2012 AHA Annual Survey
Information Technology Supplement
Health Forum, L.L.C.

Please Note: This year we continue to include new questions designed to capture your current level of adoption and gain insights in the context of the US Department of Health and Human Service's Meaningful Use initiative. This information will provide important data on the state of health IT in hospitals as relating specifically to the goals of the program.

GENERAL INSTRUCTIONS: Please respond to each of the following questions as of the day the survey is completed.

1. Does your hospital currently have a computerized system which allows for:

(Fully implemented means it has completely replaced paper record for the function.)	**(1)** Fully Implemented Across ALL Units	**(2)** Fully Implemented in at least one Unit	**(3)** Beginning to Implement in at least one Unit	**(4)** Have Resources to Implement in the next year	**(5)** Do Not have Resources but Considering Implementing	**(6)** Not in Place and Not Considering Implementing
Electronic Clinical documentation						
a. Patient demographics	☐	☐	☐	☐	☐	☐
b. Physician notes	☐	☐	☐	☐	☐	☐
c. Nursing notes	☐	☐	☐	☐	☐	☐
d. Problem lists	☐	☐	☐	☐	☐	☐
e. Medication lists	☐	☐	☐	☐	☐	☐
f. Discharge summaries	☐	☐	☐	☐	☐	☐
g. Advanced directives (e.g. DNR)	☐	☐	☐	☐	☐	☐
Results Viewing						
a. Laboratory reports	☐	☐	☐	☐	☐	☐
b. Radiology reports	☐	☐	☐	☐	☐	☐
c. Radiology images	☐	☐	☐	☐	☐	☐
d. Diagnostic test results (e.g. EKG report, Echo report)	☐	☐	☐	☐	☐	☐
e. Diagnostic test images (e.g. EKG tracing)	☐	☐	☐	☐	☐	☐
f. Consultant reports	☐	☐	☐	☐	☐	☐
Computerized Provider Order Entry (Provider (e.g., MD, APN, NP) directly enters own orders that are transmitted *electronically*)						
a. Laboratory tests	☐	☐	☐	☐	☐	☐
b. Radiology tests	☐	☐	☐	☐	☐	☐
c. Medications	☐	☐	☐	☐	☐	☐

(Fully implemented means it has completely replaced paper record for the function.)	**(1)** Fully Implemented Across <u>ALL</u> Units	**(2)** Fully Implemented in <u>at least one</u> Unit	**(3)** Beginning to Implement in <u>at least one</u> Unit	**(4)** Have Resources to Implement in the next year	**(5)** Do Not have Resources but Considering Implementing	**(6)** Not in Place and Not Considering Implementing
Computerized Provider Order Entry (Provider (e.g., MD, APN, NP) directly enters own orders that are transmitted *electronically*) (continued)						
d. Consultation requests	☐	☐	☐	☐	☐	☐
e. Nursing orders	☐	☐	☐	☐	☐	☐
Decision Support						
a. Clinical guidelines (e.g. Beta blockers post-MI, ASA in CAD)	☐	☐	☐	☐	☐	☐
b. Clinical reminders (e.g. pneumovax)	☐	☐	☐	☐	☐	☐
c. Drug allergy alerts	☐	☐	☐	☐	☐	☐
d. Drug-drug interaction alerts	☐	☐	☐	☐	☐	☐
e. Drug-lab interaction alerts	☐	☐	☐	☐	☐	☐
f. Drug dosing support (e.g. renal dose guidance)	☐	☐	☐	☐	☐	☐
Bar Coding or Radio Frequency Identification (RFID) for Closed-loop Medication Tracking						
a. Medication administration	☐	☐	☐	☐	☐	☐
b. Patient verification	☐	☐	☐	☐	☐	☐
c. Caregiver verification	☐	☐	☐	☐	☐	☐
d. Pharmacy verification	☐	☐	☐	☐	☐	☐
Other Functionalities						
a. Bar coding or Radio Frequency (RFID) for supply chain management	☐	☐	☐	☐	☐	☐
b. Telehealth	☐	☐	☐	☐	☐	☐
c. Ability to connect mobile devices (tablet, smart phone, etc.) to EHR	☐	☐	☐	☐	☐	☐

