American Hospital Association

Liberty Place, Suite 700
325 Seventh Street, NW
Washington, DC 20004-2802
(202) 638-1100 Phone
www.aha.org

Testimony

of the American Hospital Association

before the Adoption and Certification Workgroup

of the Health IT Policy Committee

October 5, 2011

I am Chantal Worzala, director of policy at the American Hospital Association (AHA). On behalf of the AHA's more than 5,000 member hospitals and health systems and our nearly 40,000 individual members, I thank you for the opportunity to speak about the hospital field's experience with implementing Stage 1 of meaningful use of electronic health records (EHRs), as input to Workgroup deliberations on Stage 2 and Stage 3 requirements. America's hospitals can be very different, ranging from large academic medical centers to stand-alone community hospitals, safety net providers and very small rural critical access hospitals. Unlike many other federal policies, however, the meaningful use program has the same requirements across all facilities.

My testimony is informed by AHA surveys on hospital use of EHRs, as well as both structured and anecdotal input from scores of hospitals across the spectrum of our membership. The AHA maintains an active advisory group on health information technology (IT) that includes dozens of hospital executives responsible for meaningful use implementation. We also recently solicited feedback from hundreds of members involved in our governance process. In addition, AHA staff consult with state hospital associations and have engaged in dozens of meaningful use education sessions with hospitals, where meaningful use successes and challenges have been discussed.

EARLY EXPERIENCE WITH MEANINGFUL USE

Hospitals across the country are deploying EHRs as part of their overall strategies to improve patient care and meet patient and community needs. They report almost universal commitment to meeting meaningful use, which has served to accelerate implementations.

Low spending numbers from CMS, however, point to the challenges hospitals have faced in meeting the Stage 1 meaningful use requirements. According to CMS' data, only 114 hospitals had been paid under the Medicare EHR incentive program by the end of August (http://www.cms.gov/EHRIncentivePrograms/Downloads/EHR_Reg_Rpt.zip), although

CMS has estimated that in total about 5,000 hospitals could be eligible for the Medicare program (Final Rule, p.44548). Thus, only 2 percent of eligible hospitals had successfully attested to meaningful use and received payment by end August. This small set of hospitals have made huge strides and we congratulate them on the herculean effort they completed to meet the meaningful use requirements.

CMS also reported total payments through August of $653 million to both physicians and hospitals, across both Medicare and Medicaid programs. In comparison, the Congressional Budget Office estimated that $4.7 billion would be spent to support EHR adoption and use in fiscal year 2011, which ended on September 30 (CBO estimate of H.R. 1, February 13, 2009).

The difference in expected versus actual federal support for provider's EHR adoption to date is mostly due to the relatively high bar set for Stage 1 and the complexity of meeting the regulatory requirements. Implementation challenges facing hospitals and other providers include:

- Complexity and lack of clarity in the regulatory requirements;
- Limited vendor and workforce capacity;
- Rapidly escalating costs;
- Difficult registration processes;
- Challenges with specific meaningful use objectives (described further below); and
- Competing initiatives that require significant changes to information systems, including new administrative transactions standards (5010) and associated business rules, ICD-10, and health reform initiatives.

We do expect growing numbers of hospitals to meet the meaningful use requirements over time, but are wary that the slow start will limit the extent of actual federal support for EHR adoption. We remain concerned about the complexity of the program, and the challenges small, rural, and safety net facilities may face. A successful EHR incentive program is needed to support widespread adoption of EHRs that will, in turn, support care system transformations and health information exchange. Therefore, the AHA recommends that Stage 2 begin only when at least 75 percent of eligible hospitals and eligible physicians have successfully reached Stage 1, and no sooner than fiscal year 2014.

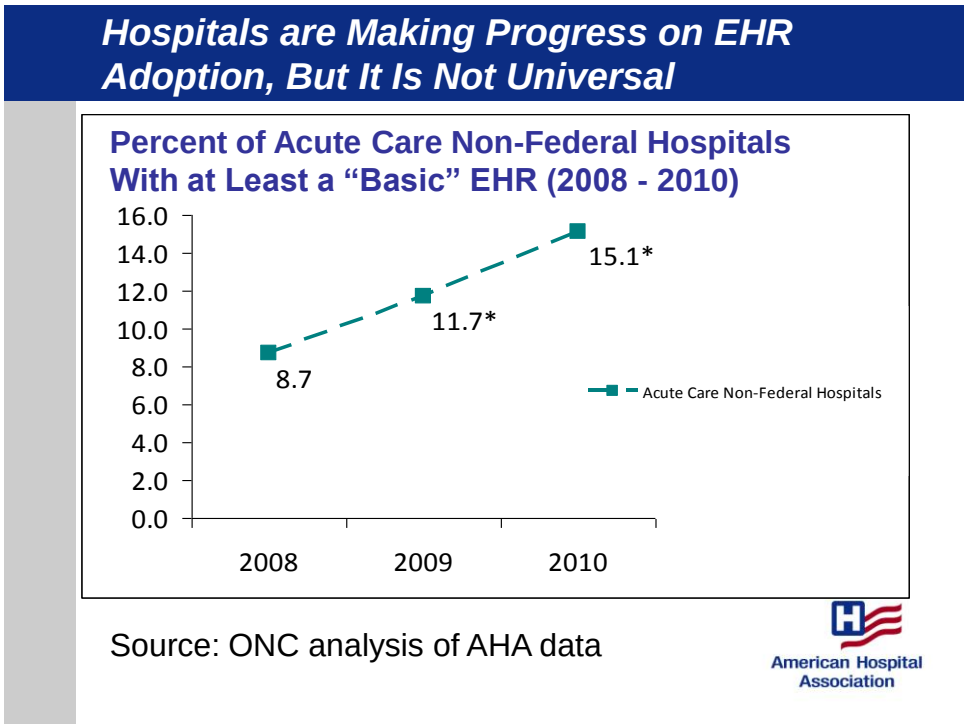
LONGITUDINAL TRENDS IN HOSPITAL ADOPTION OF EHRS

The AHA annually conducts a survey on hospital use of EHRs to track longitudinal adoption patterns. These surveys are supported by the Office of the National Coordinator for Health Information Technology (ONC) as a major source of national monitoring data, and survey results have been published in several peer-reviewed journal articles (see, for example, Jha et al. A Progress Report On Electronic Health Records In U.S. Hospitals, *Health Affairs*, October 2010). We are currently fielding our 2011 hospital IT survey, which will provide additional insights in the coming months.

