

TRENDWATCH

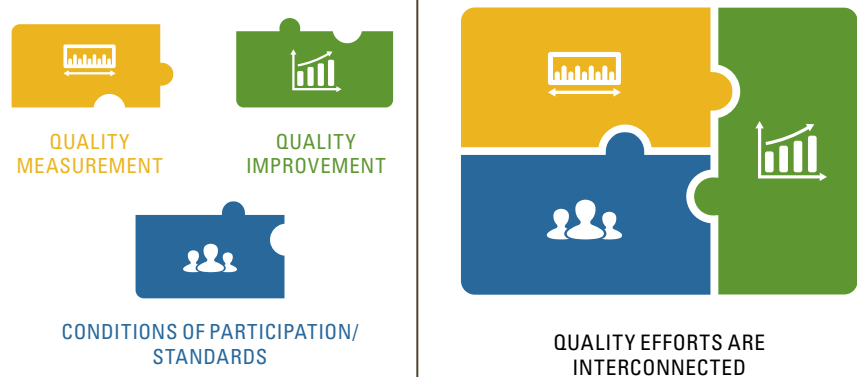
Aligning Efforts to Improve Quality

Introduction

America's hospitals and health systems are committed to providing patients with high-quality, safe and person-centered care. Hospitals and health systems improve patient outcomes through quality measurement, quality improvement (QI) and adoption of hospital standards and best practices. Public policies around quality — especially the Centers for Medicare & Medicaid Services' (CMS) quality reporting and pay-for-performance programs, Medicare and Medicaid Conditions of Participation (CoPs) and accrediting organizations' evaluations and various efforts to support process improvement — are critical to shaping and accelerating the field's efforts to make care better and safer. Changes in public policy, including increased transparency on quality, investment in the development of quality metrics and

Safe, high-quality care requires alignment of federal quality policies.

Figure 1: Foundations of Hospital Quality Efforts



the sponsorship of collaboratives, such as the Hospital Improvement Innovation Network, have energized these efforts. But more needs to be done.

As hospitals and health systems look to further improve care, they face significant challenges as a result of the burden imposed by current requirements

Key Messages:

- Hospitals and health systems have made great strides to improve quality of care.
- To sustain and accelerate progress, policy changes are needed to alleviate complexity, burden and lack of alignment. Policymakers should embrace a strategic focus on:

1. "Measures that matter" the most to improving outcomes and health in measurement and pay-for-performance programs.
2. Continuous quality improvement that makes care safer and more effective.
3. Standards that enable innovation and require adherence to fundamental principles necessary to protect patients; and
4. Alignment of measurement, CoPs, and infrastructure to support quality improvement efforts.

and confusion because the policies are not aligned. A proliferation of quality measures, growing and unaddressed inconsistencies in reporting requirements for measures, and concerns about the validity of electronic clinical quality measures (eCQMs) threaten continued progress and, in some cases, have a negative impact on quality of care.^{1,2,3} Clinical experts and policymakers must identify meaningful measures that provide reliable, valid and actionable information to patients, providers and

regulators⁴ and “drive the health system to higher performance.”⁵

Similarly, CoPs outline foundational requirements that ensure that patient care is appropriate and safe; however, significant work is necessary to ensure CoPs are evidence-based, do not conflict with requirements imposed by other authorities, and place challenging but realistic expectations on providers.

Perhaps most importantly, policymakers often focus on measurement, quality

improvement and CoPs in silos; however, the three areas are interrelated. The impact and influence of these elements on each other underscores the need to align measurement, QI and the CoPs in order to create a cohesive framework for advancing patient care.

This *TrendWatch* report highlights the progress that hospitals and health systems have made in improving quality, the challenges that remain, and how policymakers can think strategically to align QI, measures and CoP policies.

Improvement by the Numbers: Substantial Advances Have Been Made in Care Quality

Nationally, hospitals and health systems employ a variety of approaches to patient safety and quality that stimulate and expedite improvement efforts. Over the past decade, hospitals and health systems significantly reduced the incidence of many hospital-acquired conditions (HACs) and healthcare-associated infections (HAIs), reduced avoidable readmissions, dramatically reduced early-elective deliveries, and improved outcomes for stroke and heart attack victims. Further, patients have reported more favorable experiences with their hospital. Patient perception of the care experience is critical to quality improvement efforts and a fundamental aspect of quality of care. Evidence shows that improving the patient experience and developing partnerships with patients are linked to improved health outcomes and better quality.⁶

- **Significant decline in HACs since 2010.** HACs are conditions that patients did not have upon hospital admission but developed during their hospital stay, such as pressure sores. HACs can lead to poor patient outcomes and increased spending on health care. Preliminary estimates for 2015 — the most recent available

data — show a 21 percent decline in HACs since 2010.⁷

- **Significant decline in most HAIs since 2009.** HAIs are infections acquired while receiving treatment in a health care facility and are among the most common complications of hospital care. HAIs often lead to an increase in the length of a patient’s hospital stay, mortality risk and hospital costs. The standardized infection ratios (SIRs) compare the observed number of infections reported to the National Healthcare Safety Network (NHSN) during a year to the predicted number of infection. Predicted infections are calculated using a baseline period:
 - The central line-associated bloodstream infections (CLABSI) SIR decreased more than 40 percent between 2009 and 2014.
 - The surgical site infections (SSI) SIR decreased 16 percent between 2009 and 2014.
 - The laboratory-identified hospital-onset *Clostridium difficile* (*C. difficile*) infection SIR decreased 4 percent between 2012 and 2014.⁸
- **Significant decline in avoidable readmissions since 2010.** Although

not all hospital readmissions are preventable, readmission rates may be reflective of a hospital’s quality, ability to prevent complications, educate patients at discharge, and ensure patients make a smooth transition to their homes or other settings, such as a nursing home. Overall, there were approximately 70,000 fewer unplanned readmissions from 2011 through 2015 than would be expected if performance continued at the 2011 rate.⁹ From July-December 2010 to January-June 2013, the median 30-day risk-standardized readmission rate decreased 12 percent among patients with pneumonia and chronic obstructive pulmonary disease (COPD), 11 percent among patients with heart failure, 10.5 percent among patients with stroke and 10 percent among patients with acute myocardial infarction (AMI).¹⁰

- **Increase in patients reporting a highly favorable experience with their hospital (2008–2015).**¹¹ The 2018 National Impact Assessment from the CMS Quality Measures Report noted that the national performance rate for “High Rating of Hospital” from the Hospital Consumer Assessment of

Healthcare Providers and Systems (HCAHPS) survey, increased by more than 8 percentage points from 2008 through 2015, improving from 64 percent to 72.3 percent.¹²

- **Decrease in early-elective deliveries that were not medically necessary.** The overuse of health services can put patients at risk of harm and waste resources. Health systems have had success in reducing the inappropriate practice of elective delivery before 39 weeks of gestation without a clear medical indication.¹³ The Joint Commission reported in 2017 that from 2012–2016, early-elective deliveries were reduced from 8.2 percent (2012) to 1.9 percent (2016).¹⁴ The percentage represents mothers whose deliveries were scheduled too early (1–2 weeks early), when a scheduled delivery was not medically necessary.¹⁵

Hospitals Organize to Respond to CMS Quality Measurement Programs

Hospitals have made considerable progress in quality of care as measured in federal hospital quality programs. Figure 2 provides a high-level overview of six federal hospital quality measurement

Quality Improvement Programs Strengthen Hospitals

Hospital quality programs implement efforts such as:

- Key frameworks (e.g., high-reliability, Just Culture) to promote a stronger focus by hospitals on safe, high-quality care.
- Increased training, technical assistance, use of process improvement tools (e.g., Plan-Do-Study-Act, Lean/Six Sigma), and shared learning through collaboration with other hospitals working on the same topic and engaging with partners in QI programs.
- Data reporting/sharing to support hospitals participation in incentive programs such as pay-for-reporting and value-based purchasing programs.
- Listening to and involving patients and families to provide important perspectives on problems and potential solutions.

