



# NATIONAL QUALITY STRATEGY

Better Care. Affordable Care.  
Healthy People/Healthy Communities

**WORKING FOR QUALITY: ACHIEVING BETTER HEALTH  
AND HEALTH CARE FOR ALL AMERICANS**

October 2015

Submitted by the U.S. Department of Health and Human Services

## EXECUTIVE SUMMARY

The National Quality Strategy establishes three aims, six priorities, and nine levers for quality improvement that are used by public and private organizations to chart a course for improved health and health care. Five years following passage of the Affordable Care Act, the National Quality Strategy has gained ground. Key measures indicate that health and health care quality are improving, and millions of Americans have gained access to the health care system. These advances are paving the way for delivery system reform goals championed by the U.S. Department of Health and Human Services that will result in better care, smarter spending, and healthier people.

### NATIONAL QUALITY STRATEGY PROGRESS

The National Quality Strategy is backed by the data published annually by the National Healthcare Quality and Disparities Report, an Agency for Healthcare Research and Quality publication. The National Healthcare Quality and Disparities Report tracks more than 250 health care process, outcome, and access measures, covering a wide variety of conditions and settings. Across the National Quality Strategy's six priorities, the 2014 report finds that half of the patient safety measures improved, led by a 17 percent reduction in rates of hospital-acquired conditions; person-centered care improved steadily, especially for children; care coordination improved as providers enhanced discharge processes and adopted health information technologies; effective treatment in hospitals improved, as indicated by measures publicly reported by the Centers for

#### NATIONAL QUALITY STRATEGY'S THREE AIMS:

1. **BETTER CARE:** Improve the overall quality of care, by making health care more patient-centered, reliable, accessible, and safe.
2. **HEALTHY PEOPLE/HEALTHY COMMUNITIES:** Improve 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.
3. **AFFORDABLE CARE:** Reduce the cost of quality health care for individuals, families, employers, and government.

#### NATIONAL QUALITY STRATEGY'S SIX PRIORITIES:

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

Medicare & Medicaid Services on the Hospital Compare [Web Site](#); healthy living improved in about half of the measures followed, led by increased administration of selected adolescent vaccines from 2008 to 2012; and care affordability worsened from 2002 to 2010 and then leveled off.<sup>1</sup> After years without improvement, the rate of un-insurance among adults ages 18 - 64 decreased substantially during the first half of 2014.<sup>1</sup> In order to obtain high-quality care, Americans must first gain entry into the health care system, and millions have done so by enrolling in the health care marketplaces that have expanded coverage to 17.6 million people through provisions of the Affordable Care Act, including both Medicaid expansion and Health Insurance Marketplaces.<sup>2</sup> As of June 30, 2015, about 9.9 million consumers had effectuated Health Insurance Marketplace coverage, and about 84 percent, or more than 8.3 million consumers, were receiving an advanced premium tax credit to make their premiums more affordable throughout the year.<sup>3</sup>

#### **PROGRAM ALIGNMENT TO THE NATIONAL QUALITY STRATEGY**

Program alignment to the National Quality Strategy aims and priorities contributes to progress on key measures. Several important programs within the Centers for Medicare & Medicaid Services are aligned with the National Quality Strategy priorities. Programs such as the Quality Improvement Organizations, Physician Quality Reporting System, Value-Based Purchasing, the Electronic Health Records (EHR) Incentive Programs, and the Quality Rating System all use the National Quality Strategy aims and priorities to drive improvements in the quality of health and health care for all Americans. The Indian Health Service Hospital Consortium adopted the National Quality Strategy as a framework for improvement work in accreditation, credentialing, privileging processes,

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<sup>1</sup> 2014 National Healthcare Quality and Disparities Report. Rockville, MD: Agency for Healthcare Research and Quality; May 2015. AHRQ Pub. No. 15-0007.

<http://www.ahrq.gov/research/findings/nhqrdr/nhqrdr14/2014nhqdr.pdf>

<sup>2</sup> Health Insurance Coverage and the Affordable Care Act. ASPE Issue Brief. May 5, 2015.

[http://aspe.hhs.gov/health/reports/2015/uninsured\\_change/ib\\_uninsured\\_change.pdf](http://aspe.hhs.gov/health/reports/2015/uninsured_change/ib_uninsured_change.pdf)

<sup>3</sup> June 30, 2015 Effectuated Enrollment Snapshot. Centers for Medicare & Medicaid Services. September 8, 2015. <https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2015-Fact-sheets-items/2015-09-08.html>

culture of safety, role of patient advocates, customer service training across the agency, harms reduction through updates and consolidation of infection control policies, and the environment of care in all facilities. More Federal programs and U.S. Department of Health and Human Services Agency-specific initiatives and plans to further implement the National Quality Strategy are available on the Working for Quality Web site (<http://www.ahrq.gov/workingforquality/index.html>).

### **NATIONAL QUALITY STRATEGY PROGRESS IN MEASURE ALIGNMENT AND HARMONIZATION**

Another important aspect of the National Quality Strategy is measure alignment and harmonization. The U.S. Department of Health and Human Services convened the Measurement Policy Council to evaluate measures in use across the Department, create consensus around harmonized core measure sets for high-priority areas, and coordinate future measure development. The Measurement Policy Council has reviewed nine topics to date: hypertension control, hospital-acquired conditions/patient safety, Hospital Consumer Assessment of Healthcare Providers and Systems, smoking cessation, depression screening, care coordination, HIV/AIDS, perinatal, and obesity/BMI. Seven core measure sets were created as a result, with the recommendation for the retirement of more than 500 measures currently in use. In 2014, the Centers for Medicare & Medicaid Services, along with America's Health Insurance Plans and its member plans' Chief Medical Officers, the National Quality Forum, and national physician organizations, formed a public-private workgroup called the Core Quality Measures Collaborative in order to assemble a set of core quality measures that align to the National Quality Strategy.<sup>4</sup> In addition to the work done by the Measurement Policy Council and the Core Quality Measures Collaborative, the Institute of Medicine recently released "[Vital Signs: Core Metrics for Health and Health Care](#)

