value

Under section 1890(b)(5)(A)(i) of the Social Security Act, the entity is required to provide a description of its implementation of quality and efficiency measurement initiatives under the Social Security Act and the coordination of those initiatives with those implemented by other payers.

Under section 1890A of the Social Security 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 federal programs as specified under section 1890(b)(7)(B) of the Social Security Act. The list of quality and efficiency measures HHS is considering for selection will be publicly published no later than December 1 of each year. No later than February 1 of each year, NQF will report the input of the multi-stakeholder groups which will be considered by HHS in the selection of quality and efficiency measures for use in federal programs as specified under section 1890(b)(7)(B) of the Social Security Act.

Alignment with respect to use of the same performance measures is a critical strategy for accelerating improvement, reducing wasteful reporting burden, and enhancing transparency in healthcare. The NQF-convened Measure Applications Partnership (MAP), launched in the spring of 2011 as mandated by the Patient Protection and Affordable Care Act (Pub. L. 111–148, section 3014), is a key facilitator of measure alignment across federal programs and between the public and private sectors. The input that the MAP provides to HHS for purposes of the pre-rulemaking process and national priorities under the National Quality Strategy results from multiple stakeholders composed of representatives from more than 60 major private-sector stakeholder organizations, 10 federal agencies, and 40 individual technical experts MAP's input enhances HHS's ability to coordinate its quality and efficiency measurement initiatives

with those initiatives implemented by other payers.

More specifically, MAP provides a forum for annual multi-stakeholder input into which performance measures are used in federal public reporting and pay-for-performance programs in advance of related regulations being issued. This approach augments traditional rulemaking, allowing the opportunity for substantive dialogue with HHS before rules are issued, a chance for alignment across programs with respect to use of measures, and consideration of longer term implications. MAP also provides a unique forum for public- and private-sector leaders to develop and then broadly vet a future-focused performance measurement strategy (outlined in the MAP strategic plan below), as well as the shorter term recommendations for that strategy on an annual basis in pre-rulemaking reports. MAP strives to offer recommendations that are cross-cutting and coordinated across: settings of care; federal, state, and private programs; levels of measurement analysis; payer type; and points in time.

Published on February 1, 2012, MAP's first pre-rulemaking report offered recommendations related to 17 federal programs.<sup>25</sup> This report:

- Recommended that 40 percent of the measures that CMS proposed at the end of 2011 move into federal programs targeting clinicians, hospitals, and post-acute care/long-term care (PAC/LTC) settings via rules issued in 2012, with another 15 percent targeted for future consideration after further development, testing, and feasibility issues are worked out. MAP did not support inclusion of the remaining 45 percent primarily because many of the measures did not have enough information, specificity, testing, or proof of implementation feasibility to guide MAP measure evaluation and selection. See Appendix C for the criteria MAP used to guide measure selection.

- Expressed clear preference for both using NQF-endorsed measures and for developing more robust feedback loops. Over 90 percent of the measures that MAP supported for inclusion in the first round of pre-rulemaking input were

currently NQF-endorsed, with the remainder likely eligible for expedited review. In addition to these criteria, NQF is establishing more robust feedback loops that can help HHS, MAP, and the broader field to discern which of the endorsed measures are best suited for inclusion in future reporting and value-based purchasing programs. More specifically, in 2012 MAP analyzed what internal and external sources exist to obtain feedback from end users and informally engaged MAP members to understand how they would prioritize varying types of feedback information.<sup>26</sup>

- Considered how to further align measures across public programs and with the private sector with the goal of more targeted, inter-related sets of measures that are reported by different kinds of providers, in different settings, and across time.

- Laid out guiding principles for a three- to five-year measurement strategy where priority is placed on: (1) Measures that drive the system toward meeting the NQS; (2) measures that are person- rather than clinician-focused; and (3) measures that span settings, time, and types of clinicians. Person-centered measurement provides information about what matters to patients (e.g., “Will I be able to run after I recover from knee surgery?”) and that is specific to patient populations or care over time, (e.g., “Did I get the care and support needed to manage my diabetes so that I did not lose my vision or my mobility?”). This kind of measurement is predicated on a redesigned delivery and payment system and an HIT-enabled environment that facilitates both coordination and integration of care for a range of patients across the continuum.

Federal Medicare and Meaningful Use rules issued over the course of 2012 largely followed the MAP pre-rulemaking recommendations for inclusion or exclusion of measures in over 20 different payment and reporting programs that MAP was asked to consider. However, concordance between the HHS final rules issued in 2012 with the MAP 2012 recommendations varied depending on the program (see table below for key

programs). Over 70% concordance was observed for the majority of relevant programs. Of the two programs that had lower concordance with MAP Recommendations, there were only five measures in one program (ESRD QIP) relevant to the analysis, and there was a relatively short time period available for HHS to consider MAP's input for the other program (Meaningful Use). There were various reasons for the individual instances of discordance. Where CMS did not finalize measures that MAP supported, the most common issue was difficulty of data collection or other burden imposed by those measures. Excluded from the concordance analysis were many measures that had not yet been reviewed or endorsed by NQF at the time of MAP's evaluation, leaving MAP with insufficient information to provide a definitive "Support" or "Do Not Support" recommendation. For example, in the Medicare Physician Fee Schedule rule, CMS included a number of non-endorsed measures that address the broad array of medical specialties to engage more physicians in federal physician-level programs. Going forward NQF is poised to quickly move these measures through review for potential endorsement.

CONCORDANCE OF MAP "SUPPORT" AND "DO NOT SUPPORT" RECOMMENDATIONS WITH MEASURES INCLUDED IN SELECTED HHS PROGRAMS FROM HHS FINAL RULES ISSUED IN 2012

HHS Final Rules	Concordance of MAP Recommendations With HHS Rules Issued in 2012 (percent)
Hospital IQR .....	73
Hospital VBP .....	71
Inpatient Psych Facility ...	100
Meaningful Use .....	50
Physician Quality Reporting System (PQRS) ....	79
End-Stage Renal Disease Quality Improvement Program (ESRD QIP) .....	40

MAP Strategic Plan for Measurement. To spur progress toward a defined set of goals and priorities related to the NQS—which include improved quality and safety, more transparency, and enhanced value—MAP developed a three-year strategic plan for measurement (2012–2015). This plan was released on October 1, 2012, and is intended to inform HHS's future measure development planning, as well as shape annual rulemaking advice in

the years ahead. The plan has the following three major components:

- Define sets of measures as *families of measures* with the objective of knitting together related measures currently found in different programs, care settings, levels of analysis, and populations. This approach complements the program-specific recommendations that MAP made in its pre-rulemaking report. Individual measures are carefully selected to work together as a “family” to drive the overall system toward better performance in a given area, promote more patient-centeredness, and decrease reporting burden for providers. Families of measures are linked to a high-impact condition (e.g., diabetes) or an NQS priority (e.g., safety) and are intended to promote further measure alignment by specifying within the families more discrete core measure sets focused on hospitals, clinicians, or post-acute/long-term care. See *MAP's Families of Measures* report or for a summary of the report, see page 28.
- Engage stakeholders that develop, report, and use measures to glean feedback about the use and usefulness of measures. The idea is to create more effective two-way communication so that the experiences of end users directly inform MAP's recommendations to HHS, contribute to the thinking of the diverse stakeholders that participate directly and indirectly in MAP's activities, as well as inform the work of measure developers as they address identified measurement gaps in a more coordinated fashion.
- Develop analytic support for MAP decision making. The goal is to further enrich MAP's thinking and decision-making by integrating important data and information that are developed across NQF as a strategic byproduct of its different activities. These include input to priority setting and strategies, measurement review and endorsement, and advice on measure selection. This function would also draw upon the various outside efforts under way to glean information about measure use and impact. The analysis and integration of internal and external data will inform and likely refine MAP's overall selection criteria, as well as its recommendations to HHS in future pre-rulemaking reports. In addition, an independent third-party evaluation is planned to determine whether MAP is meeting its overall objectives.

The MAP pre-rulemaking recommendations and strategic plan largely reflect the current reality of our siloed healthcare payment and delivery systems, but anticipate a future system with shared accountability for patient

welfare, community health, and stewardship of scarce resources.

Families of Measures

MAP selected safety, care coordination, cardiovascular conditions, and diabetes as its first focus areas for identification of families of measures—all areas called out in the NQS and/or leading causes of mortality. MAP's first families of measures report was published on October 1, 2012.

MAP reviewed 676 measures across these 4 topics, using criteria laid out in the report as a guide to inform selection. Of these measures, MAP recommended 55 safety, 60 care coordination, 37 cardiovascular, and 13 diabetes measures for inclusion in 4 distinct families of measures. MAP further defined more discrete core measures, which include available measures, and gaps specific to a care setting (e.g. hospitals, post-acute care/long-term care), level of analysis (e.g. individual clinicians), or population drawn from each family of measures and made program-specific recommendations in its 2013 pre-rulemaking report. MAP anticipates identifying families of measures for patient and family engagement, population health, affordability/cost, and mental health in 2013, pending funding decisions.

MAP defined families of measures with the intent that their implementation would lead to performance improvement and further cohesion and synergy of care in a targeted area. Measures in a given family bridge healthcare settings, types of providers, and time and are interconnected in the way patients would ideally like to experience care. Families of measures also include identifying measure gaps, which strongly signal to developers where new measures are needed, and can help facilitate prioritization of funding for measure development.

For example, the safety family of measures contains 9 topic areas and 22 subtopic areas. The topic areas include but are not limited to reducing healthcare-acquired infections and obstetrical adverse events and increasing procedural safety. Examples of specific gaps in the safety family of measures include post-discharge follow-up of infections in ambulatory settings, ventilator-associated events with special considerations for the pediatric population, and infection measures reported as rates rather than ratios, which would be more meaningful to consumers. The 55 measures selected for the safety family of measures follow themes such as creating a culture of safety, patient and caregiver

engagement, reporting meaningful safety information, and cost of care implications. These measures were selected for their ability to cross settings to simultaneously affect patients, caregivers, and purchasers and to ultimately increase safety for all patients.

#### Measure Use and Alignment

Although the advantages of measure alignment are many, few studies have systematically examined this phenomenon. A 2011 RAND study of 75 diverse organizations found that nearly all used NQF-endorsed measures, although there was considerable variability in which measures were used and for what purposes. Most used NQF-endorsed measures in quality improvement programs, followed closely by use in public reporting and then payment programs. The 2011 study also found that the organizations surveyed indicated a strong preference for NQF-endorsed measures where they exist because they are vetted, evidence-based, and known to be more credible with providers.<sup>27</sup>

In 2011 and 2012, NQF conducted initial research outside of the HHS contract to better understand which organizations are using NQF-endorsed measures and where there is alignment across sectors with respect to that use.<sup>28 29</sup> In addition, NQF is developing more systematic approaches to capturing detailed feedback from end users about the usefulness of NQF measures in driving improvements in health and healthcare.

The 2012 analysis showed that 86 percent of the 706 NQF-endorsed measures were in use, with the balance of the portfolio not in use largely consisting of measures recently endorsed (last 1–3 years) and expected to be used in the near future. Federal use of the NQF portfolio was stable at about 50 percent. Private payer use of the NQF portfolio grew from 21 percent to 35 percent during this period; state use grew from 21 percent to 23 percent.

Much of the increase in private payer use is likely attributable to better data collection by NQF, rather than increased use of NQF-endorsed measures by private payers.

The federal government, private plans, and states appear to be increasingly using the same NQF-endorsed measures. In 2012, the federal government and private payers used the same 76 measures in accountability programs, or 13 percent of the 606 NQF-endorsed measures in use. During the same period, federal and state alignment was 48 measures, or 8 percent, and private payer and state alignment was 51 measures, or 8 percent. In 2012, 25 measures were simultaneously used by the federal government, private payers, and states. When all users are taken into account (including local communities, registries and others users), about 29 percent of the NQF-endorsed portfolio was used by two or more stakeholders in 2012.

#### NQF Facilitates National, State, and Local Measure Alignment

- **Improvement Targets:** Inform the National Quality Strategy (National Priorities Partnership)
- **Measures:** Endorse and harmonize measures
- **Incentives:** Advise HHS on reporting/payment programs (Measure Applications Partnership)
- **National-Local Actions:** Develop tools to align use of measures (Quality Positioning System or QPS) and efforts of national/local organizations implementing strategies at the delivery system level (National Priorities Partnership)

#### Alignment at the Community Level

Given the number and diversity of community-based efforts, it is challenging to get a comprehensive sense of how standardized measures are being used at the local, state, or regional levels. That said, the number of regional multi-stakeholder collaboratives or alliances that are collecting, reporting, and in some cases paying on the basis

of performance measures appears to have grown over the past number of years. As of October 2012, the Robert Wood Johnson Foundation has cataloged on its Web site a compendium of nearly 260 state, local, or regional efforts to publicly report on healthcare performance across the United States.<sup>30</sup>

To better understand the public-reporting activities in a subset of these community-based groups, NQF analyzed the measure use of 16 alliances that receive funding from the Robert Wood Johnson Foundation through the Aligning Forces for Quality (AF4Q) program. This analysis showed that these alliances are using 171 NQF-endorsed measures in their reports to the public, and it provided insight to NQF as to the kinds of tools and capabilities communities are seeking as they evolve measurement efforts on the local level.

Supported by the Robert Wood Johnson Foundation, NQF has developed tools outside of the HHS contracts to support local, state, and regional leaders interested in using NQF-endorsed measures, particularly those measures also used in federal programs. For example, NQF's publicly available Quality Positioning System (QPS) enables users to search a database of NQF-endorsed measures and to build a portfolio or custom list of NQF-endorsed measures that they use or in which they are interested. A QPS user can then compare that portfolio against measures used in federal and other national programs, aligning measurement efforts where it makes sense to do so. A QPS user also can share its portfolio with others by self-publishing it within QPS on the NQF Web site. This feature and the ability to discern which NQF-endorsed measures are being used in federal programs can provide a rich information base to help communities, states, and the federal government synchronize their approaches to measuring and improving quality.

#### DELIVERABLES ASSOCIATED WITH THESE ACTIVITIES

Description	Output	Status (as of 1/7/2013)	Notes/scheduled or actual completion date
Measures for use in quality reporting programs under Medicare.	<i>Measure Applications Partnership Pre-Rulemaking Report: Input on Measures Under Consideration by HHS for 2012 Rule-making.</i>	Completed .....	February 2012.
MAP report recommending measures that address the quality issues identified for dual-eligible beneficiaries.	Final report including potential new performance measures to fill gaps in measurement for dual-eligible beneficiaries.	Completed .....	June 1, 2012.

