

2012 AHA Annual Survey

Information Technology Supplement File Layout

Health Forum LLC

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

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

Field	Field Description
MSERV	Primary service code (from membership)

Key
10 = General medical and surgical
11 = Hospital unit of an institution (prison hospital, college infirmary, etc.)
12 = Hospital unit within an institution for the mentally retarded
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 = Institution for mental retardation
80 = Acute Long-Term Care
82 = Alcoholism and other chemical dependency
90 = Children's acute long-term

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

Electronic Clinical Documentation	Field Name
a. Patient demographics	Q1_A1
b. Physician notes	Q1_B1
c. Nursing notes	Q1_C1
d. Problem lists	Q1_D1
e. Medication lists	Q1_E1
f. Discharge summaries	Q1_F1
g. Advanced directives (e.g. DNR)	Q1_G1

Results viewing

- a. Lab reports Q1_A2
- b. Radiology reports Q1_B2
- c. Radiology images Q1_C2
- d. Diagnostic test results (e.g. EKG report, Echo report) Q1_D2
- e. Diagnostic test images (e.g. EKG tracing) Q1_E2
- f. Consultant reports Q1_F2

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

- a. Laboratory tests Q1_A3
- b. Radiology tests Q1_B3
- c. Medications Q1_C3
- d. Consultation requests Q1_D3
- e. Nursing orders Q1_E3

Decision support

- a. Clinical guidelines (e.g. Beta blockers post-MI, ASA in CAD) Q1_A4
- b. Clinical reminders (e.g. pneumovax) Q1_B4
- c. Drug allergy alerts Q1_C4
- d. Drug-drug interaction alerts Q1_D4
- e. Drug-Lab interaction alerts Q1_E4
- f. Drug dosing support (e.g. renal dose guidance) Q1_F4

Bar Coding or Radio Frequency Identification (RFID) for Closed-loop Medication Tracking

- a. Medication administration Q1_A5
- b. Patient verification Q1_B5
- c. Caregiver verification Q1_C5
- d. Pharmacy verification Q1_D5

Other functionalities

- a. Bar coding or Radio Frequency (RFID) for supply chain management Q1_A6
- b. Telehealth Q1_B6
- c. Ability to connect mobile devices (tablet, smart phone, etc.) to EHR Q1_C6

Key

- 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?

	Field Name
Electronic Clinical Documentation	
a. Record gender and date of birth	Q2_A
b. Record race and ethnicity	Q2_B
c. Record time and preliminary cause of death when applicable	Q2_C
d. Record preferred language for communication with providers of care	Q2_D
e. Vital signs (height, weight, blood pressure, BMI, growth charts)	Q2_E
f. Record smoking status using standard format	Q2_F
g. Record and maintain medication allergy lists	Q2_G
h. Record patient family health history as structured data	Q2_H
i. Incorporate as structured data lab results for more than 40 percent of patients admitted to inpatient or emergency departments	Q2_I
Population Health Management	
a. Generate lists of patients by condition	Q2_A2
b. Identify and provide patient specific education resources	Q2_B2
Medication Management	
a. Compare a patient's inpatient and preadmission medication lists	Q2_A3
b. Provide an updated medication list at time of discharge	Q2_B3
c. Check inpatient prescriptions against an internal formulary	Q2_C3
d. Automatically track medications with an electronic medication administration record (eMAR)	Q2_D3
e. Electronic prescribing (eRx) of discharge medication orders	Q2_E3
Discharge Instructions and Care Summary Documents	
a. Provide patients an electronic copy of their discharge instructions upon request	Q2_A4
b. Provide patients an electronic copy of their record upon request within 3 business days	Q2_B4
c. Generate summary of care record for relevant transitions of care	Q2_C4
d. Include care teams and plan of care in summary care record	Q2_D4
e. Electronically exchange key clinical information with providers	Q2_E4
f. Send transition of care summaries to an unaffiliated organization using a different certified electronic health record vendor	Q2_F4
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
b. Automatically generate Medicare Inpatient Quality Reporting program measures for a full Medicare inpatient update	Q2_B5
c. Automatically generate physician-specific meaningful use quality measures calculated directly from the electronic health record (EHR) without additional manual processes	Q2_C5

Public Health Reporting

- a. Submit electronic data to immunization registries or immunization information systems per Meaningful Use standards Q2_A6
- b. Submit electronic data on reportable lab results to public health agencies per meaningful use standards Q2_B6
- c. Submit electronic syndromic surveillance data to public health agencies per Meaningful Use standards Q2_C6

Other Functionalities

- a. Implement at least 5 Clinical Decision Support interventions related to 4 or more clinical quality measures Q2_A7
- b. Conduct or review a security risk analysis and implement security updates as necessary Q2_B7

Key
1 = Yes
2 = No
3 = Do not know

Health Information Exchange Functionalities

3a. Does your hospital electronically exchange any of the following patient data with any of the providers listed below? (check all that apply)

a. Patient demographics

- | | Field Name |
|--|------------|
| With Hospitals in your System | Q3A_A1 |
| With Hospitals Outside of your system | Q3A_A2 |
| With Ambulatory Providers inside of your system | Q3A_A3 |
| With Ambulatory Providers outside of your system | Q3A_A4 |
| Do not know | Q3A_A5 |

b. Laboratory results

- | | |
|--|--------|
| With Hospitals in your System | Q3A_B1 |
| With Hospitals Outside of your system | Q3A_B2 |
| With Ambulatory Providers inside of your system | Q3A_B3 |
| With Ambulatory Providers outside of your system | Q3A_B4 |
| Do not know | Q3A_B5 |

c. Medication history

- | | |
|--|--------|
| With Hospitals in your System | Q3A_C1 |
| With Hospitals Outside of your system | Q3A_C2 |
| With Ambulatory Providers inside of your system | Q3A_C3 |
| With Ambulatory Providers outside of your system | Q3A_C4 |
| Do not know | Q3A_C5 |

d. Radiology reports

With Hospitals in your System	Q3A_D1
With Hospitals Outside of your system	Q3A_D2
With Ambulatory Providers inside of your system	Q3A_D3
With Ambulatory Providers outside of your system	Q3A_D4
Do not know	Q3A_D5

e. Clinical / Summary care record in any format

With Hospitals in your System	Q3A_E1
With Hospitals Outside of your system	Q3A_E2
With Ambulatory Providers inside of your system	Q3A_E3
With Ambulatory Providers outside of your system	Q3A_E4
Do not know	Q3A_E5

f. Other types of patient data

With Hospitals in your System	Q3A_F1
With Hospitals Outside of your system	Q3A_F2
With Ambulatory Providers inside of your system	Q3A_F3
With Ambulatory Providers outside of your system	Q3A_F4
Do not know	Q3A_F5

g. We do not exchange any patient data

With Hospitals in your System	Q3A_G1
With Hospitals Outside of your system	Q3A_G2
With Ambulatory Providers inside of your system	Q3A_G3
With Ambulatory Providers outside of your system	Q3A_G4
Do not know	Q3A_G5

Key
1 = Exchanges data
0 = Does not exchange data

3b. If you exchange or share clinical/summary care records with other providers, what is the primary mechanism used?

	Field Name
Sharing of clinical/summary care records with other providers	Q3_B

Key
1 = Through EHR or other electronic means
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),

	Field Name
Clinical Care Record in CCR or CCD format	Q3_C

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

4a. Do any current arrangements exist in your area to share electronic patient-level clinical data through an electronic

Electronic sharing of patient-level clinical data

Field Name

Q4_A

Key
1 = Arrangements exist
2 = Arrangements do not exist
3 = Do not know

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

Level of HIE or RHIO participation

Field Name

Q4_B

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 provide electronic notification to the patient's

Provide electronic notification to primary care physician when patient visits
Emergency Department

Field Name

Q5_A

Key
1 = Yes
2 = No
3 = 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

Field Name

Q5_B1

Q5_B2

Q5_B3

Key
1 = Yes
0 = No

6. Are providers at your hospital able to query electronically for a patient's health information (e.g. medications,

Providers able to query electronically for a patient's health information from sources outside organization or system

Field Name

Q6

Key
 1 = Yes
 2 = No
 3 = Do not know

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 records 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
- Do not know

Field Name

- Q7_1
- Q7_2
- Q7_3
- Q7_4
- Q7_5
- Q7_6
- Q7_7
- Q7_8
- Q7_9

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)

- Personal Health Record (PHR)
- Patient/Consumer portal
- Secure messaging with providers
- Other (