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<sup>4</sup> Patrick H Conway and the Core Quality Measures Collaborative Workgroup. The Core Quality Measures Collaborative A Rationale and Framework for Public-Private Quality Measure Alignment. Health Affairs. June 23, 2015. <http://healthaffairs.org/blog/2015/06/23/the-core-quality-measures-collaborative-a-rationale-and-framework-for-public-private-quality-measure-alignment/>

Progress.” The Core Measure sets selected by the report align to the National Quality Strategy priorities.<sup>5</sup>

## LOOKING FORWARD: THE NATIONAL QUALITY STRATEGY AND DELIVERY SYSTEM REFORM

Implementing payment models that reward and incentivize providers to deliver high-quality, patient-centered care is one of the nine levers of the National Quality Strategy. In January 2015, the U.S. Department of Health and Human Services announced new measureable goals and a clear timeline to move the Medicare program, and the health care system at large, toward paying providers based on the quality rather than the quantity of care they give patients. These recently announced goals reflect the intent of the National Quality Strategy and are part of the Department’s broader effort to help move the health care system to one that achieves the goals of better care, smarter spending, and healthier people. The U.S. Department of Health and Human Services set a goal of moving 30 percent of Medicare provider payments to be in alternative payment models tied to how well providers care for their patients, such as Accountable Care Organizations or bundled payment arrangements by the end of 2016, and 50 percent by 2018.<sup>6</sup> In addition, the Department set a goal of tying 85 percent of all traditional Medicare fee for service payments to quality or value by 2016 and 90 percent by 2018 through programs such as the Hospital Value-Based Purchasing and the Hospital Readmissions Reduction Program. This is the first time in the history of the Medicare program that the U.S. Department of Health and Human Services has set explicit goals for alternative payment models and value-based payments.

In order to engage the private sector in this effort, the U.S. Department of Health and Human Services launched the Health Care Payment Learning and Action Network (“Network”). Through the Learning and Action Network, the U.S. Department of

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<sup>5</sup> Vital Signs: Core Metrics for Health and Health Care Progress. Institute of Medicine. April 28, 2015. [http://www.iom.edu/~media/Files/Report%20Files/2015/Vital\\_Signs/VitalSigns\\_RB.pdf](http://www.iom.edu/~media/Files/Report%20Files/2015/Vital_Signs/VitalSigns_RB.pdf)

<sup>6</sup> Better, Smarter, Healthier: In historic announcement, HHS sets clear goals and timeline for shifting Medicare reimbursements from volume to value. U.S. Department of Health and Human Services, January 26, 2015. <http://www.hhs.gov/news/press/2015pres/01/20150126a.html>

Health and Human Services is working with private payers, employers, consumers, providers, States and State Medicaid programs, and other partners to expand alternative payment models into their programs. More than 4,000 individual patients, insurers, providers, States, consumer groups, employers and other partners have registered to participate in the Network, and many organizations have set their own goals for rewarding value and quality.

## PRIORITIES IN ACTION

Federal, State, regional, and local agencies, as well as private sector organizations, continue to demonstrate alignment to the National Quality Strategy by using the aims and priorities as a foundation for many programs and initiatives. The National Quality Strategy's Priorities in Action series, published on the [Working for Quality Web site](#), highlights organizations that put the aims and priorities into practice, and attain tangible results through their efforts.



### MAKING CARE SAFER

**The National Quality Strategy identifies patient safety as a key element for delivering high quality health care. Patients should not be harmed by the health care they receive and all clinicians should be empowered with the best tools and information to deliver safe, effective, quality care.**

### MEASURING PROGRESS

**The 2014 National Health Care Quality and Disparities Reports found that across measures related to patient safety, about half of the measures improved through 2012, with a median improvement of 3.6 percent per year.<sup>1</sup>** From 2010 to 2013, the overall rate of hospital-acquired conditions declined from 145 to 121 per 1,000 hospital discharges.<sup>1</sup> Large declines were also observed in rates of adverse drug events, healthcare-associated infections, and pressure ulcers.<sup>1</sup> The rate of central line-associated bloodstream infections improved quickly, at an average annual rate of change above 10 percent per year.<sup>1</sup> Lastly, only one measure – postoperative physiologic and metabolic

derangements during elective-surgery admissions – worsened over time.<sup>1</sup> The general trend in patient safety is a result of Partnership for Patients and other Federal efforts, such as Medicare’s Quality Improvement Organizations and the Department’s National Action Plan to Prevent Health Care-Associated Infections, as well as the dedication of hospitals, private payers, and patient advocates.

## CURRENT LANDSCAPE

In recent years, the Partnership for Patients, a major public-private partnership convened by the Centers for Medicare & Medicaid Services, has focused on eliminating a set of hospital-acquired conditions and reducing readmissions. **From 2010 to 2013, efforts by initiatives such as the Partnership for Patients and the Hospital Readmission Reduction Program helped achieve an estimated 50,000 fewer patient deaths in hospitals and approximately \$12 billion in health care cost savings from a reduction in hospital-acquired conditions.**<sup>7</sup> In total, hospital patients experienced 1.3 million fewer hospital-acquired conditions over a 3-year period, which translates to a 17 percent decline.<sup>7</sup> In addition, clinicians at some hospitals have reduced their early elective deliveries to close to zero, meaning fewer at-risk newborns and fewer admissions to the neonatal intensive care units.<sup>8</sup>

One such hospital is the **Children's Hospital of the University of Pittsburgh Medical Center**. It has achieved a significant reduction in adverse events and medication errors through an innovative electronic health record system. In addition to reducing adverse events through their electronic health record program, Children's Hospital entered into a partnership with Rothman Healthcare to develop the first-ever pediatric version of Rothman Index in 2012. The Rothman Index quantifies a patient's condition into a

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<sup>7</sup> Efforts to improve patient safety result in 1.3 million fewer patient harms, 50,000 lives saved and \$12 billion in health spending avoided U.S. Department of Health and Human Services. December 3, 2014

<http://www.hhs.gov/news/press/2014pres/12/20141202a.html>

<sup>8</sup> Better Care, Smarter Spending, Healthier People: Improving Our Health Care Delivery System. Centers for Medicare & Medicaid Services. January 26, 2015

<http://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2015-Fact-sheets-items/2015-01-26.html>

simple graphic format based on vital signs, nursing assessments, and lab results.<sup>9</sup> Index graphics are meant to serve as a backup to point-of-care physicians by providing a historical context for patient care by drawing attention to changes in health that may otherwise be difficult to detect when a patient is handed off between multiple physicians and nurses.<sup>9</sup> In-house analysis of the data mined from the record enables the hospital to go a step further and make care safer for future patients. An inter-hospital bioinformatics workgroup co-operated with the University of Pittsburgh feeds Children's Hospital data into a machine learning system with the goal of better predicting a patient's rate of readmission as soon as they enter the hospital. In doing so, hospital staff hope to better focus care management resources on those patients who need the most intensive preventive care for readmission.