Meaningful Use Functionalities

2. Do you currently have an electronic system that allows you to do the following:

Electronic Clinical Documentation	Yes	No	Do Not Know
a. Record gender and date of birth	☐	☐	☐
b. Record race and ethnicity	☐	☐	☐
c. Record time and preliminary cause of death when applicable	☐	☐	☐
d. Record preferred language for communication with providers of care	☐	☐	☐
e. Vital signs (height, weight, blood pressure, BMI, growth charts)	☐	☐	☐
f. Record smoking status using standard format	☐	☐	☐
g. Record and maintain medication allergy lists	☐	☐	☐
h. Record patient family health history as structured data	☐	☐	☐
i. Incorporate as structured data lab results for more than 40 percent of patients admitted to inpatient or emergency departments	☐	☐	☐

Population Health Management	Yes	No	Do Not Know
a. Generate lists of patients by condition	☐	☐	☐
b. Identify and provide patient-specific education resources	☐	☐	☐

Medication Management	Yes	No	Do Not Know
a. Compare a patient's inpatient and preadmission medication lists	☐	☐	☐
b. Provide an updated medication list at time of discharge	☐	☐	☐
c. Check inpatient prescriptions against an internal formulary	☐	☐	☐
d. Automatically track medications with an electronic medication administration record (eMAR)	☐	☐	☐
e. Electronic prescribing (eRx) of discharge medication orders	☐	☐	☐

Discharge Instructions and Care Summary Documents

	Yes	No	Do Not Know
a. Provide patients an electronic copy of their discharge instructions upon request	☐	☐	☐
b. Provide patients an electronic copy of their record upon request within 3 business days	☐	☐	☐
c. Generate summary of care record for relevant transitions of care	☐	☐	☐
d. Include care teams and plan of care in care summary record	☐	☐	☐
e. Electronically exchange key clinical information with providers	☐	☐	☐
f. Send transition of care summaries to an unaffiliated organization using a different certified electronic health record vendor	☐	☐	☐

Automated Quality Reporting

	Yes	No	Do Not Know
a. Automatically generate hospital-specific meaningful use quality measures by extracting data from an electronic record without additional manual processes	☐	☐	☐
b. Automatically generate Medicare Inpatient Quality Reporting program measures for a full Medicare inpatient update	☐	☐	☐
c. Automatically generate physician-specific meaningful use quality measures calculated directly from the electronic health record (EHR) without additional manual processes	☐	☐	☐

Public Health Reporting

	Yes	No	Do Not Know
a. Submit electronic data to immunization registries/information systems per meaningful use standards	☐	☐	☐
b. Submit electronic data on reportable lab results to public health agencies per meaningful use standards	☐	☐	☐
c. Submit electronic syndromic surveillance data to public health agencies per meaningful use standards	☐	☐	☐

Other Functionalities

	Yes	No	Do Not Know
a. Implement at least 5 Clinical Decision Support interventions related to 4 or more clinical quality measures	☐	☐	☐
b. Conduct or review a security risk analysis and implement security updates as necessary	☐	☐	☐

Health Information Exchange Functionalities

3a. Which of following <u>patient data</u> does your hospital <u>electronically exchange/share</u> with <u>one or more of the provider types</u> listed below? (Check all that apply)

		With Hospitals In Your System	With Hospitals Outside of Your System	With Ambulatory Providers Inside of Your System	With Ambulatory Providers Outside of Your System	Do not know
a.	Patient demographics	☐	☐	☐	☐	☐
b.	Laboratory results	☐	☐	☐	☐	☐
c.	Medication history	☐	☐	☐	☐	☐
d.	Radiology reports	☐	☐	☐	☐	☐
e.	Clinical/Summary care record in any format	☐	☐	☐	☐	☐
f.	Other types of patient data	☐	☐	☐	☐	☐
g.	We do not exchange any patient data	☐	☐	☐	☐	☐

3b. If you exchange or share clinical/summary care records with other providers, what is the <u>primary</u> mechanism used? (select only one)

Through EHR or other electronic means	Manual Process (e.g. fax, mail)	Do Not Know
☐	☐	☐

3c. Does your hospital have the capability to send clinical/summary of care records in <u>Continuous Care Record (CCR), Clinical Document Architecture (CDA)</u> or <u>Continuous Care Documentation (CCD) format</u>?

