Statement

of the

American Hospital Association

before the

United States Senate Committee on Finance

"Health Information Technology: Using it to Improve Care"

July 24, 2013

On behalf of our nearly 5,000 member hospitals, health systems and other health care organizations, and our 43,000 individual members, the American Hospital Association (AHA) appreciates the opportunity to comment for the record as part of the Committee's look at the use of information technology (IT) to improve health care. Our statement is offered in support of a safe, orderly transition to widespread use of health IT that supports hospitals' efforts to improve the safety and quality of care, better engage patients and reduce unnecessary hospital expenditures.

In the *American Recovery and Reinvestment Act* (ARRA), Congress provided much-needed financial support for the adoption of electronic health records (EHRs), followed by penalties for those who fail to meet requirements, through the Medicare and Medicare EHR Incentive Programs. The AHA believes that Congress established these programs in large measure to realize the quality benefits of health IT and allow for more efficient generation and reporting of quality measures for use in improvement efforts and payment policies. The incentives also were meant to ensure that all providers had the resources needed to adopt EHRs, regardless of their size or location.

We believe that the EHR incentive programs will have the best outcome if current regulations are realigned to ensure a safe, orderly transition to the next phase of the program that leaves no one behind. Hospitals are working hard to adopt EHRs, and many of them have been able to benefit from the incentives. However, the majority of hospitals have yet to meet the exceedingly complex federal requirements for "meaningful use" of EHRs. If they cannot, the needed incentives will quickly turn into financial penalties. In particular, small and rural hospitals lag behind their larger and urban counterparts. Nevertheless, the Department of Health and Human Services (HHS) is maintaining an aggressive timeline and will increase requirements on providers on October 1, when the program moves from Stage 1 to Stage 2. **The AHA believes that HHS can and should take steps to expand the meaningful use timelines and introduce more flexibility into the program. Our recommendations would still allow Stage 2 to start in 2014,** but the transition would be more safe and orderly.

USING HEALTH IT TO IMPROVE CARE

America's hospitals share the goals of Congress to realize the promise of health IT. They are making tremendous investments in purchasing and implementing EHRs and other IT systems, hiring new staff to guide IT deployment, and creating new structures for care delivery that leverage health IT.

EHRs can improve health care by making the right information available to the right person at the right time. For example, order-entry systems that include clinical decision support tools alert clinicians to potential adverse drug interactions, thereby preventing patient harm. The electronic sharing of a patient's hospital record with a primary care physician can help guide a patient's recovery from an acute event and avoid an unnecessary return to the hospital. Through a concerted focus on quality improvement, we have seen significant gains, including a marked reduction in readmissions in recent years. Widespread deployment of health IT can help build on those gains.

Hospitals have begun to use EHRs and other health IT to support their quality improvement, patient engagement, and community care goals, and want to continue on that path. However, they must have reliable systems that are available around the clock, every day of the year. The practical realities of implementing complicated technology inside complex organizations, demand a considered approach with patient safety as the top priority.
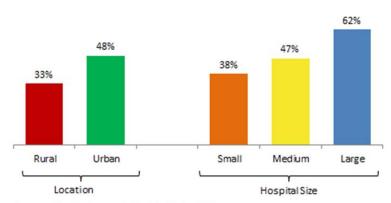
UNEVEN PROGRESS ON ADOPTION OF EHRS

The nation's hospitals are working hard to adopt EHRs. For example, data from the Health IT supplement to the AHA Annual Survey indicate that the share of hospitals that have at least a "basic EHR" increased from about 9 percent in 2008 to 44 percent in 2012. That impressive progress was made possible by the significant investment and sustained effort of the technical staff and clinicians working in hospitals.

Despite these gains, the digital divide remains a significant issue. Implementation challenges remain for many hospitals, particularly small and rural hospitals. These groups also have made progress and should not be penalized for not being further along. According to a recent article in the journal *Health Affairs* (co-authored by a team from the Office of the National Coordinator for Health IT, or ONC, the AHA and academia), "large urban hospitals continue to outpace rural and nonteaching hospitals in adopting EHR systems," with only 44 percent of all hospitals – but only one-third of rural hospitals – having "at least a basic" EHR. The trend by size of hospital is also notable, with large hospitals much further ahead in EHR adoption (62 percent) than small and medium-sized hospitals (46 and 38 percent, respectively).