## DELIVERABLES ASSOCIATED WITH THESE ACTIVITIES—Continued

Description	Output	Status (as of 1/7/2013)	Notes/scheduled or actual completion date
MAP report recommending measures for use in quality reporting for Prospective Payment System-exempt cancer hospitals.	Final report including MAP Coordinating Committee recommendations.	Completed .....	June 1, 2012.
MAP report recommending measures for use in quality reporting for hospice care.	Final report including MAP Coordinating Committee recommendations.	Completed .....	June 1, 2012.
MAP Strategic Plan 2012–2015 ....	Final report .....	Completed .....	October 2012.
MAP report detailing families of measures for safety, care coordination, cardiovascular conditions, and diabetes.	Final report .....	Completed .....	October 2012.

### 5. Identifying Measure Gaps and Developing Strategies for Filling Them

*Under section 1890(b)(5)(iv) of the Social Security 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 Social Security Act, NQF 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 National Quality Strategy and where targeted research may address such gaps.*

Performance measurement science has made important strides in the last decade, including addressing new settings and types of providers, becoming more responsive to the needs and preferences of varied stakeholders, evolving with new technology, and increasingly addressing hard-to-measure concepts such as care coordination and appropriateness. Despite these gains, measurement gaps persist, either because the measures have not yet been developed, or the measures exist but are not being used.

To identify measurement gaps, NQF conducted an extensive analysis in 2012 of its current measures portfolio against both the National Quality Strategy priority areas and high-impact conditions (both Medicare and child health) as required by statute (Social Security Act, section 1890(b)(5)(iv)), analyzed stakeholder feedback, and considered which NQF-endorsed measures were being used and by which sector. The gaps identified below, however, do need to be viewed in the context of rising concern about measurement overload and administrative burden. While more

measures are needed to address high-priority issues, NQF continues to remove measures that no longer meet its criteria or where performance “tops out” to ensure measurement parsimony.

#### Synthesis of Measure Gaps

Captured in the 2012 NQF Measure Gap Analysis, this report revealed that discussions of measure gaps too often remain at a high conceptual level, and that more detailed information is needed to inform next steps, whether those steps entail measure development or addressing barriers to implementation of existing measures. In addition, while there may be non-NQF endorsed measures currently in use that address high-priority gap areas, a full assessment of their applicability and appropriateness was beyond the scope of this project. Such measures should be brought forth for NQF endorsement to assess their importance, scientific reliability and validity, usability, and feasibility before an assessment of value or recommendations for use can be made. The following are high-level syntheses of the measure gaps identified through the NQF analysis, presented through the lens of the three aims of the NQS.

#### Better Care

The lion's share of current NQF-endorsed measures related to better care focused on specific conditions. Addressing the gaps identified below would provide added input directly from patients about their care and could further focus the healthcare system on the needs and preferences of patients and families, including the most vulnerable patients.

Patient-reported outcomes (PROs)—To fully assess the quality and safety of healthcare, the gap analysis emphasized the importance of patient-reported outcomes—any report of the patient's health status that comes directly from the patient, without interpretation by a

clinician or anyone else. Domains for measurement include symptoms and symptom burden, health-related quality of life including functional status, experience with care, and health-related behaviors. Especially important are PRO-based performance measures that can be aggregated accurately and reliably to the level of an accountable healthcare entity, and that span the full continuum of care.

Patient-centered care and shared decision-making—To spur the healthcare system to be more responsive to patients and families, measures are needed that assess whether patient and family treatment preferences are identified; whether their psychosocial, cultural, spiritual, or healthcare literacy needs are addressed; whether they are actively engaged in developing a care plan; and whether their expressed preferences and goals for care are met. Measures of decision quality are critical for assessing whether patients understand evidence-based treatment options and whether they are able to make decisions based on information provided by their healthcare practitioner.

Care coordination and care transitions—Important outcome measures are needed to assess whether patients, families, and caregivers believe that the overall care coordination process—including the quality of communication, care planning, care transitions, and team-based care—satisfactorily prepared them to manage their care and return to the best possible quality of life. The timeliness of access to high-quality palliative care or hospice services, including pain and symptom management, psychosocial support, and advance care planning also is identified as a gap area in need of further attention. Measure gaps related to effective medication management and patient adherence, and adverse drug events remain.

Care for vulnerable populations—A critical gap area to be filled includes the ability to measure whether high-quality care is available to patients most in need, particularly the vulnerable elderly, individuals with multiple chronic conditions and complex care needs, critically ill patients, patients receiving end-of-life care, children with special needs, residents in long-term care settings, the homeless, and people who are dually eligible for Medicare and Medicaid.

#### Healthy People/Healthy Communities

Recognizing that the health of the American public is mostly attributable to healthy life style behaviors, environment, or social status, the following gap areas push the field beyond the traditional boundaries of the healthcare delivery system and offer the potential for dramatic gains in health for the nation.

Health and well-being—Measures within and outside of the healthcare system are needed to assess health-related quality of life and to optimize the population's well-being. Measures that assess the burden of illness experienced by patients, families, and caregivers, as well as measures of productivity also are important. Community indices that measure key factors or social determinants known to significantly influence health or drive unnecessary utilization of healthcare services are needed to develop community programs that effectively and appropriately target resources and interventions to improve population health and reduce disparities.

Preventive care—Composite measures of the highest impact age- and sex-appropriate clinical preventive services, particularly for the cardiovascular disease priority area, continue to be important measure gaps to fill. Oral health was highlighted as an important area in need of measures, specifically for the prevention of dental caries, as were coordination of long-term support services and psychosocial, behavioral health, spiritual, and cultural services. An emerging area of focus for measurement is on the extent to which care is coordinated beyond the healthcare delivery system—particularly between healthcare, public health, and community support services—and how individual organizations are held collectively accountable.

Childhood measures—Measure gaps for child and adolescent health emphasized the attainment of developmental milestones, the quality of adolescent well-care visits, prevention of accidents and injuries, and prevention of risky behaviors. There

also is a heightened need for measures of childhood obesity in addition to body mass index for more effective upstream management, given the risk for development of diabetes, cardiovascular disease, and other chronic conditions.

#### Accessible and Affordable Care

Affordability is often narrowly construed. The following identification of gaps broadens its definition so that affordability is viewed through a variety of lenses including the individual and society, for example, out-of-pocket costs to patients and families and costs to the healthcare system. Further, a commitment to ensuring access to affordable, high quality care for all necessitates judicious use of resources at the individual level.

Access to care—In addition to measures that assess insurance coverage, the analysis revealed that measure gaps indicative of access to needed care are important to address. Important considerations include the ability to obtain medications, mental health, oral health, and specialty services in a timely fashion. Measures also are needed to assess disparities in access and affordability, particularly with regard to socioeconomic status, race, and ethnicity, and for vulnerable populations.

Healthcare affordability—Many stakeholders emphasize the need for affordability indices that reflect the burden of healthcare costs on consumers and that include direct costs (e.g., out-of-pocket expenses, personal healthcare expenditures per capita) as well as indirect opportunity costs (e.g., productivity, work and school absenteeism, and the “cost of neglect” of medical and dental care). Efficiency measures are needed to benchmark providers on cost and quality as well as to quantify the impact of inefficiencies across care settings to further target quality improvement efforts. Purchasers and consumers continue to emphasize the importance of understanding pricing and improved transparency of data through standardized measurement and reporting.

Waste and overuse—Measures that assess the extent to which the healthcare system promotes the provision of medical, surgical, and diagnostic services that offer little if any value—and that may be harmful to patients—are critical to closing gaps in variation. Specific areas frequently cited as important for measurement include appropriate, patient-centered and patient-directed end-of-life care; unnecessary emergency department visits and hospital admissions and readmissions (particularly for

ambulatory-sensitive conditions); inappropriate medication use and polypharmacy; and duplication of or inappropriate services and testing, particularly imaging.

#### Availability of NQF-endorsed Measures

Although the NQF portfolio increasingly maps to the NQS, its extent varies across each of the six NQS priorities. For example, 40 percent of NQF measures that map to the NQS at the goal level address patient safety, including a wide range of measures related to healthcare-acquired conditions and hospital readmissions. Yet only 7 percent of measures that map at the goal level address patient and family engagement, with very few measures to address important areas of shared decision making, patient navigation, and patient self-management. Likewise, measures to address healthy lifestyle behaviors and community interventions to prevent cardiovascular disease upstream also warrant increased attention. Specific measures of cost remain a high-priority gap area, particularly for purchasers of healthcare.

NQF's portfolio includes more than 400 condition-specific measures, more than 250 of which address the high-impact Medicare conditions. Yet only 53 of the measures address the specific high-impact child health conditions, and 12 of the high-impact child health conditions do not have any specific endorsed measures. While the lack of measures for certain conditions may be of interest or concern, future measure development should be prioritized to focus on cross-cutting measures that apply to patients regardless of their disease process.

#### NQF Measure Portfolio in Use

The federal government remains the predominant user of NQF-endorsed measures, but a growing number of measures are in use across other public-sector programs—including state and local programs—as well as in the private sector. More promising is the emerging overlap in measure use across these sectors. Further alignment—or use of the same measures—offers the potential to significantly reduce measurement burden and to simultaneously accelerate improvement by sending consistent signals about what is important for providers to focus care improvement resources against.

Overall, 64 measures in the NQF portfolio that address specific NQS goals are in concurrent use in federal programs and two or more private programs. While the majority of these are safety-related measures, a small

number address aspects of overuse, patient experience, and preventive screenings. A nearly equal number of measures that address specific NQS goals are not in use in any of the programs analyzed—a missed opportunity, particularly for goals related to function and quality of life, hospice and palliative care, mental health, and preventive services for children. Similarly, the analysis revealed that 57 measures in the NQF portfolio that address high-impact conditions are in concurrent use in federal programs and two or more private programs, the majority of which reflect the high-impact Medicare conditions. However, 47 measures that address high-impact Medicare or child health conditions had no identified use in any of the sectors analyzed. Consideration should be given to the potential barriers that prevent these measures from being implemented in the field.

#### The Path Forward

As the field—the public and private stakeholders committed to building a solid foundation for quality improvement—strives to continually advance the use of standardized performance measurement, there is a strong desire to accelerate efforts to fill, rather than just identify, key measurement gaps. This will require making better use of the measures already available for key priority areas and investing wisely in measure development and endorsement activities to fill the most critical gap areas.

#### 6. Looking Forward

NQF has evolved in the dozen years it has been in existence and since it endorsed its first performance measures a decade ago. While its focus on improving quality, enhancing safety, and reducing costs by endorsing

performance measures has remained a constant, its role has expanded to include a significant emphasis on 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, and they waste precious healthcare resources and may even do harm.

Looking ahead, NQF will work together with HHS and the broader quality movement to:

- Deepen the alignment between the public and private sectors and across stakeholder groups to accelerate progress and reduce burden: This relates to measure endorsement and the work of NQF-convened partnerships and is a core, enduring value of the organization;

- Focus more on “end user” needs and engagement: NQF will enlarge its current collaborative efforts to better incorporate the perspectives and values of those at the local level and those on the sharp end of healthcare—who ultimately are integrating the needs of the delivery system with those who receive and pay for care. Starting with the preferences of the end user in mind and systematically collecting user feedback about the efficacy of measures are ways to engage communities, providers, and other users in the collective goal of improving healthcare value.

- Take a more proactive approach to coordinate the measures pipeline and remake measure review and endorsement so it is more nimble: NQF will not only identify measure gaps but engage developers in filling them so that their efforts are streamlined and avoid duplication. Simultaneously, NQF plans

to set up standing committees so that measures can more readily be reviewed.

- Review and endorse “next generation” quality measures that put the patient first: A key priority is endorsing next-generation measures that are more meaningful to patients and families and that help track patient outcomes across healthcare settings. NQF is committed to moving our nation’s healthcare system to be ever more responsive to patient preferences and values and believes that richer information can play a crucial role;

- Increase the focus on measures that can enhance value: Affordability and its relationship to quality will become a focal point and better integrated into NQF’s future work, starting with defining the many aspects of affordability and prioritizing near and longer term areas of focus going forward. Given the embryonic stage of affordability measures overall, there is much upfront conceptual work to be done that will rely on getting broad-based and varied input in order to gain a deeper appreciation for how to further measurement in the areas of costs, appropriateness, and resource use and how to pair such measures with quality metrics in order to assess value.

NQF is embarking on an exciting agenda that emphasizes enhanced alignment and collaboration so as to better integrate end user needs—all with an eye on evolving our measure portfolio so that it drives the healthcare system toward both delivering higher value healthcare and incorporating the needs and preferences of patients, payers, and purchasers. The goals are clear, and the collective work of the 800 plus individuals who collaborate with NQF are focused on efforts to benefit the U.S. healthcare system and the patients it serves.

#### Appendix A: 2012 Accomplishments

JANUARY 14, 2012 TO JANUARY 7, 2013

Description	Output	Status (as of 1/7/2013)	Notes/scheduled or actual completion date
<b>I. Facilitating Coordinated Action to Achieve the National Quality Strategy Goals</b>			
NPP support for Partnership for Patients’ HHS initiative focused on patient safety.	4 quarterly convenings for 100+ people each, and 3 webinars reaching 550+.	Completed .....	Content of meetings and webinars were captured in individual summaries.
NPP support for Partnership for Patients’ HHS initiative focused on patient safety.	2 public web meetings reaching 500+ and 2 public conference calls, reaching 100+.	Completed .....	Content of meetings and calls were captured in individual summaries.
NPP support for Partnership for Patients’ HHS initiative focused on patient safety.	Formed two action teams around Readmissions and Maternal Health. Early development of additional action teams around Million Hearts/Cardiovascular Health and Patient & Family Engagement.	Completed.	

## JANUARY 14, 2012 TO JANUARY 7, 2013—Continued

Description	Output	Status (as of 1/7/2013)	Notes/scheduled or actual completion date
NPP support for Partnership for Patients' HHS initiative focused on patient safety.	Created the Action Registry, a virtual space for organizations to share their quality improvement activities—or "actions"—around the six priority areas of the National Quality Strategy and make connections with each other.	Completed.	
NPP support for Partnership for Patients' HHS initiative focused on patient safety.	Quarterly reports for HHS .....	Completed.	

