### 2013 AHA Annual Survey Information Technology Supplement File Layout Health Forum LLC

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Field	Field Description	Database Field Name
ID	AHA Identification Number	AHA ID
MCRNUM	Medicare Provider Number	Medicare Provider ID
MNAME	Hospital name (from AHA membership)	Hospital Name
MLOCADDR	Street Address (from AHA membership)	Address 1
MLOCCITY	City (from AHA membership)	City Name
MSTATE (Formerly labeled MLOCSTCD)	State (from AHA membership)	State
MLOCZIP	ZIP code (from AHA membership)	Zip Code
BDTOT	Total facility beds set up and staffed	Beds
MCNTRL	Control/ownership	Control/Ownership Type

Key	
Government, nonfederal	Government, federal
12 = State	41 =Air Force
13 = County	42 = Army
14 = City	43 = Navy
15 = City-county	44 = Public Health Service other than 47
16 = Hospital district or authority	45 = Veterans Affairs
	46 = Federal other than 41-45, 47- 48 47 = Public Health Service Indian
Nongovernment, not-for-profit	Service
21 = Church operated	48 = Department of Justice
23 = Other	
Investor-owned, for-profit	
31 = Individual	
32 = Partnership	
33 = Corporation	

Field	Field Description
MSERV	Primary service code (from AHA membership)
Кеу	
10 = General medical and surgical	
11 = Hospital unit of an institution (prison hospital, college infirmary, etc.)	
12 = Hospital unit within a facility for persons with intellectual disabilities	
13 = Surgical	
22 = Psychiatric	
33 = Tuberculosis and other respiratory diseases	
41 = Cancer	
42 = Heart	
44 = Obstetrics and gynecology	
45 = Eye, ear, nose and throat	
46 = Rehabilitation	
47 = Orthopedic	
48 = Chronic disease	
49 = Other specialty	
50 = Children's general	
51 = Children's hospital unit of an institution	
52 = Children's psychiatric	
53 = Children's tuberculosis and other respiratory diseases	
55 = Children's eye, ear, nose and throat	
56 = Children's rehabilitation	
57 = Children's orthopedic	
58 = Children's chronic disease	
59 = Children's other specialty	
62 = Intellectual disabilities	

80 = Acute Long-Term Care

90 = Children's acute long-term

82 = Alcoholism and other chemical dependency

**Database Field Name** 

Primary Service

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

Electronic Clinical Documentation	Survey Question Number	Database Field Name
a. Patient demographics	Q1_A1	Patient demographics (doc.)
b. Physician notes	Q1_B1	Physician notes (doc.)
c. Nursing notes	Q1_C1	Nursing notes (doc.)
d. Problem lists	Q1_D1	Problem lists (doc.)
e. Medication lists	Q1_E1	Medication lists (doc.)
f. Discharge summaries	Q1_F1	Discharge summaries (doc.)
g. Advanced directives (e.g. DNR)	Q1_G1	Advanced directives (doc.)
Results viewing		
nesults viewing		
a. Laboratory reports	Q1_A2	Lab reports (view)
b. Radiology reports	Q1_B2	Radiology reports (view)
c. Radiology images	Q1_C2	Radiology images (view)
d. Diagnostic test results (e.g. EKG report, Echo report)	Q1_D2	Diagnostic test results (view)
e. Diagnostic test images (e.g. EKG tracing)	Q1_E2	Diagnostic test images (view)
f. Consultant reports	Q1_F2	Consultant reports (view)

Computerized provider order entry (Provider (e.g., MD, APN, NP) directly enters own orders that are transmitted electronically)

	Survey Question Number	Database Field Name
a. Laboratory tests	Q1_A3	Laboratory tests
b. Radiology tests	Q1_B3	Radiology tests
c. Medications	Q1_C3	Medications
d. Consultation requests	Q1_D3	Consultation requests
e. Nursing orders	Q1_E3	Nursing orders

