2015 AHA Annual Survey
Information Technology Supplement
Health Forum, L.L.C.

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

HOSPITAL NAME:_____

CITY & STATE:_____

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	☐	☐	☐	☐	☐	☐
d. Consultation requests	☐	☐	☐	☐	☐	☐
e. Nursing orders	☐	☐	☐	☐	☐	☐

(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**
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. Remote patient monitoring	☐	☐	☐	☐	☐	☐
d. Ability to connect mobile devices (tablet, smart phone, etc.) to EHR	☐	☐	☐	☐	☐	☐

Meaningful Use Functionalities

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

Electronic Clinical Documentation & Population Health Management	**Yes**	**No**	**Do Not Know**
a. Record patient demographics, including race, ethnicity and preferred language	☐	☐	☐
b. Identify and provide patient-specific education resources	☐	☐	☐
Medication Management			
a. Compare a patient's inpatient and preadmission medication lists	☐	☐	☐
b. Check inpatient prescriptions against an internal formulary	☐	☐	☐
c. Prescribe (eRx) discharge medication orders electronically	☐	☐	☐
d. Provide an updated medication list at time of discharge	☐	☐	☐
Care Summary Documents			
a. Generate summary of care record for relevant transitions of care	☐	☐	☐
b. Send summary of care records to an unaffiliated organization using a different certified EHR vendor	☐	☐	☐
Automated Quality Reporting			
a. Automatically generate hospital-specific meaningful use quality measures by extracting data from an EHR 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 EHR without additional manual processes	☐	☐	☐
Public Health Reporting			
a. Submit electronic data to immunization registries/information systems on an ongoing basis per meaningful use standards	☐	☐	☐
b. Submit electronic data on reportable lab results to public health agencies on an ongoing basis per meaningful use standards	☐	☐	☐
c. Submit electronic syndromic surveillance data to public health agencies on an ongoing basis per meaningful use standards	☐	☐	☐
d. Submit specialized data registry reports to public health agencies on an ongoing basis 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	☐	☐	☐

3. Are patients treated in your hospital able to do the following:	**Yes**	**No**	**Do Not Know**
a. View their health/medical information online	☐	☐	☐
b. Download information from their health/medical record	☐	☐	☐
c. Electronically transmit (send) transmission of care/referral summaries to a third party	☐	☐	☐
d. Request an amendment to change/update their health/medical record	☐	☐	☐
e. Request refills for prescriptions online	☐	☐	☐
f. Schedule appointments online	☐	☐	☐
g. Pay bills online	☐	☐	☐
h. Submit patient-generated data (e.g., blood glucose, weight)	☐	☐	☐
i. Secure messaging with providers	☐	☐	☐
j. Designate family member or caregiver to access information on behalf of the patient (e.g., proxy access)	☐	☐	☐

Health Information Exchange Functionalities

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

	With Hospitals Inside of 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	☐	☐	☐	☐	☐

This next section asks further detail about sending and/or receiving summary care records.

5. When a patient transitions to another care setting or organization outside your hospital system, how does your hospital routinely send and/or receive a summary of care record? Check *all* that apply.

	Send	Receive	Neither send nor receive	Do not know
a. Mail or fax	☐	☐	☐	☐
b. eFax using EHR	☐	☐	☐	☐
c. Secure messaging using EHR (via DIRECT or other secure protocol)	☐	☐	☐	☐
d. Provider portal (i.e., post to portal or download from portal)	☐	☐	☐	☐
e. Via health information exchange organization or other third party	☐	☐	☐	☐

6. When a patient transitions to or from another care setting or organization, does your hospital routinely electronically send and/or receive (NOT eFax) a summary of care record in a structured format (e.g. CCR, CCDA, or CCD) with the following providers? Check *all* that apply.

