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

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Secretarial Review and Publication of the National Quality Forum Annual Report to Congress and the Secretary Submitted by the 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 2016 National Quality Forum Annual Report to Congress and the Secretary submitted by the consensus-based entity (CBE) under a contract with the Secretary as mandated by section 1890(b)(5) of the Social Security Act, established by section 183 of the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) and amended by section 3014 of the Patient Protection and 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 the statutory requirements.

FOR FURTHER INFORMATION CONTACT: Sophia Chan (410) 786–5050.

The order in which information is presented in this notice is as follows:

I. Background

The Patient Protection and Affordable Care Act of 2010 (ACA) provides strategies and tools to more fully achieve ''*Quality, Affordable Health Care For All Americans*''—Title I of ACA. In the six years since its passage, 20 million people have gained access to health care, (See ASPE. ''HEALTH INSURANCE COVERAGE AND THE AFFORDABLE CARE ACT, 2010–2016 available at: *https://aspe.hhs.gov/pdf-report/health-insurance-coverage-and-affordable-care-act-2010-2016''*) and the quality of that care is significantly improved. Fewer Americans are losing their lives or falling ill due to conditions acquired in the hospital such as pressure ulcers, infections, falls and traumas. Hospital-acquired conditions are estimated to have declined by 17 percent between 2010 and 2014. Preliminary data show that between 2010 and 2014, there was a decrease in these conditions by more than 2.1 million events; and as a result, 87,000 fewer people lost their lives. See: ''Saving Lives and Saving Money: Hospital-Acquired Conditions Update.'' December 2015. Agency for Healthcare Research and Quality, Rockville, MD. *http://www.ahrq.gov/professionals/quality-patient-safety/pfp/interimhacrate2014.html.*

A key ACA strategy for ''*Improving The Quality and Efficiency of Health Care''* (Title III of ACA) is to transform the health care delivery system by encouraging development of new patient care models and linking payment to quality outcomes in the Medicare program. As part of this strategy, the Department of Health and Human Services (HHS) has established a goal of tying 30 percent of traditional or fee-for-service Medicare payments to quality or value through alternative payment models by the end of 2016; and 50 percent of payments to these models by the end of 2018. HHS also set a goal of tying 85 percent of all traditional Medicare payments to quality or value by 2016 and 90 percent by 2018 through programs such as the Hospital Value-Based Purchasing Program. In March 2016, HHS announced that it has reached the goal of tying 30 percent of traditional Medicare payments to alternative payment models nearly a year ahead of schedule.

Efforts to transform the health care system to provide higher quality care require accurate, valid, and reliable measurement of the quality and efficiency of health care. Recognition of the need for such measurement predates ACA; MIPPA created section 1890 of the Social Security Act (the Act), which requires the Secretary of HHS to contract with a CBE to perform multiple duties to help improve performance measurement. Section 3014 of ACA expanded the duties of the CBE to help in the identification of gaps in available measures and to improve the selection of measures used in health care programs.

In response to MIPPA, in January of 2009, a competitive contract was awarded by HHS to the National Quality Forum (NQF) to fulfill requirements of section 1890 of the Act. A second, multi-year contract was awarded again to NQF after an open competition in 2012. This contract now includes the following duties created by MIPPA and ACA and contained in section 1890(b) of the Act:

Priority Setting Process: Formulation of a National Strategy and Priorities for Health Care Performance Measurement. The CBE is to 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. In doing so, the CBE is to give priority to measures that: (a) Address the health care provided to patients with prevalent, high-cost chronic diseases; (b) have the greatest potential for improving quality, efficiency and patient-centered health care; and c) may be implemented rapidly due to existing evidence, standards of care or other reasons. Additionally, the CBE must take into account measures that: (a) May assist consumers and patients in making informed health care decisions; (b) address health disparities across groups and areas; and (c) address the continuum of care across multiple providers, practitioners and settings.

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

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

*Review and Endorsement of an Episode Grouper Under the Physician Feedback Program. ''*Episode-based'' performance measurement is an approach to better understanding the utilization and costs associated with a certain condition by grouping together all the care related to that condition. ''Episode groupers'' are software tools that combine data to assess such condition-specific utilization and costs over a defined period of time. The CBE is required to provide for the review, and as appropriate, endorsement of an episode grouper as developed by the Secretary.

Convening Multi-Stakeholder Groups. The CBE must convene multi-stakeholder groups to provide input on: (1) The selection of certain categories of quality and efficiency measures, from among such measures that have been endorsed by the entity; and such measures that have not been considered

for endorsement by such entity 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 in the delivery of health care services for consideration under the national strategy. The CBE provides input on 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 provide input on 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, psychiatric hospitals, and home health care programs.

Transmission of Multi-Stakeholder Input. Not later than February 1 of each year, the CBE is to transmit to the Secretary the input of multi-stakeholder groups.

Annual Report to Congress and the Secretary. Not later than March 1 of each year, the CBE is required to submit to Congress and the Secretary of HHS an annual report. The report is to describe:

(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 the CBE's duties required under its contract with HHS;

(iv) gaps in endorsed quality and efficiency measures, including measures that are within priority areas identified by the Secretary under the national 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.

The statutory requirements for the CBE to annually report to Congress and the Secretary of HHS also specify that the Secretary of HHS must review and publish the CBE's annual report in the **Federal Register**, together with any comments of the Secretary on the report, not later than six months after receiving it.

This **Federal Register** notice complies with the statutory requirement for Secretarial review and publication of the CBE's annual report. NQF submitted a report on its 2015 activities to the Secretary on March 1, 2016. This 2016 Annual Report to Congress and the Secretary of the Department of Health and Human Services is presented below in Section II. Comments of the Secretary on this report are presented below in section III.

II. The 2016 Annual Report to Congress and the Secretary: ''NQF Report of 2015 Activities to Congress and the Secretary of the Department of Health and Human Services''

I. Executive Summary

Over the last eight years, Congress has passed two statutes with several extensions that call upon the Department of Health and Human Services (HHS) to work with a consensus-based entity (the ''entity'') to facilitate multistakeholder input into: (1) Setting national priorities for healthcare performance measurement, and (2) endorsement and maintenance of measures. The first of these statutes is the 2008 Medicare Improvements for Patients and Providers Act (MIPPA) (Pub. L. 110–275), which established the responsibilities of the consensus-based entity by creating section 1890 of the Social Security Act. The second statute is the 2010 Patient Protection and Affordable Care Act (ACA) (Pub. L. 111–148), which modified and added to the consensus-based entity's responsibilities. The American Taxpayer Relief Act of 2012 (PL 112–240) extended funding under the MIPPA statute to the consensus-based entity through fiscal year 2013. The Protecting Access to Medicare Act of 2014 (PAMA) (Pub. L. 113–93) extended funding under the MIPPA and ACA statutes to the consensus-based entity through March 31, 2015. The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) (Pub. L. 114–10) extended funding for fiscal years 2015 through 2017. HHS has awarded the consensus-based entity contract under these statutes to the National Quality Forum (NQF).

Section 1890(b)(5) of the Social Security Act specifically charges the Entity to report annually on its work:

As amended by the above laws, the Social Security Act (the Act)—specifically section 1890(b)(5)(A)—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 an integrated national strategy and priorities for health care performance measurement in all applicable settings; (3) NQF's performance of the duties required under its contract with HHS; (4) gaps in endorsed quality and efficiency measures, including measures that are within priority areas identified by the Secretary under HHS' national strategy, and where quality and efficiency measures are unavailable or inadequate to identify or address such gaps; (5) areas in which evidence is insufficient to support endorsement of measures in priority areas identified by the National Quality Strategy, and where targeted research may address such gaps and (6) matters related to convening multistakeholder groups to provide input on: (a) The selection of certain quality and efficiency measures, and (b) national priorities for improvement in population health and in the delivery of healthcare services for consideration under the National Quality Strategy.[i]

This seventh annual report highlights NQF's work related to these laws and conducted between January 1 and December 31, 2015, under contract with the HHS. The deliverables produced under contract in 2015 are referenced throughout this report, and a full list is included in Appendix A.

Recommendations on the National Quality Strategy and Priorities

Section 1890(b)(1) of the Act mandates that the consensus-based entity (entity) also required under section 1890 of the Act shall ''synthesize evidence and convene key stakeholders to make recommendations . . . on an integrated national strategy and priorities for health care performance measurement in all applicable settings.'' In making such recommendations, the entity shall ensure that priority is given to measures that address the healthcare provided to

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

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

NQF has continued to further the NQS by endorsing measures linked to the NQS priorities and by convening diverse stakeholder groups to reach consensus on key strategies for performance measurement. In 2015, NQF began or completed work in several emerging areas of importance that address the NQS, such as how to improve population health within communities, the need to address gaps in quality measurement in home and community-based services, and exploring quality reporting improvements in rural communities.

Quality and Efficiency Measurement Initiatives (Performance Measures)

Under section 1890(b)(2) and (3) of the Act, the entity must provide for the endorsement of standardized health care performance measures. The endorsement process shall consider whether measures are evidence-based, reliable, valid, verifiable, relevant to enhanced health outcomes, actionable at the caregiver level, feasible to collect and report, responsive to variations in patient characteristics, and consistent across health care providers. In addition, the entity must maintain endorsed measures, including updating endorsed measures or retiring obsolete measures as new evidence is developed.

Since its inception in 1999, NQF has developed a measure portfolio that currently contains approximately 600 measures, subsets of which are used in a variety of settings. About 300 NQF-endorsed measures are used in more than 20 federal public reporting and pay-for-performance programs; these measures used in the federal programs along with other endorsed measures are also used in private-sector and state programs.

In building upon NQF's endorsement and maintenance work, HHS charged NQF with two new tasks in the areas of variation of measures and attribution. These two new tasks that aim to improve maintenance and usability of endorsed measures relate to how a measure works both in the field on an operational basis and in payment linked to measure performance.

Health Information Technology (HIT) continues to evolve and drive change in healthcare for both providers and patients. As this field grows rapidly, it is important to recognize and understand the potential effects that HIT will have on performance measures. While HIT presents many new opportunities to improve patient care and safety, it can also create new hazards and pose additional challenges, specifically regarding establishing harmonized and consistent value sets—potentially altering measures and leaving validity and reliability at question. NQF embarked on two new task orders specifically addressing patient safety in HIT and value set harmonization.

In 2015, NQF endorsed 161 measures and removed 42 measures from its portfolio across 14 HHS-funded projects. These measure endorsement and maintenance projects help ensure that the measure portfolio contains ''best-in-class'' measures across a variety of clinical and cross-cutting topic areas. Expert committees review both previously endorsed and new measures in a particular topic area to determine which measures deserve to be endorsed or re-endorsed because they are best-in-class. Working with expert multistakeholder committees,[iii] NQF undertakes actions to keep its endorsed measure portfolio relevant.

In 2015, NQF endorsed measures in order to:

Drive the healthcare system to be more responsive to patient/family needs. This effort included continued work in Person- and Family-Centered Care and Care Coordination, and Palliative and End-of-Life Care endorsement projects, which included endorsing patient-reported outcome measures and patient experience surveys.

Improve care for highly prevalent conditions. NQF's work included Cardiovascular, Renal, Endocrine, Behavioral Health, Musculoskeletal, Eye Care and Ear, Nose and Throat Conditions, Pulmonary/Critical Care, Neurology, Perinatal, and Cancer endorsement projects.

Emphasize cross-cutting areas to foster better care and coordination. This effort included Behavioral Health, Patient Safety, Cost and Resource Use, and All-Cause Admissions and Readmissions endorsement projects.

During 2015, NQF also removed 42 measures from its portfolio for a variety of reasons: measures no longer met endorsement criteria; measures were harmonized with other similar, competing measures; measure developers chose to retire measures that they no longer wished to maintain; a better, substitute measure was submitted; or measures ''topped out,'' with providers consistently performing at the highest level. Continuously culling the portfolio through these means and through the measure maintenance process ensures that the NQF portfolio is relevant to the most current practices in the field.

In October 2015, HHS awarded NQF additional endorsement projects, addressing topics such as pulmonary and critical care, neurology, perinatal, cancer, and palliative and end-of-life care. NQF has begun work on these projects by issuing calls for measures to be reviewed and considered for endorsement.

Stakeholder Recommendations on Quality and Efficiency Measures

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

The Measure Applications Partnership (MAP) is a public-private partnership convened by NQF, as mandated by the ACA (Pub. L. 111–148, section 3014). MAP was created to provide input to HHS on the selection of quality and efficiency measures for more than 20 federal public reporting and performance-based payment programs. Launched in the spring of 2011, MAP is comprised of representatives from more than 90 major

private-sector stakeholder organizations and seven federal agencies.

During the 2014–2015 pre-rulemaking process, MAP examined almost 200 unique measures for consideration for use in 20 different federal health programs. MAP convened workgroups specified by care settings both in person and by webinar to evaluate the measures and make recommendations concerning their proposed use in various federal programs.

In 2015, MAP conducted an ''off-cycle'' review to provide recommendations to HHS on a selection of performance measures under consideration to implement the Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014 (Pub. L. 113–185). An off-cycle deliberation is one that occurs outside of the usual timing for MAP deliberations and in which HHS seeks input from the MAP on additional measures under consideration on an expedited 30-day timeline. The IMPACT Act requires, among other things, standardized patient assessment data to enable comparisons across four different post-acute care settings: skilled nursing facilities, inpatient rehabilitation facilities, long-term care hospitals, and home health agencies. In these deliberations, MAP highlighted the importance of integrating data with existing assessment instruments where possible, as well as noted the challenges in standardizing across the four different settings of care.

Under separate funding from the CMS, MAP also convened task forces to address the unique needs of Medicare and Medicaid dual beneficiaries, as well as made recommendations on strengthening the Adult and Child Core Sets of Measures utilized in Medicaid and CHIP programs. The Adult Core Set refers to the Core Set of Health Care Quality Measures for Adults Enrolled in Medicaid. The Child Core Set refers to the Core Set of Healthcare Quality Measures for Children Enrolled in Medicaid and CHIP. Work on the Adult and Child core sets of measures utilized in the Medicaid and CHIP programs helped HHS fulfill requirements for Child and Adult core sets of measures required under the Affordable Care Act (ACA) § 2701 and the Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA).

Cross-Cutting Challenges Facing Measurement: Gaps in Endorsed Quality and Efficiency Measures Across HHS Programs

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

In 2015, NQF staff examined the current measure portfolio and after exhaustive review, identified over 250 measure gaps that have yet to be filled. Additionally, building upon its ongoing role in identifying gaps in measurement, MAP developed a scorecard approach which quantifies the number of MAP-recommended measures in gap areas organized by the priority areas of the National Quality Strategy.

MAP also addressed the need for alignment across multiple programs by focusing on comparable performance across care settings, data sources, and measure elements to facilitate better information exchange that could close potential ''reporting gaps,'' areas of measurement lacking sufficient data, across the healthcare system.

Coordination With Measurement Initiatives Implemented by Other Payers

Section1890(b)(5)(A)(i) of the Social Security Act mandates that the Annual Report to Congress and the Secretary include a description of the implementation of quality and efficiency measurement initiatives under this Act and the coordination of such initiatives with quality and efficiency initiatives implemented by other payers.

This year NQF worked with other payers and entities to better understand the areas of alignment and socioeconomic risk adjustment of measures in an effort to coordinate quality measurement across the public and private sectors.

The Centers for Medicare & Medicaid Services (CMS) and America's Health Insurance Plans (AHIP) brought together private- and public-sector payers to work on better measure alignment in 2015. NQF provided technical assistance to this effort which is largely focused on aligning clinician level measures in ambulatory settings across CMS and private plans. While these collaborative efforts are not intended to solve all alignment challenges, they will serve as an important first step toward accomplishing a lofty and very necessary goal.

Additionally, NQF commenced a two-year trial period, evaluating risk adjustment of measures for socioeconomic status (SES) and other demographic factors. This two-year trial period is a temporary policy change that will allow for the SES risk adjustment of performance measures where there is a sound conceptual and empirical basis for doing so. At the conclusion of this trial period, NQF will determine whether to make this policy change permanent.

II. Recommendations on the National Quality Strategy and Priorities

Section 1890(b)(1) of the Social Security Act (the Act), mandates that the consensus-based entity (entity) 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. In making such recommendations, the entity shall ensure that priority is given to measures: (i) That address the health care provided to patients with prevalent, high-cost chronic diseases; (ii) with the greatest potential for improving the quality, efficiency, and patient-centeredness of health care; and (iii) that may be implemented rapidly due to existing evidence, standards of care, or other reasons.'' In addition, the entity is to ''take into account measures that: (i) May assist consumers and patients in making informed healthcare decisions; (ii) address health disparities across groups and areas; and (iii) address the continuum of care a patient receives, including services furnished by multiple health care providers or practitioners and across multiple settings.''

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

Annually, NQF has continued to further the National Quality Strategy by endorsing measures linked to the NQS priorities and by convening diverse stakeholder groups to reach consensus on key strategies for performance measurement. In 2015, NQF began or

completed work in several emerging areas of importance that address the National Quality Strategy, such as population health within communities, measurement gap identification in home and community-based services, and rural health.

Improving Population Health Within Communities

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

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

One of the NQS's related six priorities specifically emphasizes:

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

With the expansion of coverage due to the Affordable Care Act (ACA), the federal government has had opportunities to meaningfully coordinate its improvement efforts with those of local communities in order to better integrate and align medical care and population health. Such efforts can help improve the nation's overall health and potentially lower costs.

