

HEALTH INFORMATION TECHNOLOGY

CHARTBOOK VOLUME II MAINE HOSPITALS SURVEY



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Health Information Technology Maine Hospitals Survey Chartbook Volume II

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Table of Contents

Introductioni

Section I: EHR Adoption1

Section II: EHR Use11

Section III: Progress Towards Meeting Meaningful Use Requirements28

Introduction

Electronic Health Records (EHRs) and Health Information Technology (HIT) have the potential to improve the quality and efficiency of health care. However, EHR adoption among hospitals is growing slowly. To encourage wider use, Congress passed the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH) to authorize Medicaid and Medicare incentive payments to hospitals and clinicians when they achieve specified improvements in care delivery. In the following year, the Department of Health and Human Services (DHHS) first proposed draft criteria, and then issued final rules specifying annual sets of “meaningful use” goals for 2011 and 2012 that eligible hospitals and professionals will need to meet to qualify for incentives.

In Maine, responsibility for HIT planning activities rests with the Office of MaineCare Services (the State’s Medicaid agency) and the Office of the State Coordinator (OSC) for Health Information Technology. To inform the planning process, these two offices asked researchers at the Muskie School at the University of Southern Maine (USM) to perform an environmental assessment of the current status of HIT adoption and use in Maine among three types of providers eligible for Medicare and Medicaid incentive payments under HITECH: acute care hospitals, ambulatory practices, and dental practices. To complete this assessment, the Muskie School conducted surveys of hospitals and practices in each of these sectors.

This Chartbook presents our findings from the 2010 Maine Hospital Survey on the status of EHR adoption, implementation, and meaningful use. The Office of MaineCare Services is using this

information to plan the administration of Medicaid incentive payments. The Office of the State Coordinator for HIT and HealthInfoNet, in its role as the Regional Extension Center (REC),* are using the data to target technical assistance to providers to adopt or upgrade their HIT systems, and to achieve the annual goals for HIT meaningful use. Finally, the availability of these estimates provide a baseline for measuring Maine’s progress in meeting our goals for HIT adoption and use.†

Description of the Survey

Survey Development

Muskie School researchers reviewed the literature and consulted with stakeholders and with state personnel from the Office of MaineCare Services and the Office of the State Coordinator for HIT to develop a set of domains to be included in the survey. Researchers also reviewed HIT surveys used in other states and relied heavily on Minnesota’s HIT survey. Survey questions covered the following domains:

- Medical Records
- Electronic Practice Management Systems
- Patient-Specific Information
- Electronic Health Records
- EHR Capabilities
- Decisions Support Tools
- Privacy and Security
- Quality Improvement Functions
- Meaningful Use
- Information Exchange
- Telemedicine

* RECs were established to support the adoption and meaningful use of health information technology.

† Maine Statewide Health Information Exchange Strategic and Operational Plans <http://www.maine.gov/hit/privacy-security/Revised-Plan-10-1.pdf>

Sample Development

Researchers at USM created a listing of all acute care, short stay hospitals in Maine and then, where possible, with assistance from stakeholders from MaineCare and the Maine Hospital Association, identified individuals at each hospital who would be likely to be cognizant of health information technology at their facilities. Invitations, including a link to the online web-based survey, were emailed to this primary contact person at each hospital. The contact person was asked to forward the invitation to an appropriate person if they were not the most appropriate person at the hospital or hospital system.

Survey Administration

The survey was administered by the Muskie School's Survey Research Center, using Survey Monkey®, an internet-based survey tool. An initial cover letter with a link to the survey website was e-mailed in April, 2010 and reminders were e-mailed a week later. The Survey Research Center made follow-up phone calls through June, 2010 to hospitals that had not yet completed the survey. The Maine Hospital Association and OMS encouraged survey participation in newsletters and other communication with the hospitals.

Response Rate

Of the 38 hospitals that received a survey, 30 responded. Therefore the final response rate for the survey was 79%.

Data Collection and Analysis

Survey results were initially downloaded from Survey Monkey® to Microsoft Excel®. The data were then analyzed using Statistical Analysis Software® (SAS) and Microsoft Access®. Geographical data maps were prepared using ESRI ArcMap®.

Limitations

The 2010 Hospital Health Information Technology (HIT) Survey was administered in the spring of 2010, and therefore provides a baseline of the status of health information technology at that point in time.

Survey questions were developed before the final “meaningful use” regulations were announced. Therefore the analysis presented in this Chartbook is limited in several ways. First, since the final meaningful use regulations are more relaxed and easier to achieve than the draft regulations in place at the time of the survey, the results presented here may underestimate the proportion of hospitals that intend to apply for incentive payments for meaningful use of certified EHR technology. Also, because the wording of the survey was based on draft regulations, we had to estimate the proportion of hospitals meeting some meaningful use items (see Section III).

Results in Brief

EHR Adoption among Maine Hospitals

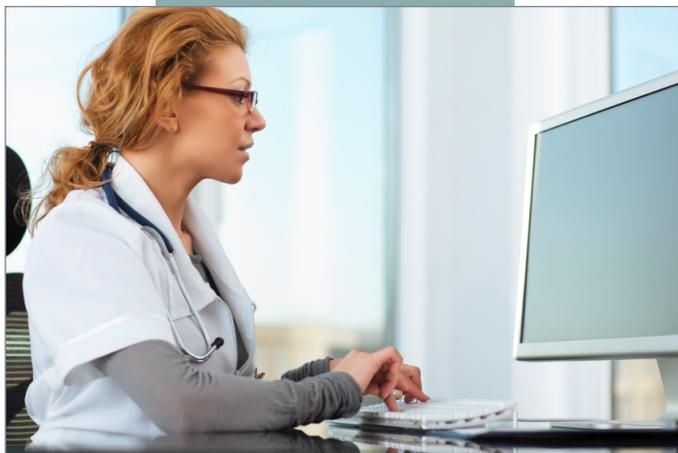
Nearly all of Maine's short-term, acute care hospitals responding to the survey had adopted EHR systems at the time of the survey. Larger hospitals were more likely to report EHR use in all or nearly all hospital departments. Maine hospitals with EHRs use a variety of inpatient and outpatient EHR systems. Two-thirds of Maine's hospitals with EHRs first deployed in 2005 or earlier, and most hospitals anticipate major changes in their EHR systems in the near future. Hospitals most often cite resource investments and concerns about false alarms as barriers to EHR implementation.

EHR Use among Maine Hospitals

Maine hospitals report high rates of EHR use by clinical staff and providers, with clinical staff more likely to routinely use the EHR than providers. Most hospitals report that they use Computerized Physician Order Entry (CPOE) for some or all provider orders. Most hospitals report that a high proportion of radiology and lab reports are incorporated into hospital EHRs. A smaller share of hospitals, 28%, reported that a large majority of diagnostic test images are incorporated into the EHR. Nearly all hospitals with an EHR report using Clinical Decision Support (CDS) tools for drug prescribing, clinical guidelines, and clinical reminders. All hospitals have begun implementing or have fully implemented CDS for drug-allergy and drug-drug alerts; however, a large majority of hospitals have no specific plans to implement CDS for diagnosing support.

Meaningful Use among Maine Hospitals

Most hospitals (25 of 29 responding, 83%) report that they intend to apply for both the Medicare and Medicaid incentive payments for meaningful use of EHR technology. Three additional hospitals report intent to apply for the Medicare incentive payments only. Most had also made a great deal of progress towards meeting the meaningful use criteria outlined in the regulations, however, the survey findings indicate a number of areas where many hospitals need to do additional work.



Section I

EHR Adoption

EHR Adoption Among Maine Hospitals

Nearly all short-term, acute care hospitals in Maine have adopted EHR systems.

- 80% of the responding hospitals have an EHR installed in all or nearly all (more than 90%) areas or departments. Another 17% of Maine's hospitals have an EHR installed and in use in some areas or departments.
- Only 1 hospital (3%) reports that it does not have an EHR.

Larger hospitals are more likely to report EHR use in all or nearly all hospital departments.

- All of Maine's larger hospitals report they use an EHR in all or at least some areas; nearly all (94%) report they use EHR systems in all or nearly all hospital areas.
- More than half of Maine's smaller, critical access hospitals (CAH) report that they have EHRs in use in all or nearly all areas; another third report that they use EHRs in some areas; and one CAH (8%) reported it did not have an EHR.

Two-thirds of Maine hospitals with an EHR report using an EHR system primarily from a single vendor, but use a variety of inpatient and outpatient EHR systems.

- Two-thirds of Maine's hospitals report that their EHR system is primarily from one vendor and about one-third report that they use a mix of different products.
- Maine hospitals with EHRs use a variety of inpatient and outpatient EHR systems.

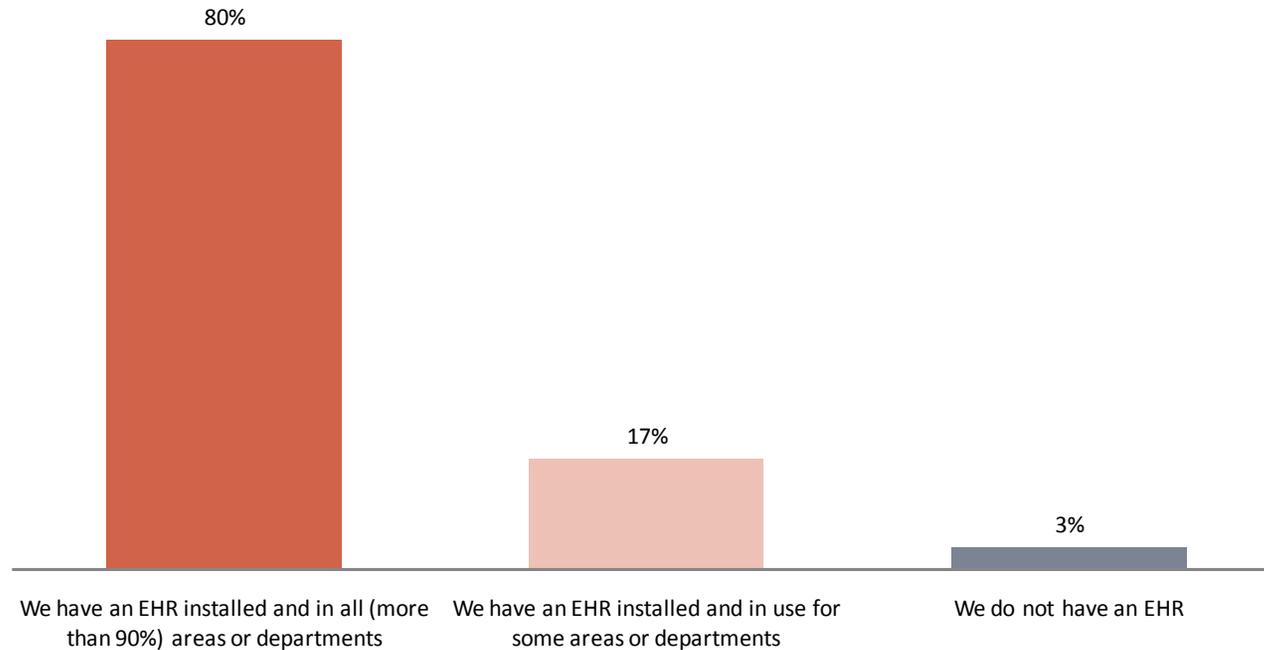
Two-thirds of Maine's hospitals with EHRs first deployed in 2005 or earlier and most hospitals anticipate major changes in their EHR systems in the near future.

- 60% of the hospitals anticipate significant additional functionalities,
- 7% anticipate a major change in vendor, and
- 7% anticipate initial deployment.

Hospitals most often cite resource investments and concerns about false alarms as barriers to EHR implementation.