The most recently available data (collected in summer 2010) show continued progress in adoption, but suggest that meaningful use stage 1 is a major challenge for most. As shown in Figure 1, the share of hospitals that have adopted at least a "basic" EHR has increased from 8.7 percent in 2008 to 15.1 percent in 2010.

The definitions for EHR adoption in hospitals used for longitudinal tracking precede meaningful use and are less stringent, particularly in the areas of reporting data to others and use of specific data standards. Although the 2010 annual tracking survey was designed before the final rules on Stage 1 meaningful use were out, the AHA was able to match the data to 12 of the 24 meaningful use objectives (Appendix A). Among the hospitals in the survey, only 2.7 percent had implemented all 12 of these functionalities, while 12 percent had implemented none of them, and 57 percent had implemented six or fewer.

More recent data from our 2011 tracking survey should be available next spring, and will better track meaningful use.



CAPACITY TO MEET SPECIFIC OBJECTIVES

Given the need for data mapped to the final Stage 1 certification and meaningful use requirements, the AHA fielded a special survey in January 2011. Data were collected between January 6 and January 20, 2011 with 1,297 hospitals responding (25 percent response rate). Respondents were broadly representative of the universe of community hospitals (Attachment B).

The survey found great commitment to the incentive programs, with 95 percent of respondents reporting that they plan to pursue meaningful use. However, the survey found that fewer than 2 percent of hospitals could meet the meaningful use and certification requirements in January 2011.

Hospitals are making progress on specific objectives, however (Table 1). In general, hospitals have made the most progress on objectives that improve clinical care, such as those ensuring medication safety. Objectives that center on reporting information to others, such as automated quality measures, pose greater challenges. Hospitals have not generally used their EHRs for this purpose and will need time to transition. The table below shows the share of hospitals that could meet each core and menu set objective in January 2011 using certified EHR technology. Attachment B also includes information on attainment regardless of certification status, as well as information on the survey methodology.

Table 1. Share of Hospitals Able to Meet Each Meaningful Use Objective Using Certified EHR Technology, January 2011

Stage 1 Meaningful Use Objective	Share of Hospitals
Core Set:	
Drug-drug and drug-allergy interaction checks	43%
Active medication allergy list	39%
Patient demographics	38%
Vital signs	38%
Smoking status	34%
Active medication list	34%
Privacy and security	32%
Clinical decision support	25%
Computerized provider order entry for medication orders	23%
Problem list	21%
Electronic copy of hospital discharge instructions	18%
Electronically exchange key clinical information	18%
Electronic copy of patient health information	15%
Clinical quality measures generated directly from the EHR	7%
Menu Set:	
Clinical laboratory test results as structured data	42%
Advance directives	39%
Drug formulary checks	38%
Lists of patients by specific conditions	34%
Patient-specific education resources	22%
Medication reconciliation	18%
Syndromic surveillance data to public health	12%
Reportable lab results to public health	12%
Summary of care record	12%
Immunization data to public health	10%

MORE RECENT FEEDBACK ON SPECIFIC OBJECTIVES AND MEASURES

Structured and anecdotal feedback from hospitals since January substantiates the survey findings. The following sections speak to the objectives most often cited as challenging to meet, the costs of implementation, and specific issues with submitting automated clinical quality measures (CQMs). According to feedback from members since our January survey, the following core and menu objectives are most challenging to meet:

Core:

- Reporting clinical quality measures (see section below)
- Exchange of health information
- Electronic copy of health information to patient
- Electronic copy of discharge instructions
- Problem list

Menu:

- Summary of care record provided at transitions of care
- Medication reconciliation
- Public health reporting

***Health information exchange objectives*.** Most, but not all, of these challenging objectives require health information exchange (HIE) in one form or another. HIE is still nascent and many hospitals find it challenging to share data in a meaningful and efficient way. EHRs certified for meaningful use Stage 1 do not support true interoperability, and the infrastructure to support exchange is not yet widely deployed. In addition, providers are unclear about federal policy directions for HIEs, which support multiple strategies, including state and local HIEs, point-to-point exchange, and query-based exchange. Hospitals do not want to invest resources in temporary exchange mechanisms, and are looking for greater certainty in this area.

While the infrastructure is still being built, providers have been challenged to operationalize exchange before their information "trading partners" are ready. For example, in the area of public health reporting, the CDC reported in August 2011 that only 26 states were ready to either test or accept data on reportable laboratory results in the formats required for meaningful use (Public Health Informatics Conference, August 23). Hospitals have found additional challenges in the public health arena because the meaningful use requirements specify that the reporting must be done through the EHR. Many hospitals have been reporting to public health electronically for years, however, using different standards, and sending data directly from their laboratory information systems, which generally are not an integral part of the EHR. Changing the format of reporting, and requiring providers to be ready ahead of their public health trading partners represents new costs and work that do not result in clear benefits. The "fix" of offering exceptions for those who do not have trading partners ready to at least "test" brings additional burdens of canvassing trading partners, and tracking their readiness over time without any benefit to the public health.

Patient copy of health information and discharge instructions. AHA members report that very few patients are asking for a copy of health information or discharge instructions. On discharge instructions in particular, hospitals have specific, in-person processes to communicate and review discharge instructions with patients before they leave the hospital. These processes are generally conducted with a paper copy of the discharge instructions available for review and note-taking. Complying with the meaningful use requirements, however, has resulted in tremendous efforts to change existing processes and document both requests for information and the sharing of that information. Given denominators that start with defining the population requesting an electronic copy, hospitals have found these objectives to be particularly challenging to measure, to the point where they detracted from actually implementing the capacity.

Problem list. It may surprise Workgroup members that many hospitals report the problem list as a challenging objective in the inpatient setting. One reason for this is how physicians currently document their findings, which can include written and dictated notes. Transferring these clinical observations into a structured, coded problem list in the EHR requires significant changes to work flows and training to ensure accuracy. It also increases time demands for documentation by physicians that are already stretched thin. Physician documentation in the EHR is not a requirement until Stage 2, but the problem list drives off of physician documentation. In addition, many inpatient stays involve both confirming specific problems and ruling out suspected problems.

Medication reconciliation. Hospitals have a significant commitment to medication reconciliation as part of their efforts to improve patient safety. However, the complexity of the transfers in care that take place, and the lack of good ways to electronically exchange data across settings of care make it challenging to gather the needed information in electronic format. In addition, vendors historically have not had modules to support medication reconciliation. Those products newly available to support meaningful use were developed very rapidly and were not widely tested to ensure that they had reasonable workflows and supported hospital needs.