## II. Supporting National Healthcare Measurement Needs

Surgery measures and maintenance review.	Two-phase project to endorse new surgery measures and conduct maintenance on existing NQF-endorsed measures.	Completed .....	Phase 1: 18 measures endorsed in December 2011. NQF Board endorsed 24 measures in Phase 2 in January 2012. Phase 2 addendum endorsed 9 measures in May 2012. 51 endorsed measures total, 42 maintenance.
Efficiency and resource-use measures.	Endorsed measures of imaging efficiency; white paper drafted; endorsed measures of healthcare efficiency.	Completed .....	Imaging Efficiency (Complete) —6 imaging efficiency measures endorsed in February 2011. —1 imaging efficiency measure was recommended to be combined with an existing NQF measure and was endorsed in April 2011. Efficiency—Resource Use (Complete). Cycle 1: 4 measures endorsed in January 2012. Cycle 2: 4 measures endorsed in April 2012. —8 total measures endorsed, zero maintenance.
Cancer measures and maintenance review.	Project to endorse new cancer measures and conduct maintenance on existing NQF-endorsed measures.	Completed .....	Phase 1: 22 measures endorsed October 2012, 18 maintenance. Phase 2: 16 measures endorsed in October 2012, 10 maintenance.
Perinatal measures and maintenance review.	Project to endorse new perinatal measures and conduct maintenance on existing NQF-endorsed measures.	Completed .....	14 perinatal measures endorsed April 2012, 12 maintenance.
Renal measures and maintenance review.	Project to endorse new renal measures and conduct maintenance on existing NQF-endorsed measures.	Completed .....	12 renal measures endorsed April 2012, nine maintenance.
Pulmonary/critical-care measures and maintenance review.	Project to endorse new pulmonary/critical-care measures, and conduct maintenance on existing NQF-endorsed measures.	In progress .....	19 pulmonary/critical-care measures endorsed July 2012, 16 maintenance. One additional measure endorsed in January 2013, with two final measures still under review.
Palliative and end-of-life care.	Project to endorse new palliative and end-of-life care measures and conduct maintenance on existing NQF-endorsed measures.	Completed .....	14 palliative and end-of-life care measures endorsed February 2012, 2 maintenance.
Care coordination measures and maintenance review.	Set of endorsed care coordination measures ...	Completed .....	12 care coordination measures endorsed August 2012, 12 maintenance.
Population Health Phase 1: Prevention measures and maintenance measures review.	Set of endorsed measures for preventative services.	Completed .....	19 population health measures endorsed May 2012, 17 maintenance.
Population health Phase 2: Population health measures.	Commissioned paper addressing population health measurement issues and set of endorsed population health measures, plus set of endorsed measures.	Completed .....	Five measures also endorsed in October 2012, 3 maintenance.
Behavioral health measures and maintenance review.	Set of endorsed measures for behavioral health.	Phase I completed, phase 2 slated for 2013.	Phase 1 endorsed 10 measures in October 2012, 4 maintenance.
All-cause readmissions (expedited Consensus Development Process [CDP] review).	Set of endorsed all-cause readmission measures.	Completed .....	Two all-cause readmissions measures endorsed June 2012, zero maintenance.

## JANUARY 14, 2012 TO JANUARY 7, 2013—Continued

Description	Output	Status (as of 1/7/2013)	Notes/scheduled or actual completion date
<i>Multiple Chronic Conditions Measurement Framework</i> report analyzing measures being used to gauge quality of care for people with multiple chronic conditions.	Work plan completed; interim report available for public comment.	Completed .....	May 2012.
Patient-reported outcomes (PROs) workshops addressing prerequisites for endorsed PRO measures.	Two workshops discussing commissioned papers addressing methodological prerequisites for NQF consideration of PRO measures for endorsement.	Completed .....	Final report completed December 2012.
Oral health .....	Report that catalogs oral health measures, measure concepts, priorities and gaps in measurement.	Completed .....	July 2012.
Rapid-cycle CDP improvement (measure-endorsement process).	Summary of process improvement approach, events, and metrics used to enhance the quality and efficiency of CDP process.	Completed .....	May 2012.
GI/GU Two-Stage CDP	Proposed two-stage pilot project designed to provide early guidance to measure developers on whether a measure concept meets NQF's criterion for importance to measure and report before they invest time and resources in specifying and testing a measure.	Stage 1 completed	12 measure concepts approved in December 2012.
Patient-safety-complications measures and maintenance review (Phase 1).	Set of endorsed measures on complications-related areas.	Completed .....	14 measures endorsed June 2012, 14 maintenance. 2 additional measures endorsed August 2012. 2 maintenance. 16 measures total, 16 maintenance.
Infectious disease measures and maintenance review.	Set of endorsed infectious disease measures ..	In progress .....	14 measures endorsed January 2013, 10 maintenance. Two measures still under review.
Regionalized Emergency Medical Care Services measure topic prioritization.	Provide guidance for measure development to ASPR's prioritized areas of (1) ED crowding, including a specific focus on boarding and diversion, (2) emergency preparedness, and (3) surge capacity.	Completed.	
Registry Needs Assessment.	Hosted a public workshop that discussed measure information needs, requirements, and potential approaches to measure information management, as well as 2 webinars—focused on measure information management systems and a discussion on major findings of the workshop, respectively. Final report summarized major findings and included public feedback.	Completed.	
Common formats for patient safety data.	Responsible—on behalf of AHRQ—for coordinating a process to obtain comments from stakeholders about the Common Formats authorized by the Patient Safety and Quality Improvement Act of 2005.	Completed.	
QDM maintenance .....	Updated the QDM to incorporate additional types of measurement data needed to support emerging measures. The QDM June 2012 Update was released in summer for public comment.  The QDM December 2012 was released in December based on feedback from the 2014 Clinical Quality Measure (CQM) development cycle for Meaningful Use Stage 2.	Completed .....	Work stopped effective 1/10/13 as a result of amendments made by the American Taxpayer Relief Act.
MAT .....	Non-proprietary, web-based tool that allows performance-measure developers to specify, submit, and maintain electronic measures in a more streamlined, efficient, and highly structured way.	Completed .....	CMS assumed day-to-day responsibilities of the MAT as of January 2013.

## JANUARY 14, 2012 TO JANUARY 7, 2013—Continued

Description	Output	Status (as of 1/7/2013)	Notes/scheduled or actual completion date
Refinement of the eMeasure Process and Technical Assistance.	Provided education and outreach to both HHS and its contractors, and to the users of QDM, eMeasures, and the Measure Authoring Tool: Measure developers, EHR vendors, and providers implementing measures. This education and outreach included both interactive teaching through webinars and live presentations, as well as development of technical information posted on NQF's Web site. Technical support was also provided to HHS/CMS/ONC as needed.	Ongoing .....	Launched and maintained the Health IT Knowledge Base which includes frequently asked questions (FAQs) from webinars, technical assistance log, user feedback, etc., a glossary of terms and links to Health IT reports. Updated and maintained the Measure Authoring Tool (MAT) User Guide. Provided technical assistance to HHS/ONC/CMS eMeasure contractors focusing on topics such as QDM and eMeasure logic in preparation for the release of MU2. Participated in eMeasure support calls and meeting as requested by ONC and CMS.
Commissioned paper on data sources and readiness of HIT systems to support care coordination.	Final report and commissioned paper .....	Completed .....	April 2012.
Critical Paths .....	Examine new measurement areas (e.g., care plans) to understand the feasibility of measuring such areas in an electronic environment.	Completed .....	Patient Safety and Care Coordination final reports completed in October and November 2012.
eMeasure Learning Collaborative.	Examining issues related to implementation of eMeasures with a multi-stakeholder group in order to define best practices and recommendations to the Office of the National Coordinator's Federal Advisory Committees.	Completed .....	Final report completed in December 2012.
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.	In progress .....	Draft guidance report to be finalized and released for public comment. Slated for completion by 4/5/13.
Composite evaluation guidance.	Reassess NQF's existing guidance for evaluating composites, with particular consideration of recent changes in composite measure development and related methodology.	In progress .....	Final report slated for completion by 4/5/13.

## III. Aligning Accountability Programs to Enhance Value

Measures for use in quality reporting programs under Medicare.	<i>Measure Applications Partnership Pre-Rulemaking Report: Input on Measures Under Consideration by HHS for 2012 Rulemaking.</i>	Completed .....	Completed February 2012.
MAP report recommending measures that address the quality issues identified for dual-eligible beneficiaries.	Final report including potential new performance measures to fill gaps in measurement for dual-eligible beneficiaries.	Completed .....	June 1, 2012.
MAP report recommending measures for use in quality reporting for Prospective Payment System-exempt cancer hospitals.	Final report including MAP Coordinating Committee recommendations.	Completed .....	June 1, 2012.
MAP report recommending measures for use in quality reporting for hospice care.	Final report including MAP Coordinating Committee recommendations.	Completed .....	June 1, 2012.
MAP Strategic Plan 2012–2015.	Final report .....	Completed .....	October 2012.
MAP report detailing families of measures for safety, care coordination, cardiovascular conditions, and diabetes.	Final report .....	Completed .....	October 2012.

## JANUARY 14, 2012 TO JANUARY 7, 2013—Continued

Description	Output	Status (as of 1/7/2013)	Notes/scheduled or actual completion date
<b>IV. Identifying Measure Gaps and Developing Strategies for Filling Them</b>			
Gaps Report .....	.....	.....	Feedback received on 2/8. Revised draft due back on 3/31/13.

**Appendix B: NQF Board and Management Team***Board of Directors*

William L. Roper, MD, MPH (Chair), Dean, School of Medicine, Vice Chancellor for Medical Affairs and Chief Executive Officer, UNC Health Care System, University of North Carolina at Chapel Hill

Helen Darling, MA (Vice Chair), President, National Business Group on Health

Gerald M. Shea (Treasurer and Interim CEO), Assistant to the President for External Affairs, AFL–CIO

Lawrence M. Becker, Director, HR Strategic Partnerships, Xerox Corporation

JudyAnn Bigby, MD, Secretary, Executive Office of Health & Human Services, Commonwealth of Massachusetts

Jack Cochran, MD, FACS, Executive Director, The Permanente Federation

Maureen Corry, Executive Director, Childbirth Connection

Leonardo Cuello, Staff Attorney, National Health Law Program

Joyce Dubow, Senior Health Care Reform Director, AARP Office of the Executive Vice-President for Policy and Strategy

Robert Galvin, MD, MBA, Chief Executive Officer, Equity Healthcare, The Blackstone Group

Ardis Dee Hoven, MD, Chair, Board of Trustees, American Medical Association

Charles N. Kahn III, MPH, President, Federation of American Hospitals

Donald Kemper, Chairman and CEO, Healthwise, Inc.

William Kramer, Executive Director for National Health Policy, Pacific Business Group on Health

Harold D. Miller, President and CEO, Network for Regional Healthcare Improvement

Elizabeth Mitchell, CEO, Maine Health Management Coalition

Dolores L. Mitchell, Executive Director, Commonwealth of Massachusetts Group Insurance Commission

Mary Naylor, Ph.D., RN, FAAN, Director, New Courtland Center for Transitions & Health and Marian S. Ware Professor in Gerontology,

University of Pennsylvania School of Nursing

Debra L. Ness, President, National Partnership for Women & Families

Samuel R. Nussbaum, MD, Executive Vice President and Chief Medical Officer, WellPoint, Inc.

J. Marc Overhage, MD, Ph.D., Chief Medical Informatics Officer, Siemens Medical Solutions, Inc.

Bernard M. Rosof, MD, Chair, Board of Directors, Huntington Hospital, Chair, Physician Consortium for Performance Improvement (PCPI)

John C. Rother, JD, President and CEO, National Coalition on Health Care

Bruce Siegel, MD, MPH, President and Chief Executive Officer, National Association of Public Hospitals and Health Systems (NAPH)

Joseph R. Swedish, FACHE, President and CEO, Trinity Health

John Tooker, MD, MBA, MACP, Associate Executive Vice President, American College of Physicians

Richard J. Umbdenstock, FACHE, President and CEO, American Hospital Association

*CMS*

Patrick Conway, MD, Chief Medical Officer, Centers for Medicare & Medicaid Services

*AHRQ*

Carolyn M. Clancy, MD, Director, Agency for Healthcare Research and Quality

Designee: Nancy Wilson, MD, MPH, Senior Advisor to the Director

*HRSA*

Mary Wakefield, Ph.D., RN, Administrator, Health Resources and Services Administration

Designee: Terry Adirim, MD, Director, Office of Special Health Affairs

*CDC*

Thomas R. Frieden, MD, MPH, Director, Centers for Disease Control and Prevention

Designee: Peter A. Briss, MD, MPH, Captain, U.S. Public Health Service, Medical Director

*EX OFFICIO (NON-VOTING):*

Ann Monroe, (Chair, Consensus Standards Approval Committee),

President, Health Foundation for Western and Central New York

Paul C. Tang, MD, MS, (Chair, Health Information Technology Advisory Committee) Vice President and Chief Medical Information Officer Palo Alto Medical Foundation

*Management Team*

Gerald Shea, Interim Chief Executive Officer

Karen Adams, Vice President, National Priorities

Heidi Bossley, Vice President, Performance Measures

Helen Burstin, Senior Vice President, Performance Measures

Ann Greiner, Vice President, Government Relations

Ann Hammersmith, General Counsel

Lisa Hines, Vice President, Member Relations

Rosemary Kennedy, Vice President, Health Information Technology

Nicole Silverman, Vice President, Program Operations

Lindsey Spindle, Senior Vice President, Communications and External Affairs

Diane Stollenwerk, Vice President, Stakeholder Collaboration

Jeffrey Tomitz, Chief Financial Officer, Accounting & Finance

Thomas Valuck, Senior Vice President, Strategic Partnerships

Kyle Vickers, Chief Information Office

**Appendix C: MAP “Working” Measure Selection Criteria***1. Measures Within the Program Measure Set Are NQF-endorsed or Meet the Requirements for Expedited Review*

*Measures within the program measure set are NQF-endorsed, indicating that they have met the following criteria: important to measure and report, scientifically acceptable measure properties, usable, and feasible.*

*Measures within the program measure set that are not NQF-endorsed but meet requirements for expedited review, including measures in widespread use and/or tested, may be recommended by MAP, contingent on subsequent endorsement. These measures will be submitted for expedited review.*

*Response option: Strongly Agree/Agree/Disagree/Strongly Disagree*

Measures within the program measure set are NQF-endorsed or meet requirements for expedited review (including measures in widespread use and/or tested)

#### *Additional Implementation*

*Consideration:* Individual endorsed measures may require additional discussion and may be excluded from the program measure set if there is evidence that implementing the measure would result in undesirable unintended consequences.