Hospital Size and Location Drive the Digital Divide in Adoption of EHRs

Share of hospitals with "at least a basic" EHR by size and location

Rural 33% Urban 48% Small 38% Medium 47% Large 62%

Location   Hospital Size

Source: DesRoches, et al. Health Affairs. 2013.

The study authors conclude that policymakers should "focus on hospitals that are still trailing behind, especially small and rural institutions. This will be especially important as stage 2 meaningful-use criteria become the rule, and positive incentives are replaced by penalties … As the penalty phase draws nearer, efforts to assist these hospitals will become even more important because the decrease in their revenue could further exacerbate barriers to their adoption of EHR systems" (DesRoches, et. al., Health Affairs 32:8; available at http://content.healthaffairs.org/content/early/2013/06/27/hlthaff.2013.0323).

Congress established the Regional Extension Center (REC) program to help primary care physicians and rural hospitals adopt EHRs and meet the meaningful use requirements of the EHR incentive programs. Through the RECs, ONC has provided technical assistance, but generally chose to focus available resources on physicians over hospitals (funding is limited to $18,000 per hospital). These efforts are helpful, but may not be sufficient to overcome the barriers. A May 2013 report commissioned by ONC indicates that while 72 percent of critical access hospitals (CAHs) have signed up to work with a REC, only 18 percent of them have demonstrated meaningful use. Among the other small rural hospitals signed up with a REC, 27 percent have demonstrated meaningful use, according to the ONC study (NORC at the University of Chicago. Understanding the Impact of Health IT in Underserved Communities and Those with Health Disparities, available at www.healthit.gov/sites/default/files/hit_disparities_report_050713.pdf).

THE MEDICARE AND MEDICAID EHR INCENTIVE PROGRAMS

The Medicare and Medicaid incentive payments offer much-needed financial support to health care providers. However, to receive incentives, providers must meet the requirements of meaningful use established by HHS. These requirements increase over time, beginning with Stage 1 and quickly moving to Stage 2.

The AHA believes that the EHR incentive programs will have the best outcome if current regulations are realigned to ensure a safe, orderly transition to Stage 2 that leaves no one behind. We are concerned that the proscriptive requirements of meaningful use and rushed regulatory timelines pose significant challenges that detract from quality improvement goals by focusing attention on meeting complicated regulatory metrics. We also are concerned that these policies could widen, rather than narrow, the existing digital divide, affecting not only the hospitals in underserved communities, but also their patients.

Progress to date. The vast majority of hospitals are participating in the incentive programs. Most hospitals, however, are still working to meet the exceedingly complex requirements for Stage 1 of meaningful use. According to an AHA analysis of hospital-specific data from the Centers for Medicare & Medicaid Services (CMS), only 37 percent of all hospitals met Stage 1 meaningful use and received incentive payments under the Medicare EHR Incentive Program for fiscal year (FY) 2012 – the second year of the program. As with the data on adoption of EHRs, smaller and rural hospitals are further behind in successfully meeting meaningful use and receiving Medicare EHR incentive payments. A greater share of hospitals has received a first year payment under Medicaid, which supports adoption, implementation and upgrading of EHRs, but does not require meeting meaningful use. Meeting meaningful use is challenging and is becoming significantly more so.

Regulatory requirements make 2014 a very challenging year. HHS has laid out a set of regulatory policies that will put tremendous strain on EHR vendors and health care providers in the coming year, without clear benefit for care improvement:

- **Vendors must support a nation-wide switch of EHRs.** At this time, we are less than three months away from the start of meaningful use Stage 2. For hospitals, Stage 2 begins on Oct. 1,

2013, the first day of federal FY 2014. For physicians, the start is Jan. 1, 2014, the beginning of the calendar year (CY). Current policy requires all hospitals and physicians to upgrade to the 2014 Edition EHR during FY/CY 2014, whether they are beginning participation in the EHR incentive program in 2014 or are among the trailblazers who entered the program when it first began three years ago. Even a hospital or physician who just installed a certified EHR in 2013 will need to replace it in 2014. This means that the EHR vendors will need to support every single eligible hospital and physician to install or replace their EHRs – that represents more than 500,000 hospitals and physicians, as well as millions of other clinicians and staff that work with them.

