



“Health Care Quality: The Path Forward”

Statement of:

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Health Care Quality: The Path Forward

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Thank you Chairman Baucus and Ranking Member Hatch for inviting me to participate in today's hearing on behalf of the National Quality Forum (NQF).

My name is Dr. Christine Cassel, and I am the newly appointed President and CEO of NQF. Most recently, I was President and CEO of the American Board of Medicine and ABIM Foundation. I am board certified in geriatrics and internal medicine and have authored or co-authored 14 books and over 200 articles about quality, medical ethics, and geriatrics. I also currently serve as one of 20 scientists on the President's Council of Advisors on Science and Technology (PCAST).

Thank you for inviting me to give my first testimony as head of NQF before this distinguished panel.

Why We Are Here Today

Chairman Baucus, we commend your leadership and that of the entire committee in making it a priority to enhance the performance of the US healthcare system by establishing initiatives focused on public reporting, value based purchasing, and care delivery reforms.

As you know, these efforts are reliant on "quality measures" to assess where improvements are needed and what strategies work to improve quality. Quality performance measures can help you and other policymakers understand, for example, if linking payment to hospital readmissions rates drives down unnecessary readmissions, or if Patient-Centered Medical Homes and ACOs enhance clinical quality and help control costs.

Performance measures — if they themselves are "high quality" — help us answer these and other critically important questions about whether our public and private efforts to improve quality are paying off.

Overview of NQF

Founded in 1999, NQF is a non-profit, non-partisan organization with over 440 organizational members that span the health care spectrum — including physicians, nurses, hospitals, businesses, consumer and patient representatives, health plans, certifying bodies and other healthcare stakeholders. NQF's two main roles are: reviewing and endorsing quality measures; and convening diverse sectors that have a stake in healthcare to agree on key priorities and related measures to use in improving our nation's health.

Improving care is why I chose to serve on NQF committees before I became CEO. Last year, I was joined by over 850 other NQF volunteers — who logged about 55,000 hours or the equivalent of roughly \$4 million in donated hours — to further the quality cause. Collectively, we embody NQF's public service mission to improve the health of the nation.

Our Board of Directors is composed of 33 members—key public- and private-sector leaders who represent major stakeholders in America’s healthcare system (see Appendix A). A distinguishing characteristic of NQF is that our by-laws stipulate that a majority of the Board must be representatives of patients/consumers and purchasers. This assures a strong voice for those who receive and pay for care. By practice, patient representatives are prominent in all NQF committees and workgroups.

In terms of funding, NQF is supported by membership dues, foundation grants, and Federal funding.

How Do We Ensure that “High Quality” Measures Are Used?

It may sound simple, but it is true, that focusing on quality will only be effective if the tools we use to measure are themselves “high quality.”

For quality measurement to have an impact, the measures must be understandable to patients and payers; they need to be actionable by providers; and they need to meet high medical and scientific standards. Also, it is critical that a range of stakeholders agree on what is important to measure and that there is evidence that the measures selected can drive improvements in care.

To ensure high quality measures, we need criteria or standards. And to make sure that these measures are regularly used across the country, we need consensus or buy-in by all the sectors that have a stake in healthcare. That’s where NQF comes in.

NQF has two distinct but complementary roles focused on enhancing healthcare quality and value — endorsing measures based on rigorous criteria and, secondly, convening diverse stakeholders to gain agreement on where improvement is needed and what measures can be used to reach our goals.

More specifically:

1. NQF reviews and endorses quality performance measures against rigorous criteria.

A key role of NQF is convening clinical and other experts to review and endorse quality measures through a multi-stakeholder process. Measures recommended by these experts are then voted upon by the diverse NQF membership.

More specifically, NQF brings clinical experts from across the healthcare spectrum together to evaluate sets of quality measures. These measures are submitted to NQF from about 65 different developers from across the country, including physician specialty societies and certifying boards, the American Medical Association, The National Committee for Quality Assurance (NCQA), and others. These measures are developed largely from scientifically based clinical guidelines.