### **2. Program Measure Set Adequately Addresses Each of the National Quality Strategy (NQS) priorities**

*Demonstrated by measures addressing each of the National Quality Strategy (NQS) priorities:*

Subcriterion 2.1 Safer care

Subcriterion 2.2 Effective care coordination

Subcriterion 2.3 Preventing and treating leading causes of mortality and morbidity

Subcriterion 2.4 Person- and family-centered care

Subcriterion 2.5 Supporting better health in communities

Subcriterion 2.6 Making care more affordable

*Response option for each subcriterion:* Strongly Agree/Agree/Disagree/Strongly Disagree:

NQS priority is adequately addressed in the program measure set

### **3. Program Measure Set Adequately Addresses High-impact Conditions Relevant to the Program's Intended Population(s) (e.g., Children, Adult non-Medicare, Older Adults, Dual Eligible Beneficiaries)**

*Demonstrated by the program measure set addressing Medicare High-Impact Conditions; Child Health Conditions and risks; or conditions of high prevalence, high disease burden, and high cost relevant to the program's intended population(s). (Refer to tables 1 and 2 for Medicare High-Impact Conditions and Child Health Conditions determined by the NQF Measure Prioritization Advisory Committee.)*

*Response option:* Strongly Agree/Agree/Disagree/Strongly Disagree:

Program measure set adequately addresses high-impact conditions relevant to the program.

### **4. Program Measure Set Promotes Alignment With Specific Program Attributes, as Well as Alignment Across Programs**

*Demonstrated by a program measure set that is applicable to the intended care setting(s), level(s) of analysis, and population(s) relevant to the program.*

*Response option for each subcriterion:*

Strongly Agree/Agree/Disagree/Strongly Disagree

Subcriterion 4.1 Program measure set is applicable to the program's intended care setting(s)

Subcriterion 4.2 Program measure set is applicable to the program's intended level(s) of analysis

Subcriterion 4.3 Program measure set is applicable to the program's population(s)

### **5. Program Measure Set Includes an Appropriate Mix of Measure Types**

*Demonstrated by a program measure set that includes an appropriate mix of process, outcome, experience of care, cost/resource use/appropriateness, and structural measures necessary for the specific program attributes.*

*Response option for each subcriterion:* Strongly Agree/Agree/Disagree/Strongly Disagree

Subcriterion 5.1 Outcome measures are adequately represented in the program measure set

Subcriterion 5.2 Process measures are adequately represented in the program measure set

Subcriterion 5.3 Experience of care measures are adequately represented in the program measure set (e.g. patient, family, caregiver)

Subcriterion 5.4 Cost/resource use/appropriateness measures are adequately represented in the program measure set

Subcriterion 5.5 Structural measures and measures of access are represented in the program measure set when appropriate

### **6. Program Measure Set Enables Measurement Across the Person-Centered Episode of Care<sup>1</sup>**

*Demonstrated by assessment of the person's trajectory across providers, settings, and time.*

*Response option for each subcriterion:* Strongly Agree/Agree/Disagree/Strongly Disagree

Subcriterion 6.1 Measures within the program measure set are applicable across relevant providers

Subcriterion 6.2 Measures within the program measure set are applicable across relevant settings

Subcriterion 6.3 Program measure set adequately measures patient care across time

<sup>1</sup> National Quality Forum (NQF), Measurement Framework: Evaluating Efficiency Across Patient-Focused Episodes of Care, Washington, DC: NQF; 2010.

### **7. Program Measure Set Includes Considerations for Healthcare Disparities<sup>2</sup>**

*Demonstrated by a program measure set that promotes equitable access and treatment by considering healthcare disparities. Factors include addressing race, ethnicity, socioeconomic status, language, gender, age disparities, or geographical considerations (e.g., urban vs. rural). Program measure set also can address populations at risk for healthcare disparities (e.g., people with behavioral/mental illness).*

*Response option for each subcriterion:* Strongly Agree/Agree/Disagree/Strongly Disagree

Subcriterion 7.1 Program measure set includes measures that directly assess healthcare disparities (e.g., interpreter services)

Subcriterion 7.2 Program measure set includes measures that are sensitive to disparities measurement (e.g., beta blocker treatment after a heart attack)

### **8. Program Measure Set Promotes Parsimony**

*Demonstrated by a program measure set that supports efficient (i.e., minimum number of measures and the least effort) use of resources for data collection and reporting and supports multiple programs and measurement applications. The program measure set should balance the degree of effort associated with measurement and its opportunity to improve quality.*

*Response option for each subcriterion:* Strongly Agree/Agree/Disagree/Strongly Disagree

Subcriterion 8.1 Program measure set demonstrates efficiency (i.e., minimum number of measures and the least burdensome)

Subcriterion 8.2 Program measure set can be used across multiple programs or applications (e.g., Meaningful Use, Physician Quality Reporting System [PQRS])

**TABLE 1—NATIONAL QUALITY STRATEGY PRIORITIES**

1. Making care safer by reducing harm caused in the delivery of care.
2. Ensuring that each person and family is engaged as partners in their care.
3. Promoting effective communication and coordination of care.
4. Promoting the most effective prevention and treatment practices for the leading causes of mortality, starting with cardiovascular disease.

<sup>2</sup> NQF, *Healthcare Disparities Measurement*, Washington, DC: NQF; 2011.

TABLE 1—NATIONAL QUALITY STRATEGY PRIORITIES—Continued

5. Working with communities to promote wide use of best practices to enable healthy living.
6. Making quality care more affordable for individuals, families, employers, and governments by developing and spreading new healthcare delivery models.

TABLE 2—HIGH-IMPACT CONDITIONS

## Medicare Conditions:

1. Major Depression.
2. Congestive Heart Failure.
3. Ischemic Heart Disease.
4. Diabetes.
5. Stroke/Transient Ischemic Attack.
6. Alzheimer's Disease.
7. Breast Cancer.
8. Chronic Obstructive Pulmonary Disease.
9. Acute Myocardial Infarction.
10. Colorectal Cancer.
11. Hip/Pelvic Fracture.
12. Chronic Renal Disease.
13. Prostate Cancer.
14. Rheumatoid Arthritis/Osteoarthritis.
15. Atrial Fibrillation.
16. Lung Cancer.
17. Cataract.
18. Osteoporosis.
19. Glaucoma.
20. Endometrial Cancer.

## Child Health Conditions and Risks:

1. Tobacco Use.
2. Overweight/Obese ( $\geq 85$ th percentile BMI for age).
3. Risk of Developmental Delays or Behavioral Problems.
4. Oral Health.
5. Diabetes.
6. Asthma.
7. Depression.
8. Behavior or Conduct Problems.
9. Chronic Ear Infections (3 or more in the past year).
10. Autism, Asperger's, PDD, ASD.
11. Developmental Delay (diag.).
12. Environmental Allergies (hay fever, respiratory or skin allergies).
13. Learning Disability.
14. Anxiety Problems.
15. ADD/ADHD.
16. Vision Problems not Corrected by Glasses.
17. Bone, Joint, or Muscle Problems.
18. Migraine Headaches.
19. Food or Digestive Allergy.
20. Hearing Problems.
21. Stuttering, Stammering, or Other Speech Problems.
22. Brain Injury or Concussion.
23. Epilepsy or Seizure Disorder.
24. Tourette Syndrome.

**Appendix D: 2012 NQF Expert Participant Leaders (organized by committee)***Behavioral Health Steering Committee*

Peter Briss, Co-Chair, National Center for Chronic Disease Prevention and Health Promotion  
 Harold Pincus, Co-Chair, Columbia University

*Cancer Steering Committee*

Stephen Edge, Co-Chair, Roswell Park Cancer Institute  
 Stephen Lutz, Chair, Blanchard Valley Regional Cancer Center

*Cardiovascular Endorsement Maintenance 2010 Steering Committee*

Mary George, Vice Chair, Centers for Disease Control and Prevention  
 Raymond Gibbons, Chair, Mayo Clinic

*Care Coordination Steering Committee*

Donald Casey, Co-Chair, Atlantic Health  
 Gerri Lamb, Co-Chair, Arizona State University

*Common Formats Expert Panel*

David Classen, Co-Chair, University of Utah School of Medicine  
 Henry Johnson, Co-Chair, ACS—MIDAS+

*Council Leadership*

Tanya Alteras, Chair, National Partnership for Women & Families  
 Maureen Corry, Vice Chair, Childbirth Connection  
 Deborah Fritz, Vice Chair, GlaxoSmithKline  
 Seiji Hayashi, Chair, Health Resources and Services Administration  
 David Hopkins, Chair, Pacific Business Group on Health  
 Thomas James, Chair, Humana Inc.  
 Carol Mullin, Chair, Virtua Health  
 Michael Phelan, Vice Chair, Cleveland Clinic  
 Louise Probst, Vice Chair, St. Louis Area Business Health Coalition  
 William Rich, Chair, Northern Virginia Ophthalmology Associates  
 Richard Salmon, Vice Chair, CIGNA HealthCare  
 David Shahian, Vice Chair, Massachusetts General Hospital  
 Kathleen Shoemaker, Chair, Lilly USA, LLC  
 Hussein Tahan, Vice Chair, New York Presbyterian Healthcare System  
 Marcia Wilson, Chair, Center for Health Care Quality

*CSAC: Consensus Standards Approval Committee*

Ann Monroe, Chair, Vice Chair, Health Foundation for Central & Western New York  
 Frank Opelka, Vice Chair, American College of Surgeons

*GI & GU Pilot Project Steering Committee*

Andrew Baskin, Co-Chair, Aetna  
 Christopher Saigal, Co-Chair, UCLA Medical Center

*Health Information Technology Advisory Committee*

J. Marc Overhage, Vice Chair, Siemens Medical Solutions USA, Inc.  
 Paul Tang, Chair, Palo Alto Medical Foundation

*Healthcare Disparities & Cultural Competency Steering Committee*

Dennis Andrulis, Co-Chair, Texas Health Institute  
 Denice Cora-Bramble, Co-Chair, Children's National Medical Center

*HITAC Change Control Board*

Floyd Eisenberg, Chair, NQF

*HITAC Oversight and Testing Workgroup*

Michael Lieberman, Chair, Oregon Health and Sciences University

*HITAC Quality Data Model Subcommittee*

David Bates, Chair, Brigham and Women's Hospital  
 Caterina Lasome, Co-Chair, iON Informatics, LLC

*Infectious Disease Steering Committee*

Steven Brotman, Co-Chair, The Advanced Medical Technology Association (AdvaMed)  
 Edward Septimus, Co-Chair, HCA

*Leadership Network*

William Corley, Chair, Community Health Network

*MAP Cardiovascular and Diabetes Care Task Force*

Christine Cassel, Chair, American Board of Internal Medicine

*MAP Safety and Care Coordination Task Force*

Frank Opelka, Chair, American College of Surgeons

*MAP Strategy Task Force 2*

Charles Kahn, Co-Chair, Federation of American Hospitals  
 Gerald Shea, Co-Chair, AFL—CIO

*Measure Applications Partnership Clinician Workgroup*

Mark McClellan, Chair, The Brookings Institute

*Measure Applications Partnership Coordinating Committee*

George Isham, Co-Chair, HealthPartners  
 Elizabeth McGlynn, Co-Chair, Kaiser Permanente Center for Effectiveness & Safety Research

*Measure Applications Partnership Dual Eligibles Workgroup*

Alice Lind, Chair, Center for Health Care Strategies, Inc

*Measure Applications Partnership Hospital Workgroup*

Frank Opelka, Chair, American College of Surgeons

*Measure Applications Partnership PAC-LTC Workgroup*

Carol Raphael, Chair, Visiting Nurse Service of New York

*Multiple Chronic Conditions Measurement Framework Steering Committee*

Caroline Blaum, Co-Chair, DVAMC GRECC Institute of Gerontology  
Barbara McCann, Co-Chair, Interim HealthCare Inc.