These initiatives are essential to any hospital's or health system's quality efforts. The AHA will provide an in-depth look into the key characteristics of high-performing QI programs at hospitals in a future analysis.

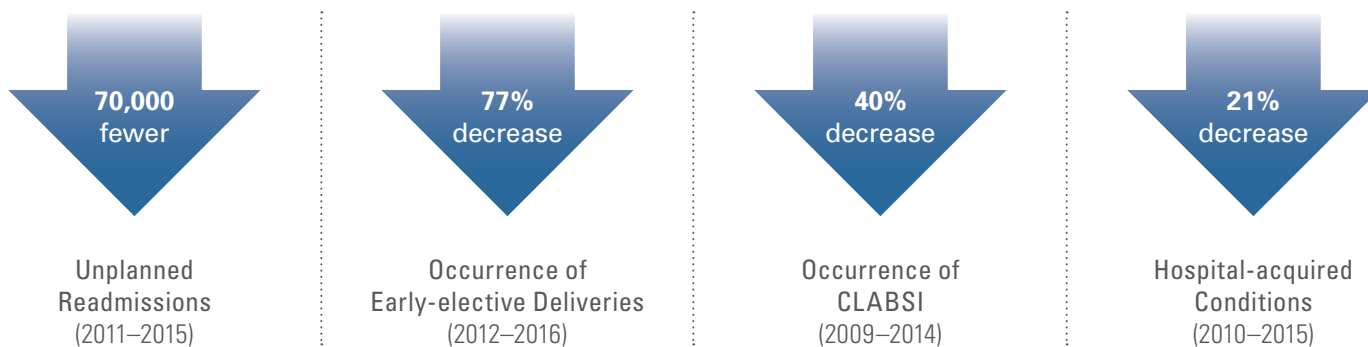
programs. Depending on their scope of services, hospitals and health systems also may be required to participate in other CMS quality measurement programs for physicians, post-acute care providers and inpatient psychiatric facilities, among others.

Hospitals and health systems have made institutional changes to improve performance on important measures and build a quality infrastructure. In

2016, hospitals were asked to report whether they had made any of 23 practice changes across seven broad categories to improve care delivery as part of an effort to improve their performance on measures required under CMS's hospital quality programs. Figure 3 illustrates key results from the survey. Further, 90 percent of hospitals reported that performance on CMS quality measures represent improvements in care.¹⁶

Hospitals and health systems are making significant strides on quality indicators.

Chart 1: Hospital Performance On Key Quality Indicators



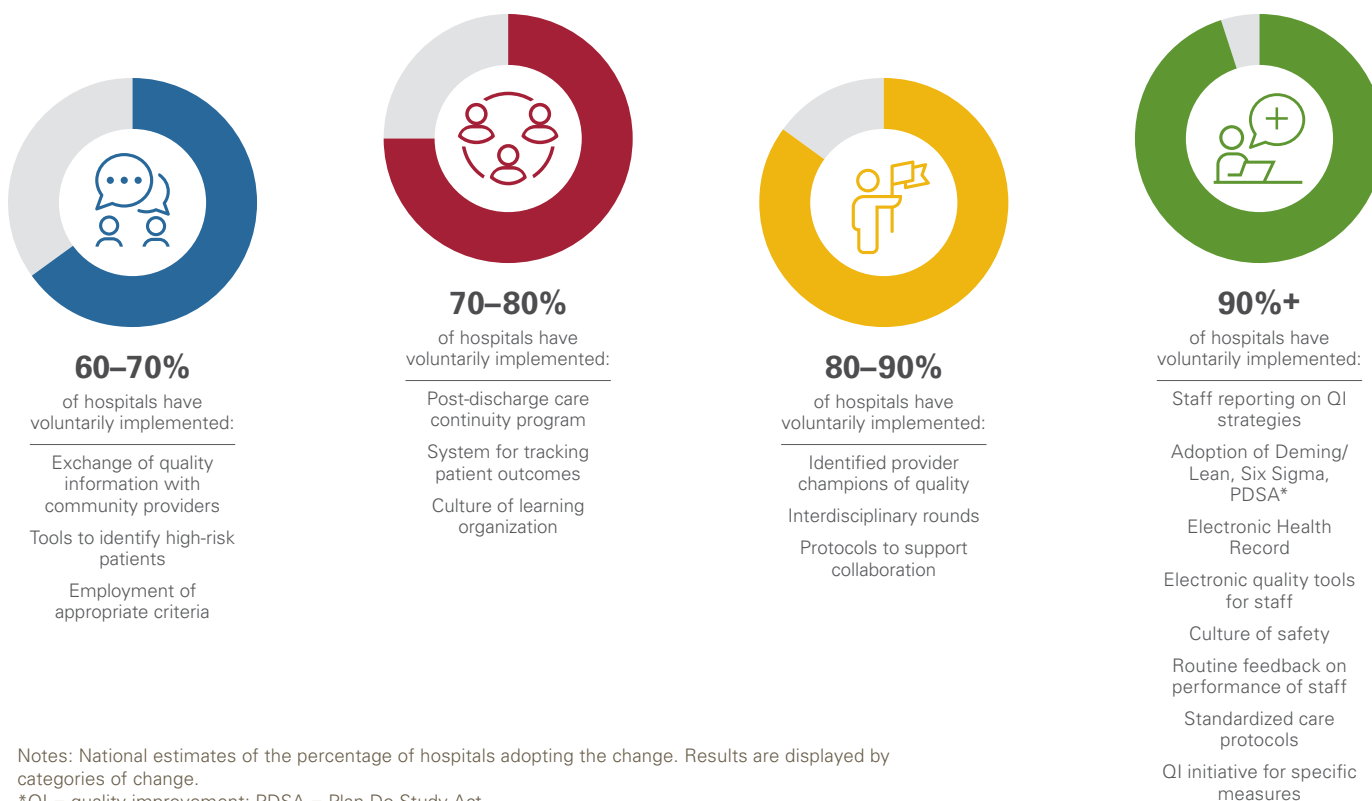
Hospitals and health systems have Medicare payment tied to six distinct federal quality programs.