NQF does not itself develop measures. Rather, our job is to assure that measures submitted to NQF meet the following rigorous standards:

- **Importance to measure and report** – These criteria evaluate whether the measure has potential to drive improvements, including care improvements, and includes a careful evaluation of the clinical evidence.

- **Scientific acceptability of measure properties** –These criteria evaluate whether the measure will generate valid conclusions about quality; if measures are not reliable (consistent) and valid (correct), they may be improperly interpreted and providers may be mis-classified.
- **Usability and use**– These criteria evaluate whether the measure can be appropriately used in accountability and improvement efforts.
- **Feasibility**– These criteria require evaluators to review the administrative burden involved with collecting information on the measure. If a measure is deemed too burdensome, alternative approaches need to be considered.
- **An assessment of related and competing measures** – These criteria require evaluators to determine whether the measure is duplicative of other measures in the field. NQF endorses best-in-class measures and where appropriate combines (harmonizes) similar measures to reduce burden associated with requests to report near-identical or “look-alike” measures.

2. NQF convenes diverse, private sector healthcare stakeholders to provide input into the quality improvement efforts of both private purchasers and the Department of Health and Human Services (HHS).

In addition to bringing clinical experts together to provide a scientific and clinical review of quality measures, NQF also brings diverse public and private sector stakeholders together to drive consensus on quality improvement goals, priorities, and activities. These stakeholders include patient representatives, physicians, nurses, hospitals, labor, health plans, other quality organizations and government representatives.

More specifically, the NQF-convened National Priorities Partnership (NPP) provides input to HHS on its overarching National Quality Strategy (NQS), which is focused on improving care, increasing affordability, and building healthier communities. Getting the public and private sectors “on the same page” about where to focus quality improvement efforts is critical given the size, heterogeneity, and complexity of our healthcare system.

In addition, the NQF-convened Measure Applications Partnership (MAP) makes recommendations on which measures should be used in Federal public reporting and payment programs in advance of HHS issuing related regulations, including Hospital Value Based Purchasing and the Physician Quality Reporting System (PQRS), among others. MAP recommendations help facilitate Federal programs as well as public and private “alignment” by focusing on coordinating the use of the same measures across sectors, where appropriate. For example, are blood pressure measures defined the same way in the PQRS and Meaningful Use programs? Are patient deaths calculated in a standardized way so that they may be tracked and compared across hospitals and across time?

A major result of this consensus building is creating a standard portfolio of measures that is accepted as the “gold standard,” with the measures increasingly used by public and private purchasers as well as accrediting/certifying organizations. This uniformity of quality priorities and specific measures helps lessen reporting burden on providers and sends strong signals about quality improvement goals. To this point: a recent analysis shows that about 28 percent of NQF’s library of measures are being used by two or more sectors, including the Federal government, private payers, states, communities, physician specialty societies, and others. Also, we know that the Federal government is actively using about half

of NQF's portfolio of measures in its various programs. Given its size and reach, the Federal government is an important actor in encouraging all sectors to focus on the same quality improvement goals, and NQF measures are a critical tool in this effort.

Despite this progress, some recent Congressional payment reform proposals suggest room for an additional measure review process. Setting up an additional process for approving measures would simply result in more cost and redundancy and will do little to improve care.

I strongly urge that you retain one central hub of measure review and endorsement — such as has been created at NQF — which allows for the most inclusive and effective process for bringing new quality measures into the system. To address concerns that I have heard, I am also committed to making NQF's endorsement process more efficient and responsive to community needs, including exploring the notion of establishing criteria for and endorsing measurement systems such as registries. Further, having multi-stakeholder input into measure selection is a critical strategy for driving alignment and needs to be retained.