*National Priorities Partnership*

Helen Darling, Co-Chair, National Business Group on Health  
Bernard Rosof, Co-Chair, American Medical Association-Physician Consortium for Performance Improvement

*Neurology Steering Committee*

David Knowlton, Co-Chair, New Jersey Health Care Quality Institute  
David Tirschwell, Co-Chair, University of Washington, Department of Neurology

*NPP Maternity Action Team*

Maureen Corry, Co-Chair, Childbirth Connection  
Bernard Rosof, Co-Chair, American Medical Association-Physician Consortium for Performance Improvement

*NPP Readmissions Action Team*

Helen Darling, Co-Chair, National Business Group on Health  
Susan Frampton, Co-Chair, Planetree

*Oral Health Expert Panel*

Paul Glassman, Co-Chair, University of the Pacific School of Dentistry  
David Krol, Co-Chair, The Robert Wood Johnson Foundation

*Palliative Care and End of Life Care Steering Committee*

June Lunney, Co-Chair, Hospice and Palliative Nurses Association  
Sean Morrison, Co-Chair, Mount Sinai School of Medicine—Dept. of Geriatrics & Palliative Medicine

*Patient Safety State Based Reporting Work Group*

Michael Doering, Co-Chair, Pennsylvania Patient Safety Authority

Diane Rydrych, Co-Chair, Minnesota Department of Health  
Iona Thraen, Co-Chair, Utah Department of Health

*Patient Safety-Measures Complications Steering Committee*

Pamela Cipriano, Co-Chair, University of Virginia Health System  
William Conway, Co-Chair, Henry Ford Health System

*Perinatal and Reproductive Health Steering Committee*

Laura Riley, Co-Chair, Massachusetts General Hospital  
Carol Sakala, Co-Chair, Childbirth Connection

*Population Health Steering Committee*

Paul Jarris, Co-Chair, Association of State and Territorial Health Officers  
Kurt Stange, Co-Chair, Case Western Reserve University

*Pulmonary Steering Committee*

Stephen Grossbart, Co-Chair, Catholic Health Partners  
Kevin Weiss, Co-Chair, American Board of Medical Specialties

*Readmissions Expedited Review Steering Committee*

Sherrie Kaplan, Co-Chair, UC Irvine School of Medicine  
Eliot Lazar, Co-Chair, New York Presbyterian Healthcare System

*Regionalized Emergency Medical Care Services Steering Committee*

Arthur Kellermann, Co-Chair, The RAND Corporation  
Andrew Roszak, Co-Chair, HHS\HRSA

*Resource Use Project Cancer TAP*

David Penson, Chair, Vanderbilt University Medical Center

*Resource Use Project Cardio/Diab TAP*

Jeptha Curtis, Co-Chair, Yale University School of Medicine  
James Rosenzweig, Co-Chair, Boston Medical Center and Boston University School of Medicine

*Resource Use Project: Bone/Joint TAP*

James Weinstein, Chair, Dartmouth-Hitchcock Medical Center

*Resource Use Project: Pulmonary TAP*

Kurtis Elward, Co-Chair, Family Medicine of Albermarle  
Janet Maurer, Co-Chair, American College of Chest Physicians

**Appendix E: 2012 NQF Expert Participants (organized by affiliation)**

Barbara Kelly—A.F. Williams Family Medicine Center  
Joyce Dubow—AARP

Naomi Karp—AARP  
Susan Reinhard—AARP  
Judith Cahill—Academy of Managed Care Pharmacy  
Marissa Schlaifer—Academy of Managed Care Pharmacy  
Henry Johnson—ACS—MIDAS+  
Madhavi Vemireddy—ActiveHealth Management  
Henry Claypool—Administration for Community Living, HHS  
Joanne Armstrong—Aetna  
Andrew Baskin—Aetna  
Thomas Howe—Aetna  
Randall Krakauer—Aetna  
Patricia McDermott—Aetna  
Gerald Shea—AFL—CIO  
Marie Kokol—Agency for Health Care Administration  
Carolyn Clancy—Agency for Healthcare Research and Quality  
Erin Grace—Agency for Healthcare Research and Quality  
Darryl Gray—Agency for Healthcare Research and Quality  
Ernest Moy—Agency for Healthcare Research and Quality  
William Munier—Agency for Healthcare Research and Quality  
Mary Nix—Agency for Healthcare Research and Quality  
Mamatha Pancholi—Agency for Healthcare Research and Quality  
D.E.B. Potter—Agency for Healthcare Research and Quality  
Judith Sangl—Agency for Healthcare Research and Quality  
Nancy Wilson—Agency for Healthcare Research and Quality  
MaryAnne Lindeblad—Aging and Disability Services Administration  
Sam Fazio—Alzheimer's Association  
Beth Kallmyer—Alzheimer's Association  
Julie Lewis—Amedisys  
Bruce Bagley—American Academy of Family Physicians  
Dennis Saver—American Academy of Family Physicians  
Dale Lupu—American Academy of Hospice and Palliative Medicine  
Jack Scariano—American Academy of Neurology  
Mary Jo Goolsby—American Academy of Nurse Practitioners  
Douglas Burton—American Academy of Orthopaedic Surgeons  
John Ratliff—American Association of Neurological Surgeons  
Christine Zambricki—American Association of Nurse Anesthetists  
Margaret Nygren—American Association on Intellectual and Developmental Disabilities  
Christine Cassel—American Board of Internal Medicine  
Lorna Lynn—American Board of Internal Medicine  
Denece Kesler—American Board of Medical Specialties

Kevin Weiss—American Board of Medical Specialties  
 Larry Gilstrap—American Board of Obstetrics and Gynecology  
 Mary Maryland—American Cancer Society Illinois Division  
 Janet Maurer—American College of Chest Physicians  
 Lisa Moores—American College of Chest Physicians  
 Lorrie Kaplan—American College of Nurse-Midwives  
 Sean Currihan—American College of Obstetricians and Gynecologists  
 Gerald Joseph—American College of Obstetricians and Gynecologists  
 Sandra Fryhofer—American College of Physicians  
 Amir Qaseem—American College of Physicians  
 Don Detmer—American College of Surgeons  
 Bruce Hall—American College of Surgeons  
 Frank Opelka—American College of Surgeons  
 Sally Tyler—American Federation of State, County and Municipal Employees  
 Jennie Hansen—American Geriatrics Society  
 David Gifford—American Health Care Association  
 Ruta Kadonoff—American Health Care Association  
 Naomi Naierman—American Hospice Foundation  
 Nancy Foster—American Hospital Association  
 Richard Umbdenstock—American Hospital Association  
 Kalpana Ramiah—American Institutes for Research  
 Norman Edelman—American Lung Association  
 Kendra Hanley—American Medical Association  
 Delane Heldt—American Medical Association-Physician Consortium for Performance Improvement  
 Bernard Rosof—American Medical Association-Physician Consortium for Performance Improvement  
 James Lett—American Medical Directors Association  
 Sam Lin—American Medical Group Association  
 Maureen Dailey—American Nurses Association  
 Marla Weston—American Nurses Association  
 Patricia Conway-Morana—American Organization of Nurse Executives  
 Dianne Jewell—American Physical Therapy Association  
 Arden Morris—American Society of Colon and Rectal Surgeons  
 Shekhar Mehta—American Society of Health-System Pharmacists  
 Janet Brown—American Speech-Language-Hearing Association  
 Aparna Higgins—America's Health Insurance Plans  
 Andrea Gelzer—AmeriHealth Mercy Family of Companies  
 Richard Dutton—Anesthesia Quality Institute  
 Jay Schukman—Anthem Blue Cross and Blue Shield  
 Michael Helgeson—Apple Tree Dental  
 Gerri Lamb—Arizona State University  
 Craig Gilliam—Arkansas Children's Hospital  
 Catherine Tapp—Arkansas Department of Health and Human Services  
 Ann Hendrich—Ascension Health  
 Sarah Hill—Ascension Health  
 Joanne Conroy—Association of American Medical Colleges  
 Marilyn Bowman-Hayes—Association of periOperative Registered Nurses  
 Paul Jarris—Association of State and Territorial Health Officers  
 Shawn Polk—Association of State and Territorial Health Officials  
 Donald Casey—Atlantic Health  
 Michael Cantine—Atlantic Health  
 Roger Kurlan—Atlantic Health  
 Rhonda Anderson—Banner Health System  
 Ann de Velasco—Baptist Health South Florida  
 Thomas Giordano—Baylor College of Medicine  
 Jochen Profit—Baylor College of Medicine  
 Carl Couch—Baylor Health Care System  
 Jean De Leon—Baylor Health Care System  
 Robert Fine—Baylor Health Care System  
 Robert Watson—Baylor Health Care System  
 David Hackney—Beth Israel Deaconess Medical Center  
 Nancy Ridley—Betsy Lehman Center for Patient Safety and Medical Error Reduction  
 Patrick Murray—Better Health Greater Cleveland  
 Debra Bakerjian—Betty Irene Moore School of Nursing  
 Tiffany Osborn—BJC HealthCare  
 Stephen Lutz—Blanchard Valley Regional Cancer Center  
 Jane Franke—Blue Cross Blue Shield of Massachusetts  
 Greg Pawlson—BlueCross BlueShield Association  
 Carol Wilhoit—BlueCross BlueShield of Illinois  
 Kristine Anderson—BoozAllenHamilton  
 George Philippides—Boston Medical Center  
 James Rosenzweig—Boston Medical Center  
 Jeffrey Samet—Boston University School of Medicine  
 Lewis Kazis—Boston University School of Public Health  
 David Bates—Brigham and Women's Hospital  
 Daniel Forman—Brigham and Women's Hospital  
 Bruce Koplan—Brigham and Women's Hospital  
 Jeffrey Greenberg—Brigham and Women's Physicians' Organization  
 Richard Zane—Brigham Women's Hospital  
 Barbara Caress—Building Services 32BJ Health Fund  
 Lisa Shea—Butler Hospital  
 Carolyn Pare—Buyers Health Care Action Group  
 Neal Kohatsu—California Department of Health Care Services  
 Lorian DeMartini—California Department of Public Health  
 Kathleen O'Malley—California HealthCare Foundation  
 Ellen Wu—California Pan-Ethnic Health Network  
 Evelyn Calvillo—California State University  
 Janet Young—Carilion Health Systems  
 Jennifer Brandenburg—Carle Foundation Hospital  
 Suzanne Snyder—Carolinas Rehabilitation  
 Kurt Stange—Case Western Reserve University  
 Suzanne Delbanco—Catalyst for Payment Reform  
 Gail Amundson—Caterpillar Inc.  
 Stephen Grossbart—Catholic Health Partners  
 Zab Mosenifar—Cedars Sinai Medical Center  
 Kimberly Gregory—Cedars-Sinai Medical Center  
 Michael Langberg—Cedars-Sinai Medical Center  
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 Elliot Sloane—Center for Healthcare Information Research and Policy  
 Arthur Levin—Center for Medical Consumers  
 Alfred Chiplin Jr.—Center for Medicare Advocacy, Inc.  
 Patricia Nemore—Center for Medicare Advocacy, Inc.  
 Terrence Batliner—Center for Native Oral Health Research  
 Diane Meier—Center to Advance Palliative Care  
 Peter Briss—Centers for Disease Control and Prevention  
 William Callaghan—Centers for Disease Control and Prevention  
 Mary George—Centers for Disease Control and Prevention

Catherine Gordon—Centers for Disease Control and Prevention  
 Gail Janes—Centers for Disease Control and Prevention  
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 Cheryl Powell—Centers for Medicare & Medicaid Services  
 Michael Rapp—Centers for Medicare & Medicaid Services  
 Ashley Ridlon—Centers for Medicare & Medicaid Services  
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 Erin Smith—Centers for Medicare & Medicaid Services  
 Judith Tobin—Centers for Medicare & Medicaid Services  
 Alisa Ray—Certification Commission for Healthcare Information Technology  
 Parinda Khatri—Cherokee Health Systems  
 Maureen Corry—Childbirth Connection  
 Carol Sakala—Childbirth Connection  
 Ellen Schwalenstocker—Children's Hospital Association  
 Richard Antonelli—Children's Hospital Boston  
 Jenifer Lightdale—Children's Hospital Boston  
 Mark Schuster—Children's Hospital Boston  
 Trude Haecker—Children's Hospital of Philadelphia  
 David Einzig—Children's Hospitals and Clinics of Minnesota  
 Carol Kemper—Children's Mercy Hospital  
 Denice Cora-Bramble—Children's National Medical Center  
 David Stockwell—Children's National Medical Center  
 Joseph Wright—Children's National Medical Center  
 William Weintraub—Christiana Care Health System  
 Colette Edwards—CIGNA HealthCare  
 Mary Kay O'Neill—CIGNA HealthCare  
 Richard Salmon—CIGNA HealthCare  
 Uma Kotagal—Cincinnati Children's Hospital Medical Center  
 Thomas Loyacono—City of Baton Rouge and Parish of East Baton Rouge  
 Joseph Alvarnas—City of Hope  
 Jo Ann Brooks—Clarian Health  
 Jocelyn Bautista—Cleveland Clinic  
 Sung Hee Leslie Cho—Cleveland Clinic  
 Irene Katzan—Cleveland Clinic  
 David Lang—Cleveland Clinic  
 Thomas Marwick—Cleveland Clinic  
 Michael Phelan—Cleveland Clinic  
 Shannon Phillips—Cleveland Clinic  
 Allan Siperstein—Cleveland Clinic  
 Sharon Sutherland—Cleveland Clinic  
 Timothy Gilligan—Cleveland Clinic  
 Stanley Pestotnik—Cognovant, Inc.  
 Chris Tonozzi—Colorado Associated Community Health Information Enterprise  
 Kim Johnson—Colorado Department of Public Health and Environment  
 Wendy Tenzyk—Colorado Public Employees' Retirement Association  
 Arthur Cooper—Columbia University  
 Jacqueline Merrill—Columbia University  
 Bobbie Berkowitz—Columbia University School of Nursing  
 Lawrence Gottlieb—Commonwealth Care Alliance  
 Roger Snow—Commonwealth of Massachusetts  
 Dolores Mitchell—Commonwealth of Massachusetts—Group Insurance Commission  
 William Corley—Community Health Network  
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 Cheryl Theriault—Connecticut Department of Health  
 Mary Alice Lee—Connecticut Voices for Children  
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 Lawrence Sadwin—Consultant  
 Adam Thompson—Consultant  
 Richard Hanke—Consumer Representative  
 Robert Ellis—Consumers' Checkbook  
 Robert Krughoff—Consumers' Checkbook  
 Steven Findlay—Consumers Union  
 Lisa McGiffert—Consumers Union  
 Doris Peter—Consumers Union  
 Andrea Russo—Cooper University Hospital  
 Russell Acevedo—Crouse Hospital  
 Dolores Kelleher—D Kelleher Consulting  
 Richard Goldstein—Dana-Farber Cancer Institute  
 Saul Weingart—Dana-Farber Cancer Institute  
 John Wasson—Dartmouth-Hitchcock Medical Center  
 James Weinstein—Dartmouth-Hitchcock Medical Center  
 Linda Wilkinson—Dartmouth-Hitchcock Medical Center  
 Erik Pupo—Deloitte Consulting, LLP  
 Richard Albert—Denver Health Medical Center  
 Edward Havranek—Denver Health Medical Center  
 Philip Mehler—Denver Health Medical Center  
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 Mary Sieggreen—Detroit Medical Center  
 Margaret Campbell—Detroit Receiving Hospital  
 Sharon Baskerville—District of Columbia Primary Care Association  
 Steve Morgenstern—Dow Chemical Company  
 Gwendolen Buhr—Duke University Health System  
 Sean O'Brien—Duke University Health System  
 John Clarke—ECRI Institute  
 Kathleen Shoemaker—Eli Lilly and Company  
 Nicole Tapay—Eli Lilly and Company  
 AnnMarie Papa—Emergency Nurses Association  
 Kathleen Szumanski—Emergency Nurses Association  
 Ricardo Martinez—Emory University School of Medicine  
 Amit Papat—Epic Systems Corp  
 Stanley Davis—Fairview Health Services  
 Brent Asplin—Fairview Medical Group  
 Kathleen Kelly—Family Caregiver Alliance  
 Kurtis Elward—Family Medicine of Albermarle  
 Allen McCullough—Fayette County Public Safety  
 Charles Kahn—Federation of American Hospitals  
 Nick Nudell—FirstWatch Solutions, Inc.  
 Joseph Ouslander—Florida Atlantic University  
 Laurie Burke—Food and Drug Administration  
 Jay Crowley—Food and Drug Administration  
 Behnaz Minaei—Food and Drug Administration  
 Terrie Reed—Food and Drug Administration  
 Terry Rogers—Foundation for Health Care Quality  
 Dwight Kloth—Fox Chase Cancer Center  
 Barbara Levy—Franciscan Health System  
 Dana Alexander—GE Healthcare  
 Brandon Savage—GE Healthcare  
 James Walker—Geisinger Health System  
 Andrew Guccione—George Mason University  
 Mayri Leslie—George Washington University  
 Robert Graham—George Washington University—School of Public Health  
 Michael Stoto—Georgetown University  
 Leslee Pool—Georgia Department of Health and Human Resources+D306  
 Rohit Borker—GlaxoSmithKline  
 Deborah Fritz—GlaxoSmithKline  
 Brenda Parker—GlaxoSmithKline  
 Richard Stanford—GlaxoSmithKline  
 John Derr—Golden Living, LLC  
 Connie Steed—Greenville Hospital System  
 Jason Colquitt—Greenway Medical Technologies