A recent retrospective study of 16,239 Children's Hospital pediatric admissions between January 2006 and December 2013 compared the use of vital signs, a common indicator of patient condition, to the Pediatric Rothman to identify patients requiring urgent intervention with pediatric Intensive Care Unit transfer. The research, conducted by Children's Hospital clinicians, found that use of vital signs alone led to false-positive identification of serious events almost half of the time (46 percent).<sup>10,11</sup> The Pediatric Rothman Index had a false-positive rate of just 1 percent. The high specificity of the pediatric Rothman Index demonstrates an innovative improvement for patient safety concerns.<sup>11</sup>

## LOOKING FORWARD

The trend of improving patient safety should continue as the Centers for Medicare & Medicaid Services continues to tie Medicare payment for hospitals to readmission rates

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<sup>9</sup> Children's Hospital of Pittsburgh of UPMC Partners with Rothman Healthcare. BusinessWire. February 2012 <http://www.businesswire.com/news/home/20120220005166/en/Childrens-Hospital-Pittsburgh-UPMC-Partners-Rothman-Healthcare#.VQyV347F-So>.

<sup>10</sup> Peer-Review: Children's Hospital of Pittsburgh of UPMC's Electronic Surveillance Framework Could Significantly Reduce False Positive Diagnosis. PR News Wire. July 15, 2015. <http://www.prnewswire.com/news-releases/peer-review-childrens-hospital-of-pittsburgh-of-upmcs-electronic-surveillance-framework-could-significantly-reduce-false-positive-diagnoses-300113604.html>

<sup>11</sup> Da Silva, et al. Evaluation of Electronic Medical Record Vital Sign Data Versus a Commercially Available Acuity Score in Predicting Need for Critical Intervention at a Tertiary Children's Hospital. *Pediatric Critical Care Medicine*. 2015 Sep;16(7):644-51. doi: 10.1097/PCC.0000000000000444. <http://www.ncbi.nlm.nih.gov/pubmed/25901545>

for certain conditions. Under the **Hospital Readmissions Reduction Program**, Medicare payments to hospitals with excess readmissions are reduced, resulting in rewards for patient safety and care quality.<sup>8</sup> The **Hospital-Acquired Condition Reduction Program** reduces Medicare payments for some hospitals that rank in the worst performing quartile with respect to hospital-acquired conditions. For the Fiscal Year 2015 program, the ranking was based on the hospital's performance on three quality measures (Patient Safety Indicator 90 composite, central-line associated bloodstream infection and catheter associated urinary tract infection).<sup>8</sup> Additional safety measures for measures such as surgical site infections and methicillin-resistant *Staphylococcus aureus* infections have been added for future years. *Choosing Wisely*® also works to reduce unnecessary care that at times can be harmful. *Choosing Wisely* promotes conversations between patients and providers that help patients choose care that is supported by evidence, not duplicative of other tests or procedures already received, free from harm, and truly necessary.<sup>12</sup>



## PERSON- AND FAMILY-CENTERED CARE

**The National Quality Strategy emphasizes the need to give individual patients and families an active role in the patient's care. Both public and private sector programs are working to promote this priority.**

### MEASURING PROGRESS

**The 2014 National Health Care Quality and Disparities Reports found that Person-Centered Care improved with large gains in patient-provider communication.<sup>1</sup> Almost all person- and family-centered care measures tracked in the report improved.<sup>1</sup>** From 2002 to 2012, the percentage of children whose parents reported poor communication with their child's health provider decreased significantly overall and among every racial, ethnic, and income groups.<sup>1</sup> The report also found that when care delivery is not person- and family-centered, patients are more likely to over-utilize health care services.<sup>1</sup>

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<sup>12</sup> Choosing Wisely®. Accessed September 14, 2015. <http://www.choosingwisely.org/about-us/>

## CURRENT LANDSCAPE

Established by the Agency for Healthcare Research and Quality, the **Consumer Assessment of Healthcare Providers and Systems®**, a collective effort of public and private research organizations, has led the nation in creating surveys that ask consumers and patients to report on and evaluate their experiences with health care. These surveys are an important tool for advancing the National Quality Strategy's priority of person- and family-centered care.

The **National Partnership for Women and Families**, a non-profit organization, also has a long history of promoting person- and family-centered care by helping to shape and advance models of care that treat the patient as a whole person and ensure coordination of care, improved communication, patient support and empowerment, and ready access to health care providers and services. They provide stakeholders with case studies, toolkits, site-specific training curricula and other educational resources to educate health professionals about the importance and positive impact of providing care that is patient- and family-centered and partnering with patients and families. The organization also promotes Patient and Family Advisors to serve on Patient and Family Advisory Councils and other work groups and committees to improve the quality, safety and experience of care. As a result of their efforts, the National Partnership for Women and Families is able to engage consumers and providers in person- and family-centered care under the new models of health care delivery and payment, such as Accountable Care Organizations and patient-centered medical home/advanced primary care.