Figure 2: Overview of Select CMS Hospital Quality Programs^{17,18}

Program	Description	Measures / Performance Assessment	Incentive Structure	Maximum Payment At Risk (FY 2017 onward)	Cumulative Hospital Payment Cuts, FYs 2013–2018 ¹⁹
Hospital Inpatient Quality Reporting (IQR) Program	<ul style="list-style-type: none"> Established by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 Measures are publicly reported on <i>Hospital Compare</i> 	Various clinical process, outcome, complication and patient experience measures ²⁰	Pay-for-reporting — Hospitals must submit data on measures on the quality of care furnished by hospitals in inpatient settings to receive the annual market-basket update	Reduction by 25% of the inpatient prospective payment system (PPS) annual market-basket update for hospitals that do not meet program requirements ²¹	Negligible — nearly all eligible hospitals meet IQR requirements
Outpatient Quality Reporting (OQR) program ²²	<ul style="list-style-type: none"> Established by the Tax Relief and Health Care Act of 2006 Program data are publicly reported on <i>Hospital Compare</i> 	Various process and outcome measures focused on hospital outpatient services	Pay-for-reporting — Hospitals must submit data on measures of the quality of care furnished by hospitals in outpatient settings to receive the annual market-basket update	Reduction by 2% of the outpatient PPS annual market-basket update for hospitals that do not meet program requirements	Negligible — nearly all eligible hospital meet OQR requirements
Hospital Readmission Reduction Program (HRRP)	<ul style="list-style-type: none"> Established by the Affordable Care Act Program data are publicly reported on <i>Hospital Compare</i>²³ 	30-day readmission measures for selected clinical conditions (e.g., heart failure) and procedures (e.g., hip / knee replacement) ²⁴	Payment penalty to hospitals with excess readmissions; Applied as a percentage of base inpatient PPS payments on a sliding scale ²⁵	Reduction by up to 3% of base inpatient PPS payments for hospitals with excess readmissions ²⁶	\$2.5 billion through FY 2018
Hospital Value-based Purchasing (VBP) Program ^{27,28,29,30}	<ul style="list-style-type: none"> Established by the Affordable Care Act Hospital performance scores are posted on <i>Hospital Compare</i>³¹ 	Hospitals scored on: <ul style="list-style-type: none"> • HAls • Mortality and complications • Patient experience (HCAHPS) • Patient safety • Process • Efficiency and cost reduction (Medicare spending per beneficiary) 	<ul style="list-style-type: none"> • Bonus or penalty on a sliding scale • Budget neutral — a percentage of each hospital’s payments is withheld each year to create a pool • Hospitals earn back some, all, or more than withheld 	Reduction by 2% of participating hospitals’ base operating Medicare severity diagnosis-related group (MS-DRG) payments	<ul style="list-style-type: none"> • No net payment impact – the program is budget neutral • However, the program has created funding pools of approximately \$8.7 billion between FY 2013 and FY 2018
Hospital-acquired Condition Reduction Program (HACRP) ³²	<ul style="list-style-type: none"> Established by the Affordable Care Act Incentives to reduce HACs Hospital performance scores for each hospital are made publicly available on <i>Hospital Compare</i> 	Measures focused on patient safety issues, including: <ul style="list-style-type: none"> • HAls • Claims-based patient safety indicator 	<ul style="list-style-type: none"> • Payment penalty applied to lowest-performing 25% of hospitals each year • Penalty is the same percentage for all penalized hospitals 	Reduction by 1% of total inpatient PPS payments to applicable hospitals that rank in the lowest performing quartile of hospitals with respect to risk-adjusted HAC performance measures	\$1.5 billion through FY 2018
Promoting Interoperability Program (previously known as the Medicare EHR Incentive Program) ³³	<ul style="list-style-type: none"> Authorized by the Health Information Technology for Economic and Clinical Health (HITECH) Act, enacted as part of the American Recovery and Reinvestment Act of 2009 Promotes meaningful use of interoperable health IT and qualified EHRs 	Objectives and measures of “Meaningful Use” of EHRs	Payment penalty — Hospitals that do not meet required level of performance receive lower annual market-basket update	Reduction by 75% of the inpatient PPS annual market-basket update ³⁴	More than 200 hospitals and critical access hospitals penalized in 2016

Hospitals and health systems have been actively working to implement quality improvement initiatives.

Figure 3: Changes Hospitals Reported Making to Advance Quality Performance



Source: 2018 National Impact Assessment of the Centers for Medicare & Medicaid Services (CMS) Quality Measures Report. Baltimore, MD: U.S. Department of Health and Human Services, CMS; Feb. 28, 2018 (Based on 2016 survey and qualitative interviews with hospitals).

While Progress Has Been Made, Policy Advances Are Necessary to Continue the Trajectory

The field has made substantial care quality improvements; however, there are significant barriers to further improvement that require policy changes to allow additional advancement.

Need for More Meaningful Measurement

Measurement is an important part of national work to improve quality, but when the measures are too numerous or definitions too complex, data collection activities can overwhelm hospital staff and diminish the hospital's ability to actually bring about improvement. A growing share of hospital payments are

dependent on performance on a variety of quality measures. For example, the HACRP, HRRP and Hospital VBP programs affect Medicare payment for inpatient services for 3,400 U.S. hospitals.³⁵ However, hospital requirements for measure data collection and tracking have become so numerous that the burden threatens to outweigh the value of the data. The ever-increasing number of quality measures hospitals must report, the barriers to reporting data, and unintended consequences of measurement across programs lead to additional challenges. Further, the programs referenced above have faced

criticism given concerns around the "redundancy and relevance of measures" used in both the VBP and HAC programs, the seemingly "arbitrary" approach of penalizing a quarter of all hospitals regardless of how well they have improved for the HAC program,³⁶ and apparent unfair penalization of safety-net hospitals and other hospitals that treat a disproportionate number of patients with a number of social risk factors.³⁷ As mandated by Congress, CMS has implemented adjustment for socioeconomic status (SES) in the HRRP. CMS also has solicited public comments on how to implement SES

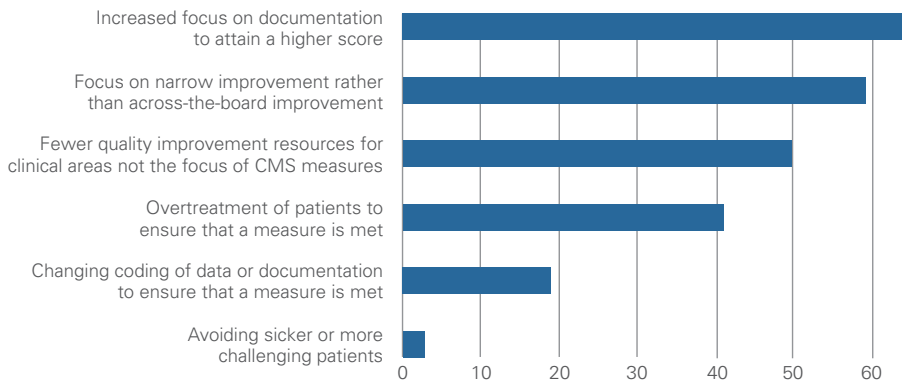
adjustment in the HACRP, Hospital VBP, Hospital IQR and Hospital OQR. But these programs still lack such adjustment. While hospitals must remain focused on identifying and addressing disparities in care, hospitals also should not be inappropriately penalized when they provide care to vulnerable populations.³⁸

Additionally, the Medicare Payment Advisory Commission (MedPAC) has raised concerns that Medicare’s current quality measurement programs rely on too many clinical process measures.³⁹ Theoretically, process measures can guide quality improvement by assessing evidence-based processes within the control of the health care provider. However, process measures must be selected judiciously to ensure that resulting process improvements ultimately yield better outcomes.⁴⁰ Both MedPAC and the Bipartisan Policy Center have noted, respectively, that many process measures are “weakly correlated” with, and are “not always a predictor” of appropriate health outcomes.^{41,42} Further, the National Quality Forum (NQF) has shared concerns that process measures might not provide as much meaningful information to patients, noting a preference for a “well-designed patient-reported outcome.”⁴³ MedPAC also shared concerns that process measures are burdensome for providers to report.⁴⁴

In addition, hospitals face logistical challenges in complying with CMS quality measurement programs:

Enhanced focus on CMS quality measures by hospitals has led unintended consequences that do not always advance higher quality patient care.