Impact across provider types. The experiences of specific subgroups of providers, such as rural and critical access hospitals, and safety-net hospitals, also must be examined to ensure that the incentive programs close the existing digital divide, not widen it. Our recent survey shows that only 0.8 percent of rural hospitals could meet all of the meaningful use and certification requirements. Previous surveys also show that smaller, rural, and safety-net hospitals have, on average, lower rates of EHR adoption. In many rural areas, reliable and sufficient broadband access, while growing, is still unavailable.

COSTS OF IMPLEMENTATION

It is challenging to understand the costs of meaningful use implementation for hospitals given the longitudinal nature of expenses and the mix of capital and non-capital costs. From anecdotal information, the costs of hardware and software are in the tens to hundreds of millions of dollars, depending on hospital and health system size. Significant additional costs, however, are incurred on training staff and clinicians, providing ongoing support, and experiencing lost productivity during training and due to increased documentation demands

on clinicians. For example, a Midwestern academic medical center currently undergoing implementation reports that it will have 1,000 people in class every day for many days to support installation, and will train 4,000 individuals overall. Care cannot stop while training occurs, leading to operational challenges and costs to ensure care is not affected.

Hospitals also report devoting considerable staff resources to simply understanding the meaningful use requirements. While this is true of any new program, the meaningful use regulations include very proscriptive requirements and measures that define denominators in ways not generally used in hospital operations. Consequently, hospitals find themselves spending large amounts of time understanding the measures, rather than implementing the technology. As the workgroup moves forward to consider new objectives, we recommend that you prioritize the value of the functionality over the complexity of the measurement.

Hospitals report significant cost increases associated with upgrading to certified versions of EHRs, and high price points attached to new, required functionality, such as quality reporting modules and interfaces to support public health reporting. One hospital reported a doubling of costs between vendor negotiations in the summer of 2010, and actual implementation in the summer of 2011. AHA members report that the cost of consultants and trained IT professionals has also accelerated dramatically since the meaningful use requirements were put into place. Like physician offices, hospitals are finding that meaningful use implementation also decreases physician and staff efficiency, at least in the short run. On balance, hospitals expect the incentive payments to only partially offset the costs of implementation, with some estimating the incentive to offset as little as ten to fifteen percent of total costs. Hospitals' ability to finance meaningful use implementations would be further challenged by any payment reductions stemming from the on-going deficit reduction talks.

Smaller and rural hospitals with limited capital resources find managing the costs of implementation particularly challenging. For example, according to an AHA analysis of Medicare cost report data, the average critical access hospital has only $600,000 per year for all capital expenditures, ranging from IT resources to building repairs and medical technology. In addition, recruiting and retaining qualified technical and clinical IT staff is a major issue, given the general challenges of lower salaries and fewer amenities in rural areas. Many safety net hospitals also struggle to find sufficient capital and qualified staff to support meaningful use.

All in all, the complexity of this undertaking should not be underestimated. More than one hospital executive has reported that managing the meaningful use implementation has been more challenging than building a new hospital, even while acknowledging the need to move ahead. While commitment to the goal of using EHRs to support high quality care is strong, the rushed timelines and complex regulatory requirements make the process difficult. We are concerned, in fact, that the complexity may be impeding progress.

Vendor Readiness. The short timelines for meaningful use makes vendor readiness a major issue for providers. Most vendors are struggling to meet the requirements of meaningful use, and because of the deadlines, are also finding it difficult to accommodate all of the hospitals that want to implement their product. High demand challenges vendors' ability to be responsive and maintain quality staffing levels. As Ascension Health testified to the

Workgroup last May, "40 of 61 eligible hospitals have reported delays in their ability to reach their expected dates for Meaningful Use Stage 1 compliance." In addition, some functionalities, such as quality reporting and medication reconciliation, are new to the majority of vendors, and were put together quickly, leading some in the field to note that they are all "beta sites," working to install largely untested products.

***Impact on strategic objectives*.** AHA members report that meaningful use has led to postponement of other important projects, both within the IT department and in other departments, as capital resources and staff resources are devoted to meaningful use. Postponed projects within the IT department include expanding on quality improvement activities, generating efficiencies in internal processes, and expanding data analytics capacity. When meaningful use is combined with implementation of ICD-10, which is at least equally expensive and complex as meaningful use, the intensive investments within IT also crowd out capital projects in other areas.

ISSUES IN QUALITY MEASUREMENT

Automated quality reporting has clear benefits, including efficient measurement, real-time results and the potential to include whole populations in measure calculations, as well as the ability to easily look at sub-groups. AHA strongly supports the move toward automated quality reporting to ease burden and provide real-time information. To be useable, however, automated quality measurement must be feasible, generate valid and reliable results and have benefits that outweigh the costs. Early experience in Stage 1 of meaningful use indicates that the current approach to automated quality measurement will not deliver on that promise.

Providers and vendors have encountered significant issues with the e-specifications, which contain known errors and have never been field tested. In particular, the clinical quality measures (CQMs) for stroke and venous thromboembolism (VTE) were e-specified under contract to CMS, and not by the original measure developer. Although CMS announced its intention to test the feasibility of using the e-specifications in fiscal year 2010, the pilot was never conducted (https://www.cms.gov/hospitalqualityinits/15_HospitalInpatientEHRTesting.asp). Furthermore, the underlying measures were developed for use by specially trained clinicians performing manual abstraction. The original versions of the measures were endorsed through the National Quality Forum process, but the e-specifications were not.

Despite reservations expressed by the AHA and others, these specifications were finalized by CMS and vendors embedded them into their products using the e-specifications provided. This functionality was completely new for most vendors, who had limited ability to map the needed data elements to where they actually reside in the EHR, or test their products given short timeframes.

Vendor products have, however, been certified for the CQMs, due to the very light testing requirements. The certification process for EHRs specifically does **not** include testing the accuracy of the embedded measure calculations, nor does it look to see if the needed data are, in fact, available in the EHR. It only requires that vendors, using their own data, show that their product can electronically produce numerators, denominators, and exclusions in the required standardized format. More recently, CMS has determined that the specified