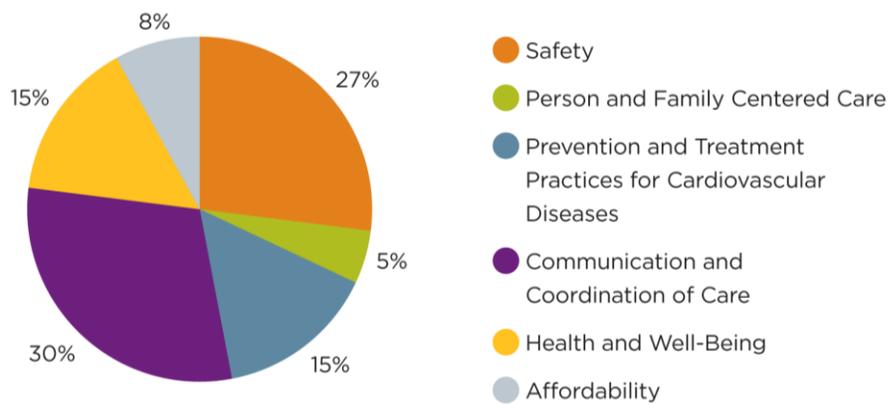
An Overall Assessment of the Current State of Quality Measures

A key question before the Committee is “Where are we on quality measurement activities?”

As described above, NQF began endorsing performance measures about a decade ago.

Based on this work, the field now has a library of about 700 NQF-endorsed measures from which hospitals, nursing homes, health plans, physicians, nurses, and others can select to focus their quality improvement activities. Most of the measures in the NQF-library are condition specific (e.g., cardiac care) and focus on clinical quality or patient safety. NQF looks to priorities in the HHS National Quality (see chart below) as a guide to where we should focus our endorsement efforts to support the nation's quality improvement goals. Current goals include an increased focus on person and family centered care, improving affordability and increasing population health (part of health/well-being).

How NQF-Endorsed Measures Stack Up Against National Quality Strategy Priorities (2012)

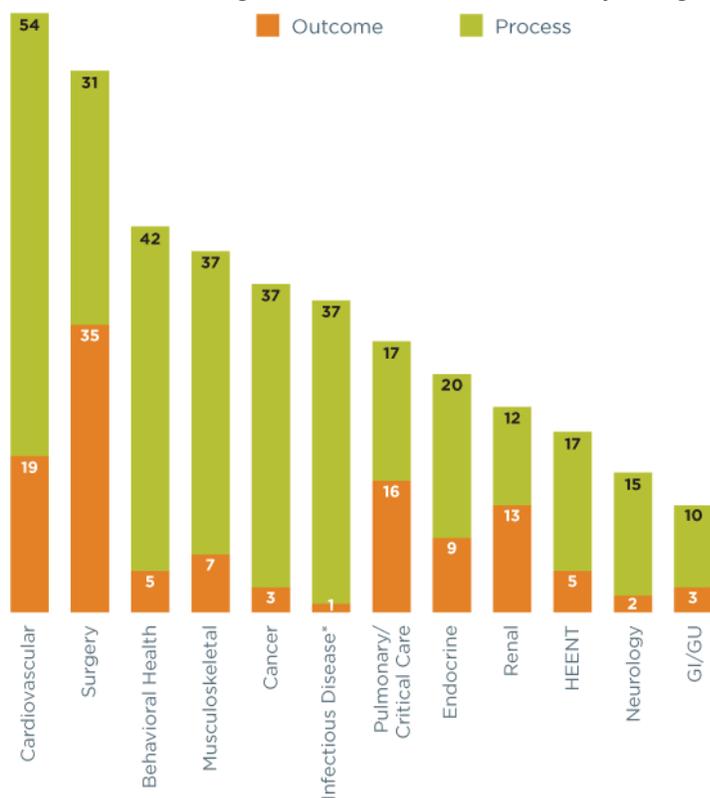


There is also a need to ramp up our review of “cross-cutting measures” that can evaluate the impact of care provided across settings and on increasing the proportion of “outcome measures” (i.e., measures that reflect the end results of care) in our portfolio.