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a. Clinical guidelines (e.g. Beta blockers post-MI, ASA in CAD)	Q1_A4	Clinical guidelines
b. Clinical reminders (e.g. pneumovax)	Q1_B4	Clinical reminders
c. Drug allergy alerts	Q1_C4	Drug allergy alerts
d. Drug-drug interaction alerts	Q1_D4	Drug-drug interaction alerts
e. Drug-Lab interaction alerts	Q1_E4	Drug-Lab interaction alerts
f. Drug dosing support (e.g. renal dose guidance)	Q1_F4	Drug dosing support
Bar Coding or Radio Frequency Identification (RFID) for Closed-loop Medication Tracking		
a. Medication administration	Q1_A5	Medication administration
b. Patient verification	Q1_B5	Patient verification
c. Caregiver verification	Q1_C5	Caregiver verification
d. Pharmacy verification	Q1_D5	Pharmacy verification
Other functionalities		
a. Bar coding or Radio Frequency (RFID) for supply chain management	Q1_A6	Bar coding or Radio frequency (RFID)
b. Telehealth	Q1_B6	Telehealth
c. Ability to connect mobile devices (tablet, smart phone, etc.) to EHR	Q1_C6	Ability to connect mobile devices to EHR

**Survey Question Number** 

**Database Field Name** 

#### Key

**Decision support** 

- 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

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

	Survey Question Number	Database Field Name
Electronic Clinical Documentation		
a. Record gender/sex and date of birth	Q2_A	Gender/sex and date of birth
b. Record race and ethnicity	Q2_B	Race and Ethnicity
c. Record time and preliminary cause of death when applicable	Q2_C	Time and preliminary cause of death
d. Record preferred language for communication with providers of care	Q2_D	Preferred language for communication with providers of care
e. Vital signs (height, weight, blood pressure, BMI, growth charts)	Q2_E	Vital signs
f. Record smoking status using standard format	Q2_F	Smoking status
g. Record and maintain medication allergy lists	Q2_G	Medication allergy lists
h. Record patient family health history as structured data	Q2_H	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	Q2_I	Incorporated as structured data lab results for >40% of patients admitted
Population Health Management		
a. Generate lists of patients by condition	Q2_A2	Generate lists of patients by condition
b. Identify and provide patient specific education resources	Q2_B2	Identify and provide patient specific education resources
Medication Management		
a. Compare a patient's inpatient and preadmission medication lists	Q2_A3	Compare patient's inpatient & preadmission med. list
b. Provide an updated medication list at time of discharge	Q2_B3	Provide updated med. list at discharge
c. Check inpatient prescriptions against an internal formulary	Q2_C3	Check inpatient prescriptions against internal formulary
d. Automatically track medications with an electronic medication administration record (eMAR)	Q2_D3	Automatically track medications with eMAR
e. Electronic prescribing (eRx) of discharge medication orders	Q2_E3	eRx of discharge medication orders

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Discharge Instructions and Care Summary Documents	Survey Question Number	Database Field Name
a. Provide patients an electronic copy of their discharge instructions upon request	Q2_A4	Electronic copy of discharge instructions upon request
b. Provide patients an electronic copy of their record upon request within 3 business days	Q2_B4	Electronic copy of record upon request
c. Generate summary of care record for relevant transitions of care	Q2_C4	Summary of care record for relevant transitions of care
d. Include care teams and plan of care in summary care record	Q2_D4	Include care teams and plan of care in care summary record
e. Electronically exchange key clinical information with providers	Q2_E4	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	Q2_F4	Transition of care summaries to an unaffiliated org using different certified EHR vendor
Automated Quality Reporting		
a. Automatically generate hospital-specific meaningful use Quality measures by extracting data from an electronic record without additional manual processes	Q2_A5	Auto generate hospital meaningful use Quality measures by electronic data extract
b. Automatically generate Medicare Inpatient Quality Reporting program measures for a full Medicare inpatient update	Q2_B5	Auto generate HQA measures for Medicare inpatient update
c. Automatically generate physician-specific meaningful use Quality measures calculated directly from the electronic health record (EHR) without additional manual processes	Q2_C5	Auto generate physician meaningful use Quality measures calculated from EHR
Public Health Reporting		
a. Submit electronic data to immunization registries or immunization information	Q2_A6	To immunization registries or information systems
systems per meaningful use standards  b. Submit electronic data on reportable lab results to public health agencies per meaningful use standards	Q2_B6	Reportable lab results to public health agencies
c. Submit electronic syndromic surveillance data to public health agencies per meaningful use standards	Q2_C6	Syndromic surveillance data to public health agencies

Other Functionalities	Survey Question Number	Database Field Name
a. Implement at least 5 Clinical Decision Support interventions related to 4 or more clinical quality measures	Q2_A7	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	Q2_B7	Security risk analysis and implement security updates
Key		
1 = Yes		
2 = No		