- **Providers face "double-jeopardy" with meaningful use**. Hospitals that have not successfully met all of the Stage 1 meaningful use requirements by July 1, 2014 will not only miss out on most of the incentives, they will be subject to financial penalties the next year (CAHs have until 2015 to meet meaningful use and avoid a penalty). Similarly, hospitals that have met Stage 1 will miss incentives and be subject to future penalties if they cannot successfully meet either a higher bar for Stage 1 requirements or the new Stage 2 requirements. Any provider who cannot successfully upgrade to the 2014 Edition EHR will face the same double-jeopardy, even if the cause is limited vendor capacity.

- **Vendors and providers also must manage the switch to ICD-10.** The deadline for transition to ICD-10 is Oct. 1, 2014. Thus, at the same time vendors are supporting a nation-wide switch of EHRs and providers are working to meet meaningful use, all parties will also be upgrading their IT systems to accommodate ICD-10. A recent AHA survey found that the vast majority of hospitals are on track for the transition to ICD-10, but see meaningful use as the single most challenging competing priority (cited by 52 percent as the top competing priority, and by 92 percent as one of the top three).

Vendors may not be ready for 2014 changes. The mandate to use a certified EHR means that health care providers are dependent on their vendors. The mandate to simultaneously upgrade or bring on over 500,000 providers to the 2014 Edition certified EHR unnecessarily creates market pressures that will stretch vendor technical and workforce resources and drive up technology and consulting prices.

As of July 17, the official federal list of certified vendor products showed only nine complete 2014 Edition certified EHRs for the inpatient setting, produced by only six vendors. By comparison, the list shows 313 complete 2011 Edition certified inpatient EHRs. Most vendors are still in the process of certifying their 2014 Edition EHRs only two months before hospitals are meant to be using them.

AHA members report that their vendors are delaying the delivery of scheduled updates and engaging in aggressive pricing, such as unbundling needed software to sell separately. Some have learned that their vendor will not be upgrading their currently certified EHRs to meet the "2014 Edition" criteria. In addition, our members are concerned that the new capabilities in the 2014 Edition EHRs, such as patient portals and transition of care documents, have not been extensively tested, and may well be immature. Providers who have not yet installed an EHR – mostly small and rural hospitals – will be at the end of the vendor queues and may not receive delivery for another 12 to 18 months. Of course, receiving an upgrade is only the first step in making the transition to the 2014 Edition EHR and meeting the meaningful use requirements. It is reasonable to expect that a provider will need up to a year after receiving a technology upgrade to make all of the necessary changes to meet the program requirements.

The compressed timeline also puts providers in a position of rushing to implement, creating conditions that prevent them from optimizing use of the systems and possibly introducing risks to patient safety. Providers' use of EHRs is hampered by the shortage of trained health IT workers. Furthermore, some

providers are reporting significant challenges with the usability of their current certified EHRs, a situation that could well be exacerbated as vendors channel their efforts to managing a nation-wide transition to the 2014 Edition. Poor usability can negatively affect use of EHRs and patient care. If the transition is too compressed and costly, hospitals may be forced to drop out of the meaningful use program, even though they want to use their EHRs to improve quality.

Hospitals believe Stage 2 will be extremely challenging and costly. For those that have already met Stage 1, Stage 2 begins on Oct. 1, 2013 and raises the bar considerably. Peer-reviewed literature shows that **only 5.1 percent of all hospitals, and only 1 percent of rural hospitals, can currently meet a proxy for Stage 2** (DesRoches, et al 2013).

The Stage 2 rules are tremendously complex and include entirely new requirements – such as sending summary of care documents – and expand on requirements that were a significant challenge in Stage 1 – such as public health reporting or reporting electronic quality measures. Many of the objectives make provider performance contingent on the actions of others (such as health information exchanges, patients and public health departments), and assume a level of interoperability and information exchange infrastructure that is still in its infancy. Moreover, Stage 2 requires the adoption and use of many new and unfamiliar data standards, such as the codes for entering patient problems (SNOMED). Finally, many of the objectives bundle together multiple requirements, such as using order-entry systems for three types of orders – medications, laboratory tests and radiology tests.

A recent AHA survey of about 900 hospitals asked those who had already achieved Stage 1 to rate the difficulty of achieving each Stage 2 objective. The majority of the responding hospitals considered half of the core measures in Stage 2 to be difficult to not possible to achieve. The objectives that most hospitals considered to be difficult were establishing a patient portal that met federal requirements (86 percent of hospitals), sending summary of care documents (72 percent), submitting clinical quality measures (66 percent), and meeting the three public health reporting requirements (50 to 55 percent). More than half of hospitals also expect Stage 2 to be more expensive than Stage 1.