Regarding outcome measures, we are working hard to transform our quality system away from focusing on “process measures,” which have served as the building blocks for quality improvement efforts, to a system focused on the end results or outcomes. Based on these efforts, the percentage of outcome measures in the NQF portfolio has grown from 18 percent to 27 percent over the last 2 years.

As we increase our focus on outcome measures, we have made progress in some areas, like surgery and cardiac care, but much work lies ahead to bring more outcome measures into our system. See the chart below for more specificity about NQF-endorsed, condition-specific measures.

Measures Receiving NQF Endorsement in 2012, by Category



*Additional outcome measures captured in safety areas (not shown).

While we are working to bring more “high impact” measures into the system, we are also working to strategically streamline our measures to ensure only the best-in-class are on the market.

In this vein, in 2012 NQF retired more measures from its portfolio than it added with respect to new measures. NQF removes measures that are no longer effective or evidence-based; replaces existing measures with those that are better, reflect new medical evidence, or are more relevant; and expands the portfolio to bring in measures that fill gaps and can help achieve the National Quality Strategy.

That said, there is always more work to be done to ensure NQF is retaining and endorsing the best possible measures so as to limit the reporting burden on health care providers, where appropriate.

NQF’s Portfolio of Endorsed Measures: 2012 at a Glance

Let me provide further details on NQF’s measure endorsement efforts in 2012.

Last year, NQF completed 16 endorsement projects — reviewing 430 submitted measures and endorsing 301 new and existing measures, or about 70 percent of those reviewed. This included 81 new measures and 220 measures that maintained their endorsement after being considered in light of any new evidence and/or against new competing measures submitted to NQF for consideration.

More specifically in 2012, NQF endorsed:

- **Patient safety measures.** Preventable medical errors cost the United States close to \$29 billion per year in additional healthcare expenses, lost worker productivity, and disability.¹ NQF endorsed 32 patient safety measures in 2012, including healthcare-associated infections, falls, medication safety, and pressure ulcers.
- **Resource use measures.** The full spectrum of healthcare stakeholders, including consumers and business leaders, is increasingly attuned to affordability and focused on how we can measure and reduce healthcare expenditures while improving care. NQF endorsed its first set of resource use measures in January 2012, and it endorsed an additional set in April 2012. These measures are primed to offer a more complete picture of what drives healthcare costs. Used in concert with quality measures, they will enable stakeholders to identify opportunities for creating a higher value healthcare system.
- **Patient experience measures.** Measures endorsed include a measure evaluating patient satisfaction during hospitalization for surgical procedures; measures focused on effective provider communication with patients regarding disease management, medication adherence, and test results; seven related measures that address health literacy, availability of language services, and patient engagement with providers; and measures that evaluate how bereaved family members perceive care provided to loved ones in long-term care facilities and hospitals.
- **Harmonized behavioral health measures.** In 2012, NQF endorsed 10 measures related to mental health and substance abuse, including measures of treatment for individuals experiencing alcohol or drug dependent episodes; diabetes and cardiovascular health screening for people with schizophrenia or bipolar disorder; and post-care follow-up rates for hospitalized individuals with mental illness. As a part of this process, NQF also brought together CMS and the National Committee for Quality Assurance (NCQA) to integrate two related measures into one measure, addressing antipsychotic medication adherence in patients with schizophrenia.
- **A measurement framework for those with multiple chronic conditions.** People with multiple chronic conditions (MCCs) now comprise more than 25 percent of the U.S. population^{2,3} and are more likely to receive care that is fragmented, incomplete, inefficient, and ineffective.^{4,5,6,7,8} Despite the growing prevalence of people with MCCs, existing quality measures typically do not address issues associated with their care, largely because of data-sharing challenges and because measures are typically limited to addressing a singular disease and/or specific setting. As a response to these challenges, NQF endorsed a measurement framework for developers to use that establishes a shared vision for effectively measuring the quality of care for individuals with MCCs.
- **Healthcare disparities measures.** Research from the Institute of Medicine shows that racial and ethnic minorities often receive lower quality care than their white counterparts, even after controlling for insurance coverage, socioeconomic status, and comorbidities.⁹ NQF commissioned a paper outlining methodological issues and an approach to identify measures that are more sensitive to disparities and as such should be stratified. From there, NQF endorsed 12 performance measures, focused on patient-provider communication, cultural competence, language services, and others.