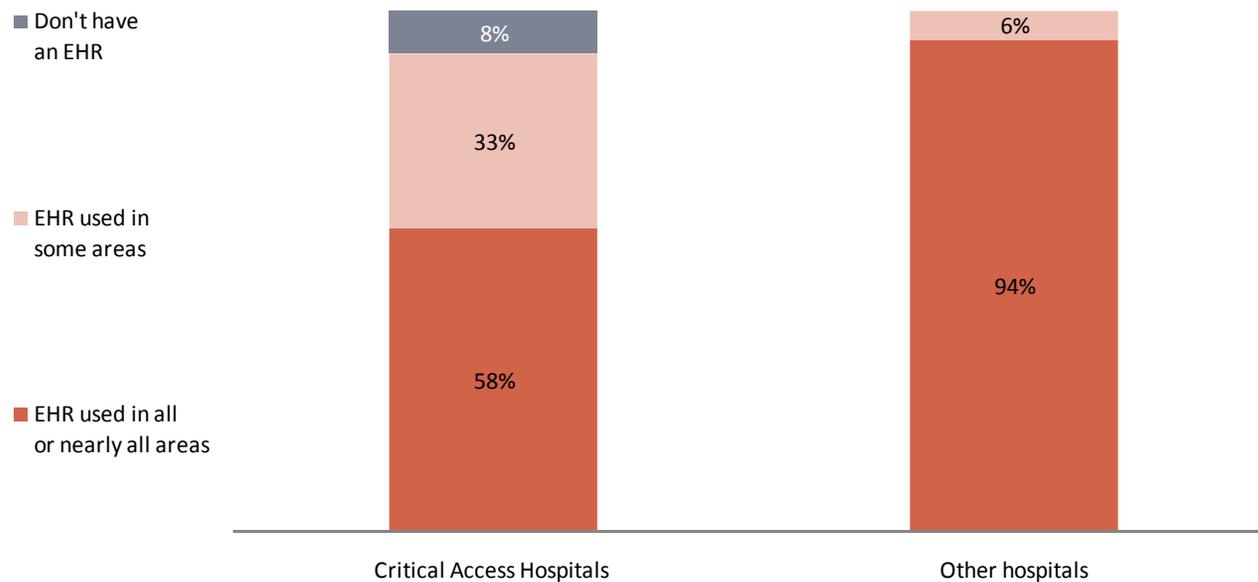
- 60% of the hospitals cite resources to implement EHRs as a "significant" barrier to EHR implementation,
- 47% cite training required, and another
- 47% cite concerns about false alarms as a "significant" barrier to EHR implementation.

Nearly all short-term, acute care hospitals in Maine have EHR systems. (n=29)



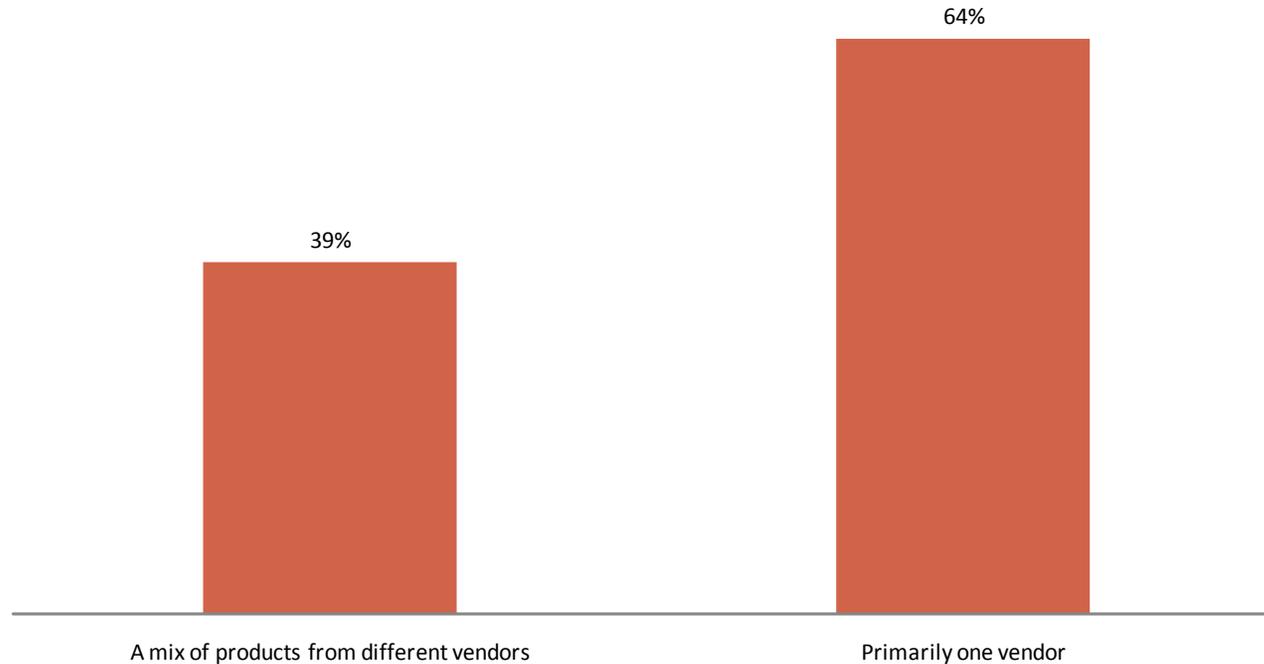
- 80% of the responding hospitals have an EHR installed in all or nearly all (more than 90%) areas or departments.
- 17% of hospitals have an EHR installed and in use in some areas or departments.
- Only one of the short-term, acute care hospitals reported having no EHR.

Maine's larger short-term, acute care hospitals have higher rates of EHR adoption and use than smaller critical access hospitals. (n=29)



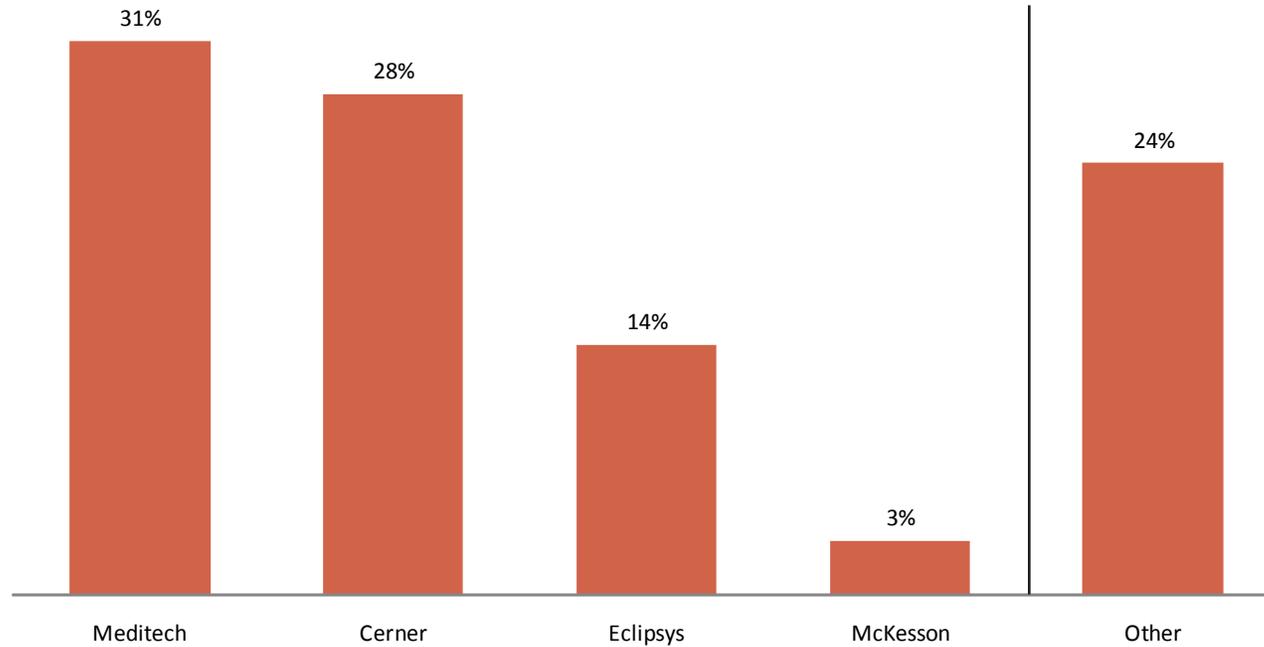
- All of Maine's larger hospitals report that they use an EHR in all or at least some areas; a large majority (94%) use EHR systems in all or nearly all hospital areas.
- More than half (58%) of Maine's critical access hospitals report that they have EHRs in use in all or nearly all areas; another third (33%) report that they use EHRs in some areas; and fewer than one-in-ten CAHs do not have an EHR.

About two-thirds (64%) of the hospitals report that they have an EHR system from a single vendor. (n=29)



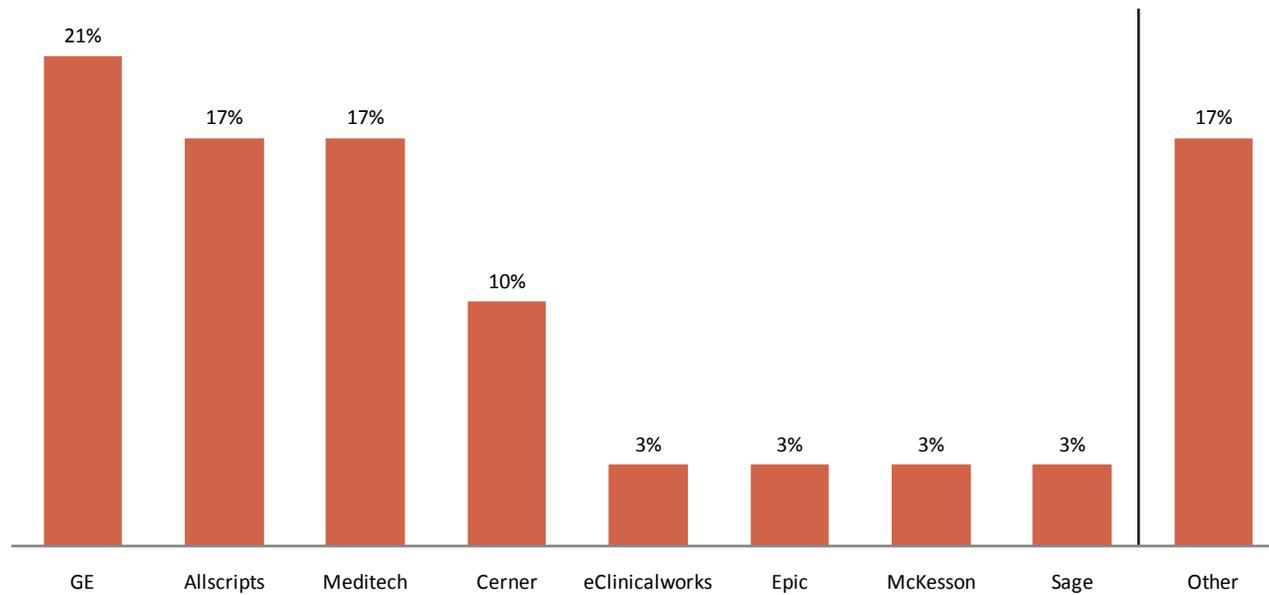
- About a third of hospitals report that their EHR systems comprise a mix of products from different vendors.

Maine hospitals with EHRs use a variety of inpatient EHR systems. (n=29)



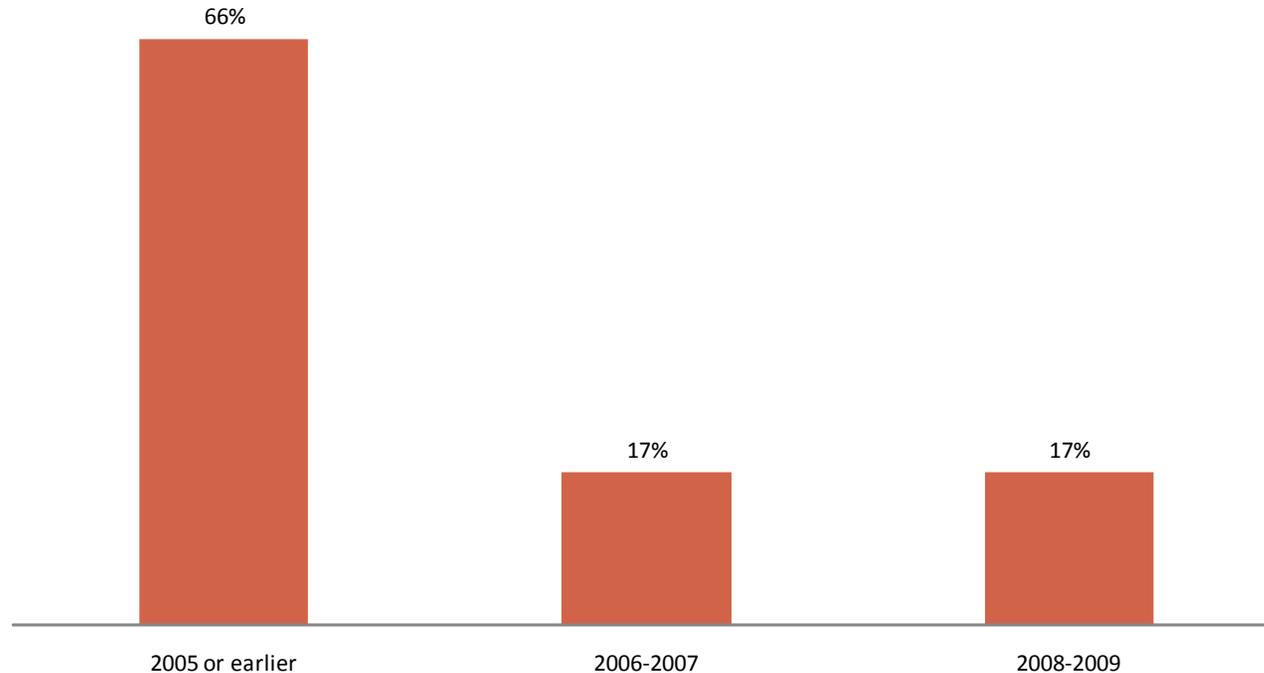
- Meditech and Cerner have the largest inpatient EHR market share among Maine’s short-term, acute care hospitals.