For 30 years, the **Colorado Coalition for the Homeless** has been working to integrate health care and housing services for people who are homeless based on the principle that managing serious mental illnesses, substance abuse disorders, and chronic medical conditions prevalent among this population requires safe housing. **In 2013, the Coalition provided health care services to more than 13,000 homeless individuals and families.** Many of the patients the Coalition treats are afflicted with multiple chronic conditions common to those without housing, such as hypertension, diabetes, and asthma. The nonprofit oversaw the development of 1,600 housing units for homeless individuals and families largely in the Denver metropolitan area. Many of those units

are specifically for men and women in frail health whose recovery is hindered by lack of consistent access to nutritious food, clean water, and a safe place to rest. The Coalition's efforts, which employ a "Housing First" approach, demonstrated marked improvements in health and substantial cost savings in comparing the health and utilization of health care by participants. **Participants in the program demonstrated a significant housing stability: during the 2-year study of 19 participants, 77 percent of participants continued to be housed. The Coalition also found that 50 percent of studied participants showed improvements in their health status: 43 percent showed improvements in their mental health status and 15 percent decreased their substance abuse.**<sup>13,14</sup> Coupled with these improvements in outcomes was a significant decline in the cost of care for the studied participants. In comparing the health and emergency services records for a subset of participants in the 24 months before entering the program with the 24 months after, **the coalition found utilization of all of these services declined, with an average cost savings of \$31,546 per participant.**<sup>14</sup> Although the numbers in this study were small, it is representative of a transformative, innovative approach to person- and family- centered care.

## LOOKING FORWARD

This year, the Centers for Medicare & Medicaid Services began to introduce **Star Ratings on Hospital Compare**, the Agency's [public information Web site](#), to make it easier for consumers to choose a hospital based on the quality of care delivered. This effort is part of the U.S. Department of Health and Human Services' broader delivery system reform goals to deliver better care, spend health care dollars more wisely, and result in healthier people. The ratings are based on data from the Hospital Consumer Assessment of Healthcare Providers and Systems Survey measures. These new Star Ratings will enable consumers to more quickly and easily assess the patient experience of care and will allow consumers to more easily compare hospitals through increased

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<sup>13</sup> Colorado Coalition for the Homeless: A Model of Supportive Housing. Commonwealth Fund. May 2015 <http://www.commonwealthfund.org/publications/newsletters/quality-matters/2014/october-november/case-study>

<sup>14</sup> Sadowski, L.S. (2009) Effect of a Housing and Case Management Program on Emergency Department Visits and Hospitalizations Among Chronically Ill Homeless Adults. JAMA. <http://jama.ama-assn.org/content/301/17/1771.full.pdf>.

transparency. The new star ratings support the use of quality measures as a key driver of health care system improvement.<sup>15</sup>



## EFFECTIVE COMMUNICATION AND CARE COORDINATION

**The National Quality Strategy calls on all stakeholders to promote effective communication and coordination of care across the health care system. Effective communication and care coordination can reduce errors in care and overutilization of services, since patients often interact with many physicians, nurses, medical assistants, or other trained professionals across multiple settings.**

### MEASURING PROGRESS

**The 2014 National Healthcare Quality and Disparities Reports found that measures of care coordination improved as providers enhanced discharge processes and adopted health information technologies.** There were noticeable improvements in the proportion of patients who received discharge instructions for serious health care conditions. Discharge instructions are considered essential for effective communication and care coordination, not only from providers to patients, but from provider to provider. **From 2005 to 2012, the percentage of hospital patients with heart failure who were given complete written discharge instructions increased overall, for both sexes, and for all racial/ethnic groups.**<sup>1</sup>

### CURRENT LANDSCAPE

In an effort to improve care coordination, the Centers for Medicare & Medicaid Services adopted the priorities of the National Quality Strategy as part of the Medicare and Medicaid Electronic Health Record Incentive Programs, which provides financial incentives for the **“meaningful use” of certified electronic health record technology to improve patient care and care delivery.** Meaningful use of electronic health records generally involves using certified electronic health record technology to improve quality, safety, efficiency, and reduce health disparities; engage patients and family, improve care coordination, and population and public health; and maintain privacy and

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<sup>15</sup> CMS Releases First Ever Hospital Compare Star Ratings. Centers for Medicare & Medicaid Services. April 16, 2015 <http://cms.gov/Newsroom/MediaReleaseDatabase/Press-releases/2015-Press-releases-items/2015-04-16.html>

security of patient health information.<sup>16</sup> The Electronic Health Record Incentive Programs set specific objectives that eligible professionals, eligible hospitals, and critical access hospitals must achieve to qualify for meaningful use. The program includes three stages with requirements that must be met by eligible professionals, eligible hospitals, and critical access hospitals. Core criteria in stage 1 include reporting of clinical quality measures, and in stage 2 include submission of measures covering no less than three of six National Quality Strategy Priorities. The Centers for Medicare & Medicaid Services published the stage 3 proposed rule on March 30, 2015 and proposed that the meaningful use objectives under stage 3 will focus on improving quality, safety, and efficiency through increased patient access to self-management tools; comprehensive patient data through robust, secure, patient-centered health information exchanges; and decision support tools for providers.

For chronic diseases like asthma that require consistent interaction with the health care system, proper coordination of care between a patient and multiple providers is an important step towards successful disease management. The **Boston Children's Hospital Community Asthma Initiative** was created to address disparities in care for children with asthma and improve the health and quality of life of those children and their families. In Boston, the rates of pediatric asthma-related hospitalizations across the city are more than 5 times higher for Black and Latino children than for White children.<sup>17,18</sup> An evaluation of the services provided by the Initiative to 283 children in Boston found significant improvements in the health of children with asthma and reductions in the cost for caring for them. A majority of the participants were of racial/ethnic minorities (39.6 percent Black and 52.3 percent Latino) and were low-income (70.8 percent had a household income less than \$25,000). **After twelve months, children served by the Initiative showed a significant decrease in the number of patients with one or more emergency department visits (68.0 percent) and**

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<sup>16</sup> Meaningful Use Definitions and Objectives. U.S. Department of Health and Health Care Services. May 2015  
<http://www.healthit.gov/providers-professionals/meaningful-use-definition-objectives>

<sup>17</sup> Boston Public Health Commission. Health of Boston 2010. December 10, 2010  
<http://www.bphc.org/healthdata/health-of-boston-report/Pages/Health-of-Boston-Report.aspx>