	Send	Receive	Neither send nor receive	Do not know
a. Other Hospitals outside your system	☐	☐	☐	☐
b. Ambulatory Care Providers outside your system	☐	☐	☐	☐
c. Long-term and Post-Acute Care Providers (inside or outside your system)	☐	☐	☐	☐
d. Behavioral Health Providers (inside or outside your system)	☐	☐	☐	☐

7. Does your EHR integrate any type of clinical information received electronically (not eFax) from providers or sources outside your hospital system/organization without the need for manual entry? *This could be done using software to convert scanned documents into indexed, discrete data that can be integrated into EHR.*

☐ Yes, routinely ☐ Yes, but not routinely ☐ No ☐ Do not know ☐ NA

8. If yes, does your EHR integrate the information contained in summary of care records received electronically (not eFax) without the need for manual entry? *This could be done using software to convert scanned documents into indexed, discrete data that can be integrated into EHR.*

☐ Yes, routinely ☐ Yes, but not routinely ☐ No ☐ Do not know ☐ NA

This next section asks further detail about other aspects of exchange and interoperability.

9. Do providers at your hospital query electronically for patients' health information (e.g. medications, outside encounters) from sources outside of your organization or hospital system?

☐ Yes ☐ No, but do have the capability ☐ No, don't have capability ☐ Do not know

10. Do providers at your hospital routinely have necessary clinical information available electronically (not e-Fax) from outside providers or sources when treating a patient that was seen by another health care provider/setting?

☐ Yes ☐ No ☐ Do not know

11a. How frequently do providers at your hospital use patient health information received electronically (not e-Fax) from outside providers or sources when treating a patient?

☐ Often ☐ Sometimes ☐ Rarely ☐ Never ☐ Don't know

11b. If rarely or never used, please indicate the reason(s) why. Check all that apply.

1. ☐ Information not always available when needed (e.g. not timely)
2. ☐ Do not trust accuracy of information
3. ☐ Difficult to integrate information in EHR
4. ☐ Information not available to view in EHR as part of clinicians' workflow
5. ☐ Information not presented in a useful format (e.g. too much information, redundant, or unnecessary
6. information)
7. ☐ Other

_____

12a. When a patient visits your Emergency Department (ED), do you routinely provide electronic notification to the patient's primary care physician?

☐ Yes ☐ No, but do have the capability ☐ No, don't have capability ☐ Do Not Know ☐ Do Not Have ED

12b. If yes, are electronic notifications provided to primary care physicians below? (Check *all* that apply)

☐ Inside System ☐ Outside System ☐ Do Not Know

13. Please indicate your level of participation in a state, regional, and/or local health information exchange (HIE) or health information organization (HIO).

a. ☐ HIE/HIO is operational in my area and we are participating and actively exchanging data in at least one HIE/RHIO

b. ☐ HIE/HIO is operational in my area but we are not participating

c. ☐ HIE/HIO is not operational in my area

d. ☐ Do not know

This next section asks about barriers to exchange and interoperability.

14. Which of the following issues has your hospital experienced when trying to <u>electronically</u> (<u>not</u> eFax) send, receive or find (query) patient health information to/from other care settings or organizations? (Check *all* that apply)

a. ☐ We lack the technical capability to electronically <u>send</u> patient health information to outside providers or other sources
b. ☐ We lack the technical capability to electronically <u>receive</u> patient health information from outside providers or other sources
c. ☐ Providers we would like to electronically send patient health information to, do <u>not</u> have an EHR or other electronic system with capability to receive the information
d. ☐ Providers we would like to electronically send patient health information to <u>have</u> an EHR; however, it lacks the technical capability to receive the information
e. ☐ Many recipients of our electronic care summaries (e.g. CCDA) report that the information is not useful
f. ☐ Cumbersome workflow to send (not eFax) the information from our EHR system
g. ☐ Difficult to match or identify the correct patient between systems
h. ☐ Difficult to locate the address of the provider to send the information (e.g. lack of provider directory)
i. ☐ Experience greater challenges exchanging (e.g. sending/receiving data) across different vendor platforms
j. ☐ We don't typically share our patient data with care settings/organizations outside our system
k. ☐ We have to pay additional costs to send/receive data with care settings/organizations outside our system