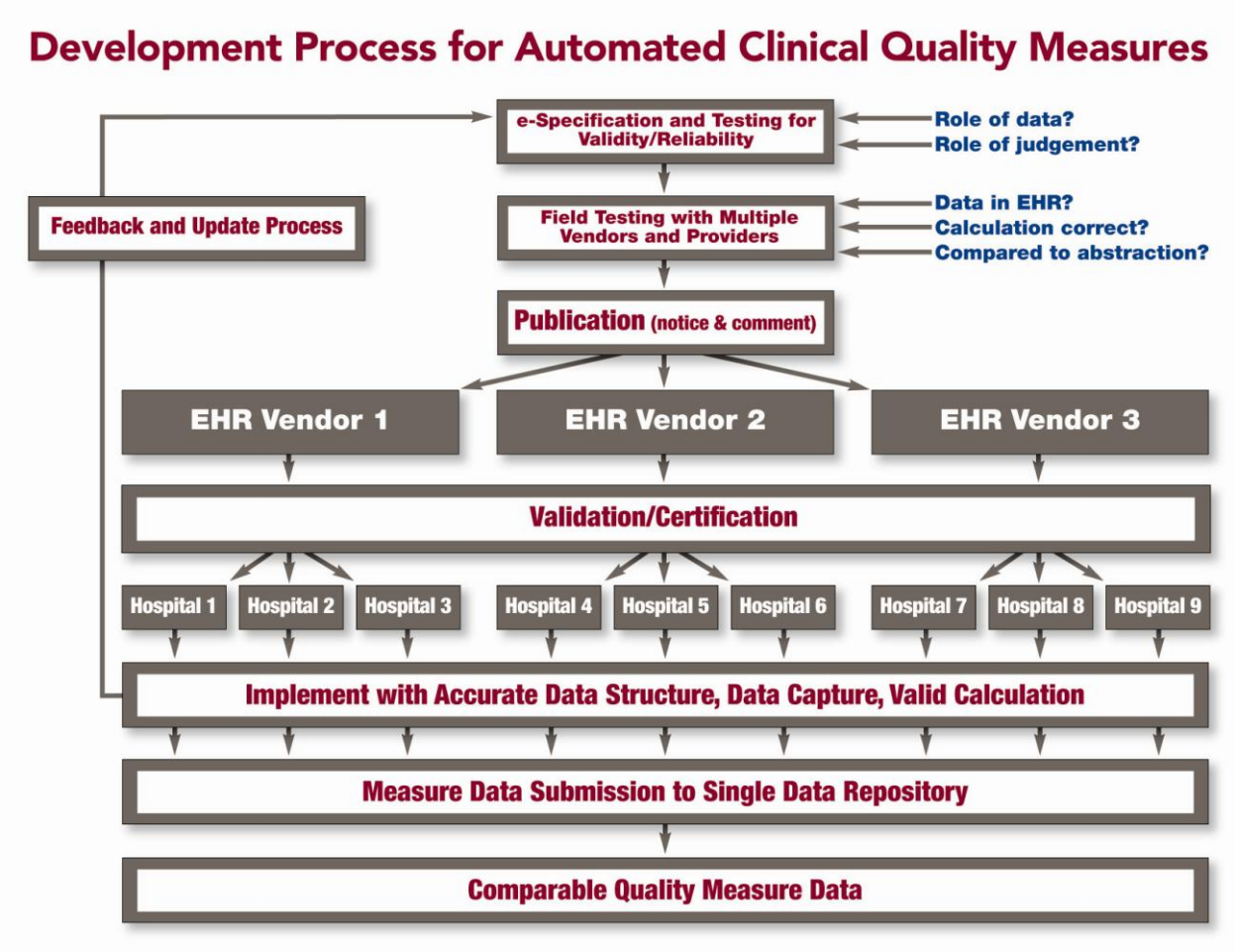
transmission standard "is not feasible to use" for automated transmission of measure data to CMS, further calling into question the value of certification for CQMs.

In practice, the existing CQMs require a level of clinical documentation and the use of coded data fields that are far more extensive than the Stage 1 requirements and not in common use. Much of the data for the inpatient measures come from physician documentation that is currently contained in written or dictated notes. The measures also include concepts not easily captured in structured format, such as "time patient last known well." Thus, the needed data are often not gathered electronically during the course of care. As a result, AHA members report that the certified EHR products they have purchased do not generate accurate quality data without significant effort, including use of custom fields and screens, significant training and increased work for clinicians to capture the necessary data during the care process, and even the use of abstractors to fill in missing data elements. Even those investing considerable resources to validate and correct the CQMs have little reason to trust the data integrity of the CQMs reported out of certified EHRs that they have not developed in house.

Finally, no structured process is in place to ensure that corrections or updates are communicated and adopted by vendors, such as the addition of new medications to treat patients with stroke or to support smoking cessation. Many AHA members report working with individual vendors to fix errors they have found during validation processes. However, to have comparable data across vendors and hospitals, we need a systematic process in place to ensure these changes are broadly communicated and systematically incorporated.

Given the struggle to operationalize the current quality measures, the AHA has urged CMS to conduct a pilot program to field test the measures used in the EHR incentive program and determine the ability of vendors and hospitals to accurately capture the necessary data in the required formats to generate valid, reliable and comparable quality measures directly from the EHR. We also have asked CMS to establish a clear process to manage updates to specifications for quality measures, and a mechanism through which vendors and providers can provide feedback on problematic or unclear measures.

The following chart illustrates the process that CMS and the quality measurement field should follow to develop automated clinical quality measures that will result in comparable data across hospitals. It emphasizes the need to consider up front whether a measure can be automated or requires a level of clinical judgment that makes automation difficult; the need for field testing to determine whether the needed data are in the EHR and vendor products can capture it; the need for validation that vendor products can, in fact, accurately calculate the measures based on test data sets; and the need for a structured feedback and update process.



The AHA understands the desire of the Workgroup to look toward inclusion of additional CQMs in future stages of meaningful use, with a growing emphasis on outcome measures. However, no additional measures should be contemplated until the current issues are resolved. Any new measures should only be included after an extensive effort to field test any and all e-measures that are proposed for future data collection. It is clear from the experience in Stage 1 that many steps in addition to the existence of e-specifications are needed for automated quality measurement to occur.

We also look forward to engaging HHS in discussions over how best to align quality measures across various Medicare programs. Recent changes in law and regulation have put additional focus on quality measures and linked performance to hospital payments. Hospitals currently report more than 50 measures as part of the inpatient quality reporting program, in addition to the 15 meaningful use measures. New policies will tie payments to performance through value-based purchasing, penalties for high rates of readmissions, and penalties for hospital acquired conditions such as falls. Quality metrics will also be built into accountable care, bundling, and other health reform initiatives. In looking across current and proposed requirements for these multiple programs, the AHA has counted more than 150 measures that will be reported in the coming years. Aligning measures across these various program will

take careful attention to ensure accuracy of data collection (whether manual or automated) and to consider how duplicating measures across programs could affect payments.