#### **Health Information Exchange Functionalities**

3 = Do not know

## 3a. 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)

a. Patient demographics	<b>Survey Question Number</b>	Database Field Name
With Hospitals in your System	Q3A_A1	Patient Demographics (HIS)
With Hospitals Outside of your system	Q3A_A2	Patient Demographics (HOS)
With Ambulatory Providers inside of your system	Q3A_A3	Patient Demographics (AIS)
With Ambulatory Providers outside of your system	Q3A_A4	Patient Demographics (AOS)
Do not know	Q3A_A5	Patient Demographics (DNK)
b. Laboratory results		
•		
With Hospitals in your System	Q3A_B1	Laboratory Results (HIS)
With Hospitals Outside of your system	Q3A_B2	Laboratory Results (HOS)
With Ambulatory Providers inside of your system	Q3A_B3	Laboratory Results (AIS)
With Ambulatory Providers outside of your system	Q3A_B4	Laboratory Results (AOS)
Do not know	Q3A_B5	Laboratory Results (DNK)

With Hospitals in your System	Q3A_C1	Medication history (HIS)
With Hospitals Outside of your system	Q3A_C2	Medication history (HOS)
With Ambulatory Providers inside of your system	Q3A_C3	Medication history (AIS)
With Ambulatory Providers outside of your system	Q3A_C4	Medication history (AOS)
Do not know	Q3A_C5	Medication history (DNK)
d. Radiology reports		
With Hospitals in your System	Q3A_D1	Radiology Reports (HIS)
With Hospitals Outside of your system	Q3A_D2	Radiology Reports (HOS)
With Ambulatory Providers inside of your system	Q3A_D3	Radiology Reports (AIS)
With Ambulatory Providers outside of your system	Q3A_D4	Radiology Reports (AOS)
Do not know	Q3A_D5	Radiology Reports (DNK)
e. Clinical / Summary care record in any format		
With Hospitals in your System	Q3A_E1	Clinical Care Record in any format (HIS)
With Hospitals Outside of your system	Q3A_E2	Clinical Care Record in any format (HOS)
With Ambulatory Providers inside of your system	Q3A_E3	Clinical Care Record in any format (AIS)
With Ambulatory Providers outside of your system	Q3A_E4	Clinical Care Record in any format (AOS)
Do not know	Q3A_E5	Clinical Care Record (DNK)
f. Other types of patient data		
With Hospitals in your System	Q3A_F1	Other types of patient data (HIS)
With Hospitals Outside of your system	Q3A_F2	Other types of patient data (HOS)
With Ambulatory Providers inside of your system	Q3A_F3	Other types of patient data (AIS)
With Ambulatory Providers outside of your system	Q3A_F4	Other types of patient data (AOS)
Do not know	Q3A_F5	Other types of patient data (DNK)

**Survey Question Number** 

**Database Field Name** 

c. Medication history

g. We do not exchange any patient data	Survey Question Number	Database Field Name	
With Hospitals in your System	Q3A_G1	Do not exchange patient data (HIS)	
With Hospitals Outside of your system	Q3A_G2	Do not exchange patient data (HOS)	
With Ambulatory Providers inside of your system	Q3A_G3	Do not exchange patient data (AIS)	
With Ambulatory Providers outside of your system	Q3A_G4	Do not exchange patient data (AOS)	
Do not know	Q3A_G5	Do not exchange patient data (DNK)	
Кеу			
1 = Exchanges data			
D = Does not exchange data			
3b. If you exchange or share clinical/summary care records with other providers, what is the primary mechanism used?			
· · · · · · · · · · · · · · · · · · ·			
Charing of clinical (cummary care records with other providers	O2 B	Sharing of clinical/summary care records with other	

#### Key

1 = Through EHR or other electronic means

Sharing of clinical/summary care records with other providers

- 2 = Manual Process (e.g. fax, mail)
- 3 = Do not know
- 3c. Does your hospital have the capability to send clinical/summary of care records in Continuous Care Record (CCR), Clinical Document Architecture (CDA) or Continuous Care Documentation (CCD) format?