Figure 4: Percentage of Hospitals Reporting Unintended Consequences Stemming from CMS Measures and Their Use in Public Reporting and Pay-for-Performance



Source: 2018 National Impact Assessment of the Centers for Medicare & Medicaid Services (CMS) Quality Measures Report. Baltimore, MD: U.S. Department of Health and Human Services, CMS; Feb. 28, 2018; National estimate of the percentage of hospitals reporting unintended consequences

- **Barriers to reporting.** Barriers include frequent updates to measure specifications and confusing measure definitions, internal EHRs or information technology (IT) limitations, technical difficulties with CMS tools, resource-intensive reporting, issues with CMS technical support, and prevalence of inaccurate data (e.g., whether claims data for Patient Safety Indicators (PSI) were captured accurately).⁴⁵
- **Unintended consequences associated with implementation of CMS quality measures in hospitals,** as

shown in Figure 4. The top three unintended consequences are: increased focus on documentation to attain a higher score, focus on narrow improvement rather than across-the-board improvement, and fewer quality improvement resources for clinical areas not in the focus of CMS measures.⁴⁶

- **Significant burden on hospitals.**⁴⁷ In 2019, hospitals will be required to report more than 80 measures to CMS.⁴⁸ An average-sized community hospital dedicates 4.6 full-time equivalents (FTEs) (with over half being

Both MedPAC and the Bipartisan Policy Center have noted, respectively, that many process measures are ‘weakly correlated’ with, and are ‘not always a predictor’ of appropriate health outcomes.

In 2019, hospitals will be required to report more than 80 measures to CMS. An average-sized community hospital dedicates 4.6 FTEs (with over half being clinical staff) and spends \$709,000 annually on the administrative aspects of quality reporting.

clinical staff) and spends \$709,000 annually on the administrative aspects of quality reporting.⁴⁹

- **The administrative burden shifts resources away from other critical quality areas.**⁵⁰ The burden on hospitals has taken the focus away from patients and placed it instead on paperwork, preventing an investment in resources on improving care and outcomes. Although quality measurement has led to significant progress, the “recent explosion” in the number of measures also has led to a major shift in resources away from quality improvement.⁵¹ Unfortunately, resources have been overinvested in measurement of certain metrics to avoid payment penalties with little left to focus on improvement work, patient-centered health outcomes and other critical areas that are most in need of improvement.⁵² Further, while the size of penalty for performance on particular measures provides an implicit prioritization from CMS, it does not always reflect the value of a particular measure to patients. For example, more hospital payment is tied to readmissions performance than mortality rates, even though it is important to assess both.

Quality Report Cards May Not Generate Accurate Comparisons

Publicly available quality reports on hospital performance are widespread. Yet, there are considerable challenges in generating fair, accurate and useful

comparisons of hospital quality for consumers. Neither *Hospital Compare* nor any other publicly reported hospital quality measure system has much impact on consumers’ choice of hospitals.⁵³ Further, differences in each report’s “measures, data sources, and scoring methodologies produce contradictory results that lead to confusion for the public, providers and governing boards, and impair the public’s ability to make well-informed choices about health care providers.”⁵⁴ A *Health Affairs* article showed significant concerns regarding reliability and validity of measures used in these reports and showed “markedly divergent rankings of the same institutions by *Hospital Compare*, Healthgrades, Leapfrog Group, and U.S. News & World Report.”⁵⁵

CMS’s overarching hospital quality rating program, the *Hospital Compare* star rating system, also provides a flawed analysis of hospital performance.^{56,57} In 2016, CMS published a set of hospital star ratings on its website. The star rating system summarizes up to 57 quality measures across seven areas of quality into a single star rating for each hospital. Once reporting thresholds are met, a hospital’s overall rating is calculated using only those measures for which data are available, which may be as few as nine or as many as 57 measures.⁵⁸

The ratings have been broadly criticized by quality experts as being inaccurate and misleading to consumers seeking to know which hospitals are more likely to provide safer, higher

quality care. MedPAC, the AHA and Harvard Chan School of Public Health Professor and Director of Harvard’s Global Health Institute Ashish K. Jha, M.D., have criticized CMS’s star rating system for its methodologic issues.

- **A substantial share of the best-performing hospitals in the program were not rated on a full set of outcome measures, raising concern that missing data is associated with higher ratings.** MedPAC has noted that only 57 out of 102 five-star hospitals (56 percent) have a rating that is based on all four outcome groups, and all but three of the 120 one-star hospitals (98 percent) were rated using all four of the outcome groups.⁵⁹ Dr. Jha has shared similar concerns that it appears reporting on fewer quality measures earn more stars.⁶⁰ Further, the AHA has concerns that not all hospitals are judged using the same measures or even the same number of measures.^{61,62}
- **The star rating system may not be an “apples-to-apples” comparison of hospitals as it may not fully account for differences in the intrinsic health risks of patients.** MedPAC has noted that one-star hospitals had on average 78 percent of admissions through the ED while five-star hospitals only saw 36 percent of admissions from the ED. One-star hospitals may be treating more severe cases from EDs, suggesting perhaps a need for an adjustment with respect to

complexity and satisfaction of patients receiving emergency care.⁶³ Further, Dr. Jha has shared concerns that the ratings system favors smaller specialty centers that care for healthier patients with hospitals caring for more complex patients not rated as highly.⁶⁴ Additionally, the AHA has pointed to the star rating system’s failure to account for socio-economic factors such as hospital location or patient income.^{65,66}

- **Measures included in the ratings were not intended to create a single, representative score of hospital quality.**^{67,68}

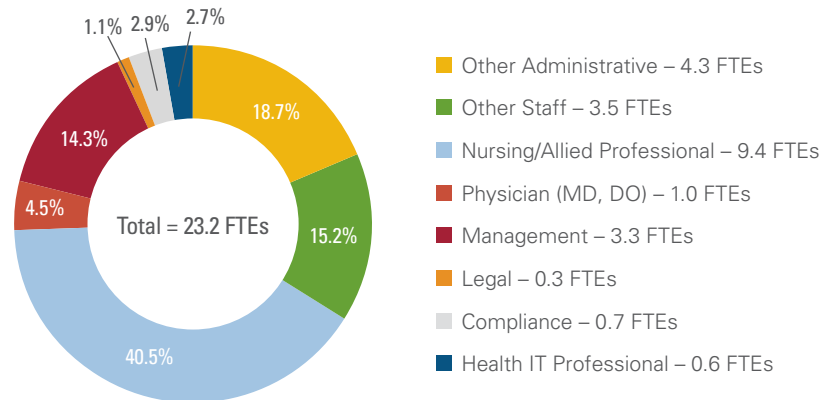
The AHA has stressed that CMS’s “flawed” approach to star ratings provides an inaccurate, misleading picture of hospital quality and urged CMS to suspend reporting of overall star ratings until the methodology is improved.⁶⁹ CMS postponed its scheduled July 2018 update of the star ratings in response to the methodology concerns raised by the AHA, and announced the agency would seek additional feedback from stakeholders through a public comment period.