Maine hospitals use a variety of outpatient EHR systems. (n=29)



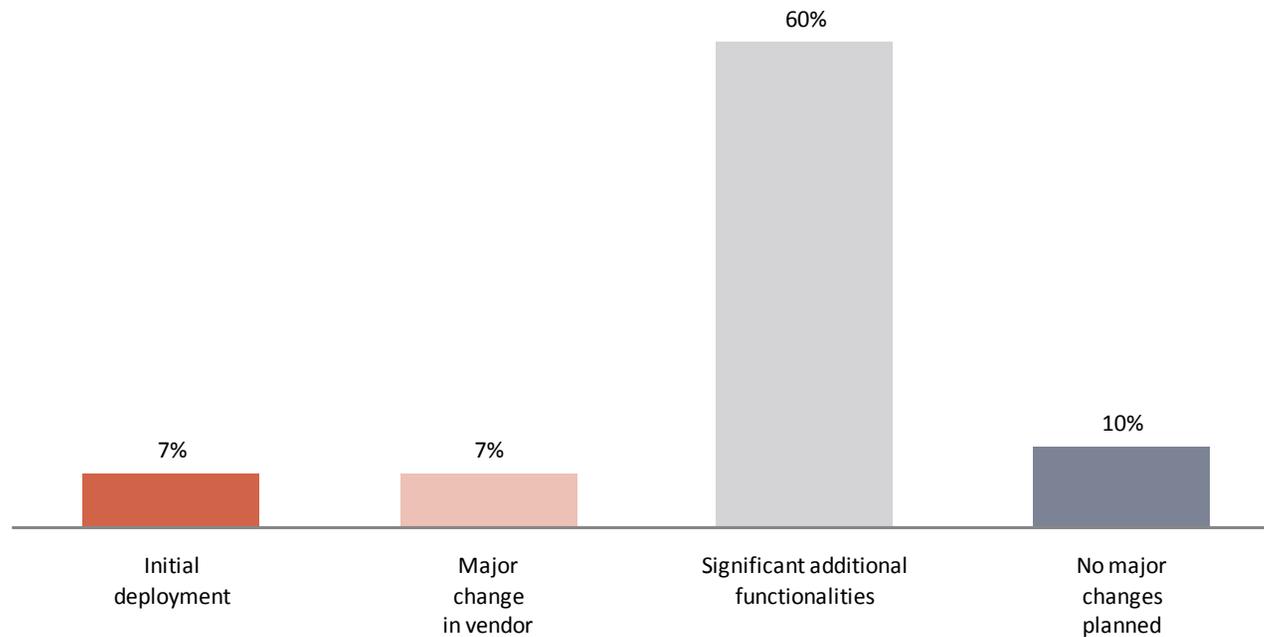
- GE, Allscripts, Meditech, and Cerner are the most commonly used outpatient EHR systems in use by Maine's short-term, acute care hospitals.

Many hospitals have six or more years experience using EHRs. (n=29)



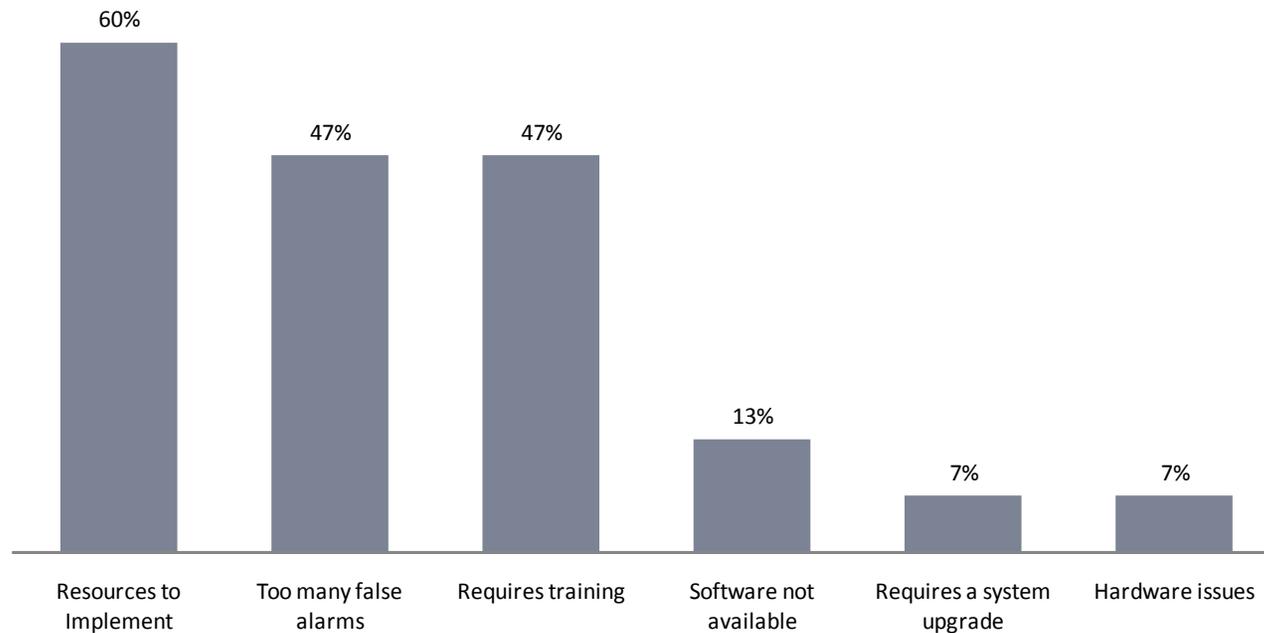
- 66% of Maine’s short-term, acute care hospitals first deployed their EHRs in 2005 or earlier.
- 17% deployed their EHRs in 2006 or 2007.
- Another 17% first installed their EHRs in 2008 or 2009.

**Most hospitals anticipate major changes in their EHR systems in the near future.
(n=29)**



- 60% of hospitals anticipate significant additional functionalities in the next 18 months.
- A small share of hospitals (7%) anticipate deploying and changing EHR vendors in the next 18 months.

Hospitals most often cite resource investments and concerns about false alarms as barriers to EHR implementation. (n=29)



- 60% of the hospitals cite resources to implement EHRs as a “significant” barrier to EHR implementation.
- 47% of the hospitals cite training required and concerns about false alarms as “significant” barriers to EHR implementation.
- Concerns about software, hardware, and systems upgrade are not cited by a large proportion of hospitals.



Section II

EHR Use

EHR Use among Maine Hospitals

Hospitals report high rates of EHR use by clinical staff and providers, with clinical staff more likely to routinely use the EHR than providers.

- Almost all hospitals (96%) report that more than half their clinical staff routinely use the EHR; and
- 72% of the hospitals report more than half their providers use the EHR routinely.

Most hospitals report that they use Computerized Physician Order Entry (CPOE) for some or all provider orders.

- 62% of Maine hospitals use CPOE for some or all provider orders; 14% have this functionality, but do not use it; and 24% do not have CPOE.
- About a third of the hospitals report that they enter a large majority (over 70%) for lab tests, radiology tests, medication, and nursing orders via CPOE; and another third enter a minority (between 10 and 40%) of these orders via CPOE.
- More than half of the hospitals cite staff training and the time it takes to build order sets as barriers to using CPOE.

Most hospitals report that a high proportion of radiology and lab reports are incorporated into hospital EHRs.

- Almost all hospitals with an EHR indicated that a large majority (75% or more) of radiology and lab reports are incorporated into the EHR.
- A smaller share of hospitals, 28%, report that a large majority of diagnostic test images are incorporated into the EHR.

Hospitals report that they are phasing in or have implemented a variety of clinical decisions support (CDS) tools.

- Nearly all hospitals with an EHR reported that CDS tools for drug prescribing, clinical guidelines, and clinical reminders are partly or fully implemented;
- All hospitals have begun implementing or have fully implemented CDS for drug-allergy and drug-drug alerts;
- A large majority of hospitals have no specific plans or are not considering implementing CDS for diagnosing support.

Nearly half of the hospitals report that they provide electronic copies of health information to a majority of patients.

- 18% of the hospitals report that they provide electronic copies of health information to a majority (80% or more) of patients within 48 hours of the request.
- 25% provide electronic copies of health information to their patients, but to fewer than 80% of patients making the request.

Hospitals report using their EHRs for a variety of internal and external quality improvement purposes.

- 93% share data with providers.
- 83% collect and submit quality measures to outside organizations.
- 79% use their EHR to create benchmarks and clinical priorities.

Hospitals report a number of prescription and medication related uses for their EHRs:

- 45% report that prescriptions are entered directly into the EHR,
- 47% of the hospitals report that they have electronic systems that issue alerts at the point of prescribing for potential drug-drug and 47% for drug-allergy interactions, and
- 60% report that medication reconciliation is performed for over 80% or more transitions and referrals; 27% for less than 80% of transitions and referrals.

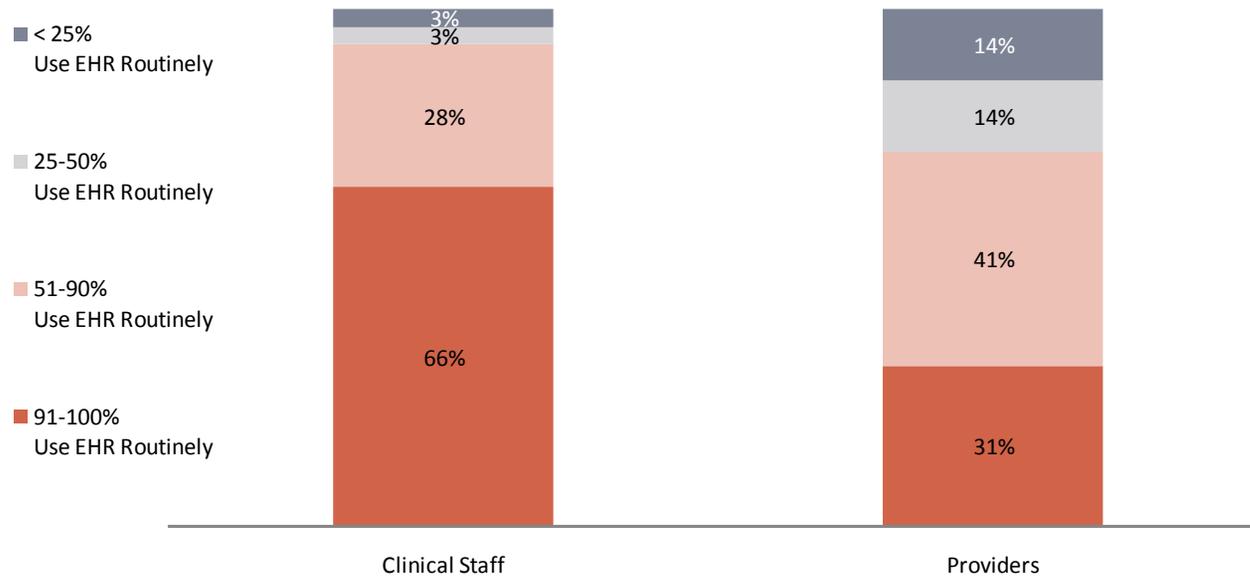
Nearly half of the hospitals actively exchange patient-level data through a health information exchange.

- While over half of the hospitals (59%) participate in a health information exchange (HIE), fewer than half, 45%, also actively exchange patient-level data through an HIE.
- While a large percentage of hospitals electronically exchange patient data with ambulatory providers in their systems, a small percentage of hospitals exchange patient data with ambulatory providers outside their system.

Hospitals cite competing priorities and privacy or legal concerns as the largest challenges to secure information exchange with outside entities.