If 14k is yes, please indicate the source(s) of those additional costs below (check all that apply)

1. ☐ Your EHR vendor
2. ☐ The recipient's EHR vendor
3. ☐ An intermediary that enables the sending or receiving of data (e.g. HISP, HIE, Direct Trust, NATE)
4. ☐ Other source not listed above:_____

EHR System and IT Vendors

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

☐ Yes ☐ No ☐ Do not know

16. 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

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

a. ☐ A mix of products from different vendors
b. ☐ Primarily one vendor
c. ☐ Self-developed

18a. 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/Greenway
☐ Siemens ☐ Self-developed
☐ Other (please specify) _____
☐ Would prefer not to disclose

18b. Do you use the same primary inpatient EHR/EMR system vendor (noted above) for your <u>primary outpatient</u> EMR/EHR system? *"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.*

☐**Yes** ☐**No** ☐**Do not Know** ☐**NA**

19. Which vendor(s) below does your hospital directly use to electronically exchange patient health information? (Please check all that apply)

☐ The same system as our primary inpatient EMR/EHR system (noted above)
☐ MedFX ☐ Intersystems ☐ Harris ☐ Surescripts
☐ Medicity ☐ Truven Analytics ☐ Mirth ☐ Relay Health
☐ Orion Health ☐ Inpriva ☐ Care Evolution ☐ Optom/Axolotl
☐ MaxMD ☐ Covinst ☐ Sandlot ☐ ICA
☐ MedAllies ☐ Microsoft ☐ Certify Data Systems
☐ Other (please specify) _____
☐ Do not exchange patient health information electronically ☐ Would prefer not to disclose

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

a. ☐ Initial deployment
b. ☐ Major change in vendor
c. ☐ Change from enterprise architecture to best-of-breed
d. ☐ Change from best-of-breed to enterprise architecture
e. ☐ Significant additional functionalities
f. ☐ Do not know
g. ☐ No major changes planned

21. What is (are, or 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)

a. ☐ Upfront capital costs/lack of access to capital to install systems
b. ☐ Ongoing cost of maintaining and upgrading systems
c. ☐ Obtaining physician cooperation
d. ☐ Obtaining other staff cooperation
e. ☐ Concerns about security or liability for privacy breaches
f. ☐ Uncertainty about certification requirements
g. ☐ Limited vendor capacity
h. ☐ Lack of adequate IT personnel in hospital to support implementation/maintenance
i. ☐ Challenge/complexity of meeting all meaningful use criteria within implementation timeframe
j. ☐ Other (specify) _____

22. Please indicate whether you have used electronic clinical data from the EHR or other electronic system in your hospital to: (Please check all that apply)

a. ☐ Create a dashboard with measures of organizational performance
b. ☐ Create a dashboard with measures of unit-level performance
c. ☐ Create individual provider performance profiles
d. ☐ Create an approach for clinicians to query the data
e. ☐ Assess adherence to clinical practice guidelines
f. ☐ Identify care gaps for specific patient populations
g. ☐ Generate reports to inform strategic planning
h. ☐ Support a continuous quality improvement process
i. ☐ Monitor patient safety (e.g., adverse drug events)
j. ☐ Identify high risk patients for follow-up care using algorithm or other tools
k. ☐ None of the above

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 4 – 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 4 – 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 6 – Continuous Care Records* (CCR)** Continuous care record standard enables a patient health summary to be created, read, and interpreted by any EHR/EMR software application.

***Question 6 – Continuous Clinical Document Architecture* (CCDA)** Continuous document architecture is an XML-based markup standard intended to specify the encoding, structure, and semantic of clinical document for exchange.

Question 6 – Continuous Care Documentation (CCD) 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