In September 2014, NQF launched phase 2 of the Population Health Framework project, enlisting 10 diverse communities to begin an 18-month field test of the deliverables of the first phase of this project. The deliverables included an evidence-based framework; key terms; a core set of measure domains and measures, building off of the CMS-developed domains and subdomains; measure gaps; data granularity needed to produce actionable information at the community level; and a list of essential 'actors' who need to be engaged in community-based work to chart and undertake a course of action when embarking on a systematic effort to improve population health in their region. The 10 field testing groups participating include:

1. Colorado Department of Health Care Policy and Financing (HCPF), Denver, CO
2. Community Service Council of Tulsa, Tulsa, OK
3. Designing a Strong and Healthy NY (DASH–NY), New York, NY
4. Empire Health Foundation, Spokane, WA
5. Kanawha Coalition for Community Health Improvement, Charleston, WV
6. Mercy Medical Center and Abbe Center for Community Mental Health—A Community Partnership with Geneva Tower, Cedar Rapids, IA
7. Michigan Health Improvement Alliance, Central Michigan
8. Oberlin Community Services and The Institute for eHealth Equity, Oberlin, OH
9. Trenton Health Team, Inc., Trenton, NJ
10. The University of Chicago Medicine Population Health Management Transformation, Chicago, IL

During the field test, these groups are participating in a variety of activities including:

- Applying the ''*Guide* for community action'' handbook developed in phase 1 of this project and released in August of 2014 to new or existing population health improvement projects;
- Determining what works and what needs enhancement in the guide; and
- Offering examples and ideas for revised or new content based on their own experiences.

These communities represent a range of groups, each with different levels of experience, varied geographic and demographic focus, and demonstrated involvement in or plans to establish population health-focused programs. These groups participate through in-person Committee meetings and monthly conference calls.

In July 2015, the *Guide* for community action, version 2.0 [v] was published and serves as a handbook for individuals and practitioners that wish to improve health across a population, whether locally, in a broader region, or even nationally. The *Guide* is designed to support individuals and groups working together to successfully promote and improve population health over time. It contains brief summaries of 10 useful elements that are important to consider when engaging in collaborative population health improvement efforts, and includes examples and links to practical resources. Version 2.0 incorporates the feedback and experiences from the 10 field testing groups mentioned above to make the information more relevant and actionable from the perspective of multisector partnerships working in the field.

Home and Community-Based Services

Home and community-based services (HCBS) are vital to promoting independence and wellness for people with long-term care needs. The United States spends $130 billion each year on long-term services and support, a figure that is likely to increase dramatically as the number of Americans over age 65 is expected to double by the end of 2016.[vi] Awarded in December 2014, this project will span two years and is currently underway.

This project offers an important opportunity to address the gap in HCBS measures that support community living. NQF convened a multistakeholder Committee to accomplish the following tasks:

- Create a conceptual framework for measurement, including a definition for HCBS;
- Perform a synthesis of evidence and an environmental scan for measures and measure concepts;
- Identify gaps in HCBS measures based on the framework; and
- Make recommendations for HCBS measure development efforts.

In August 2015, the Committee released an interim report titled *Addressing Performance Measure Gaps in Home and Community-Based Services to Support Community Living: Initial Components of the Conceptual Framework*.[vii] This interim report detailed the Committee's work to develop a conceptual framework for quality measurement. The Committee identified characteristics of high-quality HCBS that express the importance of ensuring the adequacy of the HCBS workforce, integrating healthcare and social services, supporting the caregivers of individuals who use HCBS, and fostering a system that is ethical, accountable, and centered on the achievement of an individual's desired outcomes.

This report aims to develop a shared understanding and approach to assessing the quality of home and community-based services. NQF reviewed state-level and international quality measurement activities in three states and three nations. The next steps of the project will discuss the evidentiary findings and environmental scan—also taking into consideration feasibility of measurement, barriers to implementation, and mitigation strategies for identified barriers. Project completion is expected in September 2016.

Rural Health

Challenges such as geographic isolation, small practice size, heterogeneity in settings and patient population, and low case volumes make participation in performance measurement and improvement efforts especially challenging for many rural providers. Although some rural hospitals and clinicians participate in a variety of private-sector, state, and federal quality measurement and improvement efforts, many quality initiatives implemented by the Centers for Medicare & Medicaid Services (CMS)

exclude rural healthcare providers from mandatory quality reporting and value-based payment programs. Notably, Critical Access Hospitals (CAH) are exempt from participating in the Hospital Inpatient Quality Reporting (IQR), Hospital Outpatient Quality Reporting (OQR), and Hospital Value Based Purchasing (VBP) Programs. CAHs can voluntarily participate on the Hospital Compare Web site though they are not mandated to do so. Clinicians who are not paid under the Medicare Physician Fee Schedule, are for the most part, not included in the CMS clinical reporting and payment programs. This includes those who work in Rural Health Clinics and Community Health Centers.

In September 2015, the NQF-convened Rural Health Committee released its final report,[viii] which provided 14 recommendations to address the challenges of healthcare performance measurement for rural providers, including those discussed above. The recommendations are intended to help advance a thoughtful, practical, and relatively rapid integration of rural providers into CMS quality improvements efforts.

The Committee's overarching recommendation is to make participation in CMS quality measurement and quality improvement programs mandatory for all rural providers but allow for a phased approach, calling for the inclusion of new reporting requirements over a number of years to allow rural providers time to adjust to new requirements and build the required infrastructure for their practices. Further, the Committee recommended that the low case volume must be addressed prior to mandatory participation in reporting programs. The Committee also made several additional stand-alone recommendations with the intention of easing the transition of rural providers from voluntary to mandatory participation in quality measurement and improvement programs. These recommendations were as follows:

1. Fund development of rural-relevant measures—specifically patient hand-offs and transitions, access to care and timeliness of care, cost, population health at the geographic levels;

2. Develop and/or modify measures to address low case volume explicitly considering measures that are broadly applicable across rural providers, measures that reflect wellness in the community, and measures constructed using continuous variables and ratio measures;

3. Consider rural-relevant sociodemographic factors in risk adjustment (statistical methods to control or account for patient-related factors when computing performance measure scores); and

4. When creating and using composite measures, ensure that the component measures are appropriate for rural providers.

III. Quality and Efficiency Measurement Initiatives (Performance Measures)

Under section 1890(b)(2) and (3) of the Act, the entity must provide for the endorsement of standardized health care performance measures. The endorsement process is 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, responsive to variations in patient characteristics, and consistent across types of health care providers. In addition, the entity must establish and implement a process to ensure that endorsed measures are updated (or retired if obsolete), as new evidence is developed.

Standardized healthcare performance measures are used by a range of healthcare stakeholders for a variety of purposes. Measures help clinicians, hospitals, and other providers understand whether the care they provide their patients is optimal and appropriate, and if not, where to focus their efforts to improve. In addition, performance measures are increasingly used in federal accountability public reporting and pay-for-performance programs, to inform patient choice, to drive quality improvement, and to assess the effects of care delivery changes.

Working with multistakeholder committees to build consensus, NQF reviews and endorses healthcare performance measures. Currently NQF has a portfolio of approximately 600 NQF-endorsed measures which are in widespread use; subsets of the portfolio apply to particular settings and levels of analysis. The federal government, states, and private sector organizations use NQF-endorsed measures to evaluate performance and to share information with employers, patients, and their families. Together, NQF measures serve to enhance healthcare value by ensuring that consistent, high-quality performance information and data are available, which allows for comparisons across providers and the ability to benchmark performance.

In building upon NQF's endorsement work, HHS charged NQF with two new tasks related directly to the use of endorsed measures—both in the field and in their relation to payment. At the direction of HHS, NQF embarked on a project to understand how measures are sometimes altered in the field leading to variation of measure specifications. In the second project, as financial stakes are increasingly tied to measures, there are growing debates about how to appropriately attribute a clinician's care to the outcome of the patient, made especially difficult when many providers contribute to the care of a single patient.

Implementation and adoption of health information technology (HIT) is widely viewed as essential to the transformation of healthcare. As this field grows rapidly, it is important to recognize and understand the potential effects that the introduction of HIT will have on performance measures. While HIT presents many new opportunities to improve patient care and safety, it can also create new hazards and pose additional challenges, specifically establishing harmonized and consistent value sets—potentially altering measures and leaving validity and reliability in question.

In 2015, NQF worked on two projects directed by HHS to advance eHealth Measurement: (1) The Prioritization and Identification of Health IT Patient Safety Measures, and (2) Value Set Harmonization.

Variation of Measure Specifications. Measures now apply to a diverse range of clinical areas, settings, data sources, and programs. Frequently, different organizations slightly modify existing standardized measures to address the same fundamental quality issue. This leads to challenges, including confusion for stakeholders, a heightened burden of data collection on providers, and greater difficulty when trying to compare their altered measures.

At the direction of HHS, NQF embarked on a new task order designed to look at currently endorsed measures and how they are used and modified, when the modified measure used produces data that is equivalent to the endorsed measures, or when the modification changes the measure significantly enough that the data collected is not comparable and essentially the modified measure is a new measure.

In this project, NQF will convene a multistakeholder Expert Panel to provide leadership, guidance, and input that includes:

- Conducting an environmental scan to assess the current landscape of measure variation;
- Developing a conceptual framework to help identify, develop, and interpret variations in measure specifications and evaluate the effects of those variations;

• Developing a glossary of standardized definitions for a limited number of key measurement terms, concepts, and components that are known to be common sources of variation in otherwise-similar measures; and

• Providing recommendations for core principles and guidance on how to mitigate variation and improve variability across new and existing measures.

This project was awarded in October 2015 and is currently underway with the formation of the Expert Panel.

Attribution. Attribution can be defined as the methodology used to assign patients and their quality outcomes to providers. Measurement approaches are needed that recognize the multiple providers involved in delivering care and their individual and joint responsibility to improve quality across the patient episode of care. These issues have become increasingly important with the creation and design of the Medicare Merit-Based Incentive Payment (MIPS) program and alternative payment models (APMs) for physicians under the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA). In all of these payment approaches, improvements in outcomes may not be directly tied to a single provider.

Increasingly, care is provided within structures of shared accountability, and guidance is needed regarding attribution of providers to patients. The issues regarding attribution to individual providers, which include primary care physicians, specialist physicians, physician groups, the role of nurse practitioners, and the full healthcare team, have complicated the use and evaluation of performance measures. HHS has directed NQF to examine this topic through its multistakeholder review process and commission a paper to include a set of principles for attribution. As the financial stakes tied to measures have grown, policy debates over physician payment have intensified. This project will synthesize and help further a better understanding of different approaches for addressing attribution. The lack of clarity in attribution approaches remains a major limitation to the use of outcome and cost measures.

The Panel's final report will:

• Describe the problem that exists with respect to attribution of performance measurement results to one or more providers;

• Detail the subset of measures that are affected by attribution;

• Include principles that guide the selection and implementation of approaches to attribution;

• Put forth potential approaches that could be used to validly and reliably attribute performance measurement results to one or more providers under different delivery models; and

• Put forth models of approaches to attribution that adhere to the principles described above and are developed and described in sufficient detail to enable their testing on CMS data.

This project was awarded in October 2015 and is currently underway.

Prioritization and Identification of Health IT Patient Safety Measures

Increasing public awareness of HIT-related safety concerns has raised this issue's profile and added urgency to efforts to assess the scope and nature of the problem and to develop potential solutions. The 2012 Food and Drug Administration Safety Innovation Act required coordinated activity between the Food and Drug Administration, the Office of the National Coordinator for Health Information Technology, and the Federal Communications Commission on a strategy to develop a regulatory framework for HIT that promotes patient safety, among other goals. These agencies' subsequent work and the HIT Policy Committee's recommendation to create a public-private Health IT Safety Center have underscored the importance of partnerships, collaboration, and shared responsibility in ensuring the safe use of HIT.

An HIT-related safety event—sometimes called ''e-iatrogenesis''—has been defined as ''patient harm caused at least in part by the application of health information technology.'' [ix] Detecting and preventing HIT-related safety events poses many challenges because these are often multifaceted events, which involve not only potentially unsafe technological features of electronic health records, for example, but also user behaviors, organizational characteristics, and rules and regulations that guide most technology-focused activities.

This project, launched in September 2014, assesses the current environment related to the measurement of HIT-related safety events and constructs a framework for advancement of measurement to improve the safety of HIT. The multistakeholder Committee for the project will work to:

• Explore the intersection of HIT and patient safety;

• Create a comprehensive framework for assessment of HIT safety measurement efforts;

• Construct a measure gap analysis; and

• Provide recommendations on how to address identified gaps and challenges, as well as best-practices for the measurement of HIT safety issues.

The Committee adopted a three-domain framework for categorizing and conceptualizing potential measurement concepts and gaps in the areas of HIT safety, and provided a framework for recommendations around future HIT safety measure development. The goals of the framework are to ensure (1) that clinicians and patients have a foundation for safe HIT; (2) that HIT is properly integrated and used within the healthcare organizations to deliver safe care; and (3) that HIT is part of a continuous improvement process to make care safer and more effective. After receiving public input on the framework report, posted for public comment in November 2015, the Committee reflected upon these comments prior to the release of a final report in 2016.

Value Set Harmonization

Interoperable electronic health records (EHRs) can enable the development and reporting of innovative performance measures that address critical performance and measurement gaps across settings of care. However, to achieve this future state, the field needs electronic clinical data standards and reusable ''building blocks'' of code vocabularies, known as value sets, to ensure measures can be consistently and accurately implemented across disparate systems. A value set consists of unique codes and descriptions which are used to define clinical concepts, *e.g.,* diagnosis of diabetes, and are necessary to calculate Clinical Quality Measures (CQMs)—quality measure data gathered from a clinical setting.

Launched in January 2015, the Committee of experts and key stakeholders on this project is developing a value set harmonization test pilot and approval process to promote consistency and accuracy in electronic CQM (eCQM) value sets. NQF defines value set harmonization as the process by which unnecessary or unjustifiable variance will be reduced and eventually eliminated from common value sets in eCQMs by the reconciliation and integration of competing and/or overlapping value sets. This project is guided by a multistakeholder Value Set Committee (VSC), as well as subject specific technical expert panels (TEPs).

The VSC will help NQF to determine the overall approach to the

harmonization and approval of value sets, including:

- The development of evaluation criteria;
- How to evaluate the results of the harmonization process; as well as
- Broader recommendations on how harmonized and approved value sets should be integrated into the measure endorsement process.

A final report is expected in 2016.

Current State of NQF Measure Portfolio: Responding to Evolving Needs

Across 14 HHS-funded projects in 2015, NQF endorsed 161 measures and removed 42 measures from its portfolio. NQF ensures that the measure portfolio contains ''best-in-class'' measures across a variety of clinical and cross-cutting topic areas. Expert committees review both previously endorsed and new measures in a particular topic area to determine which measures deserve to be endorsed or re-endorsed because they are best-in-class. Working with expert multistakeholder committees,[x] NQF undertakes actions to keep its endorsed measure portfolio relevant.

NQF removes measures from its portfolio for a variety of reasons, including failure to meet more rigorous endorsement criteria, the need to facilitate measure harmonization and mitigate competing similar measures or retire measures that developers no longer wish to maintain. In addition, measures that are ''topped-out'' are put into reserve because they show consistently high levels of performance, and are therefore no longer meaningful in differentiating performance across providers. This culling of measures ensures that time is spent measuring aspects of care in need of improvement, rather than retaining measures related to areas where widespread success has already been achieved.

While NQF pursues strategies to make its measure portfolio appropriately lean and responsive to real-time changes in clinical evidence, it also aggressively seeks measures from the field that will help to fill known measure gaps and to align with the NQS goals.

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

Measure Endorsement and Maintenance Accomplishments

In 2015, NQF reviewed 48 new measures for endorsement and 113 measures for the periodic maintenance review for re-endorsement. These measures (discussed below) were in the categories of behavioral health, cost and resource use, etc. As a result of this, NQF added 48 new measures to its portfolio, while 113 measures reviewed retained their NQF endorsement in 2015. Eighty-nine of the 161 endorsed measures (both new and renewed measures) are outcome measures (12 are patient-reported outcomes (PROs)), 61 are process measures, three are efficiency measures, three are composite measures, three are structural measures, and two are cost and resource use measures.

While undergoing endorsement and maintenance, all measures are evaluated for their suitability based on the standardized criteria in the following order:

1. Evidence and Performance Gap—Importance to Measure and Report
2. Reliability and Validity—Scientific Acceptability of Measure Properties
3. Feasibility
4. Usability and Use
5. Comparison to Related or Competing Measures

More information is available in the *Measure Evaluation Criteria and Guidance for Evaluating Measures for Endorsement.*[xi]

A list of measures reviewed in 2015 and the results of the review are listed in Appendix A. Summaries of endorsement and maintenance projects completed in 2015 and projects underway but not completed in 2015 are presented below.

Completed Projects

Behavioral health measures. In the United States, it is estimated that approximately 26 percent of the population suffers from a diagnosable mental disorder.[xii] These disorders—which can include serious mental illnesses, substance use disorders, and depression—are associated with poor health outcomes, increased costs, and premature death.[xiii] Although general behavioral health disorders are widespread, the burden of serious mental illness is concentrated in about 6 percent of the population.[xiv] In 2005, an estimated $113 billion was spent on mental health treatment in the United States. Of that amount, $22 billion was spent on substance abuse treatment alone, making substance abuse one of the most costly (and treatable) illnesses in the nation.[xv]

Phase 3 of the behavioral health measures project began in October of 2014 and concluded its endorsement process in May 2015. The Standing Committee evaluated 13 new measures and 6 existing measures for maintenance review. Measures examined in this phase dealt with tobacco use, alcohol and substance use, psychosocial functioning, attention deficit hyperactivity disorder (ADHD), depression and health screening, and assessment for people with serious mental illness. At the end of their review (which included public comment), 16 of these measures were endorsed by the Committee, one was approved for trial use (to further examine its validity), one was not recommended, and one was deferred.[xvi]

Cost and resource use measures. Cost measures are a key building block for understanding healthcare efficiency and value. NQF has endorsed several cost and resource use measures since beginning endorsement work in the cost arena in 2009. In February 2015, NQF finished both phase 2 and phase 3 of the Cost and Resource Use Measures project.