Despite Increased Adoption, Serious Challenges with eQMs Persist

eQMs have the potential to reduce the burden of data collection for quality measurement and serve as useful tools to drive continuous quality improvement. Yet, this is achievable only if the data are complete, accurate, reliable and captured in a standardized manner in EHRs.⁷⁰ Data extraction from the EHR is complex and the data extracted may have insufficient accuracy.⁷¹

Ensuring compliance with hospital CoPs requires significant staff time, including from doctors and nurses.

Chart 2: Number of FTEs Required to Manage Conditions of Participation for an Average Hospital (166 beds)



Since 2016, hospitals have been reporting eQMs to government agencies and accrediting bodies. eQMs rely on structured, encoded data present in the EHR to aggregate, calculate and transmit data on the quality of care provided. The data can be analyzed to measure and improve care processes, performance and outcomes.⁷² According to a fall 2016 Joint Commission survey, when compared to a spring 2016 survey, more hospitals were willing to report eQMs voluntarily, with more confidence about the accuracy of their eQm data, as well as an increased perceived readiness to successfully submit eQm data.⁷³

However, hospitals submitting eQMs in the Hospital IQR and the Promoting Interoperability programs report several concerns, including the inability of EHRs to capture and reuse

information gathered during the course of care for eQm reporting, difficulty with bringing information from other departments’ information systems into the EHR, and the need to modify clinical workflows to support data capture for eQm reporting.⁷⁴ In the Hospital IQR Program, CMS modified eQm policies to reduce eQm reporting requirements, acknowledging the challenges hospitals face with such reporting.⁷⁵

Conditions of Participation Provide Foundation for Quality, but Improvements are Needed

The Medicare and Medicaid CoPs require providers to adhere to established health quality, safety and operational standards in order to remain eligible for payment from the Medicare and Medicaid programs. Accreditation organizations maintain additional

eQMs have the potential to reduce the burden of data collection ... this is achievable only if the data are complete, accurate, reliable and captured in a standardized manner in EHRs.

requirements; hospitals and health systems must often participate in site visits and audits to ensure they are meeting all requirements.

Regulatory Burden and Outdated Requirements

There is tremendous value in the CoPs to ensure the safe delivery of care. However, it is important to choose the right requirements around which to have standards — and to survey for compliance — to ensure that standards are not overly burdensome and outdated. Guidelines change with regularity and can result in substantial investments by every hospital to meet modified requirements.

- **Regulatory Burden:** A 2017 AHA study found that the average hospital spends \$3.1 million each year for administrative compliance activities on hospital CoPs. This does not include the financial investments associated with accreditation organization standards, participation in patient safety organizations, federal government and state hospital association quality improvement projects, and hospital- or system-specific initiatives.⁷⁶ Some of this administrative burden is due to CoP inefficiencies, such as variation across agencies,

surveyors and sub-regulatory guidance interpretation.⁷⁷

- **Outdated Requirements:** Hospitals are often required to adhere to older requirements that have since been supplanted by updated standards from other oversight organizations. The *Life Safety Code*[®] (LSC) requirements illustrate how requirements to adhere to outdated standards create confusion and burden. Prior to 2016, CMS surveyors were required to survey to the 2000 LSC while their community fire marshals may have been enforcing the updated standards that were published in 2012.^{78,79} Since 2016, CMS has required the use of the LSC 2012 guidelines; however, updated requirements were issued in 2015 and have again been updated in 2018; fire marshals largely require adherence to these updated guidelines.^{80,81}

Alignment Efforts

While there are concerns about the burden of CoPs, there have been some efforts to improve guidelines. In its 2017 Annual Report, The Joint Commission — one of the four major hospital accreditation organizations — identified numerous areas where it has worked to align with CMS, including reconciling performance data that hospitals

could report to the CMS Hospital IQR Program.⁸² Similarly, CMS also has worked to improve its oversight and collaboration with accreditation organizations. Key CMS collaborative and alignment efforts include:

- Periodic meetings with national accreditation organizations to foster stronger communication between the accreditation organizations and CMS and to discuss operational and program-specific issues, such as compliance and education.
- Opportunities for accreditation organizations and other organizations to provide input into the development of sub-regulatory guidance concerning Medicare standards and survey processes.
- Formal written and oral feedback to accreditation organizations.⁸³

The next step in maximizing the value of the CoPs is ensuring that new or modified guidelines address the question of what it takes for a hospital to provide safe, high-quality care. To this end, CoPs should be developed and envisioned as supplying the building blocks for providing a safe care environment that supports quality improvement and effective measurement in all hospitals.

Recommendations Advancing a Strategic Vision

Hospitals and health systems have devoted increased efforts and resources to addressing safety and quality challenges. Yet, policy challenges remain. Accordingly, “[a] different strategy is needed — one that recognizes that problems are complex and defy simple solutions.”⁸⁴ Getting to the “gold standard” of hospital quality requires a strategic vision that addresses the realities around complexity, burden and lack of alignment while supporting flexibility, innovation and transparency. Below is

an actionable set of recommendations to advance the strategic vision to real-world implementation.

In order to enhance our current efforts to improve quality, policymakers may consider these key recommendations as they think strategically about hospital quality policies:

Implement Measures that Matter

A foundational step to streamlining measurement efforts is to identify the highest priority measurement topics across

the health care system that would most effectively promote better care and outcomes. There is emerging agreement about what those priorities should be; in 2017, CMS unveiled a “Meaningful Measures” framework that identified 19 topics as national quality measurement priority areas.⁸⁵ The meaningful measure priority topics were informed by several other priority frameworks, including the AHA’s 2016 list of 11 quality measure topics developed using the input of over 500 national hospital leaders, and the

CMS's Meaningful Measures are highly aligned with the previously developed priority areas from the AHA and the National Academy of Medicine (NAM) *Vital Signs* report.

Figure 5: Comparison of CMS, AHA, and NAM Vital Signs Priority Areas

Measure Priority Area	CMS Meaningful Measures	AHA Priority Area?	NAM Vital Signs Priority Area?
Risk-adjusted mortality	✓	✓	✓
Management of chronic conditions	✓	✓	✓
Prevention and treatment of opioid and substance use disorders	✓	✓	✓
Admissions and readmissions to hospitals	✓	✓	✓
Medication management	✓	✓	✓
Seamless transfer of health information	✓	✓	✓
Healthcare-associated infections	✓	✓	✓
Preventable health care harm	✓	✓	✓
Appropriate use of health care	✓	✓	✓
Care is personalized and aligned with patient's goals	✓	✓	✓
End-of-life care according to preferences	✓	✓	✓
Risk-adjusted total cost of care	✓	✓	✓
Patient's experience and functional outcomes	✓	✓	✓
Preventive care	✓	✓	✓
Equity of care	✓	*	
Community engagement	✓		✓
Patient-focused episode of care	✓		✓

*Equity of care is a cross-organizational focus rather than a discrete measurement topic

National Academy of Medicine's (NAM) 2015 *Vital Signs* report.⁸⁶ A crosswalk of the "Meaningful Measures" priority areas with the AHA and NAM areas is shown in Figure 5.

The AHA is working with a variety of stakeholders to advance targeted, updated and valuable quality reporting requirements across public and private payers that align with these measurement priority areas to help ensure CMS and other programs focus on the "measures that matter" most to improving health and outcomes. In addition to the priority measurement topics, the work will be guided by several overarching principles for selecting well-designed measures, as shown in Figure 6.