Given the complexity of the current reporting picture, it is hard to envision the introduction of CQMs that require data to be assembled across multiple settings or over time – such as patient-reported measures, delta measures that compare an indicator at time one vs time two, or those that require linkages between clinical and claims data. While we encourage HHS to invest in research on how such measures might be specified and used, it is premature to include them in meaningful use. In the words of one AHA member, "this is going to be a data collection "nightmare", especially because it is difficult to query and capture accurate numerators and denominators that would be consistent among all of these data integration partners."

ADMINISTRATIVE CHALLENGES

In addition to the challenges associated with meeting meaningful use requirements, the establishment of a new program has been accompanied by administrative challenges that stem from both the complexity of the requirements and the operational issues associated with registration and attestation.

The Medicare and Medicaid EHR Incentive Programs include large numbers of very specific requirements promulgated through regulation and sub-regulatory guidance. To date, CMS has issued at least 175 FAQs, while ONC has issued 23. Healthcare providers and the vendors that serve them are often challenged in fully understanding and staying abreast of regulatory requirements for Certification and Meaningful Use requirements. Although sub-regulatory guidance may be available through town hall meetings, webinars, and in various locations on the ONC and CMS websites, the information is sometimes conflicting within and between sites, can be hard to find, and may be difficult to understand. Given the increased attention of HHS to compliance issues, providers are cautious about moving forward unless they are certain they understand the rules and know they are in compliance.

In addition, CMS has sought to establish the registration and attestation process under extremely challenging timeframes. However, these processes are very complex, and raise unexpected issues. While some providers have found the registration process simple, others have encountered challenges that take weeks or even months to resolve. Providers are handed off to multiple offices, and spend undue effort trying to resolve data concerns. For hospitals and group practices supporting multiple physicians, CMS has established a "proxy" system for registration and attestation that, while greatly appreciated, continues to pose significant administrative hurdles. CMS is aware of these issues, which, until resolved, add to the challenge of meeting meaningful use. At the end of August, 23 states had initiated their Medicaid EHR incentive programs. Waiting for and understanding the state-level requirements and operational approaches have also been a challenge for providers.

LOOKING AHEAD

Before looking ahead to Stage 3, we would ask the meaningful use workgroup to recommend that ONC and CMS invest resources in a comprehensive, external evaluation of experience in

Stage 1. This evaluation should include both those who have and have not succeeded in meeting meaningful use. It should also specifically look at the circumstances of small, rural, and safety net providers, as well as physician specialties.

In addition, the Workgroup should carefully consider the evidence on benefits, costs, and feasibility of any new proposed objective. To support that analysis, the Workgroup may want to consider asking HHS to invest in operations research to better understand what works in practice. As EHR adoption grows and the benefits of sharing data increase, clinicians and patients will demand greater ability to access information, making regulatory requirements unnecessary.

As future recommendations are considered, the other obligations faced by providers must be understood. These include moving to new administrative transactions standards (5010) and operating rules by January 2012; a new ICD-10 coding standard by Oct. 1, 2013; and changes to support myriad reporting requirements and information transfers for the current quality reporting program under Medicare, as well as numerous initiatives introduced through the Affordable Care Act (ACA), such as reductions in readmission, value-based purchasing, accountable care organizations and bundling of payments. Our members are reporting that the costs and complexity of ICD-10 implementation rival, if not outweigh, those of meaningful use. Careful staging of these new federal requirements will be needed to ensure successful adoption.

Care teams and care plans. The Workgroup asked for specific feedback on the concepts of care teams and care plans. These are important concepts that need additional development before becoming requirements. In the context of inpatient hospital care, the care team and care plan will vary considerably with patient circumstances. Defining the content and use of these tools will be context dependent. For example, a patient undergoing treatment for cancer may have a treatment plan listing chemotherapy and radiation treatments, while a patient with a hip replacement may have a treatment plan listing needed therapy and follow-up visits. A child treated from a broken arm will not have an existing care plan. For patients receiving home health benefits, Medicare requires a care plan that has been approved by a physician.

As the Workgroup thinks through these issues, it may be appropriate to look first at the medical home and care coordination activities underway at the Centers for Medicare and Medicaid Innovation, before developing meaningful use requirements that apply to all providers. Maintaining an electronic list of care team members should likely be the responsibility of the physician who is coordinating a patient's overall care across settings, not each provider in each setting. For example, hospital EHRs generally record the list of treating physicians for a specific stay or ED visit, as well as the primary care provider, if named by the patient. They do not include all specialists providing ambulatory care. Similarly, maintaining an electronic longitudinal care plan is the responsibility of the physician who is coordinating the patient's care (generally, but not always, a primary care provider). Providers along the care continuum should have access to care teams and longitudinal care plans, when clinically appropriate, but should not each be responsible for maintaining them unless they are playing the coordinating role.

***Accountable care*.** The Workgroup asked specifically about objectives in MU Stage 3 that might help providers achieve the goals of accountable care. The concept of accountable care is still under development, and may change significantly as CMS continues its rule-making process. The information systems needed to support accountable care are likely to vary with the partners and services included in a specific accountable care organization. Therefore, it is premature to speculate on meaningful use objectives to support accountable care beyond supporting expanded abilities to exchange care summary documents and information needed to inform medication reconciliation across settings of care and among multiple providers caring for the same patient. Development of infrastructure to support that information exchange will also be needed.

In closing, I would like to thank the Workgroup for its continued efforts to learn about the current experience of hospitals implementing meaningful use in practice. The AHA stands ready to assist the Workgroup and HHS in gathering additional experiences. America's hospitals will continue their concerted efforts to implement technologies that support the best possible care, engaged and informed patients, and improved population health.

Attachment A

AMERICAN HOSPITAL ASSOCIATION
TRACKING SURVEY ON HOSPITAL USE OF IT
SUMMER 2010

The AHA was able to use data from its IT Supplement to the AHA Annual Survey collected in summer 2010 to estimate the share of hospitals that could meet selected meaningful use objectives. Specifically, the survey includes data that matches or approximates the following 12 objectives of meaningful use Stage 1:

- Gender, race, ethnicity, date of birth
- Patient problem lists
- Patient medication lists
- Vital signs
- Smoking status
- Comprehensive list of allergies
- CPOE for medications
- Clinical decision support -- guidelines, reminders, lab interaction alerts, dosing support
- Clinical decision support -- drug allergy alerts, drug-drug interaction alerts
- Automatically generate HQA/PQRI data from HER
- Provide patients with electronic copy of record
- Provide patients with electronic copy of discharge instructions

Based on the data, the AHA estimated the share of hospitals that could meet none of the mapped objectives, some of them, or all of them. It is important to note that the ability to meet all 12 mapped measures is a lower bar than Stage 1, which requires hospitals to meet 19 objectives, as well as certification requirements. The following table provides the results:

Number of Objectives Met:	**Share of Hospitals**
None	12.0%
1 to 3 Objectives	25.1%
4 to 6 Objectives	20.5%
7 to 9 Objectives	25.5%
10 to 11 Objectves	14.1%
All 12 Measures	2.7%
Total:	**100.0%**

Sample size: 3,140 US community hospitals
Source: Health Forum, AHA Annual Survey Information Technology Supplement
Data collected in summer 2010

Attachment B

AMERICAN HOSPITAL ASSOCIATION SURVEY ON HOSPITAL READINESS TO MEET MEANINGFUL USE JANUARY 2011

To provide a snapshot of the hospital field's current capacity to meet the meaningful use requirements, the AHA conducted a survey of all community hospitals. Data were collected between January 6 and January 20, 2011 with 1,297 hospitals (about 25 percent of all hospitals) responding to the survey. Respondents were broadly representative of the universe of community hospitals.