Phase 2 evaluated three cost and resource use measures focused on cardiovascular conditions—specifically the relative resource use for people with cardiovascular conditions, hospital-level, risk-standardized payment associated with a 30-day episode for Acute Myocardial Infarction, and hospital-level, risk standardized payment associated with a 30-day episode-of-care heart failure. All three of these measures were endorsed. Two of the endorsed measures were endorsed with the following conditions:

- *One year look-back assessment of unintended consequences.* NQF staff is working with the Cost and Resource Use Standing Committee and CMS to determine a plan for assessing potential unintended consequences—unintended negative consequences to patients and populations—of these measures in use.
- *Consideration for the SES trial period.* The Cost and Resource Use Standing Committee considers whether the measures should be included in the NQF trial period for consideration of risk adjustment for socioeconomic status and other demographic factors.
- *Attribution.* NQF considers opportunities to address the attribution issue—that is, how to assign responsibility for patient care when multiple providers are providing care to a given patient.[xvii]

In phase 3, the NQF Expert Panel evaluated three cost and resource use

measures focused on pulmonary conditions, including asthma, chronic obstructive pulmonary disease (COPD), and pneumonia. All three of the measures were endorsed with the same conditions noted in this section.[xviii]

Endocrine measures. Endocrine conditions most often result from the body producing either too much or too little of a particular hormone. In the United States, two of the most common endocrine disorders are diabetes and osteoporosis. Diabetes, a group of diseases characterized by high blood glucose levels, affects as many as 25.8 million Americans and ranks as the seventh leading cause of death in the United States. Many of the diabetes measures in the portfolio are among NQF's longest-standing measures.

Osteoporosis, a bone disease characterized by low bone mass and density, affects an estimated 9 percent of U.S. adults age 50 and over.

NQF selected the endocrine measure evaluation project to pilot test a process improvement focused on frequent submission and evaluation of measures, with the goal of speeding up endorsement time and shortening the time from measure development to use in the field. This 25-month project includes three full endorsement cycles, allowing for the submission and review of both new and previously endorsed measures every six months, in contrast to usual review every three years, in a given topical area.

Summarized in the final report released November 2015, the Endocrine Standing Committee evaluated five new measures and 18 measures undergoing maintenance review against NQF's standard evaluation criteria. Of the 23 measures evaluated, 22 measures were recommended for endorsement by the Standing Committee and have been endorsed by NQF. Only one measure was not recommended for endorsement, Discharge Instructions—Emergency Department, because the Committee stated that the discharge instructions did not equate to coordination of care. The Committee noted that there is minimal evidence indicating that written discharge instructions improve care for osteoporosis patients or have had any impact on such outcomes as prevention of future fractures.[xix]

Musculoskeletal measures. Musculoskeletal conditions include injuries or disorders precipitated or exacerbated by sudden exertion or prolonged exposure to physical factors such as repetition, force, vibration, or awkward postures. On average, the proportion of the U.S. population with a musculoskeletal disease requiring medical care has increased annually by more than two percentage points over the past decade and now includes more than 30 percent of the population.

The Musculoskeletal Standing Committee evaluated 12 measures: Eight new measures and four measures undergoing maintenance review. Measures submitted addressed the clinical areas of rheumatoid arthritis, gout, pain management, and lower back injury. Three measures were recommended for endorsement, four measures were recommended for trial measure approval (an optional pathway for eMeasures being piloted in this project), two measures were not recommended for trial measure approval, one measure was not recommended for endorsement, and two measures were deferred for later consideration. The final report of this project was issued January 2015.[xx]

Continuing Projects

Cardiovascular measures. Cardiovascular disease is the leading cause of death for men and women in the United States. It accounts for approximately $312.6 billion in healthcare expenditures annually. Coronary heart disease (CHD), the most common type, accounts for 1 of every 6 deaths in the United States. Hypertension—a major risk factor for heart disease, stroke, and kidney disease—affects 1 in 3 Americans, with an estimated annual cost of $156 billion in medical costs, lost productivity, and premature deaths.[xxi]

Completed August 31, 2015, the cardiovascular phase 2 project identified and endorsed measures for heart rhythm disorders, cardiovascular implantable electronic devices, heart failure, acute myocardial infarction, congenital heart disease, and statin medication. Many of the measures in the portfolio currently are used in public and/or private accountability and quality improvement programs; however, significant measurement gaps remain related to cardiovascular care.

In phase 2, the Cardiovascular Standing Committee evaluated eight new measures and eight measures undergoing maintenance review against NQF's standard evaluation criteria. Eleven of these measures were recommended for endorsement by the Committee, four were not recommended, and one was withdrawn by the developer.[xxii]

Phase 3 of this project is still in progress. This phase is currently reviewing 23 measures that can be used to assess cardiovascular conditions at any level of analysis or setting of care, as well as reviewing endorsed measures scheduled for maintenance. A final report is expected by April 2016. Phase 4 was launched in October 2015, with a final report expected in February of 2017. Measures are currently being submitted for this phase.

Care coordination measures. Care coordination across providers and settings is fundamental to improving patient outcomes and making care more patient-centered. Poorly coordinated care can lead to unnecessary suffering for patients, as well as avoidable readmissions and emergency department visits, increased medical errors, and higher costs.

People with chronic conditions and multiple co-morbidities—and their families and caregivers—often find it difficult to navigate our complex healthcare system. As this ever-growing population transitions from one care setting to another, they are more likely to suffer the adverse effects of poorly coordinated care. These include incomplete or inaccurate transfer of information, poor communication, and a lack of follow-up which can lead to poor outcomes, such as medication errors. Effective communication within and across the continuum of care will improve both quality and affordability.

In July 2011, NQF launched a multiphased Care Coordination project focused on healthcare coordination across episodes of care and care transitions. Phase 1, completed in 2012, sought to address the lack of cross-cutting measures in the NQF measure portfolio by developing a path forward to more meaningful measures of care coordination leveraging health information technology (HIT). Phase 2 addressed the implementation and methodological issues in care coordination measurement, as well as the evaluation of 15 care coordination performance measures. While phase 3 was completed in December 2014, the Care Coordination Standing Committee is currently conducting an off-cycle review process. An off-cycle deliberation is one that occurs outside of the usual timing for MAP deliberations and in which HHS seeks input from MAP on additional measures under consideration on an expedited 30-day timeline. Off-cycle measures reviewed focused on emergency department transfers, medication reconciliation, and timely transfers. These areas are key within care coordination measurement though do not fully address the many domains in the Care Coordination Framework. During the standard review process, the Coordinating Committee reviewed 12 measures: one new and 11 undergoing maintenance. A final report is expected in 2016.

All-cause admissions and readmissions measures. Unnecessary admissions and avoidable readmissions to acute-care facilities are an important focus for quality improvement by the healthcare system. Previous studies have shown that nearly 1 in 5 Medicare patients is readmitted to the hospital within 30 days of discharge, placing the patient at risk for new health problems caused by hospital-acquired conditions and costing upwards of $26 billion annually.[xxiii] [xxiv] Recurring admissions also can cause added stress on both patients and their families from lost financial income and the burden of providing care. Multiple entities across the healthcare system, including hospitals, post-acute care facilities, and skilled nursing facilities, all have a responsibility to ensure high-quality care transitions to help avoid unplanned readmissions to the hospital and unnecessary admissions in the first place.

The final report for phase 2, issued in April 2015, states that the All-Cause Admissions and Readmissions Standing Committee endorsed 16 measures, which marks the first time that the NQF portfolio includes measures examining community-level readmissions, pediatric readmissions, and readmissions measures in the post-acute care and long-term care settings.[xxv] These measures are currently included in the SES trial period (see section below, Risk Adjustment for Socioeconomic Status and Other Demographic Factors). Phase 3 of this project began in October 2015 with an expected completion in 2016. Currently, measures to undergo evaluation for phase 3 are in the submission process.

Health and well-being measures. Social, environmental, and behavioral factors can have significant negative impact on health outcomes and economic stability; yet only 3 percent of national health expenditures are spent on prevention, while 97 percent are spent on healthcare services. Population health includes a focus on health and well-being, along with disease and illness prevention and health promotion. Using the right measures can determine how successful initiatives are in reducing mortality and excess morbidity through prevention and wellness and help focus future work to improve population health in appropriate areas.

With the completion of phase 1 in November 2014, phase 2 of this project began with a call for measures in January 2015. Currently the Health and Well-Being Standing Committee has seven measures under review, including community-level indicators of health and disease, health-related behaviors and practices to promote healthy living, modifiable socioeconomic and environmental determinants of health, and primary screening prevention. Phase 3 of this project was awarded in October 2015 with an anticipated completion date in June of 2016. Phase 3 will review new and existing measures for endorsement in focus areas that include physical activity, cervical and colorectal cancer screenings, and adult and childhood vaccinations.

Patient safety measures. NQF has a 10-year history of focusing on patient safety. NQF-endorsed patient safety measures are important tools for tracking and improving patient safety performance in American healthcare. However, gaps still remain in the measurement of patient safety. There is also a recognized need to expand available patient safety measures beyond the hospital setting and harmonize safety measures across sites and settings of care. In order to develop a more robust set of safety measures, NQF solicited patient safety measures to address environment-specific issues with the highest potential leverage for improvement.

Phase 1 of this project concluded in January 2015 with publication of the final report.[xxvi] In phase 1, NQF sought to endorse measures addressing gap areas on providers' approach to minimizing the risk of adverse events as well as to expand the measures beyond the hospital setting while harmonizing across sites and settings of care. The Patient Safety Standing Committee evaluated four new measures and 12 measures undergoing maintenance review against NQF's standard evaluation criteria. In the end, eight of the measures were recommended for endorsement, and eight of the measures were not.

Currently, both phase 2 and phase 3 of this project are underway. These phases of the project will address topic areas including, but not limited to, fall screening and risk management; medication reconciliation; patient safety measure for skilled nursing facilities, inpatient rehabilitation facilities, and other settings; unplanned admission-related measures from other settings; all-cause and condition-specific admission measures; condition-specific readmissions measures; and measures examining length of stay. Final reports for both phases are expected in 2016.

Person- and family-centered care measures. Person- and family-centered care is a core concept embedded in the National Quality Strategy priority: ''Ensuring that each person and family are engaged as partners in their care.'' Person- and family-centered care encompasses key outcomes of interest to patients receiving healthcare services. These outcomes include survival, health-related quality of life, functional status, symptoms and symptom burden; measures of the processes of care experienced by persons receiving care; as well as patient and family engagement in care, including shared decisionmaking and preparation and activation for self-care management. This project is focusing on patient-reported outcomes (PROs), but also may include some clinician-assessed functional status measures.

NQF undertook this project in two phases. In phase 1, completed in March 2015, this project focused on measures of patient and family engagement in care, care based on patient needs and preferences, shared decisionmaking, and activation for self-care management. The Person- and Family-Centered Care Standing Committee evaluated one new measure and 11 measures undergoing maintenance against NQF's standard evaluation criteria in this first phase. At the end of phase 1, ten of these eleven measures were recommended for endorsement, one was no longer recommended for use after the Committee chose a superior measure addressing the same domain, and one additional measure was withdrawn.[xxvii]

In phase 2, the Committee reviewed 28 measures of functional status and outcomes, both clinical and patient-assessed. A final report is expected in 2016.

The project continues with a phase 3 and phase 4 awarded in October 2015, and both phases are currently underway. In these phases, the Committee will examine clinician and patient-assessed measures of functional status. This new phase of work will focus on health-related quality of life and the communication domain of person- and family-centered care. Currently, both phases are calling for measures.

Surgery measures. The number of surgical procedures is increasing annually. In 2010, 51.4 million inpatient surgeries were performed in the United States; 53.3 million procedures were performed in ambulatory surgery centers.[xxviii] [xxix] Ambulatory surgery centers have been the fastest growing provider type participating in Medicare.[xxx] Surgery is one of NQF's largest portfolios in a given clinical condition, and many of the measures in this portfolio are currently in use in the public and/or private accountability and quality improvement programs.

As part of NQF's ongoing work with performance measurement for patients

undergoing surgery, this project seeks to identify and endorse performance measures that address various surgical areas, including cardiac, thoracic, vascular, orthopedic, neurosurgery, urologic, and general surgery. This project reviewed new performance measures in addition to conducting maintenance reviews of surgical measures endorsed prior to 2012, using the most recent NQF measure evaluation criteria.

In phase 1, the Surgery Measures Standing Committee evaluated a total of 29 measures—nine new surgical measures and 20 measures undergoing maintenance review. In the final report dated February 13, 2015, 21 of these measures were recommended for endorsement (nine of which were recommended for reserve status) by the Committee, seven were not recommended, and one was withdrawn by the developer. Measures recommended for reserve status are ''topped out,'' meaning they are considered standard practice and performance is at the highest levels. Because they are good measures, removal is not warranted. If needed, they could be re-integrated into the portfolio.[xxxi]

Phase 2 was completed in December 2015. This phase included measures in the areas of general and specialty surgery that address surgical processes, including pre- and post-surgical care, timing of prophylactic antibiotic, and adverse surgical outcomes. The Surgery Standing Committee evaluated four new measures, one resubmitted measure, and 19 measures undergoing maintenance and review. The Committee recommended 22 of these measures for endorsement (including one for reserve status); one was not recommended; and one was deferred.[xxxii]

Phase 3 began in October 2015. This project will include performance measures in the areas of general and specialty surgery that address surgical events, including pre-, intra- and post-surgical care, use of medication peri-operatively, adverse surgical outcomes, and other related topics. Currently, a call for measures is underway.

Eye care and ear, nose, and throat conditions measures. This project seeks to identify and endorse performance measures for accountability and quality improvement that address eye care and ear, nose, and throat health. Nineteen measures will undergo maintenance review using NQF's measure evaluation criteria.

This project is currently in progress. Awarded in March 2015, the Committee is currently considering 24 measures for endorsement—including seven eMeasures. These measures deal with the topic areas of glaucoma, macular degeneration, hearing screening and evaluation, and ear infections. Measures of interest to NQF for this project include outcome measures; measures applicable to more than one setting; measures applicable to adults and children; measures that capture data from broad populations; measures of chronic care management and care coordination for chronic conditions; and eMeasures. A final report is scheduled for release in 2016.

Renal measures. Renal disease is a leading cause of mortality in the United States. This project identifies and endorses performance measures for accountability and quality improvement for renal conditions. Specifically, the work will examine measures that address conditions, treatments, interventions, or procedures relating to end-stage renal disease (ESRD), chronic kidney disease (CKD), and other renal conditions. Measures that address outcomes, treatments, diagnostic studies, interventions, and procedures associated with these conditions will be considered. In addition, 21 measures will undergo maintenance review using NQF's measure evaluation criteria.

Awarded in February 2015, the first phase of this project was completed in December 2015. The newly convened Standing Committee evaluated 14 NQF-endorsed measures for maintenance review and 11 new measures for endorsement recommendations. Fifteen measures were recommended for endorsement, four measures were recommended for endorsement with reserve status, and the Committee did not recommend six measures.[xxxiii]

A second phase of this project was awarded in October 2015 with an expected completion date in April 2016. Phase 2 will continue to address conditions, treatments, interventions, or procedures related to ESRD, CKD, and other renal conditions.

New Projects in 2015

Pediatric measures. A healthy childhood sets the stage for improved health and quality of life in adulthood. The Children's Health Insurance and Reauthorization Act of 2009 (CHIPRA) accelerated interest in pediatric quality measurement and presented an opportunity to improve the healthcare quality outcomes of the nation's children. CHIPRA established the Pediatric Quality Measures Program. The program, with support from the Agency for Healthcare Research and Quality (AHRQ) and CMS, funded seven Centers of Excellence to develop and refine child health measures in high-priority areas. After years of concerted effort, a selection of these measures is now ready for NQF review and endorsement consideration.

The Pediatric Measures project launched in July 2015. This project evaluates measures related to child health that can be used for accountability and public reporting for all pediatric populations and in all settings of care. This project addresses topic areas including but not limited to:

- Child- and adolescent-focused clinical preventive services and follow-up to preventive services;
- Child- and adolescent-focused services for management of acute conditions;
- Child- and adolescent-focused services for management of chronic conditions; and
- Cross-cutting topics.

For this project, the Committee evaluated 23 newly submitted measures and one previously reviewed measures against NQF's standard evaluation criteria. A final report is expected in 2016.

Pulmonary/critical care. This project seeks to identify and endorse performance measures for accountability and quality improvement that address conditions, treatments, diagnostic studies, interventions, procedures, or outcomes specific to pulmonary conditions and critical care. These conditions include the areas of asthma management, COPD mortality, pneumonia management and mortality, and critical care mortality and length of stay.

NQF currently has 25 endorsed measures in the portfolio that are due for maintenance and will be reevaluated against the most recent NQF measure criteria along with newly submitted measures. NQF has issued a call for measures in this topic area, with expected project completion in July 2016.

Neurology. Awarded in October 2015, this project comprises outcome measures, measures applicable to more than one setting, measures for adults and children, measures that capture broad populations, measures of chronic care management and care coordination, and eMeasures specifically addressing the conditions, treatments, interventions, and procedures related to neurological conditions.