All measures should be evaluated against meaningful measurement key criteria with consideration for removal of measures in federal programs as appropriate.

We recommend that policymakers:

- **Build on CMS's "Meaningful Measures" framework** by mandating an ongoing review of all measures currently used in federal hospital quality programs to identify gaps and remove measures that do not align with the framework.
- **Identify, adopt and update core sets of high-value metrics** that can be used in federal programs and across public and private sectors.
- **Ensure the core set of high-value measures are aligned across programs, are appropriately risk-adjusted and grounded in science.**
- **Continue to improve the science of performance measurement.**

This includes:

- Continuing the development of transparent, fair and accurate SES adjustment methodologies and implementing them in programs;
- Developing more accurate attribution models; and

- Promoting the development of patient-reported outcome measures (PROMs) by convening stakeholders to advise on how to best implement them in a way that balances benefit and burden.

Make Quality Report Cards More Meaningful and Accurate

Patients and families expect and deserve accurate, meaningful information on the quality of care in hospitals. However, public quality report cards that collect, analyze or display inaccurate information unfortunately lead to "more confusion than clarity."⁸⁷

In fact, a hospital may perform well on one report card and poorly on

another. For example, a 2015 *Health Affairs* study⁸⁸ examining hospital performance on four rating systems showed that only 10 percent of the 844 studied hospitals rated as a high performer by one rating system were rated as a high performer by any of the other rating systems.

Four national hospital associations, including the AHA, have endorsed a set of principles developed by the Association of American Medical Colleges (AAMC) that calls for quality report cards to:

- Have a clearly stated **purpose**, with measures selected to fit this purpose;
- Demonstrate **transparency** by using a scoring methodology that can be

Quality measures should reflect the ability to positively impact patient outcomes, while limiting reporting burden to the extent possible.

Figure 6: Core Principles for Measures to be Included in Hospital Payment and Performance Systems

1. Provider behavior must influence the outcome(s) being measured;
2. Measures must have strong evidence that their use will lead to better care and outcomes.
3. Measures should be used in programs only if they reveal meaningful differences in performance across providers, although some may be retained or re-introduced to reaffirm their importance and verify continued high levels of importance.
4. The measures should be administratively simple to collect and report, and to the greatest extent possible, be derived from electronic health records data.
5. Measures should seek to align the efforts of hospitals, physicians and others along the care continuum, and align with the data collection efforts of the other providers.
6. Measures should align across public and private payers to reduce unnecessary data collection and reporting efforts.
7. Risk adjustment must be rigorous, and account for all factors beyond the control of providers, including socioeconomic factors where appropriate. In addition, adjustment methodologies should be published and fully transparent.

Source: American Hospital Association.

replicated by others, clearly identifies data sources and describes limitations of quality scores; and

- Demonstrate **validity** by using statistical methods that are supported by evidence and are field tested.⁸⁹

We recommend that policymakers:

- **Suspend the methodologically flawed star ratings** from *Hospital Compare* until methodological shortcomings are addressed.
- **Use the national hospital association-endorsed guiding principles for public reporting of provider performance.**
- **Develop an easily understood quality rating system for consumers.**

Develop a Quality Infrastructure Supporting eCQM Quality Strategy

The promise of eCQMs will only be fully realized when CMS confronts the current challenges through a long-term eCQM Quality Strategy based on input from key stakeholders. Until then, CMS should offer greater reporting flexibility, with modified, *voluntary* reporting requirements for eCQMs. CMS noted the importance of providing flexibility in its *mandatory* reporting requirements to “ease the burden on data submitters, allowing them to shift resources to support system upgrades, data mapping, and staff training related to eCQM documentation and reporting.”⁹⁰ For these reasons, we believe it is critical to offer voluntary eCQM reporting requirements.

We recommend that policymakers:

- **Allow for voluntary eCQM reporting requirements** until the feasibility and accuracy of eCQMs are addressed through a long-term eCQM Quality Strategy.
- **Build a knowledge base on eCQM reporting** by collaborating with hospitals in the identification and sharing of successful practices in data mapping, data validation and test production file submission based on lessons learned from submissions to date.
- **Continue to communicate the future plans for eCQMs**, including plans for the public reporting of eCQMs. Hospitals that report eCQMs also are reporting the manually chart-abstracted counterpart measures. As eCQM measure specifications can change in substantive ways from year to year, hospitals would benefit from the ability to focus on measures expected to be retained and publically reported given limited time and resources.

Implement Meaningful, Effective, Up-to-Date CoPs and Standards

Many CoPs and standards are outdated and not aligned with measurement, QI and federal program goals. A comprehensive review of the effects of Medicare CoP accreditation and/or certification of hospitals on quality and patient safety outcomes and the clinical impact of these programs could prove promising. This is especially critical

since compliance with such standards requires significant resources which take away time and resources from core clinical goals and important patient safety issues.⁹¹

We recommend that policymakers:

- **Conduct an evaluation of all CoPs and standards** to determine whether CoPs are effectively focusing on health care quality and safety in a rapidly changing health care delivery system while minimizing burden.
- **Develop key criteria for CoPs and standards** (based on consensus-based stakeholder workgroups), including the importance of grounding them in the base of available research evidence and ensuring alignment with other laws and industry standards,⁹² as well as the goals of meaningful measurement, a high-reliability organization and federal programs. For example, CMS strengthened the hospital CoP for Discharge Planning to require more robust communication between acute and post-acute care settings⁹³ which aligned with, and supported, the goals of the HRRP.
- **Ensure CoPs recognize and enable systems to deliver higher quality through system-wide approaches to standard practices, policies and case management.**
- **Convey deficiencies based on identified risk levels.** Hospitals and health systems value efforts that

The next step in maximizing the value of the CoPs is ensuring that new or modified guidelines address the question of what it takes for a hospital to provide safe, high-quality care.

support their ability to prioritize corrective actions based on risk levels. One tool that holds promise is The Joint Commission's Survey Analysis for Evaluating Risk (SAFER)TM Matrix, launched on Jan. 1, 2017.⁹⁴ The SAFER scoring approach provides organizations with additional information related to risk of deficiencies and

likelihood of harm to help prioritize and focus corrective actions.⁹⁵

- **Adopt a continuum of care analysis.** A core challenge with CoPs and standards is the “point in time” analysis that such standards reflect. One tool that addresses this issue is the tracer methodology, an on-site survey process of

the Joint Commission that works to move beyond a point in time analysis towards a continuum of care analysis. The tracer methodology focuses on identifying performance issues through one or more steps in the quality process or interfaces between processes.⁹⁶

Conclusion

Hospitals and health systems face significant challenges in quality measurement, improvement and standards as they strive to advance and build on existing accomplishments and infrastructure. Although significant progress has been made, policymakers need to transform the current momentum around existing practices in order to implement a sophisticated, innovative and strategic vision that will yield

stronger reforms — not just at a provider level, but at a systems level.

The three core components of hospital quality — quality measurement, quality improvement, and quality CoPs and standards — each play a significant role in achieving this transformation. Understanding the inter-dependency of these three foundational elements and the impact each has on the others is critical as

policies are developed. Policymakers must think strategically about current programs and upcoming policies focusing on flexibility, innovation and transparency as part of the hospital quality journey. Only then can hospitals and health systems fully achieve the gold standard of hospital quality with meaningful measurement, robust quality improvement, and effective, up-to-date CoPs and standards.