Q3\_B

providers

Clinical Care Record in CCR or CCD format Q3\_C CCR, CDA or CCD format capability

#### Key

- 1 = Yes
- 2 = No
- 3 = Do Not Know
- 4 = Not applicable

4a. Do any current arrangements exist in your area to share electronic pat regional health information organization (RHIO)?	ient-level clinical data through ar	n electronic health information exchange (HIE) o
	Survey Question Number	Database Field Name
Electronic sharing of patient-level clinical data	Q4_A	Electronic sharing of patient-level clinical data
Key		
1 = Arrangement(s) exist(s)		
2 = Arrangement(s) do(es) not exist		
3 = Do not know		
4b. Please indicate your level of participation in a regional health informat	ion exchange (HIE) or regional he	ealth information organization (RHIO)
Level of HIE or RHIO participation	Q4_B	Level of HIE or RHIO participation
Key		
1 = Participating and actively exchanging data in at least one HIE/RHIO		
2 = Have the electronic framework to participate but not participating in any		
HIE/RHIO at this time		
3 = Do not have the electronic framework to participate and not participating in any		
HIE/RHIO at this time		
4 = Do not know		
5a. When a patient visits your Emergency Department, do you routinely p	rovide electronic notification to t	he patient's primary care physician?
Provide electronic notification to primary care physician when patient visits	Q5_A	Provide electronic notification to primary care
Emergency Department	~~	physician when patient visits ED
Key		
1 = Yes		
2 = No		

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

	Survey Question Number	Database Field Name
Inside of your system	Q5_B1	Electronic notification to primary care physician when patient visits ED (IS)
Outside of your system	Q5_B2	Electronic notification to primary care physician when patient visits ED (OS)
Do not know	Q5_B3	Electronic notification to primary care physician when patient visits ED (DNK)
Key		
1 =Yes		
0 = No		

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

	Survey Question Number	Database Field Name
Providers able to query electronically for a patient's health information from sources outside organization or system	Q6_A	Providers able to query electronically for a patient health info from sources outside

#### Key

1 = Yes

2 = No

3 = 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?

	Survey Question Number	Database Field Name
Providers able to send and receive secure electronic messages containing patient's health information from sources outside organization or system	Q6_B	Providers able to send and receive secure electronic messages for a patient health info from sources outside

#### Key

1 = Yes

2 = No

3 = 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)

	Survey Question Number	Database Field Name
View information from their health/medical records online	Q7_1	View information from their health/medical records online
Download information from their health/medical record	Q7_2	Download information from their health/medical record
Electronically transmit (send) transmission of care/referral summaries to a third party	Q7_3	Electronically transmit (send) transmission of care/referral summaries to a third party
Request an amendment to change/update their health/medical record	Q7_4	Request an amendment to change/update their health/medical record
Request refills for prescriptions online	Q7_5	Request refills for prescriptions online
Schedule appointments online	Q7_6	Schedule appointments online
Pay bills online	Q7_7	Pay bills online
Submit patient-generated data (e.g. blood, glucose, weight)	Q7_8	Submit patient-generated data
None of the above	Q7_9	None
Do not know	Q7_10	Health medical records (DNK)

Key 1 = Yes 0 = No

#### 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)

	Survey Question Number	Database Field Name
Personal Health Record (PHR)	Q8_1	PHR
Patient/Consumer portal	Q8_2	Patient Portal
Secure messaging with providers	Q8_3	Secure message
Other (please Specify)	Q8_4	Other method
None	Q8_5	None
Other description	Q8_6	Other method description

#### **EHR System and IT Vendors**

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

	Survey Question Number	Database Field Name
IT supports two factor authentication	Q9	Two factor authentication

#### Key

1 = Yes

2 = No

3 = Do not know

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

	Survey Question Number	Database Field Name
Hospital uses an EMR/EHR system(s)	Q9	Hospital uses EMR/EHR system

#### Key

1 = Yes, fully electronic

2 = Yes, partially electronic

0 = No

3 = Do not know

#### 11. In what year did you first deploy your EHR/EMR?

	Survey Question Number	Database Field Name
EMR/EHR initial year	Q11	EMR/EHR initial year
Do not know initial year	Q11_NA	EMR/EHR initial year - unknown

Key

YEAR

1 = Do not know

# Posses a certified system for meeting meaningful use requirements Q12 Certified EHR for Meaningful Use Key Note: NA option eliminated

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

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

	Survey Question Number	Database Field Name
Development framework/set-up of EHR	Q13	EHR Description

#### Key

1 = Yes 2 = No

3 = Do not know

1 = A mix of products from different vendors

2 = Primarily one vendor

3 = Self-developed

#### 14a. Which vendor below provides ho provides your primary inpatient EHR/EMR system?

	Survey Question Number	Database Field Name
Primary provider of inpatient EHR	Q14_A	Primary inpatient EHR/EMR vendor
	Q14_A_OTH	Primary inpatient EHR/EMR vendor - other