The multistakeholder Standing Committee will evaluate newly submitted measures in the topic areas above as well as assess the 22 NQF-endorsed measures undergoing maintenance. A final report is expected in September 2016.

Perinatal. Despite the fact that the U.S. spends more on perinatal care than on any other type of care ($111 billion in 2010),[xxxiv] the U.S. ranked 61st in the world for maternal health—suggesting that the U.S. does not get the value on return for its investment in perinatal health services.[xxxv] Research suggests that morbidity and mortality associated with pregnancy and childbirth are, to a large extent, preventable through adherence to existing evidence-based guidelines. Lower quality care during pregnancy, labor and delivery, and the postpartum period can translate into unnecessary complications, prolonged lengths of stay, costly neonatal intensive care unit (NICU) admissions, and anxiety and suffering for patients and families.

This project will identify and endorse performance measures that specifically address the areas of reproductive health, pregnancy planning and contraception, pregnancy, childbirth, and postpartum and neonatal care. Along with new measures submitted for review, the Standing Committee will also evaluate 24 NQF-endorsed measures that are due for maintenance. Topics addressed by these endorsed measures include cesarean section rates, early elective deliveries, maternal and newborn infection rates, access to prenatal and postpartum care, screening measures, and breastfeeding measures. A final report is expected June 2016.

Palliative care and end-of-life. NQF commenced a new project in October 2015 addressing the various aspects of palliative and end-of-life care. Measures undergoing evaluation under this project include measures of physical, emotional, social, and spiritual aspects of care.

In addition to new measures submitted for review and endorsement, 16 NQF-endorsed measures will undergo maintenance and re-evaluation against the most recent NQF measure evaluation criteria. Measures will focus on, but not be limited to, access to and timeliness of care, patient and family experience with care, patient and family engagement, care planning, avoidance of unnecessary hospital or emergency department admissions, cost of care, and caregiver support.

Currently, this project is underway with its call for measures. A final report is expected in June 2016.

Cancer. Cancer is the second most common cause of death in the U.S., accounting for nearly 1 of every 4 deaths. As more Americans are diagnosed with cancer and new treatments have been introduced, cancer care has grown and evolved. In 2011, 6.7 percent of the U.S. adult population received cancer treatment, as compared to the 4.8 percent in 2001.[xxxvii] Congruently, the cost of treating this population has also increased, from an estimated $56.8 billion in 2001 to an estimated $88.3 billion in 2011.[xxxviii]

As part of this endorsement project, NQF will solicit composite, outcome, and process measures related to desired outcomes applicable to any healthcare setting. The NQF multistakeholder Standing Committee will evaluate new measures and those undergoing maintenance in the following areas: breast cancer, colon cancer, chemotherapy, hematology, leukemia, prostate cancer, esophageal cancer, melanoma diagnosis, symptom management, and end-of-life care.

Currently, there are 21 NQF-endorsed measures that will undergo maintenance, and a call for new measures has been issued. A final report is expected in January 2017.

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

Measure Applications Partnership

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

The Measure Applications Partnership (MAP) is a public-private partnership convened by NQF, as mandated by the ACA (PL 111–148, section 3014). MAP was created to provide input to HHS on the selection of performance measures for more than 20 federal public reporting and performance-based payment programs. Launched in the spring of 2011, MAP is composed of representatives from more than 90 major private-sector stakeholder organizations, seven federal agencies, and approximately 150 individual technical experts. For detailed information regarding the MAP representatives, criteria for selection to MAP, and length of service, please see Appendix D.

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

Since 2012, MAP has provided guidance at the request of HHS on the measures to be included in Medicare programs, as well as Medicaid and Children's Health Insurance Program (CHIP) programs nationwide. MAP recommendations for Medicare are considered for mandatory reporting in various federal programs, while recommendations to the Adult and Child Core Sets for Medicaid/CHIP are reported on a voluntary basis by the individual states. MAP also provided guidance to HHS on the use of performance measures to evaluate and improve care of dual eligible beneficiaries, who are enrolled in both Medicaid and Medicare—a distinct population with complex and often costly medical needs.

2015 Pre-Rulemaking Input

MAP completed its deliberations for the 2014–15 rulemaking cycle with the publication of its annual report in January 2015; this was MAP's fourth review of measures for HHS programs. During this pre-rulemaking process, MAP examined 199 unique measures for potential use in 20 different federal health programs (see Appendix C). There were also a number of improvements to the MAP process this year, including the addition of a preliminary analysis of measures; a more detailed examination of the needs and objectives of the programs; a more consistent approach to measure deliberations; and expanded public comment. Conducted by staff, the preliminary analysis is intended to provide MAP members with a succinct profile of each measure and to serve as a starting point for MAP discussions.

The preliminary analysis asks a series of questions to evaluate the appropriateness for each measure under consideration (MUC):

- Does the MUC meet a critical program objective?
- Is the MUC fully developed?
- Is the MUC tested for the appropriate settings and/or level of analysis for the program? If no, could the measure be adjusted to use in the program's setting or level of analysis?
- Is the MUC currently in use? If yes, does a review of its performance history raise any red flags?
- Does the MUC contribute to the efficient use of measurements resources for data collection and reporting and support alignment across programs?
- Is the MUC NQF-endorsed for the program's setting and level of analysis?

MAP has solidified its three-step process for pre-rulemaking deliberations:

1. Define critical program objectives;
2. Evaluate measures under consideration for potential inclusion in specific programs; and
3. Identify and prioritize measurement gaps for programs and care settings.

More specifically, in October 2014, MAP workgroups convened via webinar to consider each program in its setting with the goal of identifying its specific measurement needs and critical program objectives. The workgroup recommendations on critical program objectives were then reviewed by the Coordinating Committee in a November meeting.

MAP workgroups met in person in December 2014 to evaluate the measures under consideration and made recommendations for use of those measures in various federal programs, which were then reviewed by the Coordinating Committee in January 2015. In their review, the Coordinating Committee deliberated on the workgroup recommendations as well as public and member comments received.

MAP Workgroups

MAP Hospital Workgroup

MAP reviewed 81 measures under consideration for nine hospital and setting-specific programs: Hospital Inpatient Quality Reporting (IQR), Hospital Value-Based Purchasing (VBP), Hospital Readmissions Reduction Program (HRRP), Hospital-Acquired Condition Reduction Program (HAC), Hospital Outpatient Quality Reporting (OQR), Ambulatory Surgical Center Quality Reporting (ASCQR), Medicare and Medicaid EHR Incentive Program for Hospitals and Critical Access Hospitals (Meaningful Use), and Inpatient Psychiatric Facility Quality Reporting (IPFQR).

The workgroup identified several overarching themes across the nine programs as it discussed individual measures. These workgroup deliberations are considered in MAP's pre-rulemaking recommendations to HHS for measures in these programs and reflect the MAP Measure Selection Criteria (see Appendix B), how well the measures address the identified program goal, and NQF's prior work to identify families of measures.

First, the programs should include measures that help consumers get the information that they need to make informed decisions about their healthcare, help to direct them to facilities with the highest quality of care, and spur improvements in quality and efficiency.

Second, a limited set of ''high-value measures'' allows providers to focus on high-priority aspects of healthcare where performance varies or is less than optimal. ''High-value'' measures are measures that are more meaningful and usable for various stakeholders and more likely to drive improvements in quality, including outcomes, patient-reported outcomes (PROs), composite measures, intermediate outcome measures, process measures that are closely linked by empirical evidence to outcomes, cost and resource use measures, appropriate use measures, care coordination measures, and patient safety measures. The workgroup noted that it should support measures that add value to the current set and work with existing measures to improve crucial quality issues. It also recognized that the value of a measure should be assessed while considering the burden of the full measure set, further emphasizing the need for parsimony and alignment.

Finally, MAP stressed the importance of aligning or using a more uniform set of measures across programs in order to be able to compare performance across settings and data types. In response to the need for greater alignment, MAP cautioned that the evolution of these programs calls for new areas of increased attention. Specifically, MAP raised a number of challenges to achieving alignment that need further consideration, including the unique program objectives of individual programs, updating existing measure specifications, and balancing shared accountability with appropriate attribution.

MAP reviewed 81 measures and made the following recommendations for federal programs:

- Inpatient Quality Reporting Program—outcome measures, particularly readmission measures, should be reviewed in the upcoming NQF trial period for adjustment for SES factors;
- Hospital Value-Based Purchasing Program—the need to include more measures addressing high-impact areas for performance and quality improvement with a strong preference for NQF-endorsed measures;
- Hospital Readmissions Reduction Program—planned and unrelated readmissions should be excluded from measures in the program as are not markers of poor quality and readmissions measure generally should be included in the SES trial period;
- Hospital Acquired Condition Program—measures are needed to fill gaps that are focused on minimizing the major drivers of patient harm, and there is a need for greater antibiotic stewardship programs;
- Hospital Outpatient Quality Reporting Program—measures should be aligned to reduce un undue burden on providers and patients;
- Ambulatory Surgery Center Quality Reporting Program—increased need for the development of measures in the areas of surgical quality, infections, complications from anesthesia-related complications, post-procedure follow-up, and patient and family engagement;
- Medicare and Medicaid EHR Incentive Program for Hospitals—eMeasures in the program should be valid and reliable with a preference for measures that go through the endorsement process—these measures should be assessed for comparability with measures derived from alternative data sources used in other programs;
- PPS-Exempt Cancer Hospital Quality Reporting Program—measures appropriate to cancer hospitals that reflect high-priority service areas should align with measures in the IQR and OQR programs where appropriate; and
- Inpatient Psychiatric Facility Quality Reporting Program—measurement needs to move beyond just psychiatric care at inpatient psychiatric facilities to include other important general medical conditions that affect patients with psychiatric conditions.

MAP Clinician Workgroup

Following the same MAP pre-rulemaking criteria stated above, the clinician workgroup identified characteristics that are associated with ideal measure sets used for public reporting and payment programs for physicians and other clinicians. MAP reviewed 254 measures under consideration for two programs, the

Physician Quality Reporting System (PQRS) and Medicare and Medicaid EHR Incentive Programs (Meaningful Use).

In past years, the clinician workgroup noted that some condition/topic areas had more high-value measures and requested a ''scorecard'' process to better judge progress toward more high-value measures under consideration. MAP noted that clinicians who report on more high-value measures receive the same incentive payments even though they are reporting more challenging measures. Greater incentives for those who report on high-value measures might spur development of similar measures in other condition/topic areas.

The workgroup first concluded that while noteworthy progress to more high-value measures has been made in a few areas, such as cardiac care, eye care, renal disease, and surgery, uneven or slow progress persisted for specific patient and other applications, such as individuals with multiple chronic conditions and complex conditions, outcome measures for cancer patients, measures for palliative/end-of-life care, measures for eligible professionals (EPs) in the medical field, and EHR measures that promote interoperability and health information exchange.

The workgroup felt that a greater focus on prudent alignment of measures across programs is essential to reduce burden and improve participation in quality programs. A more focused and aligned set of measures will also reduce confusion for users of public reporting data and synergize quality improvements across providers and settings of care. Greater focus on selecting composite measures, appropriate use measures, and outcome measures could promote parsimony over the number of measures. Calls for alignment of the measures in federal programs recognize the benefits of reducing data collection and reporting burdens on clinicians.

Finally, the clinician workgroup concluded that financial incentives for many stakeholders within the quality measurement enterprise could yield greater development of meaningful measures. Specifically, MAP recommended that measure developers need ongoing financial support, and clinicians must invest in infrastructure to support the reporting of measures. This investment could drive the evolution of measures from basic ''building block'' measures to more meaningful measures. Reporting on high-value measures can pose a financial hardship on providers who do not have the required capacity or infrastructure. As a result, MAP recommended that CMS consider innovative incentives to further provider participation, such as waiving nonparticipation penalties in quality programs in exchange for acting as a test site or participating in a registry. For example, primary care and emergency medicine physicians have not yet developed registries despite growing pressure to do so and are seeking a business case that would make a registry viable. Public comments strongly supported the need for steady funding for measure development.

MAP reviewed 254 clinician measures and made the following recommendations for federal programs:

- Physician Quality Reporting System, Physician Compare, Physician Value-Based Payment Modifier—include more high-value measures; encourage widespread participation in PQRS; measures selected for the program that are not NQF-endorsed should be submitted for endorsement; and nonendorsed measures should include measures that support alignment, measure outcomes that are not already addressed by outcome measures in the program, and be clinically relevant to specialties/subspecialties that do not currently have clinically relevant measures; and
- Medicare and Medicaid EHR Incentive Programs—include indorsed measures that have eMeasure specifications available; alignment with other federal programs particularly PQRS; and the need for increased focus on measures that reflect efficiency in data collection and reporting, measures that leverage HIT capabilities, and innovative measures made possible through the use of HIT.

MAP Post-Acute Care/Long-Term Care Workgroup

MAP reviewed 19 measures under consideration for five setting-specific federal programs addressing post-acute care (PAC) and long-term care (LTC): the Inpatient Rehabilitation Facility Quality Reporting Program (IRF QRP), the Long-Term Care Hospital Quality Reporting Program (LTCH QRP), the End-Stage Renal Disease Quality Incentive Program (ESRD QIP), the Skilled Nursing Facility Value-Based Purchasing Program (SNF VBP), and the Home Health Quality Reporting Program (HH QRP). Although in previous years, MAP provided guidance on measures for the Hospice Quality Reporting Program (Hospice QRP), there were no measures under consideration for the Hospice QRP during this review cycle.

Based upon the workgroup's findings, MAP defined high-leverage areas for performance measures and identified 13 core measure concepts to best address each of the high-leverage areas. Specifically, MAP recognized the six highest-leverage areas for PAC/LTC performance measurement to include function, goal attainment, patient engagement, care coordination, safety, and cost/access. Core measure concepts for each of these high-leverage areas are as follows:

- Function—functional and cognitive status assessment and mental health;
- Goal attainment—establishment of patient/family/caregiver goals, and advanced care planning and treatment;
- Patient Engagement—experience of care and shared decisionmaking;
- Care Coordination—transition planning;
- Safety—falls, pressure ulcers, and adverse drug events; and
- Cost/Access—inappropriate medicine use, infection rates, and avoidable admissions.

Through the discussion of the individual measures across the five programs, MAP identified several overarching issues. First, PAC/LTC facilities should coordinate efforts with respect to patient assessment instruments used in PAC/LTC settings to improve and maintain the quality of data. Second, HHS should emphasize that harmonization of measures is critical to promoting patient-centered care across PAC/LTC programs. Finally, HHS should better align performance measurement across PAC/LTC settings as well as with other settings to ensure comparability of performance and to facilitate information exchange.

The Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014 requires certain standardized patient assessment data, data on quality measures, and data on resource use and other measures specified under sections 1899B(c)(1) and (d)(1) respectively of the Act to be standardized and interoperable to allow for their exchange among PAC providers and other providers to facilitate care coordination and improve Medicare beneficiary outcomes. New quality measures for these programs will ideally address specified core-measure concepts and more accurately communicate health information and care preferences when a patient is transferred across settings of care. MAP stressed that following a person across the care continuum from facility to home-based care or beyond will allow for a better assessment of a person's outcomes and experience across time and settings. Additionally, the workgroup was generally supportive of standardizing patient assessment data across PAC settings; however, it noted

the importance of aligning measurement with other settings, such as LTC and home and community-based services.

MAP reviewed 19 PAC/LTC measures and made the following recommendations for federal programs:

- Inpatient Rehabilitation Facility Quality Reporting Program—the inclusion of five measures that address patient safety and functional status; conditional support for four functional outcome measures noting that the measures are meaningful to patients and actionable;
- Long-Term Care Hospital Quality Reporting Program—after the review of three measures that addressed patient safety, one was recommended while the other two were encouraged to undergo continued development;
- End-Stage Renal Disease Quality Incentive Program—after the review of seven measures, three dialysis adequacy measures were supported as they addressed both the adult and pediatric populations and encourage parsimony; four measures were not supported due to concerns raised about feasibility in the dialysis facility setting;
- Skilled Nursing Facility Value-Based Purchasing Program—one measure was reviewed and supported due to its alignment with readmissions measures in other settings;
- Home Health Quality Reporting Program—one measure was supported addressing pressure ulcers under the required IMPACT domain; and
- Hospice Quality Reporting Program—no specific measure recommendations but the inclusion of measures that address concepts such as goal attainments, patient engagement, care coordination, depression, caregiver roles, and timely referral to hospice were noted as needed for inclusion in the Hospice Item Set.

2015 MAP Off-Cycle Deliberations

MAP convened during February 2015—in what is considered an off-cycle review—to provide recommendations to HHS on selection of performance measures to meet requirements of the Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014. In addition to the annual Measure Applications Partnership (MAP) pre-rulemaking cycle process, the federal government sought input from MAP on additional measures under consideration following an expedited 30-day timeline.

As is noted above, the IMPACT Act, which was enacted on October 6, 2014, requires post-acute care (PAC) providers to report certain standardized patient assessment data as well as data on quality, resource use, and other measures within domains specified in the Act. The Act requires, among other things, the specification of measures to address resource use and efficiency, such as total estimated Medicare spending per beneficiary, discharge to community, and measures to reflect all-condition risk-adjusted potentially preventable hospital readmission rates. Such measures are to be specified across four different PAC settings: Skilled nursing facilities (SNFs), inpatient rehabilitation facilities (IRFs), long-term care hospitals (LTCHs), and home health agencies (HHAs). In its deliberations, MAP highlighted the importance of integrating data with existing assessment instruments where possible, as well as noted the challenges in standardizing between the four different care settings.