Yes	No	Do Not Know	Not applicable
☐	☐	☐	☐

4a. Do any <u>current</u> arrangements exist in your area to share electronic patient-level clinical data through an electronic health information exchange (HIE) or a regional health information organization (RHIO)?

☐ Arrangement(s) exist(s)   *(select any participation level in 4b)*

☐ Arrangement(s) do(es) not exist   *(select only second or third participation level in 4b)*

☐ Do not know   *(proceed to question 5a)*

4b. Please indicate your level of participation in a regional health information exchange (HIE) or regional health information organization (RHIO).

☐ Participating and actively exchanging data in at least one HIE/RHIO

☐ Have the electronic framework to participate but not participating in any HIE/RHIO at this time

☐ <u>Do not have</u> the electronic framework to participate and not participating in any HIE/RHIO at this time

☐ Do not know

5a. When a patient visits your Emergency Department, do you routinely provide electronic notification to the patient's primary care physician?

Yes	No	Do Not Know
☐	☐	☐

5b. If yes, are electronic notifications provided to primary care physicians listed below? (Check *all* that apply)

Inside of Your System	Outside of Your System	Do Not Know
☐	☐	☐

6. Are providers at your hospital able to query electronically for a patient's health information (e.g. medications, outside encounters) from sources outside of your organization or system?

Yes	No	Do Not Know
☐	☐	☐

Patient Engagement Functionalities

7. Are patients able to do any of the following regarding their health/medical records: (Please check *all* that apply)

- ☐ View information from their health/medical record online
- ☐ Download information from their health/medical record
- ☐ Request an amendment to change/update their health/medical record
- ☐ Request refills for prescriptions online
- ☐ Schedule appointments online
- ☐ Pay bills online
- ☐ Submit patient-generated data (e.g., blood glucose, weight)
- ☐ None of the above (*skip to question #9*)
- ☐ Do not know (*skip to question #9*)

8. What mechanism(s) do you use to provide patients with the ability to access their health information and manage their healthcare electronically (such as those capabilities listed above)?
  (Please check *all* that apply)

- ☐ Personal Health Record (PHR)
- ☐ Patient/Consumer portal
- ☐ Secure messaging with providers
- ☐ Other (Please Specify _____)
- ☐ None

EHR System and IT Vendors

9. Does your IT Department currently support an infrastructure for two factor authentication (e.g. tokens or biometrics)?

☐ Yes

☐ No

☐ Do not know

10. Does your hospital use an EMR/EHR system(s)? Do not include billing/scheduling systems.

☐ Yes, fully electronic

☐ Yes, partially electronic

☐ No *(skip to question #15)*

☐ Do not know *(skip to question #15)*

EMR/EHR is defined as "Electronically originated and maintained clinical health information derived from multiple sources about an individual's health status and healthcare. An EHR replaces the paper medical record as the primary source of patient information."

11. If so, in what year did you first deploy your current EMR/EHR system? _____

Do not know ☐

Deployed is defined as "going live with at least one major component of the EMR/EHR."

12. Do you possess an EHR system that has been certified as meeting federal requirements for the hospital objectives of Meaningful Use?

☐ Yes   ☐ No ☐ Do not know

13. On the whole, how would you describe your EMR/EHR system?

☐ A mix of products from different vendors

☐ Primarily one vendor

☐ Self-developed

14a. Which vendor below provides your <u>primary inpatient</u> EMR/EHR system? (Please check only one)
"Primary" is defined as the system that is used for the largest number of patients or the system in which you have made the single largest investment. Please answer based on vendor name rather than product.