What are Some Examples of How NQF-Endorsed Quality Measures Have Driven Care Improvements or Reduced Costs?

While there is still great progress to be made, NQF-endorsed measures have helped spur care improvements on the ground and, in some cases, have helped make a dent in our nation's rising healthcare costs.

A few examples of how NQF-endorsed measures have made a difference include:

- **Quality Measures have Helped Drive Patient Safety Improvements**
 - **Many hospital acquired infections are on the decline through the use of standardized quality measures, including central line associated blood stream infections (CLABSIs):** The use of quality measures and the underlying clinical guidelines they are based on have contributed to patient safety gains in hospitals, including a CDC-reported 58 percent reduction in CLABSIs between 2001 and 2009. This represents up to 6,000 lives saved and approximately \$1.8 billion saved in cumulative excess healthcare costs.¹⁰
 - **Hospitals that implement safe practices have better outcomes:** A peer reviewed study of more than 650 hospitals showed a decline in mortality in those hospitals that have fully implemented NQF-endorsed Safe Practices.¹¹
- **Quality Measures have Contributed to Better Health Outcomes**
 - **Improvements in Medicare's ESRD Quality Incentive Program:** In just two years, the majority of dialysis facilities showed significant improvement on the program's three clinical process measures related to dialysis adequacy and anemia management, which have a tight link to improvements in ESRD patient outcomes. Improvements on these process measures and early fistula placement are associated with a decrease in ESRD-related hospitalizations and death.^{12,13}
 - **A reduction in inappropriate, early elective deliveries before 39 weeks is resulting in healthier babies and lower costs:** Reports from the field suggest that current early delivery rates of 10 to 15 percent can be brought below 5 percent if quality guidelines developed by the American College of Obstetrics and Gynecology are followed, avoiding an estimated 500,000 days in NICUs and about \$1 billion in costs. Once this measure is publicly reported in 2014, it will allow patients to assess whether hospitals are prioritizing the safety of babies and Moms or unwittingly putting them in jeopardy.¹⁴
 - **Hospital readmission rates are coming down:** Before the adoption of hospital readmission measures and a related quality improvement and payment program, the 30-day all-cause hospital readmission rate held steady between 2008 and 2011 at an average of 19 percent. Once NQF-endorsed readmissions measures were adopted, the readmission rate dropped to 18.4 percent for the full year of 2012 and to 17.8 percent for the final quarter of 2012. While this is an early finding, it is promising.¹⁵
- **Quality Measurement is Also Helping in Prevention Efforts and Chronic Care Management**
 - **Focus on diabetes care greatly reduces worse effects of the disease on patients.** A long-time effort at HealthPartners in Minnesota to effectively care for patients with diabetes has greatly reduced the long-term effects of the disease. More specifically, data given to NQF from HealthPartners comparing over 32,000 HealthPartners members with diabetes in 2011 to the same number of members in 2000, members suffered 386 fewer heart attacks and 71 fewer leg amputations, and 692 people did not experience eye complications. This is a

- major success in chronic care management.
- **Publicly reporting measures improved physician group performance:** Physician groups in Wisconsin that publicly reported NQF-endorsed quality measures between 2004 and 2009 improved patient care on key indicators, e.g., cholesterol control and breast cancer screening, outperforming the rest of Wisconsin, nearby states of Iowa and South Dakota, and the United States as a whole.¹⁶
- **A multi-prong approach to measurement plus payment incentives demonstrated results over 10 years:** Two hundred physician groups in California associated with the Integrated Healthcare Association have participated in a pay-for-performance program over a number of years. In 2012, 47 of the physician groups received performance awards for meeting benchmark performance for meaningful use of health IT, patient experience, and clinical measures in key areas: cardiac, diabetes, musculoskeletal, respiratory, and prevention.¹⁷
- **The bar for quality measures gets raised over time.** A long-standing NQF-endorsed measure related to the use of beta blockers within seven days after an acute myocardial infarction (AMI) provides an example of driving real change in our health system. As focus on this measure ramped up over time, mortality for heart attack patients fell. Based on the progress in this area (nearly 100 percent compliance at this time), this measure was retired, and a new measure entered the system where progress still lacks. This new measure focuses on patient use of beta blockers for six months after an AMI which can help prevent another AMI and further reduces patient mortality.