MAP reviewed four measures under consideration and made recommendations on their potential use in federal programs within the post-acute and long-term care settings. The first measure, Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short Stay), was supported by MAP as a way to address the domain of skin integrity and changes in skin integrity; this measure is NQF-endorsed for the SNF, IRF, and LTCH settings.

The second measure reviewed was the Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay). MAP supported this measure, conditional upon pending proper risk adjustments and attribution for the home health setting to address the domain of incidence of major falls—addressing the IMPACT Act domain and a MAP PAC/LTC core concept. This measure is currently in use in the Nursing Home Quality Initiative. MAP also supported an All-Cause Readmission measure, noting that it specifically addresses an IMPACT Act domain and a PAC/LTC core concept.

The final measure evaluated in the off-cycle deliberation was the Percent of Patients/Residents/Persons with an Admission and Discharge Functional Assessment and a Care Plan that Addresses Function. MAP conditionally supported this measure. It addresses an IMPACT Act domain and PAC/LTC core concept.

2015 Input on Quality Measures for Dual Eligibles

In support of the NQS aims to provide better, more patient-centered care as well as improve the health of the U.S. population through behavioral and social interventions, HHS asked NQF to again convene a multistakeholder group via MAP to address measurement issues related to people enrolled in both the Medicare and Medicaid programs—a population often referred to as the ''dual eligibles'' or Medicare-Medicaid enrollees.

While the dual eligibles make up 20 percent of the Medicare population, they account for 34 percent of Medicare spending. Better healthcare, care coordination, and supportive services for dual eligible beneficiaries have the potential to make significant differences in their health and quality of life. Improvements for this population also have the potential to address the higher cost of their care.

In August 2015, MAP released its sixth annual report addressing this population. In this report, MAP provided its latest guidance to HHS on the use of performance measures to evaluate and improve care provided to Medicare-Medicaid enrollees. MAP promotes the selection of aligned measures within programs by publishing a Dual Eligible Family of Measures. It provides a varied list of potential measures from which program administrators can choose a subset most appropriate to fit individual program needs. This workgroup reviewed a total of 22 measures and added 18 new measures to the MAP Family of Measures for Dual Eligible Beneficiaries, including 12 new behavioral health measures, five admission/readmission measures, and one care coordination measure.

To inform MAP regarding the use of measures in the Dual Eligible set of measures, NQF conducted an analysis to document the use of measures across a range of public and private programs. It revealed numerous measures frequently used in programs, but none focused on an issue that reflects the health and social complexity that sets dual eligible beneficiaries apart from other healthcare consumers. MAP recommended more rapid development of new measures for this unique population in topic areas such as:

- Person-centered, goal-directed care;
- access to community-based long-term supports and services; and
- psychosocial needs.

The report also contained feedback from stakeholders regarding the use and utility of measures recommended by MAP. Through a series of stakeholder interviews, the report revealed that measurement is primarily dictated by external reporting requirements and that limited resources are available to conduct detailed analyses of this high-need population. Participants noted success in improving quality outcomes where they could promptly identify and

address barriers to access as well as unmet social needs.

MAP favors the use of targeted, appropriate measures that can support program goals while driving improvement in consumer experience and outcomes. It recommends that HHS and other stakeholders do away with nonessential measurement, attestation, and regulatory requirements to free up system bandwidth for innovation. In its final recommendation, MAP suggested that wider use of measure stratification will allow for a better understanding of the impact of health disparities, for example the use of data to identify geographical locations by municipality or zip code that provide insight into the care of diverse populations, with the goal of speeding up progress in addressing them.

2015 Report on the Core Set of Healthcare Quality Measures for Adults Enrolled in Medicaid

MAP reviewed the Medicaid Adult Core Set to identify and evaluate opportunities to improve the measures in use. In doing so, MAP considered states' feedback from the first year of implementation of the measures and applied its standard measure selection criteria. On August 31, 2015, MAP issued the final report, *Strengthening the Core Set of Healthcare Measures for Adults Enrolled in Medicaid,* 2015.[xl]

The version of the Adult Core Set for 2015 contains 26 measures, spanning many clinical conditions. MAP supported all but one of the current measures for continued use in the Adult Core Set. MAP recommended the removal of NQF-endorsed measure #0648 Timely Transmission of Transition Record (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care) due to reports of low feasibility and lack of reporting by states.

In addition, MAP supported or conditionally supported nine measures for phased addition over time to the measure set spanning many clinical areas including behavioral health, reproductive health, and treatment options for those with terminal illnesses. MAP is aware that additional federal and state resources are required for each new measure; therefore, the task force recommended that measures be ranked to provide a clear sense of priority based on the expert opinions of the group on the most important measures to report. Additionally, many important priorities for quality measurement and improvement do not yet have metrics available to properly address them.

Strengthening the Core Set of Healthcare Quality Measures for Children Enrolled in Medicaid and CHIP, 2015

HHS awarded NQF additional work in 2015 to assess and strengthen the Child Core Set. Using a similar approach to its review of the Adult Core Set, MAP performed an expedited review over a period of 10 weeks to provide input to HHS within the 2015 federal fiscal year (FFY). MAP considered states' feedback from their ongoing participation in the voluntary reporting program and applied its standard measure selection criteria to identify opportunities to improve the Child Core Set. The final report titled, Strengthening the Core Set of Healthcare Quality Measures for Children Enrolled in Medicaid and CHIP, 2015,[xli] was issued August 31, 2015.

The 2015 Child Core Set contains 24 measures representing the diverse health needs of the Medicaid and CHIP enrollee population, spanning many clinical topic areas. The measures are relevant to children ages 0–18 as well as pregnant women in order to encompass both prenatal and postpartum quality-of-care issues. Not finding significant implementation difficulties, MAP supported all of the FFY 2015 Child Core Set measures for continued use. In addition, MAP recommended that CMS consider up to six measures for phased implementation, allowing providers more time to prepare for data collection and reporting without creating undue burden on providers and their practices, specifically in the topic areas of perinatal care, behavioral health, pediatric health, and readmissions.

V. Cross-Cutting Challenges Facing Measurement: Gaps in Endorsed Quality and Efficiency Measures Across HHS Programs

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

Identifying Gaps in the NQF Portfolio

In October 2015, a team of NQF staff worked to assess current gap areas within the portfolio, a byproduct of NQF measure endorsement and selection work, as well as gaps in new areas. After careful review, NQF staff identified 254 measure gaps; some of these gap areas may be addressed through recently launched projects.

The topic areas with the largest number of gaps reported are Neurology, Cancer, Behavioral Health, Care Coordination, and Resource Use. These gaps can persist for many reasons, including lack of measure development due to a funder's priorities or agendas, lack of a champion for these gap areas, limitation on data sources, particularly for those measures that require data that does not come from administrative claims or charts, and measure gap areas such as care coordination and resource use that are difficult to conceptualize and may require new methodologies. Both neurology and cancer projects have announced a call for measures. Additionally, care coordination and cost and resource use measures can be cross-cutting and apply to multiple disease-specific areas and practice portfolios.

For a full list of the NQF portfolio gaps identified, refer to Appendix F.

In a separate but related process, each MAP workgroup has identified measure gaps in their respective areas, as well as considered efforts related to alignment and reducing disparities that may be better addressed by risk adjustment and stratification. These need to be considered in light of the gaps identified through the endorsement process.

Measure Applications Partnership: Identifying and Filling Measurement Gaps, Alignment, and Addressing Disparities

Building upon MAP's ongoing role in identifying gaps in measurement, MAP developed a scorecard approach which quantifies the number of MAP-recommended measures in gap areas. The 2015 scorecard is in Appendix E. Organized by the priority areas of the National Quality Strategy, the scorecard shows that MAP recommended multiple measures in some gap areas, while underscoring that measures are still needed in other important areas. Notable areas with a many gaps include the clinical quality measures in cancer and cardiovascular conditions, care coordination and communication, safety—particularly hospital acquired infections (HAI), medication and pain management, and person- and family-centered care—and the use of shared decisionmaking and care planning.

This high-level summary provided by the scorecard can help identify which gaps are starting to be addressed and where more work remains.

MAP members outlined several ways to strengthen the gap-filling approach in its deliberations. They included: (1) Identify where measures are not available or inadequately assess performance; (2) prioritize gaps by importance, impact, and feasibility; and (3) highlight barriers to gap-filling, such as infrastructure support needs, and offer potential solutions to these barriers. Each area-specific working group weighed in on the gaps in the Clinician, Hospital, and PAC/LTC spaces along with the Medicaid and CHIP programs.

MAP Clinician Federal Program Summaries

In this year's MAP deliberations, members noted that measurement gaps could arise when measures are removed from programs. For example, this year more than 50 measures were removed from the Physician Quality Reporting System (PQRS) across a variety of condition areas. These removals could lead to measurement gaps, and programs should be subjected to ongoing scrutiny and analysis to ensure that they continue to assess important areas. This scrutiny is of particular importance for clinician programs, which seek to have relevant measures across all clinical specialties. Public commenters shared this concern and suggested monitoring to assure that removal would not leave a gap in measurement. In the PQRS program, there is an increased need for outcome rather than process measures as well as measures that address patient safety and adverse events, appropriate use of diagnosis and therapeutics, efficiency, cost, and resource use.

MAP also suggested critical improvements to the program objectives of the Value-Based Payment Modifier and Physician Feedback of Quality Resource and Use Reports (QRURs). MAP suggested that these programs use measures that have been reported for at least one year, and ideally can be linked with particular cost or resource use measures to capture value. Also, MAP suggested that there should be a greater focus on monitoring the unintended consequences to vulnerable populations.

Similarly, MAP identified the need for greater focus on outcome measures and measures that are meaningful to consumers and purchasers for the Physician Compare Initiative—with a focus on patient experience, patient-reported outcomes (*e.g.,* functional status), care coordination, population health (*e.g.,* risk assessment, prevention), and appropriate care measures.

Finally, with the rapidly growing world of electronic health records (EHRs), MAP identified a few key areas of measurement focus for the Medicare and Medicaid EHR Incentive Programs for EPs. MAP suggested including more measures that have eMeasure specifications available. Moving forward, MAP also noted that the clinician level programs should focus on measures that reflect efficiency in data collection and reporting through the use of health IT, measures that leverage health IT capabilities, and innovative measures made possible by health IT.

MAP Hospital Federal Programs

Priority measure gaps for the Ambulatory Surgical Center Quality Reporting (ASCQR) Program include surgical quality care, infection rates, follow-up after procedures, complications including anesthesia-related complications, cost, and patient and family engagement measures including an Ambulatory Surgical Center (ASC)-specific Consumer Assessment of Healthcare Providers and Systems (CAHPS) module and patient-reported outcomes.

MAP suggested that for the Hospital Acquired Condition (HAC) Reduction program measures should focus on reducing major drivers of harm. Measures used by both HAC Reduction Program and the Hospital VBP Program can help to focus attention on critical safety issues.

Several gap areas were identified by MAP for the Hospital VBP Program. These gaps include medication errors, mental and behavioral health, emergency department throughput, a hospital's culture of safety, and patient and family engagement.

MAP suggested several areas for increased work and development for the Hospital Readmissions Reduction Program. Improved care transitions, increased care coordination across providers, and improved communication of important inpatient information to those who will be taking care of the patient post-discharge are measure areas that could benefit from further development in order to reduce readmissions.

Measure gaps in the Inpatient Psychiatric Facility Quality Reporting (IPFQR) program include step down care—care provided between hospital discharge and full immersion back into the home and community—behavioral health assessments and care in the emergency department (ED), readmissions, identification and management of general medical conditions, partial hospitalization or day programs, and a psychiatric care module for CAHPS.

Gaps identified in the Hospital Outpatient Quality Reporting (OQR) Program measure set include measures of ED overcrowding, wait times, and disparities in care—specifically, disproportionate use of EDs by vulnerable populations. Other gaps include measures of cost, patient-reported outcomes, patient and family engagement, follow-up after procedures, fostering important ties to community resources to enhance care coordination efforts, and an outpatient CAHPS module.

Finally, MAP identified several gaps in the PPS-Exempt Cancer Hospital Quality Reporting (PCHQR) Program. These measures should address gaps in cancer care including pain screening and management, patient and family/caregiver experience, patient-reported symptoms and outcomes, survival, shared decisionmaking, cost, care coordination, and psychosocial/supportive services.

MAP PAC/LTC Federal Programs

MAP carried forward the recommendation from last year's pre-rulemaking deliberations for the Nursing Home Quality Initiative (NHQI) program. There is still a need for added measures that assess discharge to the community and the quality of transition planning, as well as the inclusion of the nursing home-CAHPS measures in the program to address patient experience.

Under the Home Health Quality Reporting Program (HHQRP), while no specific measure gaps were identified, MAP recommended that CMS conduct a thorough analysis of the measure set to identify priority gap areas, measures that are topped out, and opportunities to improve the existing measures.

Consistent with the previous year, MAP states that the Inpatient Rehabilitation Facility Quality Reporting Program (IRFQRP) measure set is still too limited and could be enhanced by addressing core measure concepts not currently in the set such as care coordination, functional status, and medication reconciliation and the safety issues that have high incidence in IRFs, such as MRSA, falls, CAUTI and Clostridium Difficile (*C. diff*). Similarly, the LTC Hospitals Quality Reporting Program (LTCH QRP) recommendations continue from the previous year. Measures that address cost, cognitive status assessment, medication

management, and advance directives need to be developed.

MAP made recommendations for the future directions for the End-Stage Renal Disease Quality Incentive Program (ESRDQIP). MAP prefers to include more outcome measures and pediatric measures to assess the pediatric population that has been largely excluded from the existing measures, and sees a need to identify appropriate data elements and sources to support measures. Similarly, MAP made recommendations for the future direction of the HHQRP. These recommendations include the development of an outcome measure addressing pain and the selection of measures that address care coordination, communication, timeliness/responsiveness, responsiveness of care, and access to the healthcare team on a 24-hour basis.

Gaps in Measures for Dual Eligible Beneficiaries

During its deliberations, the task force convened to address the needs of Dual Eligible beneficiaries identified high-priority gaps in the family of measures for Dual Eligibles. The list of gaps identified this year has not changed since the previous report, Dual Eligible Beneficiary Population Interim Report 2012. This consistency emphasizes that new and improved measures are still urgently needed to evaluate:

- Goal-directed, person-centered care planning and implementation;
- Shared decisionmaking;
- Systems to coordinate acute care, long-term services and supports;
- Beneficiary sense of control/autonomy/self-determination;
- Psychosocial needs; and
- Optimal functioning levels.

Gaps in the Medicaid Adult Core Set

During its deliberations on the current state of the Medicaid Adult Core Set, MAP documented the following gaps (in no particular order of priority) that need to be filled in order to further strengthen the core set of measures:

- Access to primary, specialty, and behavioral healthcare;
- Beneficiary reported outcomes—health-related quality of life;
- Care coordination including the integration of medical and psychosocial services, and primary care and behavioral integration;
- Efficiency, specifically the inappropriate use of the emergency department (ED);
- Long-term supports and services, notably HCBS;
- Maternal health—inter-conception care to address risk factors, poor birth outcomes; postpartum complications, support with breastfeeding after hospitalization;
- Promotion of wellness;
- Treatment outcomes for behavioral health conditions and substance use disorders;
- Workforce;
- New chronic opiate use (45 days);
- Polypharmacy;
- Engagement and activation in healthcare; and
- Trauma-informed care.

Gaps in the Medicaid Child Core Set

As with Adult Core Set, many important priorities for quality measurement and improvement do not have the metrics available to address them. The following measure gaps (in no particular order of priority) will be a starting point for future discussion and will guide annual revisions to further strengthen the Child Core Set:

- Care coordination—HCBS, social service coordination, and cross-sector measures that would foster joint accountability with the education and criminal justice systems;
- Screening for abuse and neglect;
- Injuries and trauma;
- Mental health—notably access to outpatient and ambulatory mental health services, ED use for behavioral health, and behavioral health functional outcomes that stem from trauma-informed care;
- Overuse/medically unnecessary care—specifically appropriate use of CT scans;
- Durable medical equipment; and
- Cost measures—targeting people with chronic needs and family out-of-pocket spending.

Progress in Aligning Measurement Requirements

During this year's deliberations, the MAP discussions centered on the need for measurement alignment across multiple programs by focusing on having standardized measures that allow for comparing performance across care settings, data sources, and standardized definitions for measure elements—the core items needed for comprehensive assessment within the measure.

MAP noted the usefulness of expanding certain hospital programs to allow small and rural hospitals the ability to report measures, thus closing potential ''reporting gaps'' across the healthcare system. The recommendations in the report, *Performance Measurement for Rural Low-Volume Providers* (see section above, Rural Health), address this issue.[xliii] Additionally, MAP noted that true alignment goes beyond having similar concepts, but requires aligned technical specifications. Currently, providers report measure performance using a variety of data sources, including from EHR-based measures to registries to claims-based measures. Alignment would ensure that results are comparable regardless of the data source used.

However in their discussions, MAP members also noted the limits of alignment. Some measurement programs may have specific purposes which necessitate the use of specialized measures. Moreover, there were questions about what constituted alignment, such as whether measures need to be exactly the same or could differ slightly and still be considered comparable.

The public comments NQF received on the recommendations of the workgroups reflected appreciation for MAP's recognition of the importance of alignment and further emphasized the need to simplify measures across settings—leveraging consistency of similar measures used in multiple programs. Other comments centered on the importance of aligning measures on the national and the state/regional level—emphasizing a need to understand measure variation between payers.