- 67% of hospitals cite competing priorities as a challenge to secure information exchange,
- 47% cite privacy or legal concerns as a challenge, and fewer than a quarter of the hospitals cite exchange service costs, unclear return on investment, lack of access to technical support or expertise, and insufficient information on options available as large challenges to secure information exchange.

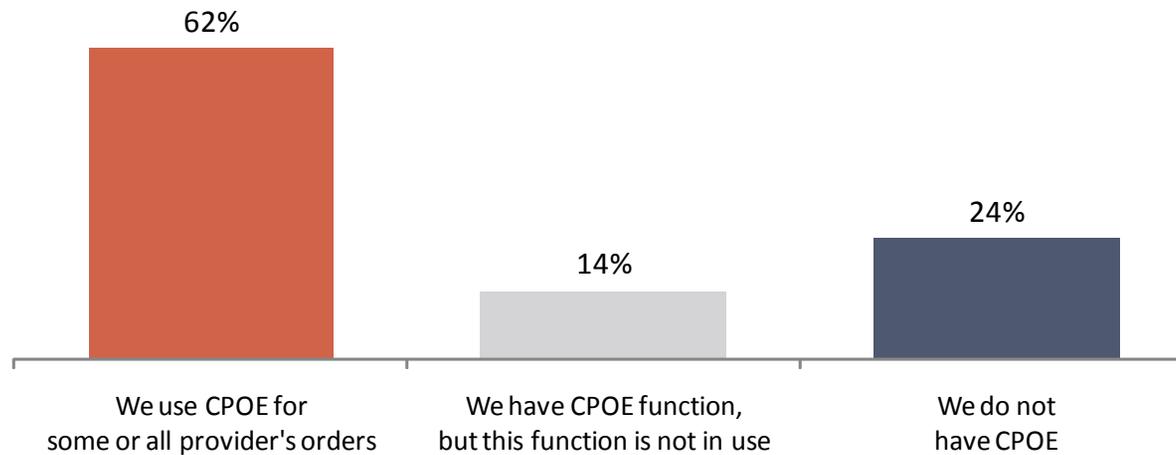
Hospitals report that clinical staff are more likely to routinely use the EHR than providers. (n=29)



Clinical Staff: nurses, LPNs, physical therapists, technicians
 Providers: physicians, physician assistants, nurse midwives, and nurse practitioners

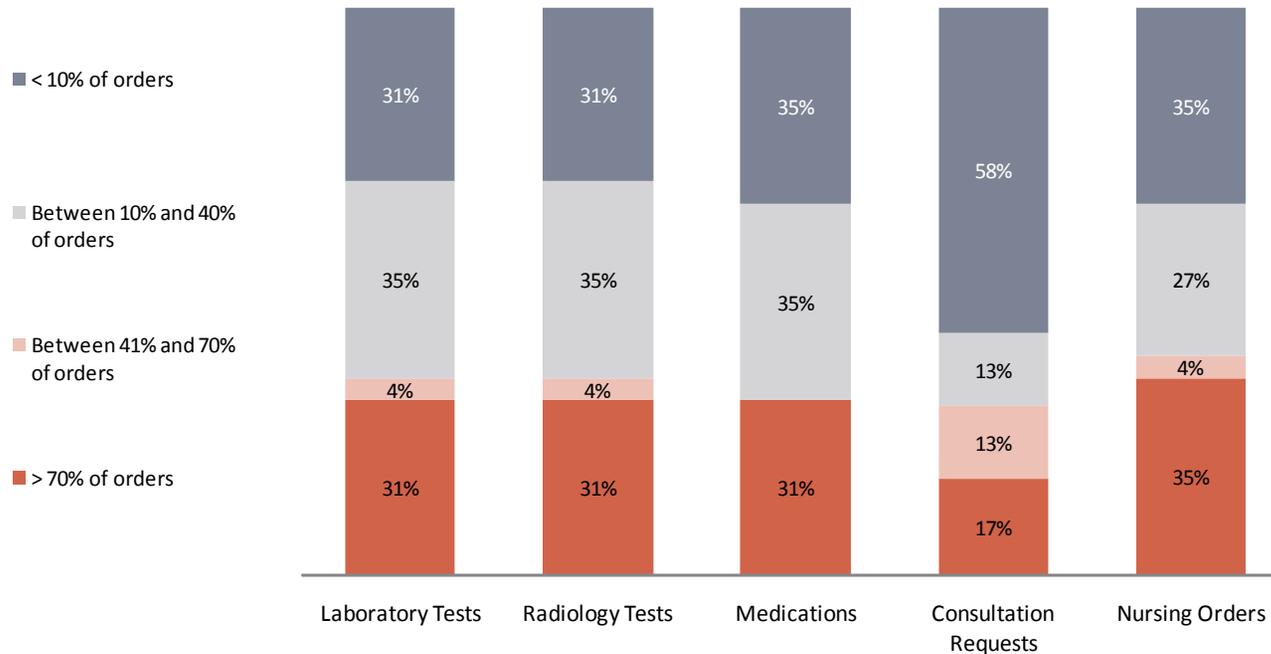
- Almost all hospitals (94%) report that more than half of their clinical staff routinely use the EHR; 66% report that nearly all (>90%) clinical staff use the EHR routinely.
- 72% of the hospitals report that more than half of their providers use the EHR routinely; 31% report that nearly all (>90%) providers use the EHR routinely.

**Two-thirds of Maine hospitals say they use Computerized Physician Order Entry.
(n=29)**



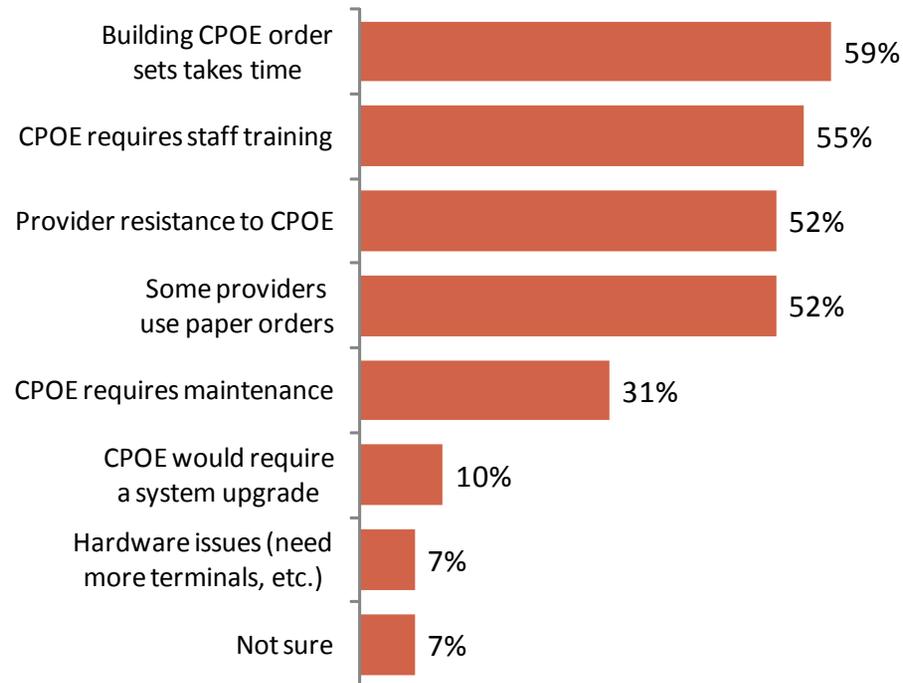
- 62% of Maine hospitals use computerized physician order entry (CPOE) for some or all provider orders.
- 14% of Maine hospitals have the CPOE function but do not use it.
- 24% do not have CPOE.

Hospitals' use of Computerized Provider Order Entry varies substantially. (n=29)



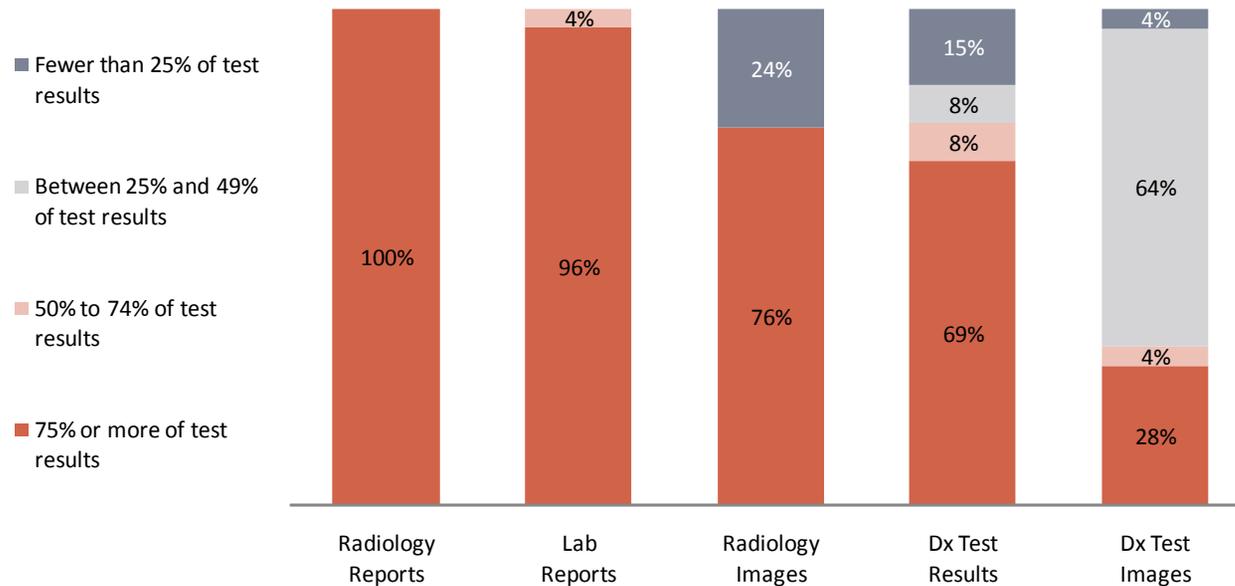
- About a third of the hospitals enter a large majority of orders for laboratory tests, radiology tests, medication, and nursing orders via CPOE.
- Another third of the hospitals enter 10-40% of orders for laboratory tests, radiology tests, medication, and nursing orders via CPOE.
- About one-third of the hospitals report entering few (less than 10%) laboratory tests, radiology tests, medication orders, and nursing orders via CPOE. Over half of the hospitals enter consultation requests via CPOE. Fewer orders for consultation requests are administered via CPOE.

More than half of Maine hospitals cite staff training and the time it takes to build order sets as barriers to using Computerized Physician Order Entry. (n=29)



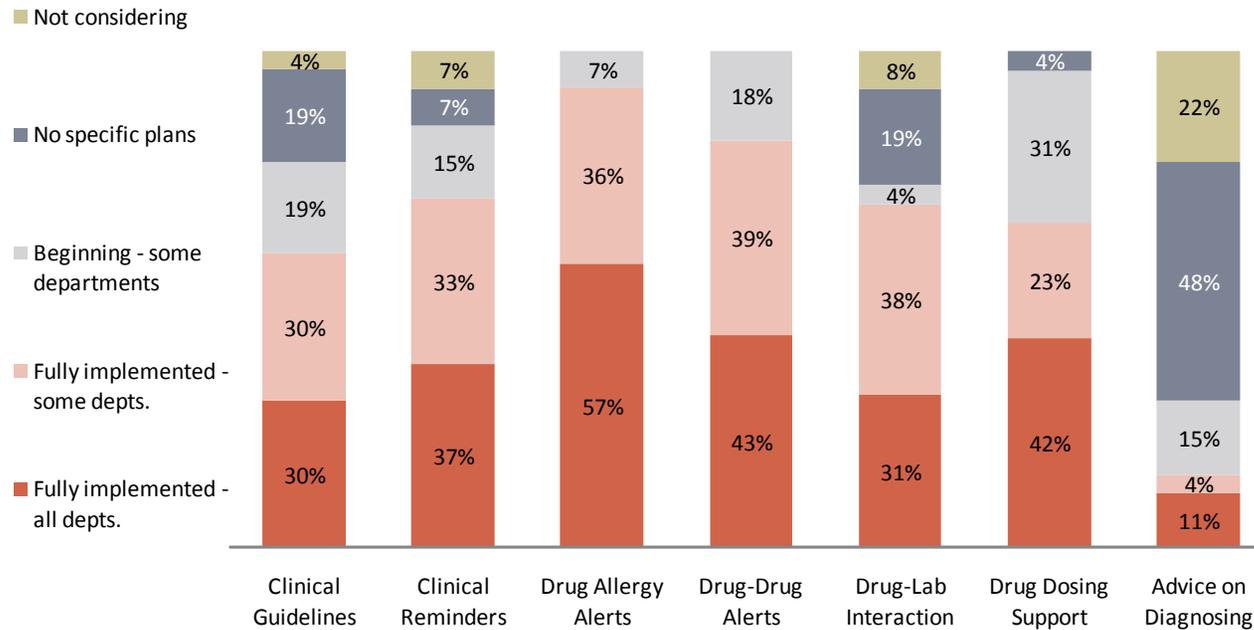
- More than half of the hospitals (n=29) cite four barriers to using CPOE:
 - Building CPOE order sets takes time (59%).
 - CPOE requires staff training (55%).
 - Provider resistance to CPOE (52%).
 - Some providers use paper orders (52%).