All-or-nothing approach is unfair. On top of this complexity, HHS has established an "all-or-nothing approach" in which failure to meet any individual part of an objective, or missing a threshold by a small amount, leads to overall failure in meeting meaningful use. For example, a provider that successfully meets the thresholds for order-entry of medications and laboratory tests, but misses the threshold for radiology tests by one percentage point will not meet meaningful use. In a complex program with a high level of difficulty, the "all-or-nothing" approach seems overly burdensome and unfair, particularly when any provider failing to successfully transition to Stage 2 will not only miss an incentive payment but also incur a future payment penalty.

Using EHRs to report quality measures. A major positive benefit of the movement toward adoption of EHRs should be greater ease in calculating and reporting quality of care measures for hospitals to use in their performance improvement efforts, report to federal and other payment programs, and share with consumers. Hospitals are eager for this transition and for real-time access to information from their EHRs to support quality improvements. Unfortunately, for Stage 1 of meaningful use, a rushed policy process and immature technology led to time-consuming efforts by hospitals to generate quality data in compliance with the instructions they were given, but in the end, they were unable to use the technology to generate accurate data. The AHA commissioned a case study of the Stage 1 experience in four hospitals with advanced EHRs (data brief attached). In summary, their experience took away from other strategic priorities and reduced clinicians' support for using EHRs to generate quality data. Capturing the measure data significantly added to clinicians' workload with no perceived benefit to patient care. The authors recommended that policymakers "slow the pace of the transition to electronic quality reporting with fewer, but better-tested measures, starting with Stage 2."

Information exchange. The establishment of an efficient and reliable mechanism for health information exchange will allow relevant data to follow across patient care settings (including home) to support the best possible care. It also will support providers in meeting many of the meaningful use objectives, such as those for public health and transitions of care. Unfortunately, the level of interoperability in EHRs is still evolving, while the existing information exchange networks are still maturing in some areas, and not yet available in others.

The nation still needs the infrastructure to support health information exchange that is based on national standards and includes such things as provider directories, efficient and mature exchange networks, and support for providers to learn how to use the standards to share data. Efforts so far are encouraging, but they are not sufficient. Additional work is needed in this area, starting with a clear strategic plan that lays out a realistic timeline and accounts for the resources and supports needed by providers to share data and be part of exchanges.

Once all providers have access to networks that allow them to efficiently share data electronically, as a streamlined part of the care process, other incentives will lead them to share data to support clinical care. New care structures, such as accountable care organizations, create a need for data sharing if providers want to meet their performance goals. Existing Medicare payment policies such as payment penalties for high readmission rates give an incentive for hospitals to share data and better coordinate care with physicians and nursing homes after a patient leaves the hospital.

HHS HAS AUTHORITY TO EXPAND THE MEANINGFUL USE TIMELINES AND CREATE MORE FLEXIBILITY

When Congress established the Medicare and Medicaid EHR Incentive Programs, it delegated to the HHS Secretary responsibility for setting the specific requirements, including the pace of the program, as well as the scope and complexity of the requirements.

HHS can and should modify its regulatory timelines and allow more flexibility in the Stage 2 requirements. The Secretary could take specific, common-sense steps to alleviate the pressures noted above. If done correctly, these changes could keep the program moving forward on a more reasonable pathway, and allow all providers to participate. Stage 2 would still start in 2014, but the transition would be more orderly. For example, the Secretary could:

1. **Allow providers at Stage 1 to meet the requirements using either the 2011 certified Edition EHR, or the 2014 certified Edition EHR.** This change would allow more time for vendors to complete their upgrades, thereby allowing advanced providers to move ahead to Stage 2, while holding harmless those remaining or entering the program at Stage 1. It also would avoid asking providers that have just implemented an EHR to replace it in the next year, giving them more time to optimize use and focus on quality goals.

2. **Extend each stage of meaningful use to no less than three years for all providers.** HHS gave the first wave of hospitals and physicians to enter the program in 2011 three years at Stage 1. We believe all providers should have at least that much time at each stage (rather than the current two years). This change would recognize that vendors need time to develop usable and safe upgrades, and that providers need time to safely implement systems and optimize their use before undertaking yet another upgrade. It would set the program on a more realistic timeline.