The AHA would like to acknowledge the following experts, who we interviewed for this TrendWatch Report: Mark R. Chassin, M.D., president and chief executive officer, The Joint Commission; Amy Compton-Phillips, M.D., executive vice president and chief clinical officer for Providence St. Joseph Health; Kate Goodrich, M.D., director and CMS chief medical officer, Center for Clinical Standards and Quality, CMS; David Pryor, M.D., executive vice president and chief clinical officer, Ascension; and Dana Gelb Safran, Sc.D., chief performance measurement and improvement officer and senior vice president, Enterprise Analytics at Blue Cross Blue Shield of Massachusetts. We thank them for their contributions and insights.

ENDNOTES

1. Kaiser Family Foundation. Claxton, Gary, et al. (Sept. 10, 2015). Measuring the quality of healthcare in the U.S. *Health Systems Tracker*.
2. National Academy of Medicine. (April 2015). Vital Signs: Core Metrics for Health and Health Care Progress.
3. Bipartisan Policy Center. (April 2015). Transitioning from Volume to Value: Consolidation and Alignment of Quality Measures.
4. American Hospital Association (Oct. 2017). Regulatory Overload: Assessing the Regulatory Burden on Health Systems, Hospitals and Post-acute Care Providers.
5. National Quality Forum (2017). Maximizing the Value of Measurement: MAP 2017 Guidance.
6. Balik B et al. (2011) *Achieving an Exceptional Patient and Family Experience of Inpatient Hospital Care*. IHI Innovation Series white paper. Cambridge, Massachusetts: Institute for Healthcare Improvement.
7. National Scorecard on Rates of Hospital-Acquired Conditions 2010 to 2015: Interim Data From National Efforts To Make Health Care Safer. Content last reviewed December 2016. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/professionals/quality-patient-safety/pfp/2015-interim.html>
8. Chartbook on Patient Safety. Content last reviewed September 2017. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/research/findings/nhqrd/charbooks/patientsafety/index.html>
9. National Impact Assessment of the Centers for Medicare & Medicaid Services (CMS) Quality Measures Report. (February 28, 2018) Baltimore, MD: U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services.
10. Chartbook on Care Coordination. Content last reviewed June 2016. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/research/findings/nhqrd/charbooks/carecoordination/index.html>
11. National Impact Assessment of the Centers for Medicare & Medicaid Services (CMS) Quality Measures Report. (February 28, 2018) Baltimore, MD: U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services.
12. National Impact Assessment of the Centers for Medicare & Medicaid Services (CMS) Quality Measures Report. (February 28, 2018) Baltimore, MD: U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services.
13. Chassin MR. (2013). Improving the quality of health care: what's taking so long? *Health Affairs*.
14. The Joint Commission. (2017). America's Hospitals: Improving Quality and Safety. Annual Report.
15. Medicare.gov. Hospital Compare. Information Page.
16. Centers for Medicare and Medicaid Services. (Feb. 28, 2018). National Impact Assessment of the Centers for Medicare & Medicaid Services (CMS) Quality Measures Report.
17. Depending on its mix of services and participation in particular CMS payment systems, a hospital also may participate in CMS' other quality measurement programs. For example, hospitals with separately licensed inpatient psychiatric facilities (IPFs) receiving payment under the IPF prospective payment system (PPS), may participate in the IPF Quality Reporting Program.
18. 2018 National Impact Assessment of the Centers for Medicare & Medicaid Services (CMS) Quality Measures Report. (February 28, 2018) Baltimore, MD: U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services.
19. American Hospital Association analysis, FY 2013-2017.
20. Centers for Medicare and Medicaid Services. (Aug. 2017). Hospital Inpatient Quality Reporting (IQR) Program Reference Checklist: Fiscal Year (FY) 2019 Payment Determination Calendar Year (CY) 2017 Reporting Period.
21. Centers for Medicare and Medicaid Services. (Sept. 19, 2017). Hospital Inpatient Quality Reporting Program.
22. Centers for Medicare and Medicaid Services. (Jan. 11, 2018). Hospital Outpatient Quality Reporting Program.
23. Kahn, Charles N. III, et al. (2015). Assessing Medicare's Hospital Pay-For-Performance Programs And Whether They Are Achieving Their Goals. *Health Affairs*.
24. Centers for Medicare and Medicaid Services. (March 26, 2018). Hospital Readmissions Reduction Program (HRRP).
25. Quality Net. (Accessed May 24, 2018). Payment Adjustment Hospital Readmissions Reduction Program (FY 2018).
26. Centers for Medicare and Medicaid Services. (April 27, 2018). Readmissions Reduction Program (HRRP).
27. Centers for Medicare and Medicaid Services. (Jan. 11, 2017). The Hospital Value-Based Purchasing (VBP) Program.
28. Centers for Medicare and Medicaid Services. (Sept. 2017). Hospital Value-Based Purchasing Fact Sheet.
29. Centers for Medicare and Medicaid Services. (Oct. 31, 2017). Hospital Value-Based Purchasing.
30. Centers for Medicare and Medicaid Services. (Nov. 1, 2016). CMS Hospital Value-Based Purchasing Program Results for Fiscal Year 2017.
31. 2018 National Impact Assessment of the Centers for Medicare & Medicaid Services (CMS) Quality Measures Report. Baltimore, MD: U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services; February 28, 2018.
32. Centers for Medicare and Medicaid Services. (2018). Hospital-Acquired Condition Reduction Program Fiscal Year 2018 Fact Sheet.
33. Centers for Medicare and Medicaid Services. (May 8, 2018). Promoting Interoperability (PI) Programs, 2018 Program Requirements.
34. Centers for Medicare and Medicaid Services. (Oct. 2017). 2017 Medicare Electronic Health Record (EHR) Incentive Program Payment Adjustment Fact Sheet for Eligible Hospitals.
35. Kahn, Charles N. III, et al. (2015). Assessing Medicare's Hospital Pay-For-Performance Programs And Whether They Are Achieving Their Goals. *Health Affairs*.
36. Kahn, Charles. (Aug. 4, 2015). In Pursuit of Hospital Quality: Creating Effective Performance Measures and Transparency in Health Care. *Health Affairs Blog*.
37. Sheingold, Steven, et al. (Jan. 2016). Understanding Medicare Hospital Readmission Rates and Differing Penalties between Safety-Net and Other Hospitals. *Health Affairs*.
38. Nagasako, Elna, et al. (May 2014). Adding Socioeconomic Data To Hospital Readmissions Calculations May Produce More Useful Results. *Health Affairs*.
39. Medicare Payment Advisory Commission. (Sept. 8, 2017). Comments on CMS' Proposed Medicare Program Hospital Outpatient Prospective Payment and Ambulatory Surgical Center Payment Systems and Quality Reporting Programs.
40. Baker, David, et al. (2017). Holding Providers Accountable for Health Care Outcomes. *Annals of Internal Medicine*.
41. Medicare Payment Advisory Commission. (Sept. 8, 2017). Comments on CMS' Proposed Medicare Program Hospital Outpatient Prospective Payment and Ambulatory Surgical Center Payment Systems and Quality Reporting Programs.
42. Bipartisan Policy Center. (April 2015). Transitioning from Volume to Value: Consolidation and Alignment of Quality Measures.
43. National Quality Forum. (Feb. 15, 2018). MAP 2018 Considerations for Implementing Measures in Federal Programs: Hospitals, Final Report.
44. Medicare Payment Advisory Commission. (Sept. 8, 2017). Comments on CMS' Proposed Medicare Program Hospital Outpatient Prospective Payment and Ambulatory Surgical Center Payment Systems and Quality Reporting Programs.

