

2009 AHA Annual Survey Information Technology Supplement Health Forum, L.L.C.

Please return to:
AHA Annual Survey
Information Technology Supplement
155 N. Wacker Drive
Chicago, IL 60606

Please Note: Where specified, this year's survey includes new questions designed to capture your current level of adoption and future plans in the context of meaningful use. This information will help inform government on the state of health IT in hospitals as relating specifically to meaningful use proposed standards.

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

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

	Functionalities we continue to measure...					
<i>(Fully implemented means it has completely replaced paper record for the function.)</i>	(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
Electronic Clinical Documentation						
a. Patient Demographics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Physician notes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Nursing notes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Problem lists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Medication lists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Discharge summaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Advanced directives (e.g. DNR)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Results Viewing						
a. Laboratory reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Radiology reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Radiology images	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Diagnostic test results (e.g. EKG report, Echo report)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Diagnostic test images (e.g. EKG tracing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Consultant reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Computerized Provider Order Entry (Provider (e.g., MD, APN, NP) directly enters own orders that are transmitted electronically)						
a. Laboratory tests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Radiology tests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Medications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Consultation requests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Nursing Orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Decision Support						
a. Clinical guidelines (e.g. Beta blockers post-MI, ASA in CAD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Clinical reminders (e.g. pneumovax)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Drug allergy alerts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Drug-drug interaction alerts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Drug-lab interaction alerts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Drug dosing support (e.g. renal dose guidance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	(1) Fully Implemented Across <u>ALL</u> Units	(2) Fully Implemented in <u>at least</u> <u>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
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Bar Coding

a. Laboratory specimens	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Tracking pharmaceuticals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Pharmaceutical administration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Patient ID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other Functionalities

a. Telemedicine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Radio Frequency ID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Physician use of personal data assistant (PDA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

New functionalities we are measuring this year...

1b. Does your hospital have a computerized system which allows for:
(Fully implemented means it has completely replaced paper record for the function.)

<i>(Fully implemented means it has completely replaced paper record for the function.)</i>	(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
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Electronic Clinical Documentation

Do the functionalities of your computerized system include patients':

a. Name, address, contact information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Gender and date of birth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Race and ethnicity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Insurance type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Preferred language for communication with providers of care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Vital signs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Height and weight and BMI displayed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Smoking status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Comprehensive list of allergies (including medication allergies)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Summary care record for relevant transitions in care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Results Viewing

a. Generation of a table or graph displaying patient specific lab results over time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Decision Support

a. Advice on diagnosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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2. Does your electronic system allow you to do the following?

	Yes	No	Do not know
a. Develop a list of a patient's current medications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Compare a patient's inpatient and preadmission medication lists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Provide an updated medication list at time of discharge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Automatically generate HQA (Hospital Quality Alliance) measures by extracting data from an electronic record for a Medicare inpatient prospective payment system update without additional manual processes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Automatically generate PQRI (Physician Quality Reporting Initiative) measures calculated directly from the EHR without additional manual processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Do any 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 3a)*
- Arrangement(s) do not exist(s) *(select only second or third participation level in 3a)*

3a. 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
- Do not have the electronic framework to participate and not participating in any HIE/RHIO at this time

4. Does your hospital electronically exchange any of the following patient data with any of the providers 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
a. Patient demographics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Clinical care record (clinical history, exam)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Laboratory results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Medication history	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Radiology reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please Note: The remaining questions are new and designed to capture your current level of adoption and future plans in the context of meaningful use. Again, this information will help inform government on the state of health IT in hospitals as relating specifically to meaningful use proposed standards.

5. In what year did you first deploy an EMR/EHR? _____

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

6. Does your electronic system allow you to do the following?

	Yes	No	Do not know
a. Check insurance eligibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Submit claims electronically to both public and private payers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Send reminders to patients for pre-admission and/or follow-up care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Capture patient consents or authorizations electronically	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Is your current system capable of providing patients with an electronic copy of their health information that includes all of the following functionalities: diagnostic test results, problem lists, medication lists, and allergies?

- Yes *Proceed to question 7a*
- No *Proceed to question 8*
- Do not know *Proceed question 8*

7a. Through what mechanism(s) are you currently providing this electronic information?
(Please check *all* that apply)

- PHR
- Patient portal
- Secure message
- USB drive or other physical device
- Other (Please List _____)
- None

8. Do you intend to apply for Medicare or Medicaid incentive payments for meaningful use of health IT?

- Yes, Medicare *Proceed to question 8a*
- Yes, Medicaid *Proceed to question 8a*
- Both Medicare and Medicaid *Proceed to question 8a*
- Neither *Proceed to question 8b*
- Undecided *Proceed to question 8b*
- Do not know *Proceed to question 8b*

8a. In what federal fiscal year (Oct 1- Sept 30) do you plan to make your first application?
Please proceed to question 9 after completing answer.

- | | |
|-------------------------------|---|
| <input type="checkbox"/> 2011 | <input type="checkbox"/> 2015 |
| <input type="checkbox"/> 2012 | <input type="checkbox"/> 2016-Medicaid only |
| <input type="checkbox"/> 2013 | <input type="checkbox"/> After 2016-Medicaid only |
| <input type="checkbox"/> 2014 | <input type="checkbox"/> Do not know |

8b. Why are you not pursuing or unsure whether you will pursue Medicare/Medicaid meaningful use incentive payments? (Please check *all* that apply)

- 1. Cost - including acquisition and maintenance
- 2. Lack of access to capital
- 3. Resistance to implementation (e.g. from physicians and/or other providers)
- 4. Concerns about security or liability for privacy breaches
- 5. Uncertainty about certification process
- 6. Lack of vendor capacity
- 7. Lack of adequate IT personnel in the hospital to support implementation/maintenance
- 8. Challenge of meeting all meaningful use criteria within implementation timeline
- 9. Other (specify) _____

8c. Of those selected from 8b, please indicate the single largest barrier to reaching meaningful use.
 (Please select option number appearing in question 8b above.)

- (Choose only one)
- | | | | | | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

9. Which two specific proposed meaningful use criteria will or would be the most challenging to achieve? (Please select *only two*)

- Implement clinical decision support (CDS) rules
- Implement computerized provider order entry (CPOE) at specified level of sophistication
- Exchange clinical information with other providers
- Perform medication reconciliation across settings of care
- Give patients access to their data in electronic form
- Generate problem lists using codified data sets
- Generate numerator and denominator data for quality reporting directly from EHR

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

- Yes
- No
- Do not know

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

- A mix of products from different vendors
- Primarily one vendor
- Self-developed
- Not Applicable (go to question 13)

12a. Who provides your primary inpatient EHR/EMR system? (Please check only one)

"Primary" is defined as the system that handles the largest number of patients or the system in which you have made the single largest investment.

- Allscripts Cerner eClinical Works Eclipsys
- Epic GE McKesson MED3000
- Meditech NextGen QuadraMed Sage
- Siemens Self-developed
- Other (please specify) _____
- Would prefer not to disclose

12b. Who provides your primary outpatient EHR/EMR system? (Please check only one)

"Primary" is defined as the system that handles the largest number of patients or the system in which you have made the single largest investment.

- Allscripts Cerner eClinical Works Eclipsys
- Epic GE McKesson MED3000
- Meditech NextGen QuadraMed Sage
- Siemens Self-developed
- Other (please specify) _____
- Would prefer not to disclose

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

- Initial deployment
- Major change in vendor
- Major change in architecture
"Architecture" is defined as change from enterprise architecture to best of breed or vice versa
- Significant additional functionalities
- Do not know
- No major changes planned

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)

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

THANK YOU