3. **Establish a 90-day reporting period for the first year of each new stage of meaningful use for all providers.** This change would allow upgrades to be spread out over time, rather than being clustered on certain dates.

4. **Offer greater flexibility to providers in meeting Stage 2**, such as allowing providers to build up to full Stage 2 compliance over the three years and simplifying complex measures. This change would ameliorate the "all-or-nothing" problem, and recognize that the level of change in Stage 2 will take time to accomplish.

5. **Redirect the electronic clinical quality reporting requirements to focus on a small set of well-tested measures supported by a mature policy infrastructure that can guide valid and feasible measure development, testing and implementation.** These changes would allow hospitals to efficiently generate electronic measures that are accurate. The end goal is good data to support quality improvement efforts and payment programs.

These changes would position the program for greater success and also begin to address the digital divide. In addition, HHS should review the meaningful use requirements to ensure that they are all relevant to care provided in rural hospitals, and particularly CAHs. Additional policies may be needed to help small and rural hospitals, such as targeted technical assistance, help with managing workforce shortages, and additional financial support through grant and loan programs.

CONCLUSION

As we look across the health care goals the nation seeks to achieve – such as improving the safety and quality of care, decreasing disparities in care, and slowing the growth in spending – health IT can be an important tool. Unfortunately, the current regulatory structure for the Medicare EHR Incentive Program may distract health care providers from those bigger goals by requiring them to rush implementations of immature EHR technology and focus on meaningful use metrics, rather than care improvements. It also may have the unintended consequence of further exacerbating the digital divide by subjecting small and rural providers to penalties, rather than providing them with support to successfully adopt EHRs and bring the benefits of health IT adoption to their patients and communities.

The HHS Secretary has the ability to extend the meaningful use timelines and introduce more flexibility in the program. Doing so would go a long way toward ensuring that we collectively achieve a safe, orderly transition to Stage 2 that leaves no one behind.

America's hospitals have adopted electronic health records (EHRs) to improve clinical care and patient health outcomes, believing the technology would support automated clinical quality reporting, empower clinicians to continuously improve the efficiency and effectiveness of care, and assist their local quality improvement initiatives. Based on the experience of four hospitals in a case study commissioned by the American Hospital Association, automated quality reporting does not yet deliver on the promise of feasibly generating valid and reliable measures or reducing the reporting burden placed on hospitals. This study describes the experience and impact of electronic clinical quality measure (eCQM) implementation in four hospitals. Each has significant experience with EHRs that predates the meaningful use program, and each uses a different EHR vendor. Specifically, the report identifies challenges hospitals face in four areas:

- **Program Design:** The timeline for implementing eCQMs is unrealistic, emphasizing regulatory requirements in advance of adequate development, vetting and testing of eCQM specifications for feasibility and clinical validity.

- **Technology:** eCQM tools were difficult to implement, did not work as expected, could not draw relevant data from other systems and could not efficiently generate accurate measure results.

- **Clinical:** eCQM implementation added to clinician workload without perceived benefit to patient care due to poor alignment with clinical workflow, and extensive validation efforts that were not successful.

- **Strategic:** Hospitals expended excessive effort on the eCQMs that negatively affected other strategic priorities.

Specific policy changes are needed to redirect the electronic clinical quality reporting requirements to focus on a small set of well-tested measures supported by a mature policy infrastructure that can guide valid and feasible measure development, testing and implementation:

1. Slow the pace of the transition to electronic quality reporting with fewer, but better-tested measures, starting with Stage 2 meaningful use.

2. Make EHRs and eCQM reporting tools more flexible so that data capture can be aligned with workflow.

3. Improve health information technology (IT) standards for EHRs and eCQM reporting tools to address usability and data management to achieve meaningful use program expectations.

4. Carefully test eCQMs for reliability and validity before adopting them in national programs. Implement eCQMs within hospitals as part of testing to ensure information flow is accurate and there is no adverse impact on quality and patient safety.

5. Provide clear guidance and tested tools to support successful hospital transition to increased electronic quality reporting requirements.