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 John Gore—Harborview Medical Center  
 Ronald Maier—Harborview Medical Center  
 Paula Minton Foltz—Harborview Medical Center  
 David Spach—Harborview Medical Center  
 David Tirschwell—Harborview Medical Center  
 Jeffrey Greenwald—Harvard Medical School  
 Elsbeth Kalenderian—Harvard School of Dental Medicine  
 Ashish Jha—Harvard School of Public Health  
 Christine Klotz—Health Foundation for Central & Western New York  
 Ann Monroe—Health Foundation for Central & Western New York  
 Lyn Paget—Health Policy Partners  
 Ahmed Calvo—Health Resources and Services Administration  
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 Leonard Epstein—Health Resources and Services Administration  
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 Seiji Hayashi—Health Resources and Services Administration  
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 Andrew Roszak—Health Resources and Services Administration  
 Mary Wakefield—Health Resources and Services Administration  
 John Seibel—HealthInsight New Mexico  
 Juliana Preston—HealthInsight Utah  
 Beth Averbeck—HealthPartners  
 David Gesko—HealthPartners  
 George Isham—HealthPartners  
 Thomas Kottke—HealthPartners  
 Thomas Von Sternberg—HealthPartners  
 Rick Luetkemeyer—HealthStrategy  
 Leslie Kelly Hall—Healthwise  
 Diane Limbo—Healthy Smiles for Kids of Orange County  
 John Pellicone—Helen Hayes Hospital  
 William Conway—Henry Ford Health System  
 Vanita Pindolia—Henry Ford Health System  
 Elizabeth Gilbertson—HEREIU Welfare Fund  
 Mary Blank—Highmark  
 Rubin Cohen—Hofstra University School of Medicine  
 June Lunney—Hospice and Palliative Nurses Association  
 Gail Austin Cooney—Hospice of Palm Beach County/Spectrum Health Inc.  
 Hayley Burgess—Hospital Corporation of America  
 Edward Septimus—Hospital Corporation of America  
 Louis Hockeiser—Humana Inc.  
 Thomas James—Humana Inc.  
 Thomas James—Humana Inc.  
 Bryan Loy—Humana Inc.  
 Charles Stemple—Humana Inc.  
 Fredrik Tolin—Humana Inc.  
 Kyu Rhee—IBM  
 Mary Driscoll—Illinois Department of Public Health  
 Richard Snyder—Independence Blue Cross  
 Steve Udvarhelyi—Independence Blue Cross  
 Christopher Lamer—Indian Health Service  
 Steven Counsell—Indiana University School of Medicine  
 Floyd Fowler—Informed Medical Decision Making Foundation  
 Paula Graling—Inova Fairfax Hospital  
 Donald Goldmann—Institute for Healthcare Improvement  
 Sue Gullo—Institute for Healthcare Improvement  
 David Radley—Institute for Healthcare Improvement  
 Matthew Grissinger—Institute for Safe Medication Practices  
 Christina Michalek—Institute for Safe Medication Practices  
 Dolores Yanagihara—Integrated Healthcare Association  
 Allison Jackson—Intel  
 Barbara McCann—Interim HealthCare Inc.  
 Elizabeth Hammond—Intermountain Healthcare  
 Laura Heerman Langford—Intermountain Healthcare  
 Teri Kiehn—Intermountain Healthcare  
 Caterina Lasome—iON Informatics, LLC  
 Bob Russell—Iowa Department of Public Health  
 Meg Nugent—Iowa Healthcare Collaborative  
 Lance Roberts—Iowa Healthcare Collaborative  
 Nancy Zions—Jewish Healthcare Foundation  
 Lisa Tripp—John Marshall Law School  
 Colleen Barry—Johns Hopkins Health System  
 Cynthia Boyd—Johns Hopkins Health System  
 Bruce Leff—Johns Hopkins Health System  
 Christoph Lehmann—Johns Hopkins Health System  
 Matthew McNabney—Johns Hopkins Health System  
 Robert Miller—Johns Hopkins Health System  
 Aaron Milstone—Johns Hopkins Health System  
 Lori Paine—Johns Hopkins Health System  
 Albert Wu—Johns Hopkins Health System  
 Patricia Abbott—Johns Hopkins University School of Nursing  
 David Domann—Johnson & Johnson Health Care Systems, Inc.  
 Christina Farup—Johnson & Johnson Health Care Systems, Inc.  
 Andy Amster—Kaiser Permanente  
 Amy Compton-Phillips—Kaiser Permanente  
 Douglas Corley—Kaiser Permanente  
 Sue Elam—Kaiser Permanente  
 Jamie Ferguson—Kaiser Permanente  
 Helen Lau—Kaiser Permanente  
 David Magid—Kaiser Permanente  
 Helene Martel—Kaiser Permanente  
 Ted Palen—Kaiser Permanente  
 David Pating—Kaiser Permanente  
 Elizabeth Paxton—Kaiser Permanente  
 Michael Schatz—Kaiser Permanente  
 Matt Stiefel—Kaiser Permanente  
 Jim Bellows—Kaiser Permanente  
 Jann Dorman—Kaiser Permanente  
 Elizabeth McGlynn—Kaiser Permanente  
 Lynn Searles—Kansas Department of Health and Environment  
 A.M. Barrett—Kessler Foundation  
 Bruce Pomeranz—Kessler Institute for Rehabilitation  
 Sean Muldoon—Kindred Healthcare  
 Laura Linebach—LA Care Health Plan  
 Rocco Ricciardi—Lahey Clinic Medical Center  
 Suma Thomas—Lahey Clinic Medical Center  
 Lauren Murray—Lamaze International  
 Paul Casale—Lancaster General Hospital  
 Cheryl Phillips—LeadingAge  
 Ian Chuang—Lockton Companies, LLC  
 Rebekah Gee—LSU School of Public Health  
 Anne Flanagan—Maine Department of Health  
 Elizabeth Mitchell—Maine Health Management Coalition  
 Ted Rooney—Maine Quality Counts  
 Scott Berns—March of Dimes  
 Cynthia Pellegrini—March of Dimes  
 Amit Acharya—Marshfield Clinic  
 Renee Webster—Maryland Department of Health  
 Elizabeth Daake—Massachusetts Department of Health  
 Joseph Betancourt—Massachusetts General Hospital  
 Liliana Bordeianou—Massachusetts General Hospital  
 Raymond Chung—Massachusetts General Hospital  
 Timothy Ferris—Massachusetts General Hospital  
 Elizabeth Mort—Massachusetts General Hospital  
 Laura Riley—Massachusetts General Hospital  
 Laura Riley—Massachusetts General Hospital  
 Karen Sepucha—Massachusetts General Hospital  
 David Shahian—Massachusetts General Hospital

