2013 AHA ANNUAL SURVEY INFORMATION TECHNOLOGY SUPPLEMENT SURVEY QUESTIONNAIRE

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 <u>ALL</u> Units | (2) Fully Implemented in at least one Unit | (3) Beginning to Implement in <u>at least</u> <u>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 | | | | | | | |
| 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 | | | | | | | |
| d. Consultation requests | | | | | | | |
| e. Nursing orders | | | | | | | |

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

| (Fully implemented means it has completely replaced paper record for the function.) | (1) Fully Implemented Across <u>ALL</u> 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 |
|---|---|--|---|--|--|---|
| 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 Identificati | on (RFID) for C | losed-loop Med | lication Trackin | ıg | | |
| 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:

| | YES | NO | DO NOT KNOW |
|---|-----|----|-------------|
| Electronic Clinical Documentation | | | |
| 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 | | | |
| a. Generate lists of patients by condition | | | |
| b. Identify and provide patient-specific education resources | | | |
| Medication Management | | | |
| 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 | | | |
| | | | |

MEANINGFUL USE FUNCTIONALITIES

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

| | YES | NO | DO NOT KNOW |
|--|-----|----|-------------|
| Discharge Instructions and Care Summary Documents | | | |
| 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 | | | |
| 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 | | | |
| 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 | | | |
| 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 electronically exchange/share 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 no know |
|------------|---|--|--|---|--|---------------|
| a. Pa | tient demographics | | | | | |
| b. La | boratory results | | | | | |
| c. Me | edication history | | | | | |
| d. Ra | diology reports | | | | | |
| e. Cl | inical/Summary care record in any format | | | | | |
| f. Ot | ther types of patient data | | | | | |
| g. W | e do not exchange any patient data | | | | | |
| 3b. 3c. | what is the primary mechanism used? (select only one) Through EHR or other electronic means Manual Process (e.g. fax, mail) Do Not Know | | | | | |
| 4a. | Continuous Care Documenta Yes No Do not Do any <u>current</u> arrangements through an electronic health is organization (RHIO)? | exist in your a | Not applicable area to share e schange (HIE) | or a regional | | |
| 4b. | Arrangement(s) exist(s) | (select only(proceed to articipation in organization data in at least one ticipate but not par | second or third pa question 5a) a regional he (RHIO). HIE/RHIO | alth informati | on exchange (F | HIE) |
| | Do not know | to participate and | not participating i | п алу пів/кніО а | u uns time | |
| | | | | | | |

HEALTH INFORMATION EXCHANGE FUNCTIONALITIES CONTINUED When a patient visits your Emergency Department, do you routinely provide electronic notification to the patient's primary care physician? 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 6a. 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 6b. Are providers at your hospital able to send and receive secure electronic messages containing patient's health information (e.g. medications, outside encounters) to and from sources outside of your organization or hospital system? Yes No Do not know **Patient Engagement Functionalities** 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 Electronically transmit (send) transmission of care/referral summaries to a third party 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) What mechanism(s) do you use to provide patients with the ability to access their health 8. 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. EMR/EHR is defined as "Electronically originated and maintained clinical health information derived from multiple sources health status and healthcare. An EHR replaces the paper medical record as the primary source of patient information." | | | | | | | |
| | Yes, fully electronic | | | | | | |
| | Yes, partially electronic | | | | | | |
| | No (skip to que | stion #15) | | | | | |
| | Do not know (skip to ques | tion #15) | | | | | |
| 11. | If so, in what year did you first deploy your current EMR/EHR system? Deployed is defined as "going live with at least one major component of the EMR/EHR." Do not know | | | | | | |
| 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/I | EHR system? | | | | |
| | A mix of products from differen | t vendors Primarily o | one vendor Self-developed | | | | |
| 14a. | Which vendor below prov (Please check only one) | ides your <u>primary inpatien</u> | t EMR/EHR system? | | | | |
| | "Primary" is defined as the system that is investment. Please answer based on vend | | or the system in which you have ma | ade the single largest | | | |
| | Allscripts/Eclipsys | CPSI | Cerner | NextGen | | | |
| | Epic | GE | HMS | Healthland | | | |
| | McKesson | Meditech | QuadraMed | Vitera | | | |
| | Siemens | Self-developed | | | | | |
| | Other (please specify) | | | | | | |
| | Would prefer not to disclose | | | | | | |

EHR SYSTEM AND IT VENDORS CONTINUED

14b. Which vendor below provides your primary outpatient 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** eClinical Works Cerner 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) _

EHR SYSTEM AND IT VENDORS CONTINUED

| 17. | Please indicate the | ease indicate the degree to which you have redesigned workflows to make optimal use | | | | | | | |
|---|---|---|-----------------------------------|--------------------|--------------------|--|--|--|--|
| | of your EHR: | | | | | | | | |
| | | | | | | | | | |
| | Workflows have | Beginning to | Some workflows | Most workflows | All workflows are | | | | |
| | not been redesigned | redesign workflows | are redesigned; others are not | are redesigned | redesigned | | | | |
| | rouosignou | WORKHOWS | others are not | | | | | | |
| 18. | Please indicate who | ether you have used | l electronic clinical da | ata from the EHR o | r other electronic | | | | |
| | system in your hos | system in your hospital to: (Please check all that apply) | | | | | | | |
| | Create a dashboard w | ith measures of organizatio | nal performance | | | | | | |
| | Create a dashboard with measures of unit-level performance | | | | | | | | |
| Create individual provider performance profiles | | | | | | | | | |
| | Create an approach for clinicians to query the data | | | | | | | | |
| | Assess adherence to clinical practice guidelines | | | | | | | | |
| | Identify care gaps for specific patient populations | | | | | | | | |
| | Generate reports to in | nform strategic planning | | | | | | | |
| Maximize quality improvement | | | | | | | | | |
| | Identify high risk patients for follow-up care using algorithm or other tools | | | | | | | | |

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.

Ouestion 3c - Continuous Care Documentation

Continuous care documentation is an HL7 Clinical Document Architecture implementation of the Continuous Care Record.