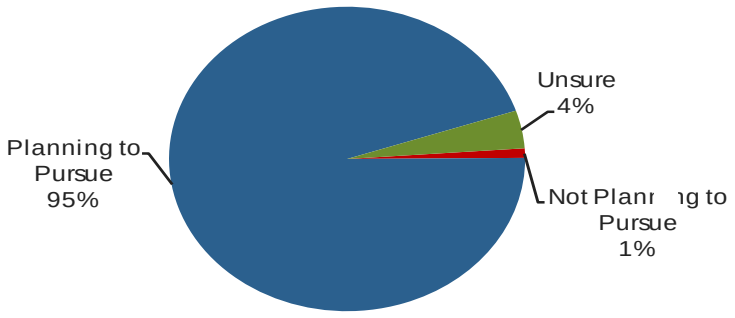
The survey found great commitment to the incentive program, with 95 percent of respondents reporting that they plan to pursue meaningful use (Chart 1). However, the survey found that only 1.6 percent of hospitals (21 of the survey respondents) can meet the meaningful use and certification requirements today. Only 0.8 percent of rural hospitals (7 of the survey respondents) could do so (Chart 2). **Clearly, the Stage 1 requirements are challenging; raising the bar significantly in Stage 2 risks limiting the success of the EHR incentive programs.**

The survey also includes information on the extent to which hospitals have met the specific requirements for meaningful use. To receive incentive payments under Medicare, a hospital must meet all of the following regulatory requirements set out by CMS:

- Possess an EHR certified against each of the 24 required objectives (or functions);
- meet specific performance requirements for each of the 14 core objectives, and at least five of the menu set objectives (to include at least one public health objective); and
- report on each of 15 quality measures successfully generated directly from the EHR.

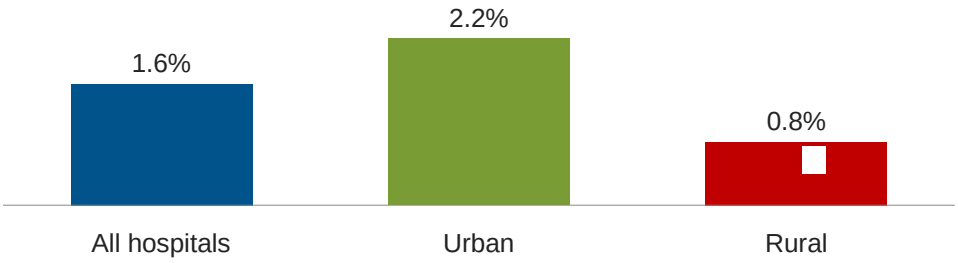
Failure to meet any one of these requirements will disallow a hospital from receiving incentives. Therefore, to assess current ability to meet meaningful use, the survey asked hospitals to separately identify whether their EHRs were certified for each objective and whether the hospital could meet the objective, regardless of certification.

Chart 1. 95 percent of hospitals report that they plan to pursue qualifying as meaningful users



Source: AHA analysis of survey data from 1,297 non-federal, short-term acute care hospitals collected in January 2011.

Chart 2. 1.6 percent of hospitals report that they can meet requirements for meaningful use and have a certified EHR today



Source: AHA analysis of survey data from 1,297 non-federal, short-term acute care hospitals collected in January 2011. Hospitals were asked to separately identify whether their EHRs were certified for each objective and whether the hospital could meet the objective, regardless of certification. To meet meaningful use, a hospital must (1) possess an EHR certified against all 24 objectives of meaningful use, (2) meet at least 19 of the objectives, and (3) successfully report quality measures generated directly from the EHR. Nationally, there are approximately 2,800 urban hospitals and 2,300 rural hospitals.

Hospitals are making progress on meeting specific objectives, but when asked if they can meet all of the 14 core objectives and an additional 5 menu set objectives, including at least one public health measure, few can put it all together to meet the meaningful use requirement. In addition, while hospitals have made progress in using their EHRs to meet the meaningful use objectives, the percentage using certified EHR technology to do so is lower. For example, while 61 percent of hospitals reported implementing drug-drug and drug-allergy checks, only 43 percent of hospitals reported both having an EHR certified for this function and successfully enabling it (Chart 3).