Hospitals report that a high proportion of radiology and lab reports are incorporated into EHRs. (n=29)



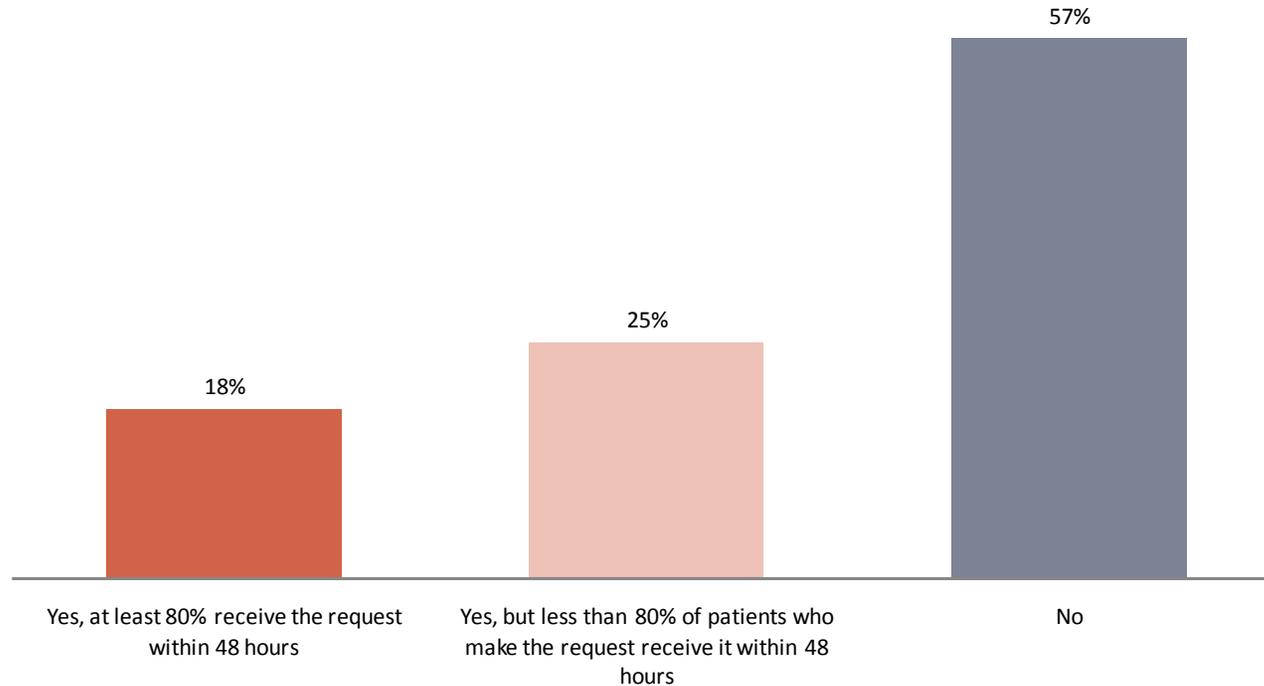
- Radiology and lab reports are commonly incorporated into hospitals' EHRs.
- Three-quarters of the hospitals report that a large majority (75% or more) of radiology images and diagnostic test results are incorporated into the hospital EHR.
- Diagnostic test images are less commonly incorporated into the EHR.

Hospitals report they are phasing in or have implemented a variety of clinical decision support tools. (n=29)



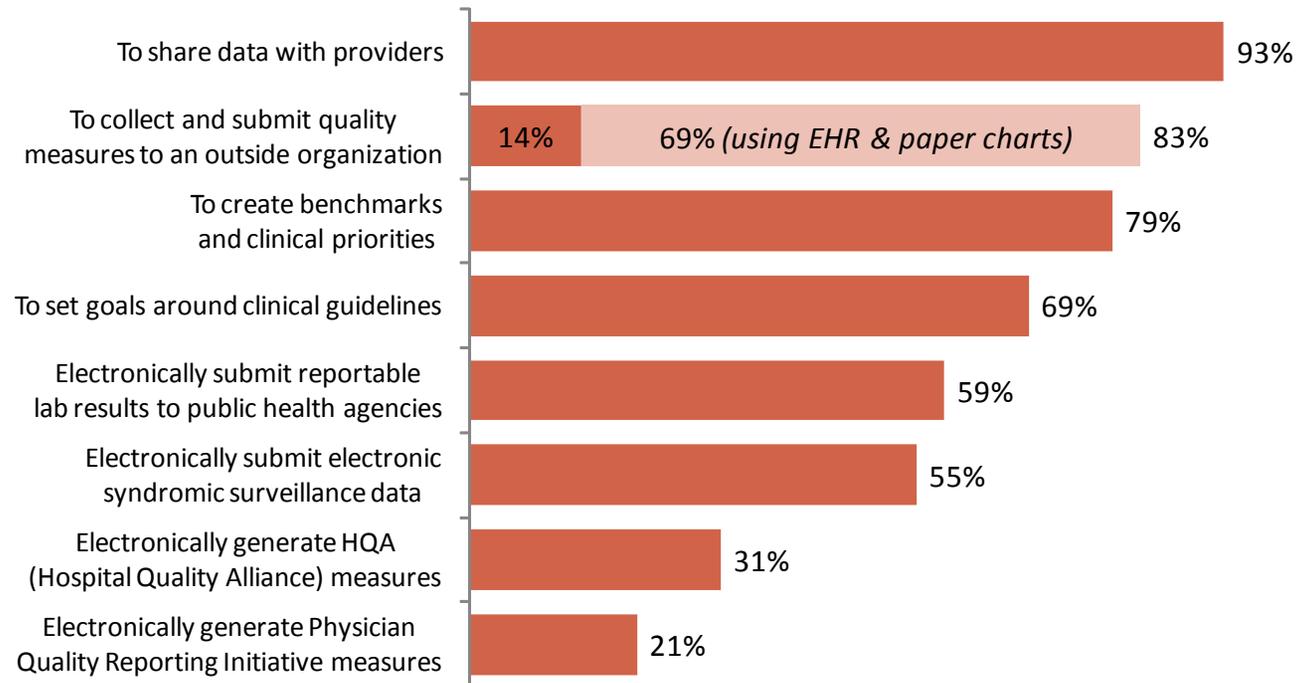
- Nearly all hospitals indicate that clinical decision support (CDS) tools for drug prescribing, clinical guidelines, and clinical reminders have been partly or fully implemented.
- All hospitals have begun implementing or have fully implemented CDS for drug-allergy and drug-drug alerts.
- A large majority of hospitals are not considering or have no specific plans to implement clinical support tools for diagnosing support.

Most hospitals report they do not provide the majority of patients with an electronic copy of health information within 48 hours of a request. (n=29)



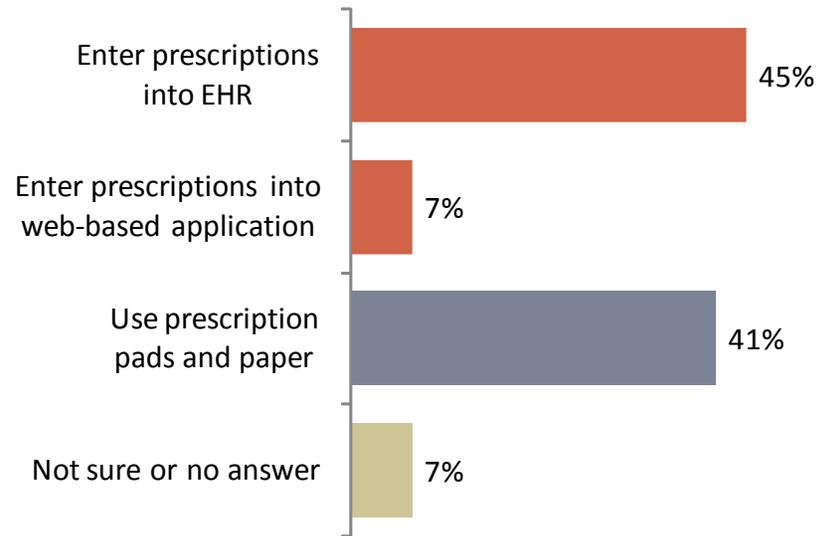
- 18% of reporting hospitals indicate providing an electronic copy of their health information to a majority (80% or more) of patients within 48 hours of the request.
- 25% of the hospitals report providing electronic copies of their health information within 48 hours of the request, but for fewer than 80% of the patients that make the request.

Hospitals use EHRs for a variety of quality improvement functions. (n=29)



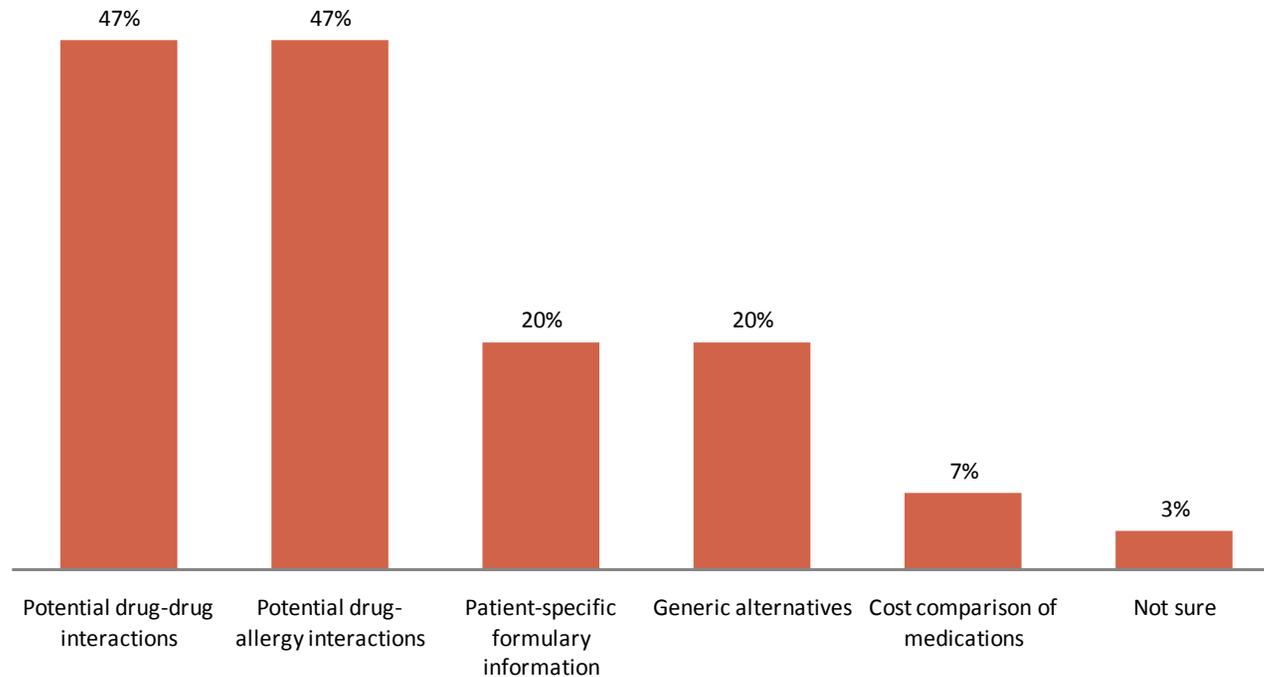
- Hospitals use EHRs for the following quality improvement functions:
 - To share data with providers (93%).
 - To collect and submit quality measures to an outside organization (83%)
 - To create benchmarks and clinical priorities (79%)

About half of the hospitals report their providers enter prescription orders directly into the EHR. (n=29)