Difficulty of Disparities

MAP also raised the issue of the need to better assess disparities. Many measures could be stratified for different populations or conditions to understand the nature and extent of variations in measure results. However, the data currently available may not contain all the information needed to allow for meaningful measure stratification. This often hampers the efforts to address health disparities. Further work is required to specify and build the data infrastructure needed to fully understand variations and disparities in care delivery and health outcomes.

VI. Coordination With Measurement Initiatives Implemented by Other Payers

Section1890(b)(5)(A)(i) of the Social Security Act mandates that the Annual Report to Congress and the Secretary include a description of the implementation of quality and efficiency measurement initiatives under this Act and the coordination of such initiatives with quality and efficiency initiatives implemented by other payers.

This year NQF worked with other payers and entities to better understand the areas of alignment and socioeconomic risk adjustment of

measures in an effort to coordinate quality measurement across the public and private sectors.

Private and Public Alignment

Beginning in 2014, CMS and America's Health Insurance Plans (AHIP) have brought together private- and public-sector payers to work on better measure alignment between the two sectors.

The stakeholders formed a variety of working groups charged with the mission to foster measure alignment in those clinical areas. The working groups address the specific areas of accountable care organizations and patient-centered medical homes, cardiology, obstetrics and gynecology, oncology, orthopedics, gastroenterology, ophthalmology, HIV and Hepatitis C, and pediatrics. Nearly all the measures that have been identified for alignment purposes are NQF-endorsed.

Their focus has been on clinician level measures and has largely been oriented toward measures used in ambulatory settings. As the endorser of measures, NQF contributed technical assistance to these working groups. The guidance that NQF provided centered on the current status of the portfolio and the individual measures.

Fostering greater measure alignment is a goal shared by many stakeholders. While these working groups are not intended to solve the alignment conundrum, they will serve as an important first step toward accomplishing this lofty and much needed goal. A report from the AHIP–CMS Core Measures Group is expected in 2016; however, no specific deadline has been publicized.

Risk Adjustment for Socioeconomic Status (SES) and Other Demographic Factors

Risk adjustment (also known as case-mix adjustment) refers to statistical methods to control or account for patient-related factors when computing performance measure scores. Risk adjusting outcome performance measures to account for differences in patient health status and clinical factors that are present at the start of care is widely accepted. There has been growing interest from policymakers and other healthcare leaders regarding whether measures used in comparative performance assessments, including public reporting and pay-for-performance, should be adjusted for socioeconomic status and other demographic factors (SES) in order to improve the comparability of performance. Because patient-related factors can have an important influence on patient outcomes, risk adjustment can improve the ability to make an accurate and fair conclusion about the quality of care patients receive.

In January 2015, NQF's Cost and Resource Use Standing Committee and All-Cause Admissions and Readmissions Standing Committee convened to discuss the NQF Board's recommendations regarding measures endorsed with conditions (see page 20). NQF staff also briefed measure developers on the need for a conceptual and empirical evaluation of potential measures for inclusion in a trial period. This two-year trial period is a temporary policy change that will allow risk adjustment of performance measures for SES and other demographic factors. At the conclusion of the trial, NQF will determine whether to make this policy change permanent.

In April 2015, the SES trial officially opened for all newly submitted measures, as well as measures undergoing endorsement maintenance review and measures already in the trial period. Measures included the SES trial are the aforementioned all cause admission/readmission and cost/resource use measures, as well as cardiovascular measures. For measures included in the trial period, measure developers are requested to provide information on socioeconomic and other related factors that were available and analyzed during measure development. However, not all measures are prime for inclusion in the trial. There must be a sound conceptual and empirical basis to be included in the SES adjustment trial. The conceptual basis for inclusion refers to a logical theory that explains the association between an SES factor(s) and the outcome of interest—it may be informed by prior research and/or healthcare experience related to the measure focus, but a direct causal relationship is not required.

Measures that are selected for this trial period have been reviewed under the regular endorsement and maintenance process prescribed by statute and have been granted a conditional endorsement based on the appropriate risk adjustment and stratification of the measures to account for socioeconomic status and other demographic factors.

VII. Conclusion and Looking Forward

NQF has evolved in the 16 years it has been in existence and since it endorsed its first performance measures more than a decade ago. While its focus on improving quality, enhancing safety, and reducing costs by endorsing performance measures has remained a constant, its role has expanded. New roles have included providing private sector input into the development of the National Quality Strategy, defining measure gaps, and recommending measures for an array of public programs. What has also changed is the centrality of performance measures in efforts by public and private policymakers to transform delivery and payment systems. In essence, performance measures are becoming more and more consequential.

NQF's work in evolving the science of performance measurement has also expanded over the years, and recent projects focus on challenges that stand in the way of getting to high-value outcome and cost measures, as well as bringing new kinds of providers into accountability programs. More specifically, this year NQF launched projects focused on attribution and variation, which will provide important guidance to developers and those implementing measures, respectively. And an Expert Panel made recommendations on how best to include rural and low-volume providers in accountability programs over the next number of years and suggested particular considerations that should be taken into account in doing so.

In 2015, NQF's work also focused on helping to facilitate the transition to eMeasurement. Efforts in this area included encouraging the submission of eMeasures for endorsement, creating a framework to help advance the notion of using measures to improve the safety of health information technology, and facilitating the development of evaluation criteria and an overall approach to the harmonization and approval of value sets, the ''building blocks'' of code vocabularies, to ensure measures can be consistently and accurately implemented across disparate HIT systems.

Moving forward into 2016, NQF looks forward to addressing other issues that stymie our collective efforts to use eMeasures, continuing our progress in addressing measurement science challenges, and furthering the portfolio of high-value measures that public and private payers, providers, and patients rely on to improve health and healthcare.

Appendix A: 2015 Activities Performed Under Contract With HHS

1. RECOMMENDATIONS ON THE NATIONAL QUALITY STRATEGY AND PRIORITIES

Description	Output	Status	Notes/Scheduled or actual completion date
Multistakeholder input on a National Priority: Improving Population Health by Working with Communities.	A common framework that offers guidance on strategies for improving population health within communities.	Phase 2 in progress	Phase 2 in progress.
Quality measurement for home and community-based services.	Report will provide a conceptual framework and environmental scan to address performance measure gaps in home and community-based services to enhance the quality of community living.	In progress	Final report due September 2016.
Rural Health	A report exploring quality reporting improvements in rural communities.	Completed	Final report issued September 2015.

2. QUALITY AND EFFICIENCY MEASUREMENT INITIATIVES

Description	Output	Status	Notes/scheduled or actual completion date
Behavioral health measures	Set of endorsed measures for behavioral health.	Phase 3 completed	Phase 2 endorsed 16 measures in May 2015.
Cost and resource use measures	Set of endorsed measures for cost and resource use.	Phase 2 completed Phase 3 completed	Phase 2 endorsed 1 measure fully; and 2 measures with conditions in February 2015. Phase 3 endorsed 3 measures with conditions in February 2015.
Endocrine measures	Set of endorsed measures for endocrine conditions.	Phase 3 completed	Phase 3 endorsed 22 measures in November 2015.
Musculoskeletal measures	Set of endorsed measures for musculoskeletal conditions.	Completed	Endorsed 3 measures fully; 4 measures recommended for trial approval in January 2015.
Cardiovascular measures	Set of endorsed measures for cardiovascular conditions.	Phase 2 completed Phase 3 in progress	Phase 2 endorsed 11 measures in August 2015.
Care coordination measures	Set of endorsed measures for care coordination.	Phase 3 completed	Currently in off-cycle review
All-cause admission and readmissions measures.	Set of endorsed measures for all-cause admissions and readmissions.	Phase 2 completed Phase 3 in progress	Endorsed 16 measures in April 2015 with conditions.
Patient safety measures	Set of endorsed measures for patient safety.	Phase 1 completed Phase 2 in progress Phase 3 in progress	Phase 1 endorsed 8 measures in January 2015.
Person- and family-centered care measures.	Set of endorsed measures for person- and family-centered care.	Phase 1 completed January 2015 Phase 2 in progress Phase 3 in progress Phase 4 in progress	Phase 1 endorsed 10 measures in January 2015.
Surgery measures	Set of endorsed measures for surgery.	Phase 1 completed February 2015. Phase 2 completed December 2015. Phase 3 in progress	Phase 1 endorsed 21 measures in February 2015. Phase 2 endorsed 22 measures in December 2015.
Eye care and ear, nose, and throat conditions measures.	Set of endorsed measures for eye care, ear, nose, and throat conditions.	In progress	Final report will be completed in January 2016.
Renal measures	Ent of endorsed measure for renal care.	Phase 1 completed Phase 2 in progress	Phase 1 endorsed 15 measures and 4 measures recommended for reserve status.
Pulmonary/critical care measures	Set of endorsed measures for pulmonary/critical care.	In progress	Final report expected October 2016.
Neurology measures	Set of endorsed measures for neurology.	In progress	Final report expected November 2016.
Perinatal measures	Set of endorsed measures for perinatal care.	In progress	Final report expected January 2017.
Palliative and end-of-life measures	Set of endorsed measures for palliative and end-of-life measures.	In progress	Final report expected January 2017.
Cancer measures	Set of endorsed measures for cancer care.	In progress	Final report expected January 2017.

2. QUALITY AND EFFICIENCY MEASUREMENT INITIATIVES—Continued

Description	Output	Status	Notes/scheduled or actual completion date
Variation of measure specifications	Environmental scan, conceptual framework, glossary of definitions, and recommendation of core principles.	In progress	Final report expected December 2016.
Attribution	Set principles for attribution and explore valid and reliable approaches for attribution, develop model that meets the requirements set.	In progress	Final report expected December 2016.
Risk adjustment for socioeconomic status or other demographic factors.	Assessment of appropriate risk adjustment stratification standards.	Trial period in progress	
Prioritization and identification of health IT patient safety measures.	Comprehensive framework for assessment of HIT safety measurement and provide recommendations on gaps.	In progress	Final report expected February 2016.
Value set harmonization	Development of evaluation criteria, recommendations on integration.	In progress	Final report expected March 2016.
Rural health	This project provided recommendations to HHS on performance measurement issues for rural and low-volume providers.	Completed	Final report completed in September 2015.

3. STAKEHOLDER RECOMMENDATIONS ON QUALITY AND EFFICIENCY MEASURES AND NATIONAL PRIORITIES

Description	Output	Status	Notes/Scheduled or actual completion date
Recommendations for measures to be implemented through the federal rulemaking process for public reporting and payment.	Measure Applications Partnership pre-pulemaking recommendations on measures under consideration by HHS for 2015 rulemaking.	Completed	Completed January 2015.
Recommendations for measures to be implemented through the federal rulemaking process for public reporting and payment.	Measure Applications Partnership pre-pulemaking recommendations on measures under consideration by HHS for 2016 rulemaking.	In progress	
Identification of quality measures for dual-eligible Medicare-Medicaid enrollees and adults enrolled in Medicaid.	Annual input on the Initial Core Set of Health Care Quality Measures for Adults Enrolled in Medicaid, and additional refinements to previously published Families of Measures.	Completed	Completed August 2015.
Identification of quality measures for children in Medicaid.	Annual input on the Initial Core Set of Health Care Quality Measures for Children enrolled in Medicaid.	In progress	Completed August 2015.

Appendix B: MAP Measure Selection Criteria

The Measure Selection Criteria (MSC) are intended to assist MAP with identifying characteristics that are associated with ideal measure sets used for public reporting and payment programs. The MSC are not absolute rules; rather, they are meant to provide general guidance on measure selection decisions and to complement program-specific statutory and regulatory requirements. Central focus should be on the selection of high-quality measures that optimally address the National Quality Strategy's three aims, fill critical measurement gaps, and increase alignment. Although competing priorities often need to be weighed against one another, the MSC can be used as a reference when evaluating the relative strengths and weaknesses of a program measure set, and how the addition of an individual measure would contribute to the set. The MSC have evolved over time to reflect the input of a wide variety of stakeholders.

To determine whether a measure should be considered for a specified program, the MAP evaluates the measures under consideration against the MSC. MAP members are expected to familiarize themselves with the criteria and use them to indicate their support for a measure under consideration.

1. NQF-endorsed measures are required for program measure sets, unless no relevant endorsed measures are available to achieve a critical program objective demonstrated by a program measure set that contains measures that meet the NQF endorsement criteria, including importance to measure and report, scientific acceptability of measure properties, feasibility, usability and use, and harmonization of competing and related measures.

- Subcriterion 1.1 Measures that are not NQF-endorsed should be submitted for endorsement if selected to meet a specific program need
- Subcriterion 1.2 Measures that have had endorsement removed or have been

submitted for endorsement and were not endorsed should be removed from programs
- Subcriterion 1.3 Measures that are in reserve status (*i.e.,* topped out) should be considered for removal from programs

2. Program measure set adequately addresses each of the National Quality Strategy's three aims demonstrated by a program measure set that addresses each of the National Quality Strategy (NQS) aims and corresponding priorities. The NQS provides a common framework for focusing efforts of diverse stakeholders on*:*
- Subcriterion 2.1 Better care, demonstrated by patient- and family-centeredness, care coordination, safety, and effective treatment
- Subcriterion 2.2 Healthy people/healthy communities, demonstrated by prevention and well-being
- Subcriterion 2.3 Affordable care

3. Program measure set is responsive to specific program goals and requirements demonstrated by a program measure set that is ''fit for purpose'' for the particular program.
- Subcriterion 3.1 Program measure set includes measures that are applicable to and appropriately tested for the program's intended care setting(s), level(s) of analysis, and population(s)
- Subcriterion 3.2 Measure sets for public reporting programs should be meaningful for consumers and purchasers
- Subcriterion 3.3 Measure sets for payment incentive programs should contain measures for which there is broad experience demonstrating usability and usefulness (Note: For some Medicare payment programs, statute requires that measures must first be implemented in a public reporting program for a designated period)
- Subcriterion 3.4 Avoid selection of measures that are likely to create significant adverse consequences when used in a specific program
- Subcriterion 3.5 Emphasize inclusion of endorsed measures that have eMeasure specifications available

4. 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, composite, and structural measures necessary for the specific program.
- Subcriterion 4.1 In general, preference should be given to measure types that address specific program needs
- Subcriterion 4.2 Public reporting program measure sets should emphasize outcomes that matter to patients, including patient- and caregiver-reported outcomes
- Subcriterion 4.3 Payment program measure sets should include outcome measures linked to cost measures to capture value

5. Program measure set enables measurement of person- and family-centered care and services demonstrated by a program measure set that addresses access, choice, self-determination, and community integration.
- Subcriterion 5.1 Measure set addresses patient/family/caregiver experience, including aspects of communication and care coordination
- Subcriterion 5.2 Measure set addresses shared decisionmaking, such as for care and service planning and establishing advance directives
- Subcriterion 5.3 Measure set enables assessment of the person's care and services across providers, settings, and time

6. Program measure set includes considerations for healthcare disparities and cultural competency 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, sexual orientation, age, 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).
- Subcriterion 6.1 Program measure set includes measures that directly assess healthcare disparities (*e.g.,* interpreter services)
- Subcriterion 6.2 Program measure set includes measures that are sensitive to disparities measurement (*e.g.,* beta blocker treatment after a heart attack), and that facilitate stratification of results to better understand differences among vulnerable populations

7. Program measure set promotes parsimony and alignment demonstrated by a program measure set that supports efficient use of resources for data collection and reporting, and supports alignment across programs. The program measure set should balance the degree of effort associated with measurement and its opportunity to improve quality.
- Subcriterion 7.1 Program measure set demonstrates efficiency (*i.e.,* minimum number of measures and the least burdensome measures that achieve program goals)
- Subcriterion 7.2 Program measure set places strong emphasis on measures that can be used across multiple programs or applications (*e.g.,* Physician Quality Reporting System [PQRS], Meaningful Use for Eligible Professionals, Physician Compare)

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

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

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

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

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

MAP Coordinating Committee

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Appendix E: Measurement Gaps Identified by MAP

As published in the *Cross-Cutting Challenges Facing Measurement: MAP 2015 Guidance* report, March 2015. Available at *http://www.qualityforum.org/Publications/2015/03/Cross-Cutting_Challenges_Facing_Measurement_-_MAP_2015_Guidance.aspx.*

Condition/topic area	Measurement gap
Affordability	
Costs for Special Populations	End-of-life care including inappropriate nonpalliative services at the end of life. Chemotherapy appropriateness, including dosing.