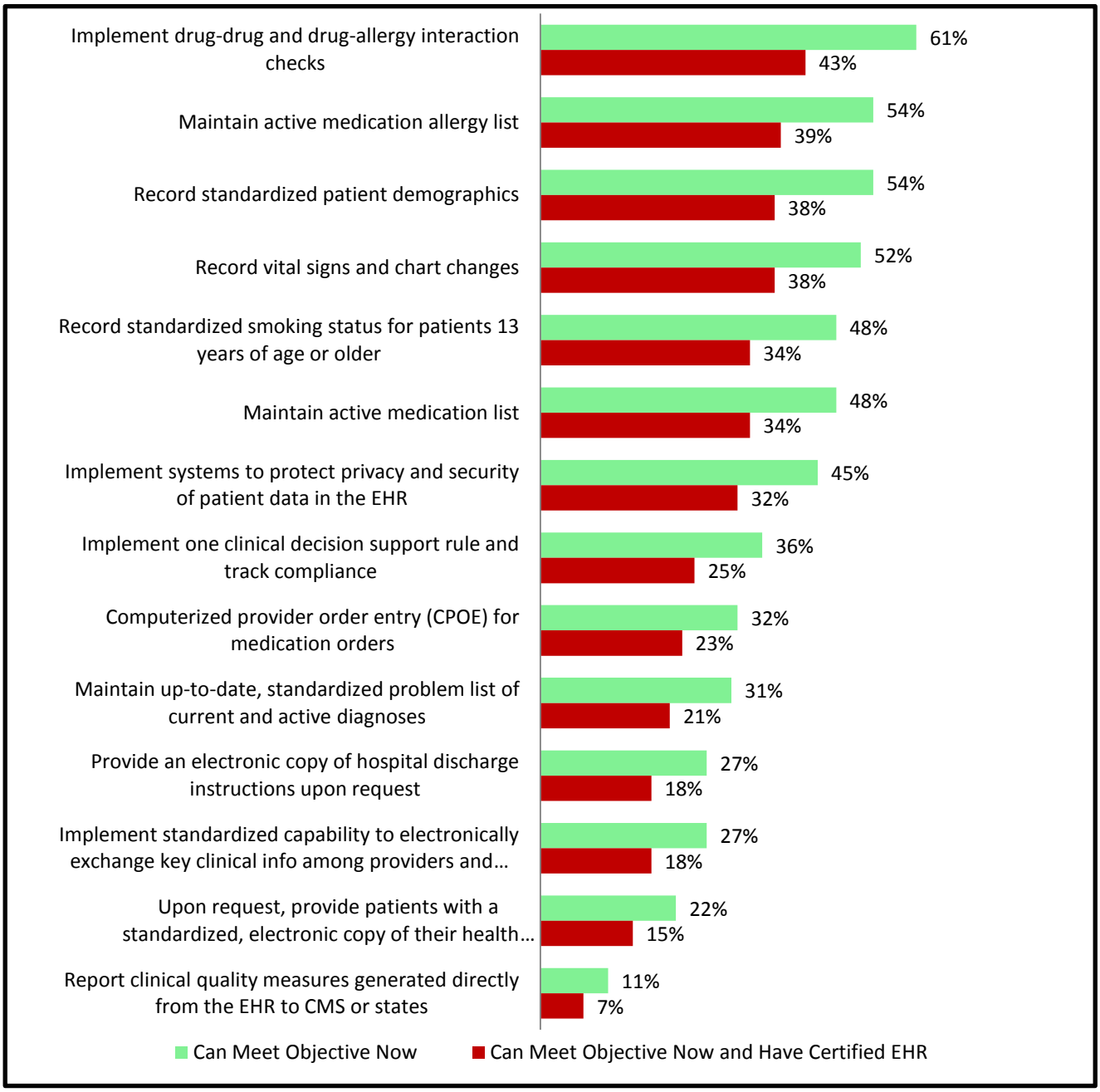
Installing and upgrading systems is a time-consuming process, and the certification requirements mean that all hospitals must either upgrade or install new systems before they can meet the meaningful use regulations. In addition, vendors' capacity to work with hospitals is stretched, given the current high demand generated by the incentive programs. Hospitals and vendors face significant shortages of trained IT and clinical informatics staff.

In looking at the 14 core objectives, hospitals reported the most progress in using their EHRs to ensure medication safety – for example, implementing drug-drug and drug-allergy checks – and maintaining active medication and medication allergy lists. The majority of hospitals also reported using their EHRs to record demographic and clinical data. Hospitals' ability to meet each core objective using certified EHR technology was lower (Chart 4).

Several of the core objectives pose significant challenges to hospitals. Most of these objectives center on reporting of information, such as quality measures or electronic copies of records, rather than using technology to improve care. Hospitals have not generally used their EHRs for this purpose and will need time to transition (Chart 3).

According to the survey respondents, the core measure requiring hospitals to report 15 quality measures generated directly from the EHR is among the most troublesome to meet. Hospitals have a strong commitment to quality reporting, and 97 percent of hospitals currently report data on more than 50 different quality measures to CMS, with data on 43 measures then made available to the public. EHRs have the potential to reduce the burden of quality reporting by automating the process. However, EHR products have not historically had the technical capacity for the quality reporting currently required for meaningful use; vendors have only recently built this function into their products, with very little testing. In fact, the certification process does not even check to see if the calculations are performed accurately. Thus, it will take time and effort for hospitals to understand whether the EHRs they deploy can actually generate valid quality metrics.

Chart 3. Percent of hospitals reporting they can meet each meaningful use **core** objective versus the percent reporting they both have certified EHR technology and can meet each objective



Source: AHA analysis of survey data from 1,297 non-federal, short-term acute care hospitals collected in January 2011. Hospitals were asked to separately identify whether their EHRs were certified for each objective and whether the hospital could meet the objective.

Hospitals report variable progress in meeting the menu set requirements. As with the core objectives, hospitals are more likely to be able to meet the performance standards for meaningful use than to have upgraded or replaced their systems to possess certified EHR

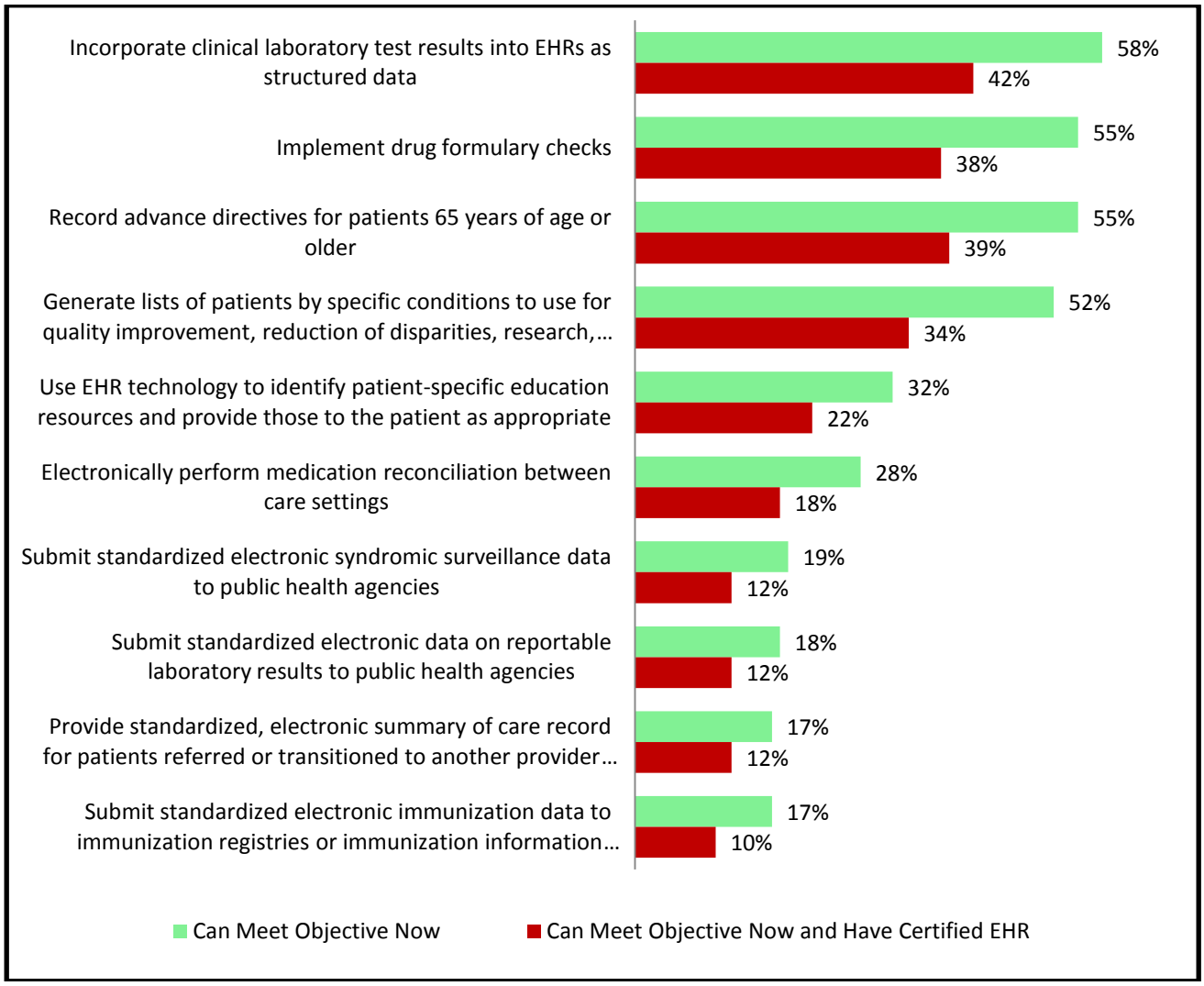
technology. For example, while 55 percent of hospitals reported implementing drug formulary checks, only 38 percent of hospitals reported doing so with an EHR certified for that functionality.