Despite these compelling examples, the nation has not come as fast or as far as expected.

There is no single reason why we haven't made even greater gains, but a number of roadblocks continue to stand in the way of improving quality further and reducing costs. These include:

- **Our ability to capture and report clinically rich and meaningful performance measures information, despite increased penetration of electronic health records.** Although between 70 and 75 percent of practicing physicians¹⁸ and approximately 80 percent of all eligible hospitals and critical access hospitals in the United States have received an incentive payment for adopting, implementing, upgrading, or meaningfully using an EHR,¹⁹ this has not yet translated into accurate electronic capture and reporting of performance results as part of the care process. In fact, only about 10 percent of measures submitted to NQF for endorsement are e-Measures, or specified for use in an electronic environment. Also, reports from the field suggest that EHRs are not consistently producing reliable quality data;²⁰
- **The quality measurement community now has the data to begin developing outcome measures, but more must be done to encourage all stakeholders to work together towards shared quality goals.** Recent public and private campaigns to address well recognized quality problems, e.g., healthcare acquired infections and early elective deliveries, have proved or are beginning to prove successful and should be replicated for other pressing problems.²¹ These campaigns should also include a focus on training in quality measurement science, culture change, and work redesign.
- **A lack of alignment across sectors, which has produced a tsunami of quality reporting requirements.** Despite efforts to align across stakeholders, hospitals and physicians still face requests for reporting of "look alike" measures and are inundated with requests for data. More must be done to find consensus among sectors on which measures should be used to improve care.

- **Leaders of physician and nursing organizations need to invest more in quality and help lead the way forward.** Quality and resource stewardship is a key tenet of a 21st century definition of professionalism and should be woven into the fabric of practice and viewed as a fundamental focus of clinician leadership.

What is on the horizon for measurement and quality improvement?

Against the backdrop of the progress we've made and the challenges we still face, we are now looking toward what is on the horizon for the quality measurement movement.

As in strategies related to care delivery and payment reform, our efforts will continue to focus on how quality measurement can be used to make our system more patient-centered and better coordinated. Our efforts will also continue to focus on how measurement can be used to drive down costs, while also increasing value in our health system.

To achieve these goals, I believe the future of quality measurement includes:

- **A continued and increasing focus on patient experience and patient reported outcomes.** Our healthcare system is still more provider-centered than patient-centered, and our measures reflect as much. To turn in a new direction, we need more emphasis on assessments of patient experience of care and self-reporting of health status and functioning. One way to do this may include partnering with other sectors to leverage technologies (such as smart phone applications) that can help facilitate the sharing of information. This and other innovative ideas should be explored.²²
- **Placing a priority on bringing measures into the market that move beyond a single, discrete focus to a broader view of patient care.** A key goal of NQF is bringing more “composite measures” and cross-cutting measures into the health system. The composite measures combine quality information within a given clinical area to provide patients, providers, and payers a more holistic and summary view of care in a given area; cross-cutting measures can provide information about care that spans clinical settings and providers.
- **Ramping up our efforts to figure out how to really assess “value.” We must continue to strive toward driving value — the intersection of cost and quality — in our health system.** This is a key focus of the hundreds of experts involved in NQF processes and is critical as the health system continues to shift toward value based purchasing programs.
- **Continuing to work within NQF to ensure we are operating as efficiently, effectively, and inclusively as possible.** At NQF, we are continuously evolving our endorsement process as the science of measurement changes and as the needs of measure developers and other stakeholders evolve. More specifically, we are:
 - **Continuing to strategically manage the NQF portfolio of endorsed measures** – bringing in high priority measures to fill gaps and removing measures whose value has diminished;
 - **Speeding up the review and endorsement processes** – This plan builds upon the success NQF has already had in reducing the measure review cycle time from 12 to 7 months. It includes setting up standing committees and moving away from committees appointed for