☐ Allscripts/Eclipsys   ☐ CPSI   ☐ Cerner   ☐ NextGen

☐ Epic   ☐ GE   ☐ HMS   ☐ Healthland

☐ McKesson   ☐ Meditech   ☐ QuadraMed   ☐ Vitera

☐ Siemens   ☐ Self-developed

☐ Other (please specify) _____

☐ Would prefer not to disclose

14b. Which vendor below provides your <u>primary outpatient</u> EMR/EHR system? (Please check only one)
"Primary" is defined as the system that is used for the largest number of patients or the system in which you have made the single largest investment. Please answer based on vendor name rather than product.

☐ Allscripts/Eclipsys   ☐ CPSI   ☐ Cerner   ☐ eClinical Works

☐ Epic   ☐ GE   ☐ HMS   ☐ Healthland

☐ McKesson   ☐ Meditech   ☐ QuadraMed   ☐ Vitera

☐ Siemens   ☐ Self-developed

☐ Other (please specify) _____

☐ Would prefer not to disclose

15. What changes, if any, are you planning for your <u>primary inpatient</u> EMR/EHR system within the next 18 months? (Check *all* that apply)

☐ Initial deployment

☐ Major change in vendor

☐ Change from enterprise architecture to best-of-breed

☐ Change from best-of-breed to enterprise architecture

☐ Significant additional functionalities

☐ Do not know

☐ No major changes planned

16. What is(are) /would be the primary challenge(s) in implementing an EMR/EHR system that meets the federal requirements for meaningful use? (Please check all that apply)

☐ Upfront capital costs/lack of access to capital to install systems

☐ Ongoing cost of maintaining and upgrading systems

☐ Obtaining physician cooperation

☐ Obtaining other staff cooperation

☐ Concerns about security or liability for privacy breaches

☐ Uncertainty about certification requirements

☐ Limited vendor capacity

☐ Lack of adequate IT personnel in hospital to support implementation/maintenance

☐ Challenge/complexity of meeting all meaningful use criteria within implementation timeframe

☐ Complexity associated with coordinating decision with system-level leadership

☐ Other (specify) _____

Definitions

Question 2 - Summary Care Record The Centers for Medicare & Medicaid Services (CMS) define a transition of care as the movement of a patient from one setting of care (hospital, ambulatory primary care practice, ambulatory, specialty care practice, long-term care, home health, rehabilitation facility) to another. The federal regulation for Meaningful Use specifies that for more than 50 percent of transitions of care or referrals, eligible hospitals must provide a summary care record using specified vocabulary, clinical documentation, and transmission standards and including, at a minimum, diagnostic tests results, problem list, medication list, and medication allergy list.

Question 3a – Electronic Exchange Electronic exchange of patient healthcare information refers to exchanging of data through non-manual means, such as EHRs and/or portals, and excludes fax/paper.

Question 3a/5a – Inside/Outside System Hospitals and ambulatory providers inside your system refer to those affiliated with your integrated delivery system/network. Hospitals and ambulatory providers outside your system refer to those unaffiliated with your integrated delivery system/network.

Question 3c – Continuous Care Records Continuous care record standard enables a patient health summary to be created, read, and interpreted by any EHR/EMR software application.

Question 3c – Clinical Document Architecture Continuous document architecture is an XML-based markup standard intended to specify the encoding, structure, and semantic of clinical document for exchange.

Question 3c – Continuous Care Documentation Continuous care documentation is an HL7 Clinical Document Architecture implementation of the Continuous Care Record.

Thank you for your cooperation in completing this survey. If you are not the CIO or person responsible for information technology, has he or she reviewed your answers to this survey?

☐ Yes   ☐ No

_____
Respondent Name (please print)   Circle CIO or Print Title if other   (Area Code) Telephone #

_____/_____/____   _____   _____
Date of Completion   Name of CIO (if other than respondent)   Email Address

NOTE: PLEASE PHOTOCOPY THIS INFORMATION FOR YOUR HOSPITAL FILE BEFORE RETURNING THE ORIGINAL FORM TO THE AMERICAN HOSPITAL ASSOCIATION.

THANK YOU