Condition/topic area	Measurement gap
	Use of radiographic imaging in the pediatric population.
	Addressing intense needs for care and support of medically complex populations (e.g., ability to obtain preventive services, medications, mental health, oral health, and specialty services).
Efficient Use of Services	Appropriateness for admissions, treatment, over-diagnosis, under-diagnosis, misdiagnosis, imaging, and procedures.
	AHRQ ambulatory sensitive conditions measures.
	Utilization benchmarking.
	Potentially inappropriate medication use: Antibiotic use for sinusitis Unwarranted maternity care interventions (C-section).
	Measures derived from Choosing Wisely.
	Availability of lower cost alternatives.
Employer/Purchaser Costs	Employer spending on employee health benefits.
	Measure of lost productivity.
Patient Costs	Consideration of patient out-of-pocket cost.
	Ability to obtain follow-up care.
Total Costs	Per capita total cost for attributed patients.
	Converging macro/national total cost data with provider-/setting-/service area-specific/patient-/third-party payer total cost.
Care Coordination	
Avoidable Admissions and Readmissions	Shared accountability and attribution across the continuum.
Communication	Bi-directional sharing of relevant/adequate information across all providers and settings.
	Measures of patient transition to next provider/site of care across all settings, as well as transitions to community services.
System and Infrastructure	Interoperability of EHRs to enhance communication.
	Structures to connect health systems and benefits.
	Emergency department overcrowding/wait times (focus on disproportionate use by vulnerable populations).
Healthy Living	
Behaviors	Healthy lifestyle behaviors (i.e., avoiding excessive alcohol use, avoiding tobacco, improving nutrition, engaging in physical activity, etc.).
General	Public health preparedness.
Health/Wellness Status	Sense of control/autonomy/self-determination/well-being.
	Treatment burden (i.e., difficulty with healthcare management tasks).
Social and Environmental Determinants of Health.	Community role; patient's ability to connect to available resources.
	Social connectedness for people with long-term services and supports needs.
	Nutrition/Food Security
Prevention and Treatment for the Leading Causes of Mortality	
Special Populations	Pediatric measures.
General	Complications such as febrile neutropenia and surgical site infection.
Cancer	Outcome measures for cancer patients (e.g., cancer- and stage-specific survival as well as patient-reported measures).
	Transplants: Bone marrow and peripheral stem cells.
	Staging measures for lung, prostate, and gynecological cancers.
	Marker/drug combination measures for marker-specific therapies, performance status of patients undergoing oncologic therapy/pre-therapy assessment.
	Disparities measures, such as risk-stratified process and outcome measures, as well as access measures.
Cardiovascular	Clinical preventive services—assessing cardio-metabolic risk factors across all levels of analysis and settings.
	Appropriateness of coronary artery bypass graft and PCI at the provider and system levels of analysis.
	Early detection of heart failure decompensation.
	Medication management and adherence as part of follow-up care for secondary prevention.
Depression	Suicide risk assessment for any type of depression diagnosis Assessment and referral for substance use.
	Medication adherence and persistence for all behavioral health conditions.
Diabetes	Measures addressing glycemic control for complex patients across settings and level of analysis.
	Sequelae of diabetes.
General	Measures of diagnostic accuracy.
	Behavioral health assessments and care.
Musculoskeletal	Evaluating bone density, and prevention and treatment of osteoporosis in ambulatory settings.
Primary and Secondary Prevention	Outcomes of smoking cessation interventions.
	Lifestyle management (e.g., physical activity/exercise, diet/nutrition).
	Modify Prevention Quality Indicators (PQI) measures to assess accountable care organizations; modify population to include all patients with the disease (if applicable).

Condition/topic area	Measurement gap
Safety	
Falls and Immobility	Standard definition of falls across settings to avoid potential confusion related to two different fall rates.
	Structural measures of staff availability to ambulate and reposition patients, including home care providers and home health aides.
General	Composite measure of most significant Serious Reportable Events.
	Measures for antibiotic stewardship.
HAI	Pediatric population: special considerations for ventilator-associated events and C. difficile.
	Infection measures reported as rates, rather than ratios.
	Sepsis (healthcare-acquired and community-acquired) incidence, early detection, monitoring, and failure to rescue related to sepsis.
	Ventilator-associated events across settings.
	Post-discharge follow-up on infections in ambulatory settings.
	Vancomycin Resistant Enterococci (VRE) measures (e.g., positive blood cultures, appropriate antibiotic use).
Medication/Infusion Safety	Potentially inappropriate medication use.
	Medication management: Medication documentation, including appropriate prescribing and comprehensive medication review.
	Adverse Drug Events: Total number of adverse drug events that occur within all settings.
	Role of community pharmacist or home health provider in medication reconciliation.
General	Blood incompatibility.
Obstetrical Adverse Events	Obstetrical adverse event index.
	Measures using National Health Safety Network (NHSN) definitions for infections in newborns.
Pain Management	Effectiveness of pain management balanced by monitoring for potentially inappropriate use of opioids.
	Assessment of depression with pain.
Perioperative/Procedural Safety	Air embolism.
	Perioperative respiratory events, blood loss, and unnecessary transfusion.
	Altered mental status in perioperative period.
	Anesthesia events (inter-operative myocardial infarction, corneal abrasion, broken tooth, etc.)
Venous Thromboembolism	VTE outcome measures for ambulatory surgical centers and post-acute care/long-term care settings.
	Adherence to VTE medications, monitoring of therapeutic levels, medication side effects, and recurrence.
Person- and Family-Centered Care	
Person-Centered Communication	Information provided at appropriate times.
	Information is aligned with patient preferences.
	Patient understanding of information.
	Outreach to ensure ability for care self-management.
Shared Decisionmaking, Care Planning, and Other Aspects of Person-Centered Care.	Person-centered care plan.
	Integration of patient/family values in care planning.
	Plan agreed to by the patient and provider and given to patient.
	Care plan shared among all involved providers.
	Identified primary provider responsible for the care plan.
	Fidelity to care plan and attainment of goals.
	Social care planning addressing all needs for patient and caregiver Grief and bereavement care planning.
	Patient activation/engagement.
Advanced Illness Care	Symptom management.
	Comfort at end of life.
Quality of Life and Functional Status	Functional status.
	Pain and symptom management.
	Health-related quality of life.
	Achievement of goals (i.e., experience, progression towards goals, efficiency).
	Step down care.

Appendix F: NQF Portfolio Identified Gaps

Topic area	Measurement gap
All	Measures that assess functional status/symptoms for Alzheimer's Disease.
All	Absence of experience-of-care and quality-of-life measures.
Behavioral Health	Measures for family caregivers (dementia).
Behavioral Health	Outcome measures, especially those regarding quality of life and experience with care (dementia).
Behavioral Health	Measures of health and well-being for family caregivers (dementia).
Behavioral Health	Person- and family-centered measures, including measures of engagement with the healthcare system or other community support systems (dementia).

Topic area	Measurement gap
Behavioral Health	Screening for alcohol and drugs, specifically using tools such as the Screening Brief Intervention and Referral to Treatment (SBIRT).
Behavioral Health	Screening for post-traumatic stress disorder and bi-polar with patients diagnosed with depression.
Behavioral Health	Expanding the target populations to include adolescent patients aged 13 years and older rather than those only aged 18 and older.
Behavioral Health	Measures specific to child and adolescent behavioral health needs; in particular, a measure on primary care screening and appropriate follow-up for behavioral health disorders in children.
Behavioral Health	Outcome measures for substance abuse/dependence that can be used by substance use specialty providers.
Behavioral Health	Quality measures assessing care for persons with an intellectual disabilities across the lifespan.
Behavioral Health	Quality measures that better align indicators of clinical need and treatment selection and, ideally, incorporate patient preferences.
Behavioral Health	Measures that assess aspects of recovery-oriented care for individuals with serious mental illness.
Behavioral Health	Quality measures related to coordination of care across sectors involved in the care or support of persons with chronic mental health problems (general medical care, mental health care, substance abuse care and social services).
Behavioral Health	Adapt measure concepts that have been developed for and applied to inpatient care to other outpatient care settings (*e.g.,* polypharmacy, follow up after discharge).
Behavioral Health	Quality measures that assess whether evidence-based psychosocial interventions are being applied with a level of fidelity consonant with their evidence base.
Behavioral Health	Expand the number of conditions for which the quality of care can be assessed in the context of a ''measurement-based care'' approach (as is possible now with the suite of measures that have been endorsed for depression).
Behavioral Health	Further develop measurement strategies for assessing the adequacy of screening and prevention interventions for general medical conditions among individuals with severe mental illness (as well as care for their co-morbid general medical conditions).
Behavioral Health	Screening for alcohol and drugs, specifically using tools such as the Screening Brief Intervention and Referral to Treatment (SBIRT).
Behavioral Health	Screening for post-traumatic stress disorder (PTSD). and bipolar disorder in all patients diagnosed with depression, attempting to differentiate between the disorders.
Behavioral Health	A measure assessing gaps in local service areas (*i.e.*, does the immediate local area have the ability to help a patient with specific behavioral health needs?).
Behavioral Health	Outcome measures that assess improvement in depressive symptoms.
Cancer	Primary care measures that screen for multiple behavioral health disorders.
Cancer	A measure examining a patient's ability to access specialty care.
Cancer	Measures of community tenure, assessing how long patients who frequently readmit stay out of hospitals between admissions.
Cancer	Measures aimed at the elderly population that attempt to distinguish behavioral health conditions and intellectual issues related to aging.
Cancer	PSA screenings for patients diagnosed with prostate cancer.
Cancer	Measures addressing hematological malignancies, particularly first line therapies.
Cancer	Measures addressing targeted therapies for kidney and lung cancer, as well as other solid tumor cancers.
Cancer	Measures capturing deviations in care for the CMS priority areas of prostate, lung, breast, and colon cancers.
Cancer	Measures addressing management of complications such as febrile neutropenia (FN).
Cancer	Measures for pediatric patients, including measures in cross-cutting areas such as pain assessment and palliative care.
Cancer	Measures ensuring that reporting details in pathology reports are standardized across all tumor types.
Cancer	Measures ensuring that treatment summaries are standardized across medical and radiation oncologists.
Cancer	Measures capturing enrollment of patients in clinical trials at appropriate times.
Cancer	Measures addressing whether appropriate patients are offered enrollment in clinical trials.
Cancer	Measures capturing access of patients to high-quality hospice care facilities.
Cancer	Measures addressing readmissions and value-based care.
Cancer	Measures of care coordination.
Cancer	Measures capturing patient-reported outcomes.
Cancer	Measures capturing cancer survival rate curve measures that can be reported by stage, identified as both overall survival (OS) and disease free survival (DFS).
Cancer	• Measures applicable to patients with: ○ lung, pancreas, liver, esophagus, and colon cancer: 5-year survival rates ○ breast cancer: 10-year survival rates ○ thyroid cancer: 20–25 year survival rates.
Cancer	Measures capturing operating room procedures or processes that need to take place in the surgical theater.
Cancer	Measures capturing patient adherence to prescribed medications or therapies, including oral chemotherapies.
Cancer	Measures capturing treatment of negative side effects from prescribed medications or therapies.
Cancer	Measures capturing gene mutations and appropriate therapies.
Cancer	Measures capturing use of biological therapies.
Cancer	Outcome measures rather than process measures.
Cancer	Measures capturing surgical outcomes.
Cancer	Measures capturing surgical processes linked to outcomes.
Cancer	Measures assessing the quality of laboratory methodologies.
Cancer	Measures assessing the quality of laboratory reports.
Cancer	Measures addressing maintenance of nutritional status throughout the course of treatment.

Topic area	Measurement gap
Cancer	Measures capturing smoking cessation for patients with lung cancers.
Cancer	Evidence-based measures related to surveillance of cancer survivors in order to minimize the probability of recurrence.
Cancer	Measures related to cancer survival in specific areas, *e.g.,* smoking cessation for lung cancer patients; maintaining nutritional status.
Cancer	Measures related to the quality, value, and effectiveness of surgical, radiation, and medical therapies in cancer care over the course of treatment.
Cancer	Measures related to predictive laboratory testing.
Cancer	Measures addressing pediatric patients with cancer.
Cancer	Measures addressing hematological cancers separately from other cancers.
Cancer	Measures addressing disparities stratified by race/ethnicity, gender, and language.
Cardiovascular	Measures submitted by patient advocacy groups or other multidisciplinary stakeholders.
Cardiovascular	Prevention measures.
Cardiovascular	Screening measures.
Cardiovascular	Combined measures to be used in ''toolkits'' to ensure a process is associated with an improved outcome.
Cardiovascular	Measures of cardiometabolic risk factors.
Cardiovascular	Patient-reported outcome measures for heart failure symptoms and activity assessment.
Care Coordination	Composite measures for heart failure care.
Care Coordination	''episode of care'' composite measure for AMI that includes outcome as well as process measures.
Care Coordination	Consideration of socioeconomic determinants of health and disparities.
Care Coordination	Global measure of cardiovascular care.
Care Coordination	Document care recipient's current supports and assets.
Care Coordination	Linkages and synchronization of care and services.
Care Coordination	Individuals' progression toward goals for their health and quality of life.
Care Coordination	A comprehensive assessment process that incorporates the perspective of a care recipient and his care team.
Care Coordination	Shared accountability within a care team.
Care Coordination	Measures of patient-caregiver engagement.
Care Coordination	Measures that evaluate ''system-ness'' rather than measures that address care within silos.
Care Coordination	Outcome measures.
Care Coordination	Composite measures.
Care Coordination	Measure maturity (more complexity in care coordination measures).
Care Coordination	Using measurement to drive practice.
Care Coordination	Patient-reported outcomes.
Care Coordination	Capturing data and documenting linkages between a patient's need/goal and relevant interventions in a standardized way and linked to relevant outcomes.
Care Coordination	Established continuity within the plan of care.
Care Coordination	Accessibility and functionality of plan of care.
Disease area dependent	Measurement of adverse events that could be markers of poor care coordination.
Health and Well-Being	Episode-based cost measures for conditions of high prevalence and high cost.
Health and Well-Being	Improvement opportunities through standardized utilization measures.
Health and Well-Being	Comprehensive analysis of episode-based measures.
Health and Well-Being	Prioritize episode-based cost measures for conditions of high prevalence and high cost.
Health and Well-Being	Further development of measures of overuse and areas of resource use that are deemed inappropriate or wasteful, better integrate overuse and appropriateness measures into the domain of cost and resource use.
Health and Well-Being	Developed an accountability framework for how cost and resource use measures are designed and attributed based on the level of analysis.
Health and Well-Being	Developing measures that enhance cost transparency.
Health and Well-Being	Time driven activity-based costing (ABC), or micro-costing, approach should continue to be explored for measure development and potential evaluation for endorsement.
Health and Well-Being	Consumer out-of-pocket expenses.
Health and Well-Being	Actual prices paid by patients and health plans rather than measures using standardized pricing approaches.
Health and Well-Being	Trends in cost performance over time at the level of analysis of the health plan.
Health and Well-Being	Measures capturing systematic cost drivers.
Health and Well-Being	Cascading measures that roll up costs from all levels of analysis and which can be deconstructed to understand costs at lower levels of analysis.
Health and Well-Being	To understand efficiency, cost and resource use measures should be linked with: • appropriateness/overuse measures • outcome measures • process measures • clinical data and patient-reported outcomes.
Health and Well-Being	Measures capturing variations in cost and outcomes for potentially high cost patients (*e.g.,* cardiovascular or diabetes patients).
Health and Well-Being	Episode-based cost and resource use measures for high-impact conditions and procedures.
Health and Well-Being	Measures capturing actual prices paid to providers by health plans.
HEENT	Measures for accountability and quality improvement that specifically address regionalized emergency medical care services such as: • Boarding, defining appropriate boarding times. • Crowding. • Disaster preparedness, and • Response.
HEENT	Measurement related to facilities and coalitions or regions having a disaster plan in place.

Topic area	Measurement gap
HEENT	Performance measures regarding the experience of both patients and their caregivers.
HEENT	Social, economic, and environmental determinants of health.
HEENT	Physical environment (*e.g.,* built environments).
HEENT	Policy (*e.g.,* smoke-free zones).
Infectious Disease	Specific subpopulations (*e.g.,* people with disabilities, elderly).
Infectious Disease	Patient and population outcomes linked to improvement in functional status.
Infectious Disease	Counseling for physical activity and nutrition in younger and middle-aged adults (18 to 65 years).
Infectious Disease	Composites that assess population experience.
Infectious Disease	Training, retraining, and development.
Infectious Disease	Infrastructure to support the health workforce and to improve access.
Musculoskeletal	Retention and recruitment.
Musculoskeletal	Assessment of community and volunteer workforce.
Musculoskeletal	Experience (health workforce and person and family experience).
Musculoskeletal	Clinical, community, and cross disciplinary relationships.
Musculoskeletal	Workforce capacity and productivity.
Musculoskeletal	Workforce diversity and retention.
Neurology	Leadership and accountability.
Neurology	Addressing other populations with known disparities, *e.g.,* gender, persons with disabilities, lesbian, gay, bisexual, and transgender (LGBT) population and correctional populations.
Neurology	Health-related quality of life.
Neurology	Inclusion of socioeconomic status variables within measure concepts, such as education level or income—particularly as proxies for health literacy/beliefs.
Neurology	Tracking the flow of information specific to disparities and culture within healthcare through Accountable Care Organizations.
Neurology	Identifying the number of bilingual/bicultural providers and tracking the number of qualified/certified medical interpreters and translators.
Neurology	Measures using comparative analyses with a reference population (*e.g.,* percent adherence of a given measure with the targeted population as a numerator and the reference or majority population as the denominator with serial assessments to demonstrate improvement to unity).
Neurology	Measurement of the effectiveness of services provided to the patient.
Neurology	Measures related to effective engagement of diverse communities.
Neurology	HPV vaccination catch-up for females—ages 19–26 years and—for males—ages 19–21 years.
Neurology	Tdap/pertussis-containing vaccine for ages 19 + years.
Neurology	Zoster vaccination for ages 60–64 years.
Neurology	Zoster vaccination for ages 65 + years (with caveats).
Neurology	Composite including immunization with other preventive care services as recommended by age and gender.
Neurology	Composite of Tdap and influenza vaccination for all pregnant women (including adolescents).
Neurology	Composite including influenza, pneumococcal, and hepatitis B vaccination measures with diabetes care processes or outcomes for individuals with diabetes.
Neurology	Composite including influenza, pneumococcal, and hepatitis B vaccinations measures with renal care measures for individuals with kidney failure/end-stage renal disease (ESRD).
Neurology	Composite including Hepatitis A and B vaccinations for individuals with chronic liver disease.
Neurology	Composite of all Advisory Committee on Immunization Practices of the Center for Disease Control and Prevention (ACIP/CDC) recommended vaccinations for healthcare personnel.
Neurology	Outcome measures.
Neurology	Antimicrobial stewardship.
Neurology	HIV/AIDS: • Testing for individuals 13–64 years of age • Colposcopy screening for women living with HIV who have abnormal PAP smear tests • Resistance testing for persons newly enrolled in HIV care with a viral load greater than 1,000 • HIV screening at first prenatal care visit for all pregnant women • Include stratification of disparity data.
Neurology	Process and outcome measures to evaluate improvements in device associated infections in the hospital setting, particularly catheter-associated urinary tract infection.
Neurology	Measures that include follow-up for screening tests.
Neurology	Screening for sexually transmitted infections (STIs), including human papillomavirus (HPV).
Neurology	Management of chronic pain.
Neurology	Use of MRI for management of chronic knee pain.
Neurology	Tendinopathy: Evaluation, treatment, and management.
Neurology	Outcomes: Spinal fusion, knee and hip replacement.
Neurology	Overutilization of procedures.
Neurology	Secondary fracture prevention.
Neurology	Measures that would drive improved diagnosis of Parkinson's disease.
Neurology	Measures that include both assessment and referral, or assessment and treatment, for Parkinson's disease patients (*e.g.,* assessment and referral for rehab services).
Neurology	Functional interventions or assessment measures for patients with dementia or Alzheimer's disease.
Neurology	Assessment and referral for treatment and interventions for dementia/Alzheimer's disease.
Neurology	Measures around support of caregivers of patients with dementia/Alzheimer's disease.
Neurology	An outcome measure of getting people with dementia to stop driving.
Neurology	Other organizations/areas to connect with around measurement (*e.g.,* working with the National Highway Traffic Safety Administration on safety measures around driving).
Neurology	Measures that are more focused (*e.g.,* measures focused on depression screening, rather than screening for all neuropsychiatric conditions).