Among the menu set objectives, hospitals reported the greatest progress on those objectives tied to the clinical care process, such as incorporating lab results as structured data, implementing drug formulary checks, and recording whether patients 65 and older have advanced directives.

The menu set objectives posing the greatest challenge to hospitals generally focused on sending data to others using the vocabulary and data transmission standards specified by CMS, including all three of the public health reporting objectives. Note that to meet the meaningful use requirements, hospitals must successfully meet at least one of the public health objectives.

Hospitals engage broadly in public health reporting. However, the meaningful use requirements include use of specific vocabulary and data transmission standards for submitting data that are not in common use today, and were not generally supported by EHR vendors. Indeed, most public health departments are not yet able to receive data in the required formats. Thus, as with quality reporting, meaningful use is setting out new ways to share data that hospitals are, in many cases, already providing through other means. The transition to these new approaches will take time and effort. And, in the case of public health reporting, it will take advances in the IT systems of public health departments, not just hospitals.

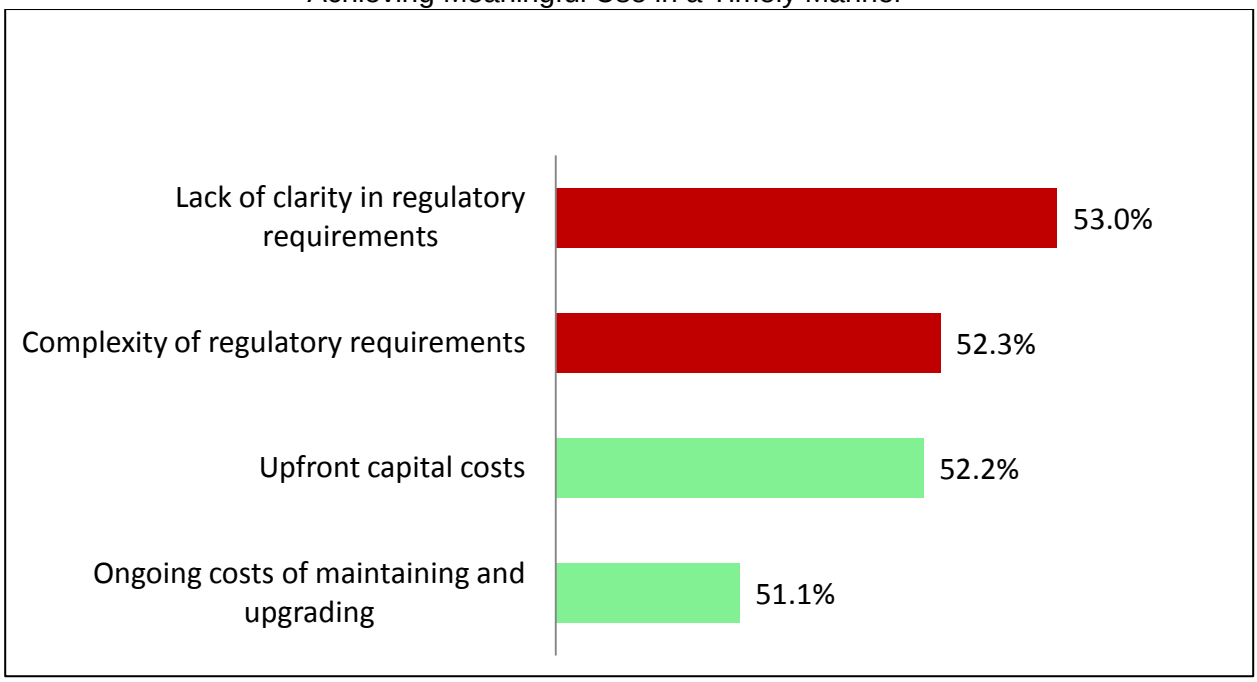
Chart 4. Percent of hospitals reporting they can meet each meaningful use **menu set** objective versus the percent reporting they both have certified EHR technology and can meet each objective



Source: AHA analysis of survey data from 1,297 non-federal, short-term acute care hospitals collected in January 2011. Hospitals were asked to separately identify whether their EHRs were certified for each objective and whether the hospital could meet the objective.

The survey also asked hospitals about barriers to achieving meaningful use in a timely manner. The majority of respondents indicated that lack of clarity (53 percent) and complexity (52.3 percent) of the regulatory requirements were barriers. These issues were cited slightly more often than costs, which were also seen as a barrier by the majority of respondents (Chart 5).

Chart 5. Percent of Hospitals Identifying Complexity of Rules and Costs as Barriers to Achieving Meaningful Use in a Timely Manner



Source: AHA analysis of survey data from 1,297 non-federal, short-term acute care hospitals collected in January 2011.