# Key 1 = Allscripts/Eclipsys 2 = Cerner 3 = eClinical works 4 = Eclipsys 5 = Epic

6 = GE

7 = McKesson 8 = MED3000

9 = Meditech

10 = NextGen

11 = QuadraMed

12 = Sage

13 = Siemens

14 = Self-developed

15 = Other (specify)

Other described

16 = Would prefer not to disclose

17 = CPSI

18 = HMS

19 = Healthland

20 = Vitera

Notes: Allscripts (1) and Eclipsys (4) are now combined

#### 14b. Who provides your primary outpatient EHR/EMR system?

Primary provider of outpatient EHR	
Кеу	
1 = Allscripts/Eclipsys	
2 = Cerner	
3 = eClinical works	
4 = Eclipsys	
5 = Epic	
6 = GE	
7 = McKesson	
8 = MED3000	
9 = Meditech	
10 = NextGen	
11 = QuadraMed	
12 = Sage	
13 = Siemens	
14 = Self-developed	
15 = Other (specify)	
Other described	
16 = Would prefer not to disclose	
17 =CPSI	
18 = HMS	

19 = Healthland 20 = Vitera

Survey Question Number	Database Field Name
Q14_B	Primary outpatient EHR/EMR vendor
Q14 B OTH	Primary outpatient EHR/EMR vendor - other

Notes: Allscripts (1) and Eclipsys (4) are now combined

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

	Survey Question Number	Database Field Name
Initial deployment	Q15_1	Initial deployment
Major change in vendor	Q15_2	Major change in vendor
Change from enterprise architecture to best-of-breed	Q15_3	Enterprise architecture to best-of-breed
Change from best-of-breed to enterprise architecture	Q15_4	Best-of-breed to enterprise architecture
Significant additional functionalities	Q15_5	Significant additional functionalities
Do not know	Q15_6	Changes Unknown
No major changes planned	Q15_7	No major changes planned

Key		
1 = Yes		
0 = No		

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

	Survey Question Number	Database Field Name
Upfront capital costs/lack to capital to install systems	Q16_1	Upfront capital costs, or lack of capital
Ongoing costs of maintaining and upgrading systems	Q16_2	Ongoing costs of maintaining/upgrading
Obtaining physician cooperation	Q16_3	Obtaining physician cooperation
Obtaining other staff cooperation	Q16_4	Obtaining other staff cooperation
Concerns about security or liability for privacy breaches	Q16_5	Concerns about security/liability for privacy breaches
Uncertainty about certification requirements	Q16_6	Uncertainty about certification process
Limited vendor capacity	Q16_7	Lack of vendor capacity
Lack of adequate IT personnel in the hospital to support implementation/maintenance	Q16_8	Lack adequate IT staff

Key		
Other description	Q16_12	Other reason specified
Other specify	Q16_11	Other reason
Complexity associated with coordinating decision with system-level leadership	Q16_10	Difficulty reaching system-level decision
Challenge/complexity of meeting all meaningful use criteria within implementation timeline	Q16_9	Meeting all meaningful use criteria on time

1 = Yes

0 = No

#### 17. Please indicate the degree to which you have redesigned workflows to make optimal use of your EHR:

	Survey Question Number	Database Field Name
Redesigned workflows to make optimal use of EHR	Q17	Redesigned workflows to make optimal use of EHR

#### Key

- 1 = Workflows have not been redesigned
- 2 = Beginning to redesign workflows
- 3 = Some workflows are redesigned; others are not
- 4 = Most workflows are redesigned
- 5 = All workflows are redesigned

#### 18. 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)

	<b>Survey Question Number</b>	Database Field Name
Create a dashboard with measures of organizational performance	Q18_1	Create a dashboard with measures of organizational performance
Create a dashboard with measures of unit-level performance	Q18_2	Create a dashboard with measures of unit-level performance
Create individual provider performance profiles	Q18_3	Create individual provider performance profiles
Create an approach for clinicians to query the data	Q18_4	Create an approach for clinicians to Query the data
Assess adherence to clinical practice guidelines	Q18_5	Assess adherence to clinical practice guidelines
Identify care gaps for specific patient populations	Q18_6	Identify care gaps for specific patient populations
Generate reports to inform strategic planning	Q18_7	Generate reports to inform strategic planning
Maximize quality improvement	Q18_8	Maximize Quality improvement
Identify high risk patients for follow-up care using algorithm or other tools	Q18_9	Identify high risk patients for follow-up care using algorithm or other tools

Key

1 = Yes

0 = No