David Torchiana—Massachusetts General Physicians Organization  
David Polakoff—MassHealth  
Robert Cima—Mayo Clinic  
Pamela Foster—Mayo Clinic  
Raymond Gibbons—Mayo Clinic  
Catherine Roberts—Mayo Clinic  
Eric Tangelos—Mayo Clinic  
Karlene Phillips—Mayo Clinic  
Gary Wingrove—Mayo Clinic  
Charles Denk—MCH Epidemiology Program  
Ginny Meadows—McKesson Corporation  
Caroline Doebling—MDwise  
Nicholas Sears—MedAssets, Inc.  
Linus Santo Tomas—Medical College of Wisconsin  
Peter Havens—Medical College of Wisconsin and Froedtert Hospital  
Dana King—Medical University of South Carolina  
Gail Stuart—Medical University of South Carolina  
Zahid Butt—Medisolv, Inc.  
Charlotte Alexander—Memorial Hermann Healthcare System  
Roy Beasley—Memorial Hermann Healthcare System  
M. Michael Shabot—Memorial Hermann Healthcare System  
Lourdes Cuellar—Memorial Hermann Healthcare System—TIRR  
David Pfister—Memorial Sloan-Kettering Cancer Center  
Cristie Travis—Memphis Business Group on Health  
Luther Clark—Merck & Co., Inc  
Jennifer Bailit—MetroHealth Medical Center  
Robin Shivley—Michigan Department of Health, EMS, and Trauma Systems  
Michael O'Toole—Midwest Heart Specialists, Ltd.  
Collette Pitzen—Minnesota Community Measurement  
Diane Rydrych—Minnesota Department of Health  
Vallire Hooper—Mission Hospital  
Karen Fields—Moffitt Cancer Center  
Jason Adelman—Montefiore Medical Center  
Daniel Labovitz—Montefiore Medical Center  
Helen Haskell—Mothers Against Medical Error  
Leslie Zun—Mount Sinai Hospital  
Peter Elkin—Mount Sinai Medical Center  
R. Sean Morrison—Mount Sinai School of Medicine  
Sean Morrison—Mount Sinai School of Medicine  
Andrew Snyder—National Academy for State Health Policy  
Gail Hunt—National Alliance for Caregiving  
David Stevens—National Association of Community Health Centers  
Robert Pestronk—National Association of County & City Health Officials  
Denise Love—National Association of Health Data Organizations  
Jane Hooker—National Association of Public Hospitals and Health Systems  
Vickie Sears—National Association of Public Hospitals and Health Systems  
Bruce Siegel—National Association of Public Hospitals and Health Systems  
Jill Steinbruegge—National Association of Public Hospitals and Health Systems  
Joan Zlotnik—National Association of Social Workers  
Charles Moseley—National Association of State Directors of Developmental Disabilities Services  
Martha Roherty—National Association of States United for Aging and Disabilities  
Colleen Bruce—National Business Coalition on Health  
Andrew Webber—National Business Coalition on Health  
Dennis White—National Business Coalition on Health  
Penney Berryman—National Business Group on Health  
Helen Darling—National Business Group on Health  
Pamela Kalen—National Business Group on Health  
Sarah Brown—National Campaign to Prevent Teen and Unplanned Pregnancy  
Steven Clauser—National Cancer Institute  
Suzanne Heurtin-Roberts—National Cancer Institute  
Linda Kinsinger—National Center for Health Promotion and Disease Prevention  
Carol Allred—National Coalition for Women with Heart Disease  
Mary Barton—National Committee for Quality Assurance  
Margaret O'Kane—National Committee for Quality Assurance  
Aldo Tinoco—National Committee for Quality Assurance  
Phyllis Torda—National Committee for Quality Assurance  
Michael Lardiere—National Council for Community Behavioral Healthcare  
Nancy Whitelaw—National Council on Aging  
Howard Kirkwood—National EMS Management Association  
Keith Mason—National Forum for Heart Disease and Stroke Prevention  
Brad Finnegan—National Governors Association  
Marcia Thomas-Brown—National Health IT Collaborative for the Underserved  
Leonardo Cuello—National Health Law Program  
Deborah Reid—National Health Law Program  
Mara Youdelman—National Health Law Program  
Elena Rios—National Hispanic Medical Association  
Carol Spence—National Hospice and Palliative Care Organization  
Charles Homer—National Initiative for Children's Healthcare Quality  
Jennifer Ustianov—National Initiative for Children's Healthcare Quality  
Michael Lauer—National Institutes of Health  
Marcel Salive—National Institutes of Health  
Salina Waddy—National Institutes of Health  
Adam Burrows—National PACE Association  
Peter Schmidt—National Parkinson Foundation, Inc.  
Tanya Alteras—National Partnership for Women & Families  
Christine Bechtel—National Partnership for Women & Families  
Debra Ness—National Partnership for Women & Families  
Lee Partridge—National Partnership for Women & Families  
Eva Powell—National Partnership for Women & Families  
Kalahn Taylor-Clark—National Partnership for Women & Families  
Janet Corrigan—National Quality Forum  
Floyd Eisenberg—National Quality Forum  
Laura Miller—National Quality Forum  
Brock Slabach—National Rural Health Association  
Robert Robin—Native Americans for Community Action, Inc.  
Kathryn Blake—Nemours Foundation  
Stephen Lawless—Nemours Foundation  
Raj Sheth—Nemours Foundation  
Mary Ann Clark—Neocure Group  
Harold Miller—Network for Regional Healthcare Improvement  
Bobbette Bond—Nevada Healthcare Policy Group LLC  
Jay Kvam—Nevada State Health Division  
Jose Montero—New Hampshire Department of Health and Human Services  
Christine Stearns—New Jersey Business & Industry Association  
Margaret Lumia—New Jersey Department of Health and Senior Services  
David Knowlton—New Jersey Health Care Quality Institute  
Ann Marie Sullivan—New York City Health and Hospitals Corporation  
Eliot Lazar—New York Presbyterian Healthcare System  
Harold Pincus—New York Presbyterian Healthcare System  
Hussein Tahan—New York Presbyterian Healthcare System  
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Norman Otsuka—New York University Hospital for Joint Diseases  
 Madeline Naegle—New York University, American Nurses Association  
 J. Emilio Carrillo—New York-Presbyterian Community Health Plan  
 Scott MacLean—Newton-Wellesley Hospital  
 Gregory Kapinos—North Shore-Long Island Jewish Health System  
 Louis Potters—North Shore-Long Island Jewish Health System  
 Kristofer Smith—North Shore-Long Island Jewish Health System  
 Jeffrey Susman—Northeast Ohio Medical University  
 William Rich—Northern Virginia Ophthalmology Associates  
 David Baker—Northwestern University  
 Romana Hasnain-Wynia—Northwestern University  
 David Stumpf—Northwestern University  
 Jane Sullivan—Northwestern University Feinberg School of Medicine  
 Mark Williams—Northwestern University Feinberg School of Medicine  
 Mary Jean Schumann—Nursing Alliance for Quality Care  
 Russell Leftwich—Office of eHealth Initiatives, State of Tennessee  
 Frank Johnson—Office of Employee Health & Benefits, State of Maine  
 Stephanie Mika—Office of the Assistant Secretary for Planning & Evaluation, HHS  
 Thomas Tsang—Office of the Governor, Hawaii  
 Jesse James—Office of the National Coordinator for Health Information Technology  
 Kevin Larsen—Office of the National Coordinator for Health Information Technology  
 Jacob Reider—Office of the National Coordinator for Health Information Technology  
 Joshua Seidman—Office of the National Coordinator for Health Information Technology  
 Allen Traylor—Office of the National Coordinator for Health Information Technology  
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 Susan Moffatt-Bruce—Ohio State University  
 Michael Sayre—Ohio State University  
 Patrick Ross—Ohio State University Comprehensive Cancer Center—James Cancer Hospital  
 Gerene Bauldoff—Ohio State University, School of Nursing  
 Douglas Nee—OptiMed, Inc.  
 Mark Leenay—OptumHealth  
 Michael Lieberman—Oregon Health and Sciences University  
 Sydney Edlund—Oregon Patient Safety Commission  
 Roger Herr—Outcome Concept Systems  
 Kate Chenok—Pacific Business Group on Health  
 Emma Hoo—Pacific Business Group on Health  
 David Hopkins—Pacific Business Group on Health  
 Jennifer Huff—Pacific Business Group on Health  
 William Kramer—Pacific Business Group on Health  
 Seena Haines—Palm Beach Atlantic University  
 Paul Tang—Palo Alto Medical Foundation  
 Sue Pickens—Parkland Health & Hospital System  
 Michael Mirro—Parkview Health  
 Blackford Middleton—Partners HealthCare System, Inc.  
 Jason Spangler—Partnership for Prevention  
 Lori Frank—Patient Centered Outcomes Research Institute  
 Marci Nielsen—Patient Centered Primary Care Collaborative  
 Ron Stock—PeaceHealth Oregon Region  
 Chris Snyder—Peninsula Regional Medical Center  
 Peter Dillon—Penn State Hershey Medical Center  
 Michael Doering—Pennsylvania Patient Safety Authority  
 Eileen Kennedy—Pepco Holdings, Inc.  
 Michael Ibara—Pfizer  
 Eleanor Perfetto—Pfizer  
 Laura Cranston—Pharmacy Quality Alliance  
 Kathleen Brady—Philadelphia Department of Public Health  
 Tina Cronin—Piedmont Medical Center  
 Susan Frampton—Planetree  
 Michael Lepore—Planetree  
 Richard Bankowitz—Premier healthcare alliance  
 Gina Pugliese—Premier healthcare alliance  
 Dennis Kaldenberg—Press Ganey Associates  
 Larry Cohen—Prevention Institute  
 James Lee—Providence Everett Medical Center  
 Robert Hellrigel—Providence Health & Services  
 Ron Bialek—Public Health Foundation  
 Mary Pittman—Public Health Institute  
 Louis Diamond—QHC Advisory Group, LLC  
 Dawn Fitzgerald—Qsource  
 Sharon Hibay—Quality Insights of Pennsylvania  
 Bonnie Paris—Quality Quest for Health of Illinois  
 David Seidenwurm—Radiological Associates of Sacramento Medical Group, Inc.  
 Leona Cuttler—Rainbow Babies and Children's Hospital  
 Arthur Kellermann—RAND Corporation  
 Debra Saliba—RAND Corporation  
 Kathleen Aller—Recommind, Inc.  
 Mary Van de Kamp—RehabCare  
 Darlene Skorski—Rhode Island Department of Health—Office of Facilities Regulation  
 David Krol—Robert Wood Johnson Foundation  
 Carey Smoak—Roche Laboratories, Inc.  
 Stephen Edge—Roswell Park Cancer Institute  
 Kathleen Lohr—RTI International  
 Ruth Kleinpell—Rush University Medical Center  
 Shannon Sims—Rush University Medical Center  
 Victoria Nahum—Safe Care Campaign  
 James Dunford—San Diego Fire-Rescue  
 Paul Merguerian—Seattle Children's Hospital  
 Rita Mangione-Smith—Seattle Children's Research Institute  
 Charissa Raynor—Service Employees International Union  
 Dale Shaller—Shaller Consulting Group  
 Karen Nielsen—Siemens Medical Solutions USA  
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 Christopher Smiley—Smiley Family Dentistry, PC  
 Richard Bringewatt—SNP Alliance  
 William Grobman—Society for Maternal-Fetal Medicine  
 Kate Menard—Society for Maternal-Fetal Medicine  
 Mitchell Levy—Society of Critical Care Medicine  
 Janet Nagamine—Society of Hospital Medicine  
 Wendy Nickel—Society of Hospital Medicine  
 Howard Barnebey—Specialty Eyecare Centre  
 Jerad Widman—Spring Hill Family Medicine  
 Dennis Rivenburgh—St Anthony's  
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 Kathleen Rice Simpson—St. John's Mercy Health Care  
 Joseph Laver—St. Jude Children's Research Hospital  
 Louise Probst—St. Louis Area Business Health Coalition  
 Mark Sanz—St. Patrick Hospital  
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 Ruth Leslie—State of New York Department of Health  
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Tina Picchi—Supportive Care Coalition  
Lois Cross—Sutter Health  
A. John Blair—Taconic IPA, Inc.  
Chad Bennett—Telligen  
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Ann Reed—Tennessee Department of Health  
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Dennis Andrulis—Texas Health Institute  
Steven Brotman—The Advanced Medical Technology Association  
Cheryl DeMars—The Alliance  
Mark McClellan—The Brookings Institute  
Anne-Marie Audet—The Commonwealth Fund  
Mary Jane Koren—The Commonwealth Fund  
Eugene Nelson—The Dartmouth Institute  
Jesse Pines—The George Washington University Medical Center  
Gerard Castro—The Joint Commission  
Mark Chassin—The Joint Commission  
Patricia Craig—The Joint Commission  
Patricia Kurtz—The Joint Commission  
Jered Loeb—The Joint Commission  
Crystal Riley—The Joint Commission  
Heather Sherman—The Joint Commission  
Margaret VanAmringe—The Joint Commission  
Ann Watt—The Joint Commission  
Susan Yendro—The Joint Commission  
Leah Binder—The Leapfrog Group  
Barbara Rudolph—The Leapfrog Group  
Nadine Gracia—The Office of Minority Health  
Mady Chalk—Treatment Research Institute  
Paul Conlon—Trinity Health  
Tami Mark—Truven Health Analytics  
Randel Johnson—U.S. Chamber of Commerce  
Salma Lemtouni—U.S. Food and Drug Administration  
Philip Schoenfeld—UM Medical School  
Jordan Eisenstock—UMass Memorial Medical Center  
Devorah Rich—United Auto Workers Retiree Medical Benefits Trust  
Rhonda Robinson Beale—United Behavioral Health  
Barbara Corn—UnitedHealth Group  
Rhonda Medows—UnitedHealth Group  
Rena Stafford—University North Carolina  
Alayne Markland—University of Alabama at Birmingham  
Robert Weech-Maldonado—University of Alabama at Birmingham  
Doug Campos-Outcalt—University of Arizona College of Medicine  
Steven Chen—University of California Davis  
Francis Lu—University of California Davis  
Richard White—University of California Davis  
Solomon Liao—University of California Irvine  
Sherrie Kaplan—University of California Irvine School of Medicine  
John Kusske—University of California Irvine School of Medicine  
Nasim Afsar-manesh—University of California Los Angeles  
Jim Crall—University of California Los Angeles  
Bonnie Zima—University of California Los Angeles Center for Health Services & Society  
Christopher Saigal—University of California Los Angeles Medical Center  
Theodore Ganiats—University of California San Diego  
Charlene Harrington—University of California San Francisco  
Louise Walter—University of California San Francisco  
Nancy Donaldson—University of California San Francisco School of Nursing  
Marshall Chin—University of Chicago  
William McDade—University of Chicago  
William Dale—University of Chicago Medical Center  
Nancy Lowe—University of Colorado Denver  
Mark Metersky—University of Connecticut Health Center  
Ramon Bautista—University of Florida HSC/Jacksonville  
Tim Williamson—University of Kansas Medical Center  
Katherine Reeder—University of Kansas School of Nursing  
Judith Warren—University of Kansas School of Nursing  
Joanna Sikkema—University of Miami, School of Nursing and Health Studies  
William Barsan—University of Michigan Hospitals and Health Centers  
James Carpenter—University of Michigan Hospitals and Health Centers  
Elaine Chottiner—University of Michigan Hospitals and Health Centers  
Curtis Collins—University of Michigan Hospitals and Health Centers  
Karen Farris—University of Michigan Hospitals and Health Centers  
Ella Kazerooni—University of Michigan Hospitals and Health Centers  
Janet Larson—University of Michigan Hospitals and Health Centers  
Jean Malouin—University of Michigan Hospitals and Health Centers  
Marc Moote—University of Michigan Hospitals and Health Centers  
Anne Pelletier Cameron—University of Michigan Hospitals and Health Centers  
Linda Lindeke—University of Minnesota Amplatz Children's Hospital  
Ira Moscovice—University of Minnesota Rural Health Research Center  
Kristi Anne Henderson—University of Mississippi Medical Center  
Bonnie Wakefield—University of Missouri  
John Fildes—University of Nevada Las Vegas Medical Center  
Ethan Basch—University of North Carolina at Chapel Hill  
Jessica Lee—University of North Carolina at Chapel Hill  
Sidney Smith—University of North Carolina at Chapel Hill  
David Weber—University of North Carolina at Chapel Hill  
Lynn Wegner—University of North Carolina School of Medicine  
Lawrence Marks—University of North Carolina, School of Medicine  
Dale Bratzler—University of Oklahoma Health Sciences Center  
Mark Wolraich—University of Oklahoma Health Sciences Center  
Judith Hibbard—University of Oregon  
Leah Marcotte—University of Pennsylvania  
Brendan Carr—University of Pennsylvania Health System  
Lee Fleisher—University of Pennsylvania Health System  
Jerry Johnson—University of Pennsylvania Health System  
Frank Leone—University of Pennsylvania Health System  
David Casarett—University of Pennsylvania School of Medicine  
Kathryn Bowles—University of Pennsylvania School of Nursing  
Nancy Hanrahan—University of Pennsylvania School of Nursing  
Therese Richmond—University of Pennsylvania, School of Nursing  
Douglas White—University of Pittsburgh  
Donald Yealy—University of Pittsburgh Medical Center  
Carl Sirio—University of Pittsburgh School of Medicine  
Heidi Donovan—University of Pittsburgh School of Nursing

Laurent Glance—University of Rochester  
 Kevin Fiscella—University of Rochester School of Medicine  
 Jeffrey Beal—University of South Florida  
 Barbara Turner—University of Texas Health Science Center at San Antonio  
 Eduardo Bruera—University of Texas MD Anderson Cancer Center  
 Kenneth Ottenbacher—University of Texas Medical Branch at Galveston  
 Ethan Halm—University of Texas Southwestern Medical Center  
 Mambambath Jaleel—University of Texas Southwestern Medical Center  
 Kathy Rinnert—University of Texas Southwestern Medical Center  
 Craig Rubin—University of Texas Southwestern Medical School  
 Victoria Jordan—University of Texas-MD Anderson Cancer Center  
 John Skibber—University of Texas-MD Anderson Cancer Center  
 Barbara Summers—University of Texas-MD Anderson Cancer Center  
 Ronald Walters—University of Texas-MD Anderson Cancer Center  
 Amy Hessel—University of Texas-MD Anderson Medical Center  
 Paul Glassman—University of the Pacific School of Dentistry  
 David Classen—University of Utah School of Medicine  
 Michael Farber—University of Vermont College of Medicine  
 Pamela Cipriano—University of Virginia Health System  
 Rachel Grob—University of Wisconsin Center for Patient Partnerships  
 Elizabeth Jacobs—University of Wisconsin, Department of Medicine  
 Patricia Brennan—University of Wisconsin-Madison  
 Tracy Schroepfer—University of Wisconsin-Madison  
 Christine Hunter—US Office of Personnel Management  
 John O'Brien—US Office of Personnel Management  
 Iona Thraen—Utah Department of Health  
 Jim Smith—Utica College  
 David Penson—Vanderbilt University Medical Center  
 W. Stuart Reynolds—Vanderbilt University Medical Center  
 Peter Almenoff—Veterans Health Administration  
 Caroline Blaum—Veterans Health Administration  
 John Duda—Veterans Health Administration  
 Stephan Fihn—Veterans Health Administration  
 Joseph Francis—Veterans Health Administration  
 Vivienne Halpern—Veterans Health Administration

Marcia Insley—Veterans Health Administration  
 Michael Kelley—Veterans Health Administration  
 Daniel Kivlahan—Veterans Health Administration  
 Robert Petzel—Veterans Health Administration  
 Patricia Quigley—Veterans Health Administration  
 Scott Shreve—Veterans Health Administration  
 Patricia Sinnott—Veterans Health Administration  
 Donna Washington—Veterans Health Administration  
 Edward Gill—Virginia Commonwealth University Medical Center  
 Cathie Furman—Virginia Mason Medical Center  
 Johannes Koch—Virginia Mason Medical Center  
 Jolynn Suko—Virginia Mason Medical Center  
 Carol Mullin—Virtua Health  
 Margaret Terry—Visiting Nurse Associations of America  
 Carol Raphael—Visiting Nurse Service of New York  
 Robert Rosati—Visiting Nurse Service of New York  
 William Frohna—Washington Hospital Center  
 Linda Furkay—Washington State Department of Health  
 David Mancuso—Washington State Department of Social & Health Services  
 Jeffery Thompson—Washington State Medicaid  
 Michael Kaplitt—Weill Cornell Medical College  
 Aron Halfin—WellPoint  
 Richard Hastreiter—WellPoint  
 Jennifer Malin—WellPoint  
 Sarah Sampsel—WellPoint  
 Grace Ting—WellPoint  
 Tracy Wang—WellPoint  
 Alonzo White—WellPoint  
 Christy Whetsell—West Virginia University Hospitals  
 Frank Ghinassi—Western Psychiatric Institute & Clinic of the University of Pittsburgh Medical Center  
 Lori Nichols—Whatcom Health Information Network  
 Christopher Queram—Wisconsin Collaborative for Healthcare Quality  
 John Bott—Wisconsin Department of Employee Trust Funds  
 Lois Sater—Wisconsin Division of Public Health  
 Nancy Faller—Wound, Ostomy and Continence Nurses Society  
 Jephtha Curtis—Yale New Haven Health System  
 Elizabeth Drye—Yale New Haven Health System  
 Marcella Nunez-Smith—Yale New Haven Health System

Patrick O'Connor—Yale New Haven Health System  
 Mary Tinetti—Yale New Haven Health System  
 Patricia Button—Zynx Health  
 David Rhew—Zynx Health

#### Appendix F: National Quality Forum—Background

Despite the hard work of many, there is broad recognition that our healthcare system can do a better job on quality, safety, and affordability. This reality, in the context of a cost-conscious economy, has re-energized a national commitment to simultaneously improve care and responsibly constrain healthcare costs. State leaders, local governments, a broad swath of federal healthcare agencies, and an increasing number of other public- and private-sector organizations that constitute the quality movement are at the center of that resurgence. NQF is a public service organization that helps unite all of these organizations in their pursuit to make healthcare better, safer, and affordable.