<sup>18</sup> Woods ER, et.al. Community Asthma Initiative: Evaluation of a Quality Improvement Program for Comprehensive Asthma Care. Pediatrics Feb. 2012;129:465-472  
<http://pediatrics.aappublications.org/content/early/2012/02/15/peds.2010-3472>

**hospitalizations (84.8 percent) due to asthma, days of limited physical activity (42.6 percent), missed school (41.0 percent), and parent missed work (49.7 percent).**<sup>18</sup> There was also a significant reduction in hospital costs compared with the comparison community.<sup>18</sup> A follow-up review of the Initiative 3 years later showed that for every \$1 invested in the Community Asthma Initiative, \$2.04 was saved in hospital utilization and \$0.52 accrued to the family from fewer missed school days and work days.<sup>18</sup>

## LOOKING FORWARD

In an effort to continue improving care coordination through the use of technology, a group of public and private stakeholders is coming together to form the group of public and private stakeholders is coming together to form the **Argonaut Project, an innovative approach to effective communication and care coordination.** This Project consists of 11 private sector stakeholders—including Electronic Health Record vendors Epic and Cerner and health systems such as Mayo Clinic, Partners Healthcare, and Intermountain Healthcare—working to accelerate query/response interoperability under the auspices of American National Standards Institute (ANSI)-certified Health Level 7 (HL7) standards development organization processes, which aligns well with the draft [Federal Health IT Strategic Plan](#) and the draft version 1.0 of [A Shared Nationwide Interoperability Roadmap released by the Office of the National Coordinator for Health Information Technology](#). The U.S. Department of Health and Human Services' Roadmap identifies critical actions that should be taken by a wide range of stakeholders to help advance nationwide interoperability, and provides a key framework toward more effectively coordinating care for patients.<sup>19</sup>



## PREVENTION AND TREATMENT OF LEADING CAUSES OF MORTALITY

**To improve quality across all stages of life, the National Quality Strategy focuses on efforts targeting diseases that are responsible for the largest number of American deaths and disabilities.**

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<sup>19</sup> Connecting Health and Healthcare for the Nation: A Shared Nationwide Interoperability Roadmap. Draft version 1.0, Accessed May 2015 <http://www.healthit.gov/sites/default/files/nationwide-interoperability-roadmap-draft-version-1.0.pdf>

## MEASURING PROGRESS

The 2014 National Healthcare Quality and Disparities Report found that many measures of effective treatment achieved high levels of performance. **Half of all measures that track effective treatment in the report improved. From 2005 to 2012, the percentage of hospital patients with a heart attack who were given percutaneous coronary intervention within 90 minutes of arrival increased overall, for both sexes, and for all races and ethnic groups.**<sup>1</sup> Eight other effective treatment measures achieved overall performance levels of 95 percent or better, including five measures of pneumonia care and two measures of HIV care.<sup>1</sup> Additionally, two measures related to cancer treatment improved quickly – at an average annual rate of change above 10 percent per year.<sup>1</sup>

## CURRENT LANDSCAPE

**Million Hearts®** is a national initiative led by the U.S. Department of Health and Human Services that aims to prevent one million heart attacks and strokes by 2017. Aligned closely with the National Quality Strategy's priorities, Million Hearts focuses on the implementation of evidence-based strategies in cardiovascular disease care and prevention, including appropriate aspirin therapy (for those whom it is indicated), blood pressure control, cholesterol management, and smoking cessation, the ABCS.<sup>20</sup> Million Hearts calls attention to small changes that can be made in communities and health care systems to support long-term reductions in heart attacks and strokes. Million Hearts also emphasizes the importance of coordination between public health organizations and clinical systems. Since launching in 2012, Million Hearts has made progress toward reducing illness and death from heart attack and stroke. More than 100 partners have formally committed to specific Million Hearts action. Many U.S. Department of Health and Human Services Agencies are lending their leadership and programs to this unified set of strategies. Examples include the Agency for Healthcare Research and Quality's EvidenceNow program, the Center for Disease Control and Prevention's support to state and local health departments to improve state-wide performance on hypertension control, the Centers for Medicare & Medicaid Services'

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<sup>20</sup> Million Hearts Initiative. U.S. Department of Health and Human Services. Accessed May 2015  
<http://millionhearts.hhs.gov/aboutmh/overview.html>

funding of a cardiovascular risk model, the Health Resources and Services Administration's identification of its community health centers that have achieved excellence in the ABCS, and the Indian Health Service's hypertension treatment protocol electronic health record enhancement. Every year new providers are identified and recognized as [Million Hearts Hypertension Control Champions](#). Many health care professionals have adopted health tools and technologies and innovative care delivery models to support their ABCS goals. These examples highlight how experts are coming together to put evidence-based strategies into action to improve heart health.

American Indian and Alaska Native communities face distinct challenges in preventing and treating leading causes of mortality when compared to other racial groups. Records from the Indian Health Service's annual survey indicate that 16.1 percent of adults treated by the agency had Type 2 diabetes, a higher prevalence than found in any other race in comparable studies. The **Wind River Reservation** is located in the heart of the Northern Plains in southwestern Wyoming, and currently serves as the home of the Eastern Shoshone and Northern Arapaho tribes. Roughly 12,500 residents live on the reservation, approximately 12 percent of whom have diabetes and 71 percent of whom are clinically obese.<sup>21</sup> In 2009, the Eastern Shoshone Tribal Health Department, in partnership with the Northern Arapaho Tribe, Indian Health Service, and Sundance Research Institute, was awarded a 5-year grant to create a community-clinical partnership on the reservation to address barriers to diabetes management and prevention and create a comprehensive system of care to provide education and support services to assist tribal members with or at-risk of diabetes to manage their condition and improve outcomes.