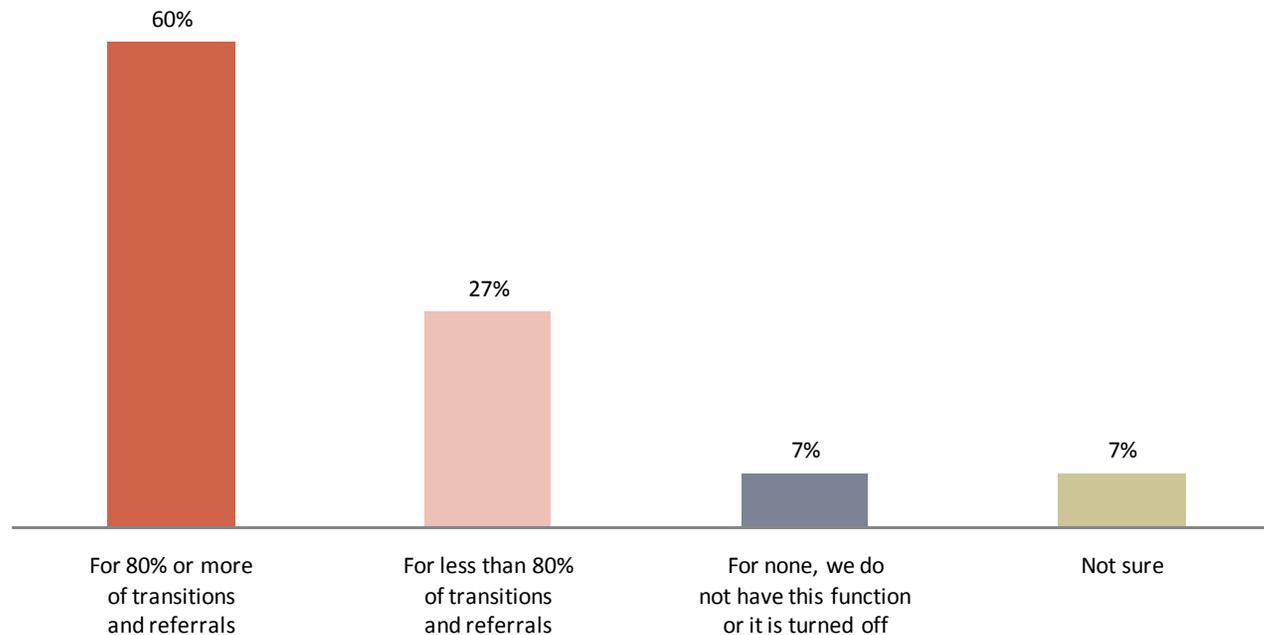
- 45% of hospitals report their providers enter prescription orders directly into the EHR.
- 41% of hospitals report their providers use prescription pads and paper to order medications.
- Less than 10% of hospitals report using web-based applications to order entries.

Half of the hospitals report that they have electronic systems that issue alerts at the point of prescribing for potential drug-drug and potential drug-allergy interactions. (n=29)



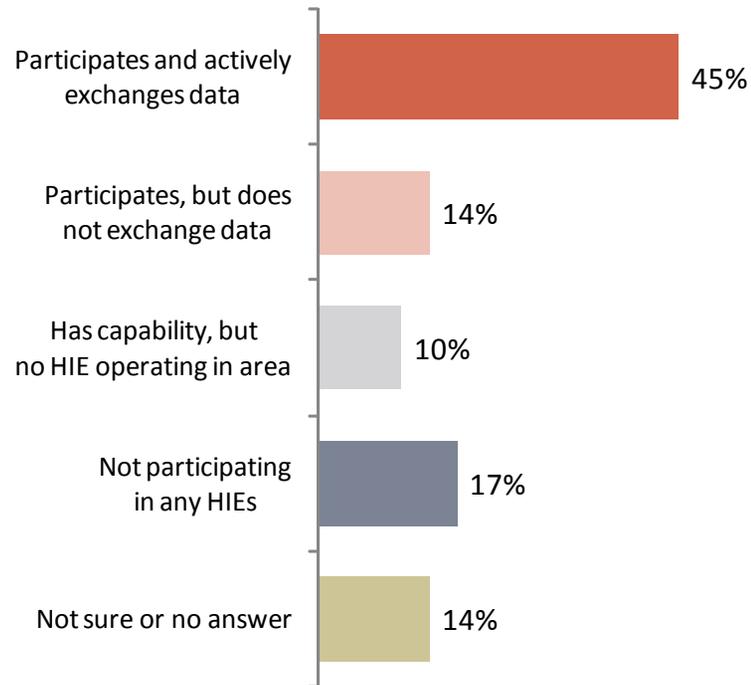
- About half of hospitals have systems that issue alerts of potential drug-drug and drug-allergy interactions at the point of prescribing.
- A fifth of the hospitals have systems that issue patient specific formulary information and generic alternatives at the point of prescribing.
- A small minority (7%) of hospitals have systems that provide cost comparisons of medications.

More than half of hospitals report that medication reconciliation is routinely performed at relevant patient encounters or care transitions. (n=29)



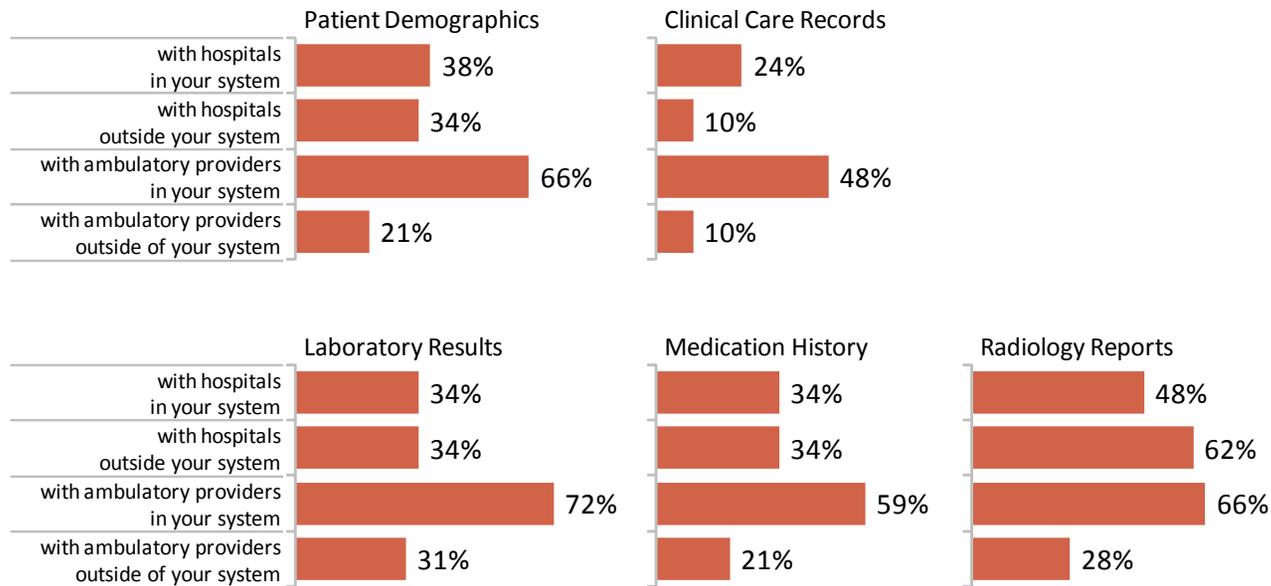
- 60% of hospitals report that medication reconciliation is performed for 80% or more of transitions and referrals.
- 27% of hospitals report that medication reconciliation is performed, but for fewer than 80% of transitions and referrals.

Nearly half of the hospitals actively exchange patient-level clinical data through a health information exchange. (n=29)



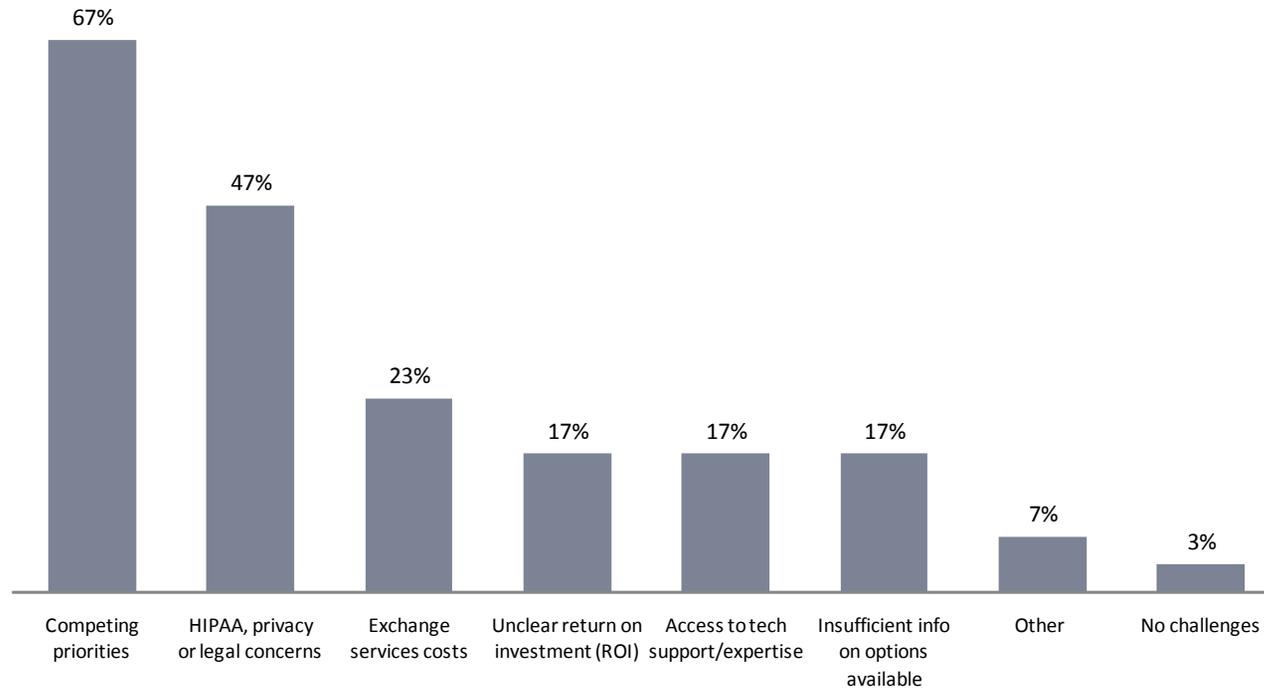
- While over half of hospitals (59%) participate in a health information exchange (HIE), less than half (45%) also actively exchange patient-level data through an HIE.
- 27% of hospitals are not participating in an HIE.

Many hospitals electronically exchange patient data with ambulatory providers within the hospital system. (n=29)

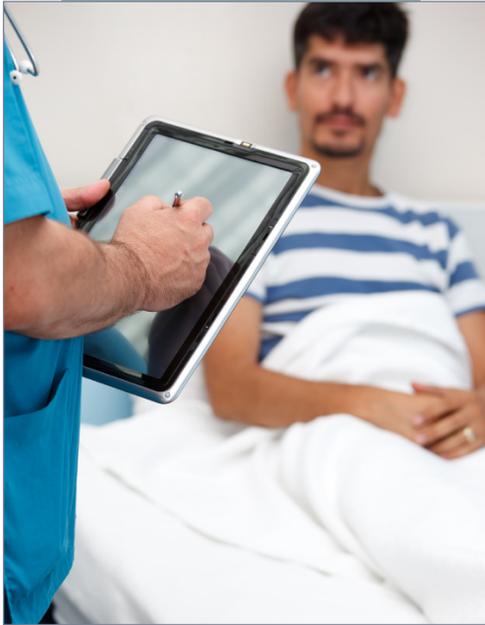


- While a large percentage of hospitals electronically exchange patient data with ambulatory providers in their systems, a small percentage exchange patient data with ambulatory providers outside their system.
- Hospitals are more likely to exchange radiology reports and lab results than clinical care records, medication history and patient demographics.

Hospitals frequently cite competing priorities and HIPAA, privacy, or legal concerns as the largest challenges to exchanging information with outside entities. (n=29)



- 67% of hospitals cite competing priorities as the largest challenge to secure information exchange with outside entities.
- 47% cite HIPAA, privacy, or legal concerns as one of the biggest challenges to secure information exchange.
- Less than a quarter of the hospitals cite exchange services costs, unclear return on investment, lack of access to technical support or expertise, and insufficient information on options available as among the largest challenges to information exchange with outside entities.



Section III

Progress Towards Meeting Meaningful Use Requirements

Meaningful EHR Use among Maine Ambulatory Practices

Background

To encourage the adoption and use of HIT, Congress authorized Medicaid and Medicare to make annual incentive payments to eligible hospitals and professionals (providers) over six years, beginning in 2011. To qualify for these incentives, hospitals and providers must maintain a certain minimum percentage of Medicaid or Medicare patients in their caseload and meet criteria that set goals for the meaningful use of electronic health records.