Program Design Challenges	Hospital Experience	Policy Recommendations
eCQMs were introduced before robust testing for validity, accuracy and feasibility.	■ Modifications led to multiple iterations of tools and associated workflow redesign. ■ Measure results were frequently inaccurate. ■ Costs to implement were much higher than expected.	■ Reduce pace of rollout with fewer, but more well-tested measures.
Specifications were hard to find, lengthy and frequently modified to correct errors.	■ Hospitals spent excessive time searching for correct versions or used specifications for chart-abstract measures. ■ These problems contributed to inaccurate measure results.	■ Provide clear guidance and a consistent, reliable process for eCQM development, availability, updating and implementation.
Meaningful use eCQMs require unfamiliar vocabularies for data elements (such as LOINC®, SNOMED-CT).	■ Hospitals struggled with unfamiliar vocabularies. ■ Hospitals relied on eCQM reporting tools to manage the crosswalks between new vocabularies in the eCQMs and the terms used locally or purchased another vendor's service to support new vocabularies. ■ Hospitals incurred additional costs. ■ Hospitals voiced concerns about potential errors in coding or billing and associated risks of subsequent audits.	■ Support the development of an accurate, complete and validated crosswalk from SNOMED-CT to ICD-10-CM and ICD-10-PCS. ■ Provide for adequate training and education.
Sub-regulatory guidance to ignore data accuracy conflicts with hospital goals for both quality improvement and other program policy to report accurate quality data.	■ Hospitals and clinicians saw no benefit from generating inaccurate data. ■ Hospitals were worried that reporting data that they did not consider to be accurate would create a compliance issue.	■ Create an eCQM development, testing, and certification program that supports accurate measurement.

Technology Challenges	Hospital Experience	Policy Recommendations
EHRs are not designed to capture and enable re-use of information captured during the course of care for later eCQM reporting.	■ Hospital clinical staff enter information multiple places in EHRs to ensure data availability for eCQM reporting. ■ Staff time devoted to manual re-entry of information that already exists elsewhere in the EHR reverses efficiencies gained from the use of EHRs and undermines the presumed value of automation for quality reporting and improvement.	■ Improve heath IT standards for EHRs and eCQM reporting tools to address usability and data management. ■ Improve vendor tools to include workflow design flexibility.
EHRs are not designed to capture information from other department information systems at the level of detail needed for eCQM reporting.	■ Quality or other staff abstract information from other department information systems and enter it into the fields in the EHR required to report the eCQMs.	■ Improve EHRs and reporting tools to support intra-hospital interop-erability.
EHR vendors update and separately deliver individual EHR components for Meaningful Use.	■ Hospitals conducted multiple updates and iterative testing.	■ Establish a predictable update process and schedule for eCQMs with easy access and notification of updates. ■ Require vendors to support the latest update on a specified schedule.

Clinical Challenges	Hospital Experience	Policy Recommendations
EHRs and certification requirements are not designed to support effective and efficient patient care workflows or draw data from them.	■ Hospitals modified workflows solely to support adequate data capture, working iteratively with their vendors. ■ Ultimately, hospitals substantively altered clinical workflow solely to accommodate the data needed for the eCQMs, with no benefit for patient care.	■ Give vendors more time to develop useful and accurate tools that support logical workflows and leverage data already in the EHR.
Hospitals were unable to validate the eCQM results.	■ Hospitals either reported the results of eCQMs as inaccurate, but a work in progress, or did not report the eCQM results directly to physicians and nurses. ■ Inaccurate results from the eCQM reporting tool combined with increased workflow requirements led to clinicians mistrusting the data and not using it for care improvement.	■ Create an eCQM development, testing, and certification program that supports accurate measurement.
Meaningful use Stage 1 eCQM specifications are out-of-date and sometimes inconsistent with current care recommendations.	Physicians who use up-to-date sets of orders may cause the hospital to have poorer performance as measured by the eCQMs.	■ Create a mechanism to update eCQMs to reflect new state of the art clinical practice and to match updates to corresponding chart abstracted measures.

Strategic Challenges	Hospital Experience	Policy Recommendations
Time and personnel requirements to implement eCQMs were far beyond expectations and excessive.	■ Hospitals added tasks to existing IT and/or quality management staff responsibilities and delayed projects. ■ Clinical staff expended considerable time documenting for eCQMs, with no perceived value for patient care. ■ Excessive staff time spent on eCQMs delayed focus on other priorities such as reducing readmissions, improving patient safety or advancing care coordination.	■ Consider the effort required in future policy for eCQMs.
Combination of time and effort involved and inability to validate results meant hospitals saw no return on investment.	■ Results damaged credibility of hospital leadership and meaningful use program as a whole.	■ Reduce pace of rollout with fewer, but more well-tested measures that can be generated by tools that support logical workflows and leverage data already in EHRs.