each project. Standing committees would reduce project start-up time; reduce time between measure submission and measure review; and move to single flow processing of measures, encouraging developers to submit measures whenever they are available and ready for consideration.

- **Continuing to leverage existing multi-stakeholder forums to further alignment and address challenging measure and measure information issues.** Recent examples include using our multi-stakeholder processes to review and work through difficult issues related to the implementation of hospital readmissions measures and fostering tighter alignment in use of the same measures across different stakeholders.

What will it take to get there?

As I close out my testimony, I thought I would take a few more moments to outline critical activities that we — as a quality community — should undertake to help move our quality improvement efforts forward.

These ideas include:

- **More upstream, strategic, and coordinated measure development that is laser focused on filling high priority gaps.** Today, while there are many talented individuals and organizations out in the field developing measures, there is little coordination or organization in this area. This has resulted in duplicative measures being developed, and there is no clear sense in the community about the top ten measure gaps that need filling. HHS can help drive this and NQF can play an important role.²³
- **Electronic systems to facilitate measure development and endorsement processes.** Electronic systems will help facilitate a more iterative, faster measure development process and help support a more seamless inter-digitation between development and endorsement. NQF is working on this with CMS, ONC, and measure developers.²⁴
- **An evolution of the current review and endorsement process to meet changing needs.** A recognition that registries and other strategies such as Choosing Wisely contribute to quality improvement. More must be done to appropriately leverage these activities to improve quality and reduce administrative burden on providers. Congress has recognized the need for more flexibility and the recent fiscal cliff bill suggested openness to innovation.
- **More measurement information “sense making” for patients/families and policymakers.** We need to move from a focus on many measures, to measures that really matter to providers, to patients, and to purchasers — after all, our primary audience should be the end users of healthcare and those charged with oversight of healthcare resources.
- **Finally, we need continued support in both the public and private sectors for the measurement and quality improvement enterprise.** Neither the public nor private sector can make progress alone. Continued achievements will require commitments of resources, time, and focus. Without this support, quality improvement efforts will stop short at a time when real progress is on the horizon.²⁵

While the quality community is proud of the advancements we have made over the last decade, we are also excited for the opportunities and possibilities that lay ahead to further improve our nation's healthcare system. We look forward to continuing down this quality road together.

Thank you, again, for the opportunity to provide this testimony on behalf of the National Quality Forum.

I look forward to answering your questions

¹ Institute of Medicine. *To Err is Human*. Washington, DC: National Academies Press; 2001.

² Department of Health and Human Services (HHS), Office of the Assistant Secretary for Health (ASH), *Initiatives*, Washington, DC: HHS, ASH: 2011. Available at <http://www.hhs.gov/ophhs/initiatives/mcc/index.html>. Last accessed December 2011.

³ Thorpe KE, Howard DH, The rise in spending among Medicare beneficiaries: the role of chronic disease prevalence and changes in treatment intensity, *Health Aff*, 2006;25(5):w378-w388.

⁴ Gijssen R, Hoeymans N, Schellevis FG, et al., Causes and consequences of comorbidity: a review, *J Clin Epidemiol*, 2001;54(7):661-674.

⁵ Boulton C, Wieland GD, Comprehensive primary care for older patients with multiple chronic conditions: "nobody rushes you through", *JAMA*, 2010;304(17):1936-1943.

⁶ Parekh AK, Barton MB, The challenge of multiple comorbidity for the US health care system, *JAMA*, 2010;303(13):1303-1304.

⁷ Wolff JL, Starfield B, Anderson G, Prevalence, expenditures, and complications of multiple chronic conditions in the elderly, *Arch Intern Med*, 2002;162(20):2269-2276.

⁸ Boyd CM, Boulton C, Shadmi E, et al., Guided care for multimorbid older adults, *Gerontologist*, 2007;47(5):697-704.

⁹ Institute of Medicine (IOM). *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington, DC: National Academies Press; 2003. Available at <http://www.nap.edu/openbook.php?isbn=030908265X>. Last accessed August 2012.

¹⁰ Centers for Disease Control and Prevention. "Vital Signs: Central Line Bloodstream Infections—United States, 2008 and 2009." *Morbidity and Mortality Weekly Report*, 60:243-248, 2011.

¹¹ Department of Health and Human Services (HHS), Office of the Assistant Secretary for Health (ASH), *Initiatives*, Washington, DC: HHS, ASH: 2011. Available at <http://www.hhs.gov/ophhs/initiatives/mcc/index.html>. Last accessed December 2011.

¹² Rocco MV, MD, Frankenfield DL, DrPH, Hopson SD, MSPH, et al. Relationship between Clinical Performance Measures and Outcomes among Patients Receiving Long-Term Hemodialysis. *Annals of Internal Medicine* 2006; 145:512-519.

¹³ Berenson RA, Pronovost PJ, Krumholz HM. "Achieving the Potential of Health Care Performance Measures, *Timely Analysis of Immediate Health Policy Issues*." Robert Wood Johnson Foundation Urban Institute, May 2013.

¹⁴ Clark SL, MD, Donna RF, RN, MN, Janet AM, RN, et al. Reduction in elective delivery at <39 weeks of gestation: comparative effectiveness of 3 approaches to change and the impact on neonatal intensive care admission and stillbirth. *American Journal of Obstetrics and Gynecology*. November 2010.

¹⁵ Gerhardt G, Yemane A, Hickman P, et al. *Medicare & Medicaid Research Review*, 3(2):E1-E12, 2013.

¹⁶ Lamb, GC, Smith, MA, Weeks, WB, Queram, C. Publicly Reported Quality-Of-Care Measures Influenced Wisconsin Physician Groups To Improve Performance. *Health Affairs*, March 2013 32:536-543.

¹⁷ Ernst, Cindy R. "Integrated Healthcare Association Honors Top Performing and Most Improved California Physician Organizations." September 12, 2012. Integrated Healthcare Association. Print.

¹⁸ Terry, K. "EHR Adoption Passes the Tipping Point." *InformationWeek Healthcare* 2 October 2012.

¹⁹ Department of Health and Human Services, Press Office. "Doctors and Hospitals' use of health IT more than doubles since 2012." May 22, 2012. Accessed on June 24, 2013, <http://www.hhs.gov/news/press/2013pres/05/20130522a.html>.

²⁰ DesRoches CM, DrPH, Audet AM, MD, Painter M, MD, et al. "Meeting Meaningful Use Criteria and Managing Patient Populations: A National Survey of Practicing Physicians." *Annals of Internal Medicine* 2013;158(11):791-799.

²¹ Berenson RA, Pronovost PJ, Krumholz HM. "*Achieving the Potential of Health Care Performance Measures, Timely Analysis of Immediate Health Policy Issues.*" Robert Wood Johnson Foundation Urban Institute, May 2013.

²² Ibid.

²³ Conway PH, MD, MSc, Mostashari F, MD, MPH, Clancy C, MD, The Future of Quality Measurement for Improvement and Accountability, *JAMA*, 2013: 309(21): 2215-2216.

²⁴ Ibid.

²⁵ Berenson RA, Pronovost PJ, Krumholz HM. "*Achieving the Potential of Health Care Performance Measures, Timely Analysis of Immediate Health Policy Issues.*" Robert Wood Johnson Foundation Urban Institute May 2013.

Appendix A - National Quality Forum Board of Directors

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