The meaningful use regulations were drafted and then finalized by the federal Office of the National Coordinator for Health Information Technology (ONC). The regulations define meaningful use goals for each of five policy priorities:

- Improving quality, safety, efficiency, and reducing health disparities;
- Engaging patients and families in their healthcare;
- Improving care coordination;
- Ensuring adequate privacy and security protections for personal health information (PHI); and
- Improving population and public health.

The meaningful use criteria will be introduced in three stages, with each stage more rigorous than the one before. To qualify for the incentives during Stage 1, eligible hospitals must satisfy 14 core (mandatory) meaningful use objectives, at least 5 of the 10 “menu objectives”, and 6 clinical quality measures.

Because this survey was developed and administered before the final regulations were issued, the analysis presented in this report is limited. First, because draft criteria were more stringent and difficult to achieve than the final criteria, the survey may have underestimated the number of practices that will apply for incentives. Second, because the wording of the survey was based on the draft regulations, some of the survey’s multiple-choice categories do not correspond exactly to the final regulations.

For example, the survey asked whether at least 80% of a hospital’s patients who request an electronic copy of their health information receive their copy within 48 hours. However, the final regulations reduced the 80% threshold to just 50% of patient requests, and extended the delivery deadline from 48 hours to three business days.

Where these differences occur, we have translated the survey answers into the language of the final regulations. For example, we received the following responses to the prescriptions question:

Answer	Percent among practices with an EHR†
Yes, at least 80% of patients who make the request receive it within 48 hours	17%
Yes, but less than 80% of patients who make the request receive it within 48 hours	24%
No	55%
Not Sure	3%
Total	100%

†The individual numbers in this column do not add up to 100% due to rounding.

This tells us that the first 17% of those hospitals clearly met the new 50%- in-three-days requirement, and that the next 24% of hospitals may, or may not, have completed enough requests within three days to reach the final rule's new 50% threshold. Therefore, we can say that between 17% and 41% percent of EHR-equipped provider practices would have been able to meet the new meaningful use criterion.

Key Findings

At the time of the survey, 25 of the 29 hospitals that responded (83%) said they intended to apply for both the Medicare and Medicaid HIT incentive payments. Three additional hospitals (10%) said they intended to apply for the Medicare incentives only. The remaining 2 hospitals (7%) said they were unsure, or left the question blank. The one hospital that had not yet implemented an EHR was among those that intended to apply for both types of HIT incentives.

As of the date of the survey, most Maine hospitals had already made a great deal of progress toward meeting the meaningful use criteria, but there were still a number of areas where many hospitals needed to do more work. Following is a summary of their overall readiness to meet the final rule's meaningful use criteria associated with the five goals.

HIT survey results by meaningful use priority areas

1. Improving quality, safety, efficiency, and reducing health disparities

Core criteria already met by more than half of Maine hospitals:

- implement one clinical decision support rule relevant to a high clinical priority;
- maintain an active medication allergy list;
- implement drug-drug and drug-allergy interaction checks;
- maintain patient-specific active medication lists; and
- maintain patient-specific, up-to-date problem lists of current and active diagnoses.

Core criteria clearly achieved by the fewest number of Maine hospitals:

- Licensed health care professionals use Computerized Provider Order Entry (CPOE) to enter medication orders; and
- Ambulatory clinical quality measures reported to CMS or the States.

A large majority of Maine hospitals already met two menu criteria:

- Incorporate clinical lab-test results into certified EHR technology as structured data; and
- Record the status of advance directives for patients 65 or older.

Only about one-fifth of the hospitals could meet the criterion to implement drug formulary checks in their EHRs.

2. Engaging patients and families in their healthcare

Core criterion:

- Fewer than one-fifth of hospitals clearly met the requirement to complete at least half of patient requests for an electronic copy of their health information within three business days, while over half said they did not provide that service at all.

Menu criterion:

- The criterion requiring hospitals to provide patient-specific educational materials to at least 10% of their inpatients or ER patients was not included in the survey because it was not introduced until the announcement of the final rule.

3. Improving care coordination

Core criterion:

- Four-fifths of hospitals said they had demonstrated the capability to exchange key clinical information among providers.

Fewer than half of hospitals could meet either of the two menu criteria:

- Provide a summary of care record for at least half of patients who are transferred or referred to another setting or provider; and
- Perform medication reconciliation for at least half of patients admitted to the hospital or to the ER.

4. Improving population and public health

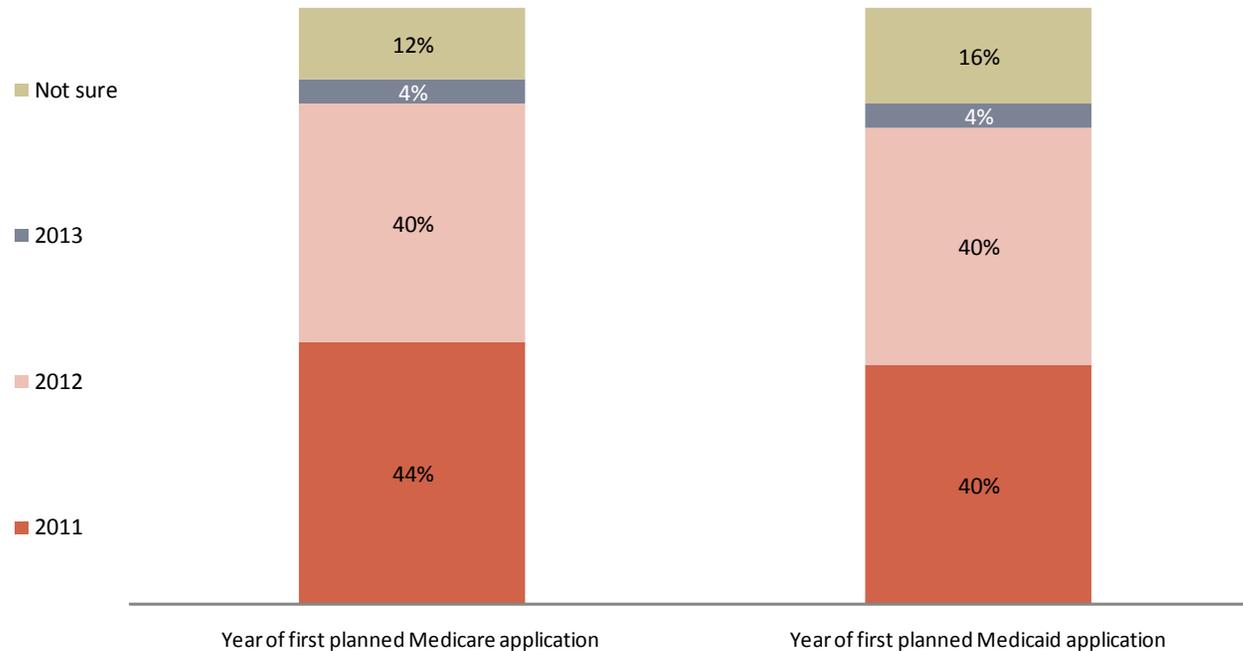
Each of the two menu criteria were satisfied by more than half of Maine hospitals:

- Demonstrate the ability to submit electronic data on reportable lab results to public health agencies; and
- Demonstrate the ability to electronically report syndromic surveillance data.

5. Ensuring adequate privacy and security protections for PHI

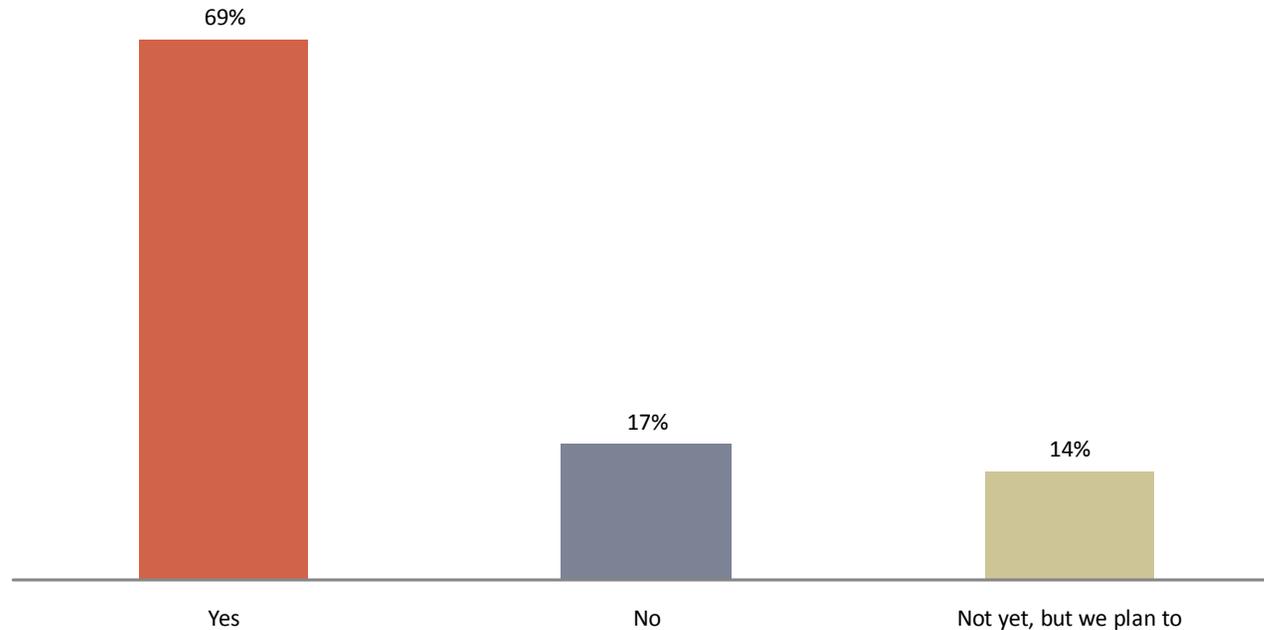
The final rule's criterion for protecting privacy and securing personal healthcare information (PHI) differed considerably from the survey's questions about patient privacy and data security.

Most Maine hospitals plan to make their first Medicare or Medicaid incentive payment application in 2011 or 2012. (n=29)



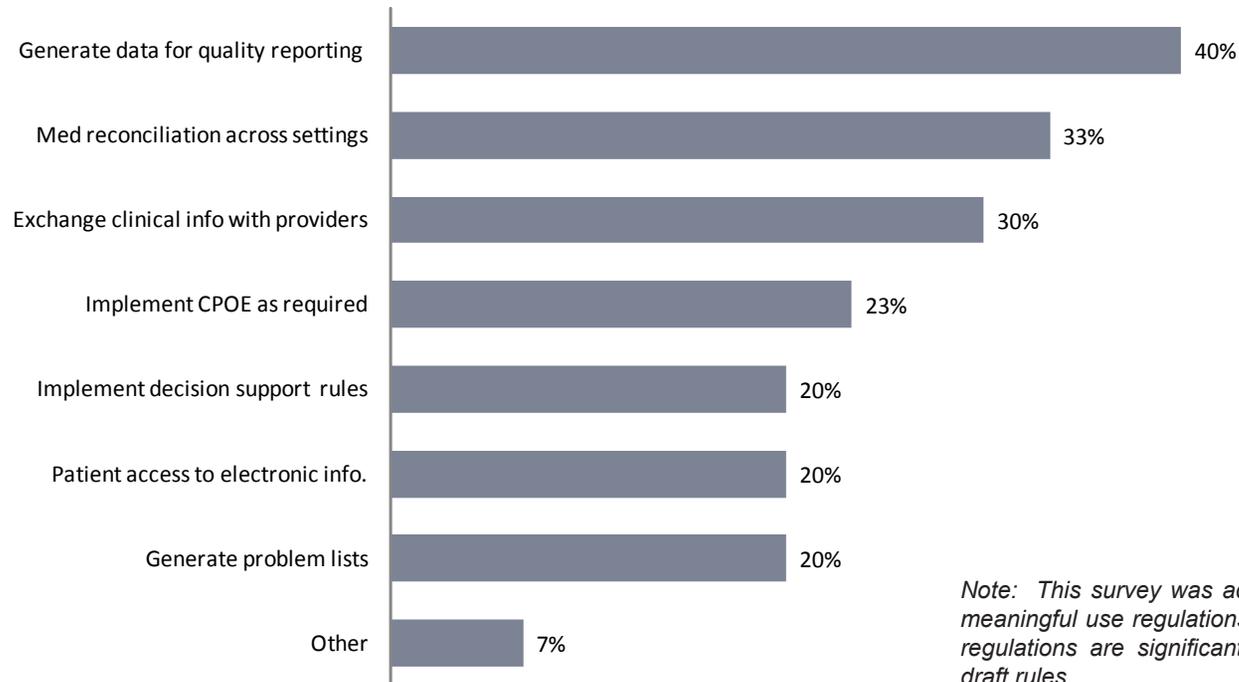
- About four-in-ten hospitals plan to make their first Medicare (44%) and Medicaid (40%) incentive payment applications the first year they can be made. (2011)
- Another four-in-ten hospitals plan to make their first Medicare (40%) and Medicaid (40%) incentive payment applications in 2012.