45. 2018 National Impact Assessment of the Centers for Medicare & Medicaid Services (CMS) Quality Measures Report. (February 28, 2018) Baltimore, MD: U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services.
46. Ibid.
47. Ibid.
48. American Hospital Association (Oct. 2017). Regulatory Overload: Assessing the Regulatory Burden on Health Systems, Hospitals and Post-acute Care Providers.
49. Ibid.
50. 2018 National Impact Assessment of the Centers for Medicare & Medicaid Services (CMS) Quality Measures Report. (February 28, 2018) Baltimore, MD: U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services.
51. Meyer GS, et al. (2012). More quality measures versus measuring what matters: a call for balance and parsimony. *BMJ Qual Saf.*
52. Ibid.
53. Dor, Avi, et. al. (2015). Medicare's Hospital Compare Quality Reports Appear to Have Slowed Price Increases for Two Major Procedures. *Health Affairs.*
54. American Association of Medical Colleges. (2014). Guiding Principles for Public Reporting of Provider Performance.
55. American Association of Medical Colleges. (2014). Guiding Principles for Public Reporting of Provider Performance *citing* Rothberg, Michael B. (2008). Choosing the Best Hospital: The Limitations of Public Quality Reporting. *Health Affairs.*
56. Medicare Payment Advisory Commission. (Sept. 22, 2016). Comments on CMS' Hospital Star Rating System.
57. Jha, Ashish K. (Aug. 23, 2017). *NEJM Catalyst.*
58. Centers for Medicare and Medicaid Services (2017). How the Hospital Compare overall rating is calculated.
59. Medicare Payment Advisory Commission. (Sept. 22, 2016). Comments on CMS' Hospital Star Rating System.
60. Jha, Ashish K. (Aug. 23, 2017). *NEJM Catalyst.*
61. American Hospital Association. (Sept. 25, 2017). Letter from the American Hospital Association to Kate Goodrich, Chief Medical Officer, Centers for Medicare and Medicaid Services, "Enhancements of the Overall Hospital Quality Star Rating, August 2017."
62. The American Hospital Association. (July 7, 2016). CMS Star Rating Methodology Biased, Flawed.
63. Medicare Payment Advisory Commission. (Sept. 22, 2016). Comments on CMS' Hospital Star Rating System.
64. Jha, Ashish K. (Aug. 23, 2017). *NEJM Catalyst.*
65. American Hospital Association. (Sept. 25, 2017). Letter from the American Hospital Association to Kate Goodrich, Chief Medical Officer, Centers for Medicare and Medicaid Services, "Enhancements of the Overall Hospital Quality Star Rating, August 2017."
66. The American Hospital Association. (July 7, 2016). CMS Star Rating Methodology Biased, Flawed.
67. American Hospital Association. (Sept. 25, 2017). Letter from the American Hospital Association to Kate Goodrich, Chief Medical Officer, Centers for Medicare and Medicaid Services, "Enhancements of the Overall Hospital Quality Star Rating, August 2017."
68. The American Hospital Association. (July 7, 2016). CMS Star Rating Methodology Biased, Flawed.
69. American Hospital Association. (Sept. 25, 2017). Letter from the American Hospital Association to Kate Goodrich, Chief Medical Officer, Centers for Medicare and Medicaid Services, "Enhancements of the Overall Hospital Quality Star Rating, August 2017."
70. McConville, Elizabeth. (2016). The Transition to eMeasures: Learning from early adopters can help smooth the transition to electronic clinical quality measures. *Industry Edge.*
71. Tonner, Chris, et al. (March 29, 2017). A New Era of Quality Measurement in Rheumatology: Electronic Clinical Quality Measures and National Registries. *Curr Opin Rheumatol.*
72. The Joint Commission. (Nov. 7, 2017). *The Joint Commission Reports Increased Electronic Clinical Quality Measure (eCQM) Adoption and Reporting from U.S. Hospitals.*
73. The Joint Commission. (2017). America's Hospitals: Improving Quality and Safety. Annual Report.
74. American Hospital Association (Oct. 2017). Regulatory Overload: Assessing the Regulatory Burden on Health Systems, Hospitals and Post-acute Care Providers.
75. 82 Fed. Reg. 37990, 38358-59 (Aug 14, 2017).
76. American Hospital Association (Oct. 2017). Regulatory Overload: Assessing the Regulatory Burden on Health Systems, Hospitals and Post-acute Care Providers.
77. Ibid.
78. HcPRO. (2015). The CMS Hospital Conditions of Participation and Interpretive Guidelines.
79. Ibid.
80. 42 CFR 482.41 (2018).
81. National Fire Protection Association. (2018). Life Safety Code, Current and Prior Editions.
82. The Joint Commission. (2017). America's Hospitals: Improving Quality and Safety. Annual Report.
83. HcPRO. The CMS Hospital Conditions of Participation and Interpretive Guidelines (2015).
84. Chassin MR. (2013). Improving the quality of health care: what's taking so long? *Health Affairs.*
85. Centers for Medicare and Medicaid Services. (March 13, 2018). Meaningful Measures Hub. CMS Information Page.
86. National Academy of Medicine. (April 2015). Vital Signs: Core Metrics for Health and Health Care Progress.
87. American Association of Medical Colleges. (2014). Guiding Principles for Public Reporting of Provider Performance.
88. Austin, J. Matthew, et al. (2015). National hospital ratings systems share few common scores and may generate confusion instead of clarity. *Health Affairs.*
89. American Association of Medical Colleges. (2014). Guiding Principles for Public Reporting of Provider Performance.
90. 82 Fed. Reg. 37990, 38358-59 (Aug 14, 2017).
91. Brubakk et al. (2015). A systematic review of hospital accreditation: the challenges of measuring complex intervention effects *BMC Health Services Research.*
92. American Hospital Association (Oct. 2017). Regulatory Overload: Assessing the Regulatory Burden on Health Systems, Hospitals and Post-acute Care Providers.
93. Centers for Medicare and Medicaid Services. (2016). Overview of the CMS Quality Strategy.
94. The Joint Commission. (April 20, 2017). *Facts about The SAFER™ Matrix scoring process.* https://www.jointcommission.org/facts_about_the_safer_matrix_scoring/
95. The Joint Commission. (May 2016). The SAFER Matrix: A New Scoring Methodology. *Joint Commission Perspectives.*
96. The Joint Commission. (Feb. 10, 2017). *Facts About the Tracer Methodology.*

TrendWatch, produced by the American Hospital Association, highlights important trends in the hospital and health care field. Sappho Health supplied research and analytic support for this issue.

TrendWatch — October 2018
Copyright © 2018 by the American Hospital Association.
All Rights Reserved

**Sappho Health
Strategies, LLC**



1200 Veitch Street
Suite 843
Arlington, VA 22201
202.210.3417
www.sapphohealth.com

 **American Hospital
Association™**

Advancing Health in America

800 10th Street, NW
Two CityCenter, Suite 400
Washington, DC 20001-4956
202.638.1100
www.aha.org