Topic area	Measurement gap
Neurology	Advance directives for dementia patients that are written early in the course of illness.
Neurology	Broader definitions of which providers can meet a measure (*e.g.,* functional assessments/treatments should include physical and occupational therapists, not just physicians).
Neurology	Interventions for women with epilepsy who might become pregnant.
Neurology	A measure about the impact of pregnancy on the epilepsy treatment.
Neurology	An outcome measure for epilepsy that focuses on seizure frequency.
Neurology	Epilepsy measures that examine whether the treatment matches the epilepsy type and the seizure type.
Neurology	Measures for epilepsy patients who are not seizure-free: Percent referred to an epilepsy specialist, percent referred for surgical evaluation.
Neurology	Functional outcome measures for individuals with stroke, TBI, SCI, MS, PD, etc.
Neurology	Patient reported measures in the areas of function, self-efficacy, balance/falls, knowledge of care (emergency care, red flags, medication, etc.)
Neurology	A process measure of referral for formal driving assessment in patients with dementia/Alzheimer's Disease.
Neurology	Reduction of psychotic symptoms in patients assessed with psychosis: Clinical trials have shown that psychotic symptoms can be reduced with appropriate management.
Palliative and End of Life Care	Reduction of depression in patients assessed with depression or reduction of burden of depression in populations at risk for depression (*e.g.,* Parkinson's disease).
Palliative and End of Life Care	Frequency of falls/hip fracture in patients with a high falls risk (*e.g.,* Parkinson's disease).
Person and Family Centered Care	Measures of arterial/venous ulceration and plaque composition that are paired with measure #0507.
Person and Family Centered Care	Measures of patients with indicators of dementia for other healthcare settings in addition to nursing homes (measures similar to #2091 and #2092).
Person and Family Centered Care	Measures around care plans for epilepsy.
Person and Family Centered Care	Outcome measures for infants born to women with epilepsy (*e.g.,* infants with congenital birth defects born to mothers who are on epilepsy medications).
Person and Family Centered Care	Patient-reported outcome measures to assess the impact of the counseling about contraception and pregnancy for women with epilepsy.
Person and Family Centered Care	Measures that incorporate screening for Mild Cognitive Impairment and dementia.
Person and Family Centered Care	Measures around delirium, particularly for patients who have delirium superimposed on dementia.
Person and Family Centered Care	Imaging: Measures that would impact care (*e.g.,* how fast imaging is completed, how fast a reliable interpretation is completed, preliminary revisions to report; reports should capture a time window appropriate to stroke patients, contain guidelines about a minimum imaging study (*e.g.,* CT vs. MRI in acute care), and be comprehensively-worded and accurate).
Pulmonary/Critical Care	End-of-life care in stroke.
Pulmonary/Critical Care	Palliative care (*e.g.,* presence/absence of a palliative care consultation after stroke severity rating).
Pulmonary/Critical Care	Functional status outcome measures (especially functional status outcomes related to stroke severity).
Pulmonary/Critical Care	Measures with better information on exclusions, including exclusions weighted by stroke severity score and a way to validate patients excluded from reporting.
Pulmonary/Critical Care	Rehabilitation measures (both process and outcome, including whether patients actually receive rehabilitation services).
Pulmonary/Critical Care	Measures that explore hidden health disparities and/or disabilities and that focus on patients with health disparities and disabilities.
Pulmonary/Critical Care	Measures of pre-hospital care and emergency response, including use of stroke scale before hospital arrival and use of protocols by emergency response teams.
Pulmonary/Critical Care	Measures of post-acute care and rehabilitation care (prescription use at timed intervals after stroke, whether health problems are controlled over time, etc.)
Pulmonary/Critical Care	Transfers between facilities.
Pulmonary/Critical Care	Community-level measures that capture whether or not a patient received services ordered (such as t-PA and rehabilitation or if/how code protocols exist and if they are followed).
Pulmonary/Critical Care	Hospital-level dysphagia screening measure.
Pulmonary/Critical Care	Measures of care separated by stroke vs. TIA; specific measures for the care of TIA patients.
Pulmonary/Critical Care	Screening and diagnosis of atrial fibrillation, including identifying appropriate patients, screening rates, rate of actual detections/under-diagnosis rate, and use of types of diagnostic tools used to determine atrial fibrillation.
Pulmonary/Critical Care	An outcome measure that is a combined endpoint of death and severe disability (*i.e.*, Rankin Score 4–6), for a patient-centered approach that would incorporate a patient's values on quality of life.
Pulmonary/Critical Care	Measures to document patient and family training and education in acute and post-acute settings to reduce disability, burden of care, and primary and secondary prevention.
Readmissions	Overuse.
Readmissions	Appropriateness.
Resource Use	Patient safety.
Resource Use	Effectiveness (linking cost & quality).
Resource Use	Trauma.
Resource Use	Disparities.
Resource Use	Vascular screening for patients with existing leg ulcers.
Resource Use	Adequate venous compression for patients with existing venous leg ulcers.
Resource Use	Adequate offloading patients with diabetic foot ulcers.
Resource Use	Adequate support surface for patients with stage III–IV pressure ulcers.
Resource Use	Induction and augmentation of labor.
Resource Use	Outcomes of neonatal birth injury.
Resource Use	Clostridium difficile colitis is epidemic in U.S. and should be measured.
Resource Use	Vascular catheter infections in other settings including, dialysis catheters, home infusion, peripherally inserted central catheter lines, nursing home catheters.
Resource Use	Monitoring of product related events.

Topic area	Measurement gap
Resource Use	EHR programming related errors.
Resource Use	The expectation for physical mobility among hospitalized adults:
Resource Use	Measures that extend to settings outside the hospital, such as post-acute care and extended care facilities, specifically nursing homes.
Resource Use	Measures that focus on best practices of health care delivery, specifically interventions that have been shown to result in improved outcomes.
Resource Use	Measures that stratify by direct patient care nursing hours and non-direct patient care nursing hours.
Safety	Longer term follow-up of patients is needed to determine the effects of care and interventions as opposed to only focusing on shorter-term outcomes.
Safety	Voluntary patient surveys should be used more to evaluate the care patients received related to treatment and follow-up.
Safety	Organizational measures that examine the culture of patient safety.
Safety	Outcome measures that examine social factors in the prevention and treatment of falls, focusing on community level measurement.
Safety	Measures that address the continuum of care including patient assessment, plan of care, intervention, and outcomes, and should take into account care across various settings, such as inpatient, outpatient, ambulatory surgical centers, and home health.
Safety	Measures that focus on complications linked to surgical site infections (including cesarean sections) and outcomes.
Safety	Measures that are easy to understand and meaningful to consumers.
Safety	Measures focused on in-hospital, severity adjusted, high mortality conditions such as 30-day mortality rates, readmissions, sepsis and acute respiratory distress syndrome (ARDS).
Safety	Measures for earlier identification of sepsis at the compensated stage before it becomes decompensated septic shock and appropriate resuscitative measures.
Safety	Measures of efficiency and overutilization.
Safety	Measures that focus on palliative care for patients with end-stage pulmonary conditions.
Safety	Better measures of comprehensive asthma education, *e.g.,* instruction related to the appropriate application of handheld inhalers prior to discharge and demonstration of use.
Safety	Measures of unplanned pediatric extubations.
Safety	Measures for effectiveness and outcomes of post-acute care for COPD patients.
Safety	Measures of functional status.
Safety	Measures for quality of spirometries in relation to meeting the American Thoracic Society (ATS) standards for pediatric and adult patients.
Safety	More outpatient composite measures targeted for consumer use.
Safety	Management of sepsis.
Safety	Overuse of blood transfusions.
Safety	Ventilator-associated pneumonia and mechanical ventilation.
Safety	Risk-adjusted ICU outcome.
Safety	Therapeutic hypothermia.
Safety	Daily chest radiographs in ICU patients.
Safety	Screening of ALI/ARDS.
Safety	COPD.
Safety	Palliative care and dyspnea.
Safety	Asthma.
Safety	Idiopathic pulmonary fibrosis.
Safety	Iatrogenic pneumothorax with thoracentesis.
Safety	Measure gaps for the pediatric population (related to admissions/readmissions).
Safety	Complications.
Safety	All-cause readmissions.
Safety	Mortality.
Surgery	Orthopedic surgery, bariatric surgery (measures of patient weight loss and maintenance of that weight loss over time), neurosurgery, and others.
Surgery	Measures of adverse outcomes that are structured as ''days since last event'' or ''days between events''.
Surgery	Measures around functional status or return to function after surgery, as well as other patient-centered and patient-reported outcomes like patient experience.

III. Secretarial Comments on the 2016 Annual Report to Congress and the Secretary

Once again we thank the National Quality Forum (NQF) and the many stakeholders who participate in NQF projects for helping to advance the science and utility of health care quality measurement. As part of its annual recurring work to maintain a strong portfolio of endorsed measures for use across varied providers, settings of care, and health conditions, NQF reports that in 2015 it updated its portfolio of approximately 600 endorsed measures by reviewing and endorsing or re-endorsing 161 measures and removing 42. Removed measures no longer met endorsement criteria, were retired by their developers, were replaced by stronger measures, or were no longer needed because providers consistently performed at the highest level on these measures. NQF-endorsed measures address a wide range of health care topics relevant to HHS programs including such high prevalence and high impact conditions and topics as: Person- and family-centered care, care coordination, palliative and end-of-life care, cardiovascular disease, behavioral health, pulmonary/critical care, neurology, perinatal care, and cancer. Additionally, as part of its annual review of measures proposed for use in the Medicare program, NQF stakeholder teams reviewed and made recommendations on nearly 200 measures for use in 20 different programs, including measures under consideration to implement new post-acute care measurement requirements

mandated by the Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014. In doing all of this work, NQF teams identified more than 250 measurement gaps needing attention from measure developers and those who use quality measures.

In addition to this important recurring work, a number of NQF's 2015 projects tackled or began tackling several difficult quality measurement issues that are key to the successful implementation of new patient care models and the transformation of the health care delivery system overall. These projects address:

- How to ''attribute'' patient health care and outcomes to individual providers under newer payment models in which multiple providers are involved in delivering care;
- How to address the performance measurement challenges of geographic isolation and small practice size common to rural and other low-volume providers;
- How to detect and assess new types of health care errors as we increasingly rely on health information technology (Health IT) to reform health care; and
- How to address patient social risk factors when measuring healthcare quality and outcomes.

''Attribution'' is a method used to assign patients and their quality outcomes to specific providers when trying to evaluate patient care. As HHS works to develop new models of care delivery and alternative payment models that integrate and coordinate care delivered by multiple providers, attributing the quality of health care delivered and the outcomes of that care to a particular provider or providers becomes more difficult. This issue has become increasingly important as these new models of care delivery often are built on an expectation of shared accountability—across primary care physicians, specialist physicians, physician groups, nurse practitioners, and the full healthcare team. In 2015 HHS requested NQF to convene a multi-stakeholder committee to examine this topic and recommend principles to guide the selection and implementation of approaches to attribution, potential approaches to validly and reliably attribute performance measurement results to one or more providers under different delivery models, and models of attribution for testing. Although this work just began in late 2015, HHS is closely following it and eager to receive the recommendations of this committee.

NQF's report on ''Performance Measurement for Rural Low-Volume Providers'' similarly was commissioned by HHS' Health Resources and Services Administration (HRSA) to identify challenges in healthcare performance measurement faced by rural providers and to make recommendations to address these, particularly in the context of Medicare pay-for-performance programs. This report aimed to support Critical Access Hospitals (CAHs), Rural Health Clinics, Community Health Centers, small rural non-CAH hospitals, other small rural clinical practices, and the clinicians who serve in any of these settings.

The resulting NQF report well-articulated the challenges these providers face, including the geographic isolation of some rural providers and the concomitant lack of patient transportation and provider information technology capabilities. These rural providers also may not have enough patients to achieve reliable and valid performance measurement results for all measures. Because of these ''small number'' challenges and because rural providers sometimes are paid differently than other providers, many HHS quality initiatives have historically excluded them from participation. We recognize that this can have the unintended effects of preventing rural residents from having access to information on provider performance, and preventing these rural providers from earning payment incentives that are open to non-rural providers.

To address these challenges, the stakeholders convened by NQF recommended phasing in rural providers' participation in quality measurement and quality improvement programs, and a number of specific approaches to measure development, alignment, selection and rural provider participation in pay-for-performance programs to support this transition. In response, HRSA, CMS, and HHS' Office of the Assistant Secretary for Planning and Evaluation are working together to examine how best to act on these recommendations.

The effective deployment of Health IT such as electronic health records (EHRs) is another critical dimension of reforming the delivery of health care. Health IT and health information exchange play a critical role in the continuing evolution of delivery system reform. As evidence of this, the new Merit-based Incentive Payment System (MIPS) for payments to physicians and other clinicians created by the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) specified Advancing Care Information (referred to in the statute as meaningful use of certified EHR technology) as one of four performance categories upon which payment adjustments will be based. Approximately 98% of hospitals and more than 80% of physicians currently use EHRs to help provide better patient care.

While promoting and assisting providers to adopt this new technology, HHS is mindful that the use of new technology of all kinds can be accompanied by unintended consequences and the potential risk of new types of errors. With respect to health IT, for example, the NQF HIT Safety Committee found that health IT user interfaces have sometimes proven to be unclear, confusing, cumbersome, or time-consuming for clinicians to use, leading to inadvertent mistakes in data entry or retrieval of information, and other opportunities for error. Conversely, HHS recognizes that there are opportunities for this new technology to eliminate or reduce the occurrence of a variety of adverse events. For this reason, HHS' Office of the National Coordinator for Health Information Technology (ONC) requested NQF to examine the intersection of Health IT and patient safety; identify priority measurement areas with the greatest potential for both improving the safety of Health IT and using Health IT to improve patient safety; make recommendations on how to address identified gaps and challenges in Health IT safety measurement; and identify best-practices for the measurement of Health IT safety issues. Although the report of this work was not released until early 2016, the majority of this work was conducted in 2015. The final report was very helpful to ONC and HHS overall, and ONC is working with AHRQ and CMS to incorporate the Health IT safety measure framework and measure concepts into measurement strategies.

Finally, we note that in 2015, NQF began a two year trial period during which new measures submitted for endorsement and endorsed measures that are undergoing maintenance review would be reviewed for possible ''risk adjustment'' for socioeconomic status (SES) and other demographic factors. Risk adjustment is a statistical technique that allows certain factors to be taken into account when computing and making comparisons between different performers. Although it has been common to ''risk adjust'' health care provider performance measures based on certain patient health factors such as how ill or how old patients are, it is been debated for some time whether performance measures should be adjusted for factors other than a patients' illness—such as a patient's race, ethnicity, income or where they live. If populations with SES risk factors

(social risk) suffer worse health outcomes and have higher costs due to factors beyond providers' control, not adjusting for these differences could unfairly penalize providers. On the other hand, incorporating social risk factors into payment could mask low quality care. This issue is particularly complex because research evidence suggests that both of these forces often contribute to the outcomes experienced by patients in various communities.

This issue is now being studied by HHS' Office of the Assistant Secretary for Planning and Evaluation (ASPE) as mandated by the *Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014.* Through the IMPACT Act, Congress mandated ASPE to conduct two studies evaluating the effect of social risk factors on quality measures used in Medicare quality and payment programs. The results of this first ASPE study should be of great help to NQF as it undertakes this trial period.

In conclusion, the need for quality measurement to evolve alongside healthcare delivery reform is evident in many of the targeted projects that NQF is being asked to undertake. HHS greatly appreciates the ability to bring many and diverse stakeholders to the table to help develop the strongest possible approaches to quality measurement as a key component to health care delivery system reform. We look forward to continued strong partnership with the National Quality Forum in this ongoing endeavor.

IV. 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).

Dated: August 25, 2016.

Sylvia M. Burwell,

Secretary, Department of Health and Human Services.

[i] Throughout this report, the relevant statutory language appears in italicized text.

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[iii] NQF steering committees are comparable to the expert advisory committees typically convened by federal agencies.

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