Nearly three-quarters of the hospitals had calculated their expected Medicaid or Medicare Incentive Payment. (n=29)



- 69% of the hospitals had calculated their expected Medicare or Medicaid incentive payment for adopting, implementing, upgrading or demonstrating meaningful use of certified EHR technology.
- 14% had not yet calculated their expected incentive payment, but plan to do so.
- 17% had not yet calculated their expected payment.

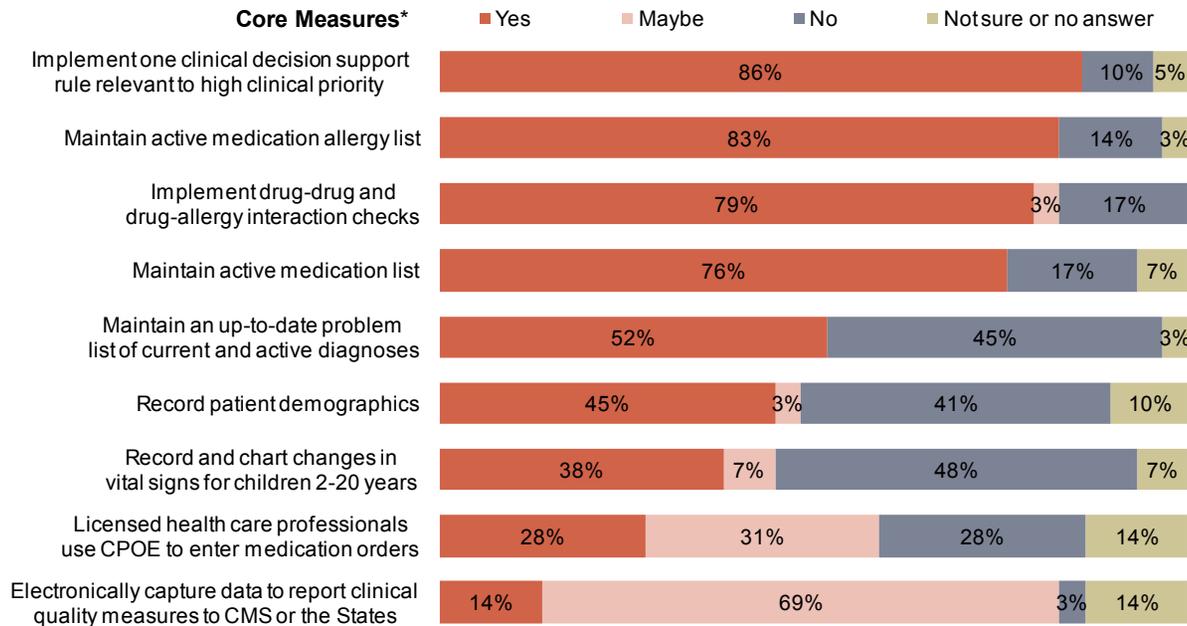
Hospitals commonly identified generating data for quality reports, performing medication reconciliation, and exchanging clinical information with providers as the most difficult meaningful use criteria to achieve. (n=29)



Note: This survey was administered when the draft meaningful use regulations were released. The final regulations are significantly less stringent than the draft rules.

- At the time of the survey, 40% of the hospitals identified generating data for quality reports as one of the most difficult meaningful use criteria to achieve.
- 33% identified performing medication reconciliation across settings as one of the most difficult meaningful use criteria to achieve.
- 30% of the hospitals identified clinical information exchange with providers as one of the most difficult meaningful use criteria to achieve.

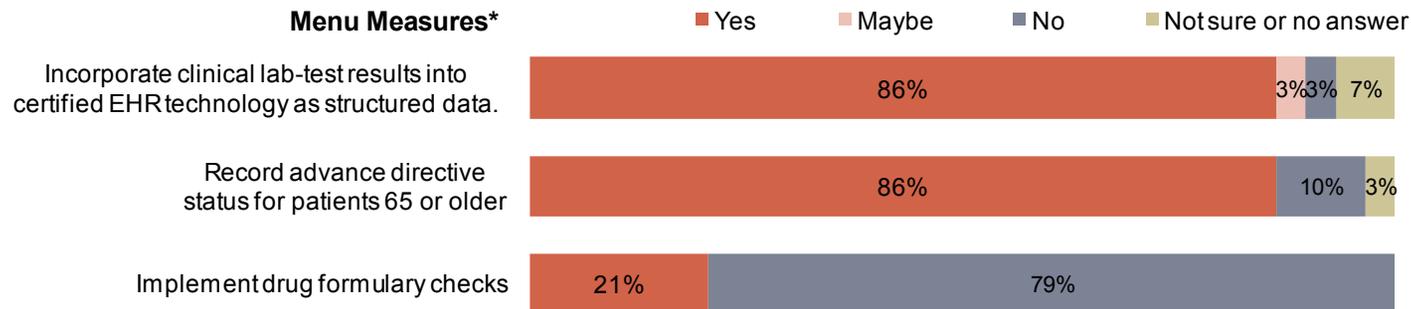
Most Maine hospitals that have an EHR appear to meet half of the core criteria related to improving quality, safety, efficiency, and reducing health disparities. (n=29)



* The hospital HIT survey did not include the core criterion for recording the smoking status of at least half patients older than 12.

- Most Maine hospitals report meeting the first five core quality criteria in the chart above.
- Fewer than half of Maine hospitals appear to meet four other quality meaningful use criteria. For example, one-quarter clearly exceeded the new threshold for the proportion of medication orders entered into a CPOE system.
- While only 14% of EHR-equipped hospitals said they collected quality measures exclusively through their EHRs, another 69% said they collect the data from both their EHR and paper charts. If all of those hospitals were to convert to collecting all the data through their EHR, then more than 8-out-of-10 would meet the criterion.

Most Maine hospitals that have an EHR meet at least two of the four meaningful use criteria related improving quality, safety, efficiency, and reducing health disparities. (n=29)



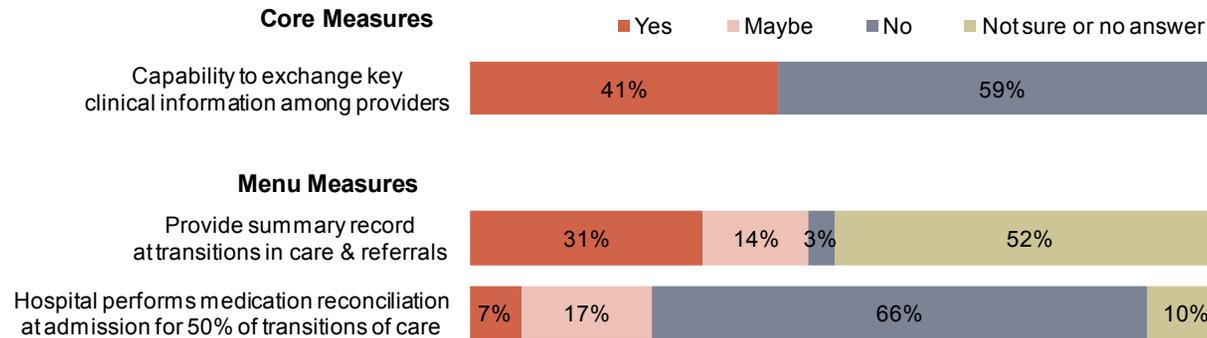
- More than 8-out-of-10 Maine hospitals that had an EHR:
 - stored their clinical lab test results electronically; and
 - used their EHR to record whether patients age 65-and-above had an advance directive on file.
- However, only one-fifth of Maine hospitals used their EHR to check whether a drug they might prescribe for a given patient was covered by the patient’s insurer.

Most Maine hospitals do not appear to meet meaningful use core criteria related to engaging patients and families in their health care. (n=29)



- 55% do not meet the new core requirement that hospitals provide patients with an electronic copy of their health care information upon request within three business days.
- At least 17% meet this criteria and another 24% may meet the new criteria.
- The survey did not include an item on a new meaningful use measure on relating to patient education. To satisfy this new measure, hospitals will need to use their EHR to identify and provide patient-specific education resources to more than 10% of all unique hospital inpatients and emergency room patients.

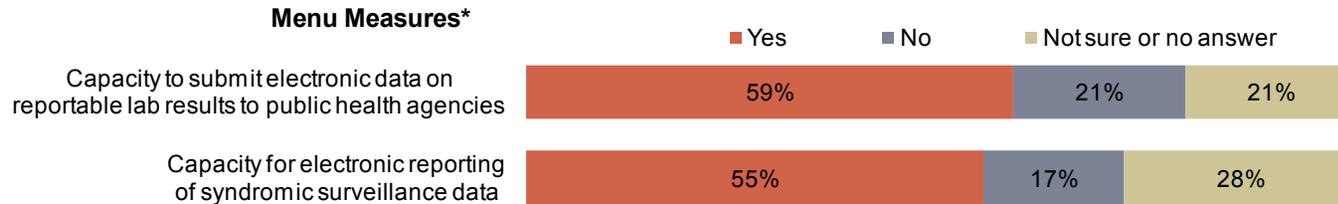
Most Maine hospitals will need to expand capacity to share clinical information with other providers to satisfy meaningful use criteria around improving care coordination. (n=29)



- 41% of the hospitals appeared to meet the core measure of capability to exchange key clinical information among providers, according to our analysis. However, changes in the meaningful use criteria around care coordination make it difficult to translate survey data into information about readiness to meet the new meaningful use criteria.
- A minority of hospitals meet menu meaningful use measures related to improving care coordination.

Note: The final rule’s core criterion for improving care coordination requires hospitals to have performed at least one test of their ability to electronically exchange key clinical information with other clinical entities who do not share the hospital’s EHR. The survey instead asked if the hospital had already put clinical data exchange to use and asked about the relationship of entities’ relationship to the hospital. Our analysis included as meeting the criteria, hospital data exchange with ambulatory providers within their system; other hospitals outside their system and outside ambulatory providers.

Most Maine hospitals that have EHRs already meet both menu measures associated with the meaningful use goal of improving population and public health. (n=29)



** The meaningful use regulations include a third menu criterion that was not covered in the HIT survey – a test of the hospital EHR’s ability to electronically submit data to an immunization registry.*

- Most hospitals (59%) report that they have the ability to submit electronic data on reportable lab results to public health agencies.
- Most hospitals also report they have capacity for electronically reporting syndromic surveillance data.
- Syndromic surveillance acts as an early warning system by reporting combinations of patient symptoms that are typical of a communicable disease even before the diagnosis has been confirmed.

Note: While the menu criteria for population and public health require that hospitals perform a test of their ability to electronically submit the appropriate data to public health authorities, the HIT survey only asks if they believe they have that ability.

The HIT survey does not directly address the core measure specified for the fifth meaningful use goal, ensuring adequate privacy and security protections for personal health information.

The CMS meaningful use criteria and the HIT survey take different approaches to patient privacy and the security of their personal health information. The meaningful use criterion for privacy protection requires hospitals to conduct a thorough security review, and establish the security-related procedures, technical standards, personnel rules and employee training programs specified by the Health Insurance Portability and Accountability Act (HIPAA).

The hospital HIT survey covered only one aspect of the HIPAA security rules, whether the EHR prevents users from accessing data they are not authorized to see. Twenty-four (24) of the 29 hospitals with EHRs (83%) said they have those protections in place, while only 3 hospitals (10%) said they did not, one hospital didn't answer, and one hospital was not sure.

- In answer to a related question, 23 hospitals (79%) said they allow individual patients to set limits to:
- Who can access to their health records;
- The conditions under which their health records may be accessed;
- Authorization of the release of their health records to third parties; and
- Authorization for the release of their mental health information to third parties.

Four hospitals (14%) allowed patients to set their own privacy standards in some, but not all of these areas. One hospital (3%) said they did not provide for patients to specify any privacy standards, and the one remaining hospital (3%) was unsure.