Established in 1999 as the standard-setting organization for healthcare performance measures, NQF today has a much-broadened mission to:

- Build consensus on national priorities and goals for performance improvement, and work in partnership with the public and private sectors to achieve them.
- Endorse and maintain best-in-class standards for measuring and publicly reporting on healthcare performance quality.
- Promote the attainment of national healthcare improvement goals and the use of standardized measures through education and outreach programs.

NQF is recognized as a voluntary consensus standard-setting organization under the National Technology Transfer and Advancement Act of 1995. Its process for reaching consensus adheres to the Office of Management and Budget's formal definition of consensus.<sup>31</sup>

The NQF Board of Directors governs the organization and is composed of 31 voting members—key public- and private-sector leaders who represent major stakeholders in America's healthcare system. Consumers and those who purchase healthcare hold a simple majority of the at-large seats (see Appendix B). In 2012, NQF convened more than 800 hundred experts across every stakeholder group who contributed their time, experience, and insights to measure-review, measure-selection, and priority-setting committees (see Appendix E).

In recent years as part of a close working partnership with HHS, the

variety of NQF-endorsed measures has greatly expanded to address most settings of care, conditions, and provider types. NQF's measure portfolio includes measures of clinical process, patient experience of care, the actual outcomes of care, the costs and resources that go into providing care, as well as select structural measures. The portfolio is being enhanced with advanced measures, such as patient-reported outcomes and cross-cutting care-coordination measures. At the same time, NQF carefully manages its portfolio to be lean, retiring measures that no longer meet the more rigorous criteria. In the past year alone, 430 measures were submitted to NQF and 301, or nearly 70 percent, were endorsed. This endorsement rate—or ratio of submitted to endorsed measures—reflects NQF's efforts to systematically raise the bar on performance measurement and to fill key measurement gap areas even as it aggressively seeks to reduce the burden on providers by eliminating duplicative measures that add unnecessary data collection and administrative workload.

#### PERCENTAGE OF OUTCOME MEASURES IN NQF PORTFOLIO, 2010–2012

Year	Percentage of outcome measures in portfolio
2010 .....	18
2011 .....	24
2012 .....	27

To be NQF endorsed, a measure must capture a process or outcome that is important to measure and report, be scientifically acceptable, be feasible to collect, and provide useful results. NQF conducts an eight-step, consensus-based process for reviewing measures and other standards; this process has been continually improved over a decade, and is as follows:

1. Call for Nominations allows anyone to suggest a candidate for the committee that will oversee the project. Committees are diverse, often encompassing experts in a particular field, providers, scientists, and consumers. After selection, NQF posts committee rosters on its Web site to solicit public comments on the composition of the panel and makes adjustments as needed to ensure balanced representation.
2. Call for Measures starts a 30-day period for developers to submit a measure or practice through NQF's online submission forms.
3. Steering Committee Review puts submitted measures to a four-part test to

ensure they reflect sound science, will be useful to providers and patients, and will make a difference in improving quality. The expert steering committee conducts this detailed review in open sessions, each of which starts a limited period for public comment.

4. Public Comment solicits input from anyone who wishes to respond to a draft report that outlines the steering committee's assessment of measures for possible endorsement. The steering committee may request a revision to the proposed measures.

5. Member Vote asks NQF members to review the draft report and cast their votes on the endorsement of measures.

6. CSAC Review marks the point at which the NQF Consensus Standards Approval Committee (CSAC) deliberates on the merits of the measure and the issues raised during the review process, and makes a recommendation on endorsement to the Board of Directors. The CSAC includes consumers, purchasers, healthcare professionals, and others. It provides the big picture to ensure that standards are being consistently assessed from project to project.

7. Board Ratification asks for review and ratification by the NQF Board of Directors of measures recommended for endorsement.

8. Appeal opens a period when anyone can appeal the Board's decision.

Review committees comprise multiple stakeholders; consumer organizations and individual patients are equal partners with clinicians and other stakeholders throughout the process. There is a strong commitment to transparency: NQF invites public participation at every step, ranging from nominations for committees to comments and votes on specific measures. Endorsed measures are re-evaluated every three years to ensure their continuing relevance with current science and their actual use and usefulness in the field, and to determine whether they continue to represent the best in class compared to new measures. At any time, NQF can also conduct an ad hoc review of a measure if there is evidence of unintended consequences related to measurement or emerging clinical evidence that should result in a change to the measure.

Measures included in the NQF portfolio are developed and maintained by about 65 different organizations including the Centers for Medicare and Medicaid Services (CMS), the National Committee for Quality Assurance (NCQA), the Physician Consortium for Performance Improvement, convened by the American Medical Association (AMA-PCPI), Ingenix, The Joint

Commission, American College of Surgeons (ACS), Bridges to Excellence, Cleveland Clinic, Minnesota Community Measurement, and Pharmacy Quality Alliance.

Many public- and private-sector leaders contributed to developing NQF's multi-stakeholder consensus process in the measure-endorsement realm. In recognition of this unique public service, HHS is required under statute to contract with a consensus-based entity, and contracted with NQF to convene diverse stakeholder groups to advise the public sector on priorities for healthcare improvement, related implementation strategies, and selection of measures to both drive these strategies and gauge results. The NQF-convened NPP and MAP and their published reports are tangible outcomes of this work. An equally important outcome of these partnerships is the ongoing alignment across stakeholder groups and across public- and private-sector leaders about which levers are most powerful in both improving healthcare performance and making the delivery system more patient centered.

NQF was initially funded primarily through grants from major philanthropic foundations, including the Robert Wood Johnson Foundation and the Commonwealth Fund. NQF in turn built a strong membership base across all those who care about advancing healthcare quality; membership dues continue to provide annual funding for NQF's work.

In 2012, NQF received \$4.43 million a year in membership dues, an amount equaling 18 percent of its total budget. When combined with private foundation funding, 23 percent of NQF's budget comes from the private sector, with the remainder of its funding stemming from the public sector. In addition, the value of uncompensated donated time in 2012—some 55,000 hours of work done on a volunteer basis by healthcare leaders and experts—is conservatively estimated to equal another \$4 million in private funding for NQF's work. Scaling up NQF's capacity became a necessity when the public sector, in its role as the largest American healthcare purchaser, made a serious commitment to buying healthcare based on value. This policy direction immediately generated the need for a more sustainable, steady resource that stood ready to regularly review and endorse performance measures.

NQF has been fortunate to have received support from the federal government for more than 10 years, particularly since 2008 when federal leaders strongly committed themselves

to designing and implementing a value-driven agenda for healthcare. More specifically:

- MIPPA has provided NQF with \$10 million annually over a four-year period starting in 2009, which was extended for FY 2013 by HR8 (PL 112–240). These funds—awarded to NQF through a competitive process—support the organization's efforts to identify priority areas for improvement, endorse and update related performance measures, foster the transition to an electronic environment, and report annually to Congress on the status and progress to date of this effort.

ACA has provided NQF with support of about \$10 million annually, starting in 2011. Under Section 3014, Congress directed HHS to contract with “the consensus-based entity under contract” to provide multi-stakeholder input into the NQS, as well as input to the Secretary of HHS on the selection of measures for use in various quality programs that utilize the federal rulemaking process for measure selection.

#### **IV. Secretarial Comments on the Annual Report to Congress**

This 2013 Annual Report describes NQF's work in 2012 to fulfill the requirements specified in section 1890 of the Social Security Act. This section of the Social Security Act requires the Secretary of the Department of Health and Human Services to “have in effect a contract with a consensus-based entity, such as the National Quality Forum,” to perform certain duties including those related to performance measurement and NQS priorities. The Social Security Act also requires by not later than March 1 of each year (beginning with 2009), that the CBE shall submit to Congress and the Secretary of the Department of Health and Human Services a report containing a description of:

- (i) Implementation of quality and efficiency measurement initiatives under the Social Security Act and the coordination of such initiatives with quality and efficiency initiatives implemented by other payers;
- (ii) recommendations on an integrated national strategy and priorities for health care performance measurement;
- (iii) performance of its duties required under its contract with HHS;
- (iv) gaps in endorsed quality and efficiency measures, and where quality and efficiency measures are unavailable or inadequate to identify or address such gaps;
- (v) areas in which evidence is insufficient to support endorsement of quality and efficiency measures in priority areas identified by the Secretary under the national strategy and where targeted research may address such gaps; and

- (vi) convening multi-stakeholder groups to provide input on: 1) The selection of quality and efficiency measures for use in various Medicare programs, in reporting performance information to the public; and in other health care programs; and 2) national priorities for improvement in population health and the delivery of health care services for consideration under the national quality strategy.

This 2013 report fulfills the statutory requirement for the annual report described above and describes the results of work that NQF, as the CBE, undertook in 2012.

For example, in 2012, NQF managed its portfolio of more than 700 endorsed measures by replacing some measures with improved measures; removing measures that were no longer effective or where the evidence base had evolved; and expanding the portfolio to address well-recognized measurement gaps. NQF reviewed 430 submitted measures and endorsed 301 of them. This set included 81 new measures and 220 measures that maintained their endorsement after being considered in light of new evidence and/or against new competing measures submitted to NQF for consideration. The newly endorsed measures align with needs identified in the NQS and address several critical areas, including patient outcomes, underserved populations, healthcare disparities, and hospital readmissions.

In 2012, NQF's National Priorities Partnership (NPP), a collaborative public-private partnership, focused on how to advance patient safety by aligning its work with HHS' “Partnership for Patients” initiative. Through a series of web-based and in-person meetings, nearly 2,700 participants from multiple sectors learned about and shared new improvement approaches, information, tools, and professional connections to improve health care safety. The NPP also developed action plans to focus a range of national and local organizations in diverse sectors on how to align efforts to reduce preventable readmissions and improve maternity care, and created a web-based “action registry” to track improvement activities focused on readmissions and maternity care to enable learning across participants. Launched in the fourth quarter of 2012, by March 2013, the registry housed over 50 actions by 30 different organizations.

In 2012, NQF also continued its work to facilitate the electronic reporting of quality measures using electronic health records (EHRs) that health care providers across the nation are adopting. NQF's work on these “eMeasures” included standardizing

data elements so the same quality of care information can be collected from different EHRs. NQF also convened an eMeasure Learning Collaborative to help multiple parties address barriers to developing and implementing eMeasures.

NQF's Measure Applications Partnership (MAP) provided multi-stakeholder input to HHS about the potential use of quality measures in more than 17 different Medicare quality reporting and performance programs and the Medicare and Medicaid Electronic Health Record (EHR) Incentive Program. This input was critical to HHS programs. At the same time, MAP released its Families of Measures report, which defined measure families in four key areas—safety, care coordination, cardiovascular, and diabetes care—with the goal of promoting more cohesion and integration of care regardless of setting, provider, level of care intensity, or timing of care.

In 2012, NQF also conducted an analysis of its current measures portfolio against both the NQS priority areas and high-impact Medicare and child health conditions. This analysis found that while many NQF measures address patient safety, fewer measures address patient and family engagement. For example, measures of shared decision-making, patient navigation and self-management, healthy lifestyle behaviors, community interventions to improve health, and access, cost, and resource use are significantly less prevalent than safety measures. The analysis also found gaps in measures of preventive care, patient-reported outcomes (particularly quality of life and functional status), appropriateness (particularly for specialty care), access to timely palliative care, and health and healthcare disparities. Additionally, the analysis revealed the need for better population-level measures to assess improvements in health and healthcare. And, while certain high-impact conditions common to adults have an abundance of measures—e.g., cardiovascular disease, end-stage renal disease, and diabetes—many of the high-impact childhood conditions have few or no NQF-endorsed measures.

These and the other activities described in the Annual Report reflect the wide scope of work required for sound measurement of health care quality—and the accompanying hard work needed for the continued improvement of health care. HHS thanks NQF for its hard work and submission of this report.

## V. Future Steps

The work reflected in this annual report was produced under HHS' initial four-year contract to NQF which was executed in 2009 and will expire in 2013.

To continue to fulfill the statutory requirement for a contract with a consensus-based entity, HHS competitively procured a new contract with NQF in September 2012. Through this new contract, NQF will continue to perform the statutory activities for the CBE described above in support of HHS' efforts to achieve the aims of the NQS—better care, healthier people and communities, and affordable care.

## VI. Collection of Information Requirements

This document does not impose information collection and recordkeeping requirements. Consequently, it need not be reviewed by the Office of Management and Budget under the authority of the Paperwork Reduction Act of 1995 (44 U.S.C. 35).

<sup>1</sup> Measure Applications Partnership. Pre-Rulemaking Report: Input on Measures Under Consideration by HHS for 2012 Rulemaking. Washington, DC: National Quality Forum, 2013.

<sup>2</sup> National Quality Forum. NQF's Portfolio of Measures: Who is Using it, and how is it Evolving? Washington, DC: National Quality Forum, January 2012.

<sup>3</sup> National Quality Forum. NQF Measure Portfolio Report. Washington, DC: National Quality Forum, November 2012.

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Dated: July 25, 2013.

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