The program assists individuals with making lifestyle changes to better manage their diabetes, increases the skills of health care workers who help patients manage their diabetes, and strengthens the community support system that serves people living with diabetes. More than 25 percent of tribal members with diabetes participated in the program and, as a whole, saw notably improved clinical outcomes. **Participants**

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<sup>21</sup> U.S. Department of the Interior, Bureau of Indian Affairs. Indian Affairs: Wind River Agency. May 2015 <http://www.bia.gov/WhoWeAre/RegionalOffices/RockyMountain/WeAre/WindRiver/>

**documented improvements in eating and exercise habits attributable to the tailored exercise and nutrition program, and also in clinical measures including blood pressure, body weight, and HbA1c levels, a common measure of a person's blood sugar where a lower number represents improved diabetes management.<sup>22,23</sup> Before implementation of the program, the number of people on the Wind River Indian Health Service Diabetes Registry with HbA1c levels above 9.0 was 32 percent; by the last year of the program, the number of people on the Registry with levels above 9.0 had decreased to 28 percent, a reduction of 12.5 percent.<sup>23</sup>** Through individual-level diabetes management education, increasing communication and coordination between Indian Health Service providers and tribal programs, and concurrent policy and systematic changes, the chronic care management program on the Wind River Reservation has achieved success in reducing the leading causes of morbidity and mortality for the population served.

#### LOOKING FORWARD

Going forward, Million Hearts will continue to work toward preventing 1 million heart attacks and strokes by 2017. The Centers for Medicare & Medicaid Services is recognizing and rewarding achievement and improvement on measures that matter in cardiovascular disease by adopting the Million Hearts clinical quality measure set and embedding it across quality reporting and performance programs, such as **Accountable Care Organizations, the Physician Quality Reporting System, and the Center for Medicare and Medicaid Innovation's Comprehensive Primary Care Initiative.** The Centers for Medicare & Medicaid Services encourages health care professionals to use the Million Hearts clinical quality measure set, and in 2015, the Agency will highlight those who report these measures on the Physician Compare Web site. Additionally, in 2015, the Center for Medicare and Medicaid Innovation rolled out a Cardiovascular Disease Risk Reduction Model (MH Model) that supports both the Million Hearts' goal to prevent 1 million heart attacks and strokes and the Centers for Medicare & Medicaid Services' objective to identify and spread better models of care delivery and payment.

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<sup>22</sup> Keene, C. Battling Diabetes on Reservations: A Two-Part Look at Coalitions and Culture. November, 6, 2014. <http://indiancountrytodaymedianetwork.com/2014/11/06/battling-diabetes-reservations-two-part-look-coalitions-and-culture-157707>

<sup>23</sup> Keene, C., et al. An American Indian community implements the chronic care model: evolution and lessons learned. Health Promotion Practice. November 2014 [http://hpp.sagepub.com/content/15/2\\_suppl/23S.long](http://hpp.sagepub.com/content/15/2_suppl/23S.long)

This model aims to improve quality while maintaining budget neutrality for Medicare beneficiaries ages 18-79 who have not had a previous heart attack or stroke.<sup>24</sup>

The Centers for Disease Control and Prevention will also continue to support efforts that help Americans identify and address risk factors for heart attack and stroke, such as smoking, high sodium intake, and high blood pressure. In 2015, the Agency is investing nearly \$300 million in State and community initiatives that work to prevent heart disease, obesity, diabetes, and stroke and to reduce health disparities.<sup>25</sup> The Agency will also continue to support community initiatives, including the *Tips From Former Smokers* campaign. An evaluation of the 2012 campaign found that it motivated 1.6 million smokers to make a quit attempt, resulting in at least 100,000 U.S. smokers remaining tobacco free as a result.<sup>26</sup> Similarly, during the 16-week 2013 campaign, calls to 1-800-QUIT-NOW increased by 75 percent, showing a significant impact on smokers.<sup>27</sup> **The Sodium Reduction in Communities Program** is helping another 10 communities find innovative ways to reduce daily sodium consumption.<sup>25</sup> Through these efforts by both the public and private sectors, progress is underway to substantially decrease suffering, disability, and premature death for Americans as a result of cardiovascular disease and stroke.



## HEALTH AND WELL-BEING OF COMMUNITIES

**The National Quality Strategy identifies the benefits of working with communities to promote best practices for healthy living. Increasing the provision of clinical preventive services for children and adults, and increasing the adoption of evidence-based interventions to improve health are important opportunities for success in promoting healthy living.**

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<sup>24</sup> Million Hearts: Cardiovascular Disease Risk Model. Centers for Medicare & Medicaid Services. Accessed September 2015. <http://innovation.cms.gov/initiatives/Million-Hearts-CVDRRM/>

<sup>25</sup> Million Hearts Initiative Mid-Course Review. U.S. Department of Health and Human Services. Accessed May 2015 [http://millionhearts.hhs.gov/Docs/MH\\_Mid-Course\\_Review.pdf](http://millionhearts.hhs.gov/Docs/MH_Mid-Course_Review.pdf)

<sup>26</sup> McAfee, Tim et al. Effect of the first federally funded US antismoking national media campaign. *The Lancet* Vol 382, Issue 9909. [http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(13\)61686-4.pdf](http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(13)61686-4.pdf)

<sup>27</sup> Impact of a National Tobacco Education Campaign on Weekly Numbers of Quitline Calls and Website Visitors — United States, March 4–June 23, 2013. Centers for Disease Control and Prevention. *MMWR* September 20, 2013. Vol. 62 No. 37 <http://www.cdc.gov/mmwr/pdf/wk/mm6237.pdf>

## MEASURING PROGRESS

**The 2014 National Healthcare Quality and Disparities Report found that measures of healthy living improved in about half of the measures followed, led by selected adolescent vaccines from 2008 to 2012.**<sup>1</sup> From 2008 to 2012, the percentage of adolescents ages 16-17 years who received 1 or more doses of meningococcal conjugate vaccine increased overall, for residents of both metropolitan and nonmetropolitan areas, and for all income groups and four measures related to adolescent immunizations improved quickly, at an average annual rate of change above 10 percent per year (meningococcal vaccine ages 13-15 and ages 16-17; tetanus-diphtheria-acellular pertussis vaccine ages 13-15 and ages 16-17).<sup>1</sup>

## CURRENT LANDSCAPE

*Let's Move!* is a comprehensive initiative dedicated to improving the health and well-being of children and families in communities. It aims to combine comprehensive strategies with tools that communities can use to put children on the path to a healthy future by giving parents helpful information and fostering environments that support healthy choices.<sup>28</sup> The initiative works to provide healthier foods in schools, ensuring that every family has access to healthy, affordable food, and works to help kids become more physically active.<sup>28</sup> *Let's Move!* believes everyone has a role to play in reducing childhood obesity and improving the health of communities, including governments, schools, health care professionals, faith-based and community-based organizations, and private-sector companies. Since its launch in 2010, there have been substantial commitments from parents, business leaders, educators, elected officials, military leaders, chefs, physicians, athletes, childcare providers, community and faith leaders, and kids themselves to improve the health of the Nation's children. Due to these commitments, members of the community, tools, and resources are in place that allow families to access more of the information to make healthier decisions. As a result, many schools have transformed into healthier environments, providing more nutritious meals and snacks, with increased opportunities for physical activity. More Americans have access to healthy, affordable food in their communities through improvements in food

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<sup>28</sup> Let's Move! U.S. Department of Health and Human Services. Accessed May 2015  
<http://www.letsmove.gov/learn-facts/epidemic-childhood-obesity>

deserts and farmers markets; and more businesses are shifting to support increased consumer demands for healthier products.<sup>28</sup>

**Health Leads** is a service provider that helps health systems create models for integrating patients' social needs into care, using a full spectrum of tools, including the Health Leads' desk, in which providers "prescribe" basic resources like food and heat, and well-trained student advocates stationed in the clinics work side-by-side with patients to "fill" those prescriptions by accessing community resources and public benefits. "Prescribing" basic resources like food and heat helps patients stay healthy between medical visits.<sup>29</sup> The organization increases access to health and health care services by addressing the social and economic factors that contribute to illness.<sup>30</sup> They do so by expanding clinics' capacity to address basic resource needs often at the root causes of poor health. **In 2014, nearly 9,000 Health Leads Advocates connected more than 13,000 patients and their families to the resources they needed to be healthy.**<sup>31</sup> More recently, Health Leads piloted new solutions (including technology, training, and implementation insights) that will enable health care organizations to address social needs in a range of care settings and with a variety of workforces.

## LOOKING FORWARD

**The Centers for Disease Control and Prevention's new Community Health Improvement Navigator** initiative will provide tools and resources for collaborative approaches to community health improvement, establishing and maintaining effective collaborations, and finding interventions that work for the greatest impact on health and well-being.<sup>32</sup> There are resources for hospitals, for people who lead or participate in community health improvement work within hospitals and health systems, public health agencies, and other community organizations. The Navigator initiative will also host a database of successful interventions. This database aims to help communities and

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<sup>29</sup> Health Leads. Accessed May 2015 <https://healthleadsusa.org/about/news/>

<sup>30</sup> Health Leads. Robert Wood Johnson Foundation. Accessed May 2015 [http://www.rwjf.org/en/grants/grantees/Health\\_Leads.html](http://www.rwjf.org/en/grants/grantees/Health_Leads.html)

<sup>31</sup> Health Leads expands movement to place social needs at the center of preventive care" TedMed. June 9, 2014 <http://blog.tedmed.com/?tag=health-leads>

<sup>32</sup> CDC Community Health Improvement Navigator. Centers for Disease Control and Prevention. Accessed May 2015 <http://www.cdc.gov/chinav/>

hospitals identify interventions that can complement and enhance the effectiveness of current ongoing programs. By providing stakeholders with ideas for actions, the Navigator initiative anticipates that evidence-based interventions will become more widespread to improve health of communities.



## MAKING QUALITY CARE MORE AFFORDABLE

**The National Quality Strategy identifies opportunities for success in making quality health care more affordable by developing and spreading new health care delivery models. To accelerate the spread of effective delivery models that can improve health care quality and constrain cost growth, the U.S. Department of Health and Human Services is engaging with private- and other public-sector partners to provide payment and infrastructure support (e.g., health information technology) to health care providers committed to delivering three-part aim outcomes to their patients and communities.**

### MEASURING PROGRESS

The 2014 National Healthcare Quality and Disparities Report found that from 2002 to 2010, prior to the Affordable Care Act, care affordability was worsening. Since 2010, the Affordable Care Act has made health insurance accessible to many Americans with limited financial resources.<sup>1</sup> **From 2002 to 2010, the overall percentage of people unable to get or who are delayed in getting needed medical care, dental care, or prescription medicines and who indicated a financial or insurance reason rose from 61.2 percent to 71.4 percent.**<sup>1</sup> From 2002 to 2010, the rate worsened among people with any private insurance and among people from high- and middle- income families. After 2010, the rate leveled off overall for most insurance and income groups. Another measure of care affordability tracked by the 2014 National Healthcare Quality and Disparities Report is people without a usual source of care who indicate a financial or insurance reason for not having a source of care. This measure worsened from 2002 to 2010, and then leveled off after 2010.<sup>1</sup> Of the approximately 10.2 million Marketplace consumers who had effectuated their coverage on March 31, 2015, nearly 8.7 million (85 percent) received an average premium tax credit of \$272 per month. The average premium increased just 3 percent in 2014, tied for the smallest increase since 1999.<sup>8</sup> Affordable Care Act tax credits and cost-sharing reductions are instrumental to

eliminating health insurance access barriers for low-income Americans eligible to purchase coverage through the Health Insurance Marketplaces.

## CURRENT LANDSCAPE

In Massachusetts, new models of payment are being implemented in order to reward high-quality care. In 2007, Blue Cross Blue Shield of Massachusetts began first evaluating how paying hospitals and physicians could be changed to better support high-quality care. In 2009, the Alternative Quality Contract was offered to provider organizations on an optional basis. The goal of Alternative Quality Contract is to reduce the medical expense trend of participating organizations by half over a 5-year contract term. A key component of this contract is to change the way insurers reimburse doctors and hospitals for their services. The new contract model combines a per-patient global budget with significant performance incentives based on quality measures, and places the focus on quality, value, and patient outcomes. **This Alternative Quality Contract has improved the quality of patient care by 12 percent and lowered costs by 10 percent in the 4 years since it was first implemented.**<sup>33</sup> As of 2010, the Alternative Quality Contract includes 85 percent of the physicians and hospitals in the Blue Cross Health Maintenance Organization network.<sup>34</sup>

Nationwide, the Centers for Medicare & Medicaid Services is funding high-quality, high-value health care through innovative payment and service delivery initiatives such as **Medicare Shared Savings Program and the Pioneer Accountable Care Organization Model**. In these programs, Accountable Care Organizations, which are formed by groups of providers and suppliers, agree to become responsible for the overall cost and quality of the care furnished to a population of Medicare fee-for-service beneficiaries. Different models test the impact of different payment arrangements to improve care for patients while reducing Medicare costs. Since passage of the Affordable Care Act, more than 420 Medicare Accountable Care Organizations have been established, serving

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<sup>33</sup> Song, Z., et al. (2014). Changes in Health Care Spending and Quality 4 Years into Global Payment. The New England Journal of Medicine, 371(18), 1704–1714. doi:10.1056/NEJMsa1404026

<http://www.ncbi.nlm.nih.gov/pubmed/25354104>

<sup>34</sup> Blue Cross Blue Shield Alternative Quality Contract May 2010

<http://www.bluecrossma.com/visitor/newsroom/press-releases/2014/2014-10-30.html>

more than 7.8 million Americans with Original Medicare as of January 1, 2015.<sup>8</sup> As existing Accountable Care Organizations choose to add providers and more organizations join the Shared Savings Program, participation in these initiatives is expected to grow. In 2014, the 20 Accountable Care Organizations in the Pioneer Accountable Care Organization Model and 333 Medicare Shared Savings Program Accountable Care Organizations generated more than \$411 million in total savings.<sup>35</sup>

Founded in 1998, the **Arkansas Center for Health Improvement** brings together research and policy in order to address Arkansas's most pressing health issues. The organization is a unique public-private partnership connected to the State Surgeon General's office, and serves as a resource for nonpartisan, policy-relevant information. The **Arkansas Payment Improvement Initiative** implemented patient-centered medical homes to keep people well, manage chronic conditions, and proactively meet the needs of patients; target those patients with the most complex needs who require additional guidance and care; and target episodes of care to incentivize doctors to better serve patients needing treatments for specific conditions. Initial results from this initiative reflect success in the areas of improved practice patterns and more efficient treatment for patients. Arkansas was one of six States to receive a round-one State Innovation Model (SIM) Testing Award and Arkansas' episodic model, and other components of the Arkansas Payment Initiative have been supported by funding from the Center for Medicare and Medicaid Innovation.<sup>36</sup> The Arkansas Payment Improvement Initiative, Medicaid, and two private insurers reviewed claims for episodes of care in five categories: upper respiratory infections, total hip and knee replacements, congestive heart failure, attention deficit/hyperactivity disorder, and perinatal care. The program defines an episode as "the collection of care provided to treat a particular condition for a given length of time."<sup>37</sup> For those five episodes during the first year, **there was a 19 percent decrease in antibiotic prescriptions for upper respiratory infections; an**

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<sup>35</sup> Medicare ACOs Provide Improved Care While Slowing Cost Growth in 2014. Centers for Medicare & Medicaid Services. August 25, 2015 <https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2015-Fact-sheets-items/2015-08-25.html>

<sup>36</sup> Arkansas Payment Improvement Initiative. Health Affairs Blog. May 2015 <http://healthaffairs.org/blog/2015/05/19/arkansas-payment-improvement-initiative-expanding-episodes-to-other-clinical-areas/>

<sup>37</sup> Health Care Payment Initiative. Accessed May 2015 <http://www.paymentinitiative.org/episodesOfCare/Pages/default.aspx>

**increase in guideline-concordant care in attention deficit/hyperactivity disorder with a dramatic reduction in therapy visits combined with recognition of additional comorbidities; cost stabilization in hip and knee replacement and congestive heart failure; and greater screening of pregnant women for hepatitis B, HIV, and diabetes.**<sup>38</sup>

## LOOKING FORWARD

As mentioned previously, in January 2015, the U.S. Department of Health and Human Services set new measurable goals and a clear timeline to move the Medicare program, and the health care system at large, toward paying providers based on the quality, rather than the quantity of care they give patients will move the system a step forward in achieving high quality, affordable health care.

Through new innovative payment models that move the needle further toward paying health care providers for the quality of the care they give patients, instead of the quantity of care, providers have a financial incentive to coordinate care for their patients and get the right care to the right patient the first time. This can lead to better care and smarter spending. The Innovation Center, created by the Affordable Care Act, is charged with testing innovative payment and service delivery models to reduce expenditures in Medicare, Medicaid, and the Children's Health Insurance Program (CHIP), and at the same time, preserving or enhancing quality of care. Already the Innovation Center is engaged in projects with more than 60,000 health care providers to improve care, and an estimated 2.5 million Medicare, Medicaid and CHIP beneficiaries are receiving care through the Innovation Center's payment and service delivery models. As we continue to test and learn from new models, there are growing opportunities for improving care and lowering costs across the health system.

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<sup>38</sup> William G., et al. Arkansas Payment Improvement Initiative: The First Year Health Affairs Blog. August 25, 2014 <http://healthaffairs.org/blog/2014/08/25/arkansas-payment-improvement-initiative-the-first-year/>

## SUMMARY

The National Quality Strategy continues to serve as the framework for health and health care improvement efforts across the Nation. Stakeholders from across the health care community, focused on addressing the Strategy's six priorities, are making significant national and local progress toward accomplishing the Strategy's three aims of better care, healthy people/healthy communities, and affordable care.

Federal programs, combined with innovative State, local, and private-sector efforts have contributed to the historically slow growth in health care costs over the past few years, reducing costs for workers, businesses, and governments, and have achieved striking improvements in the quality of patient care that have avoided 50,000 patient deaths.<sup>39</sup> Together, these efforts, and the stakeholders who lead them, will carry the National Quality Strategy into the future.

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<sup>39</sup> Interim Update on 2013 Annual Hospital-Acquired Condition Rate and Estimates of Cost Savings and Deaths Averted From 2010 to 2013. Agency for Healthcare Research and Quality.  
<http://www.ahrq.gov/professionals/quality-patient-safety/pfp/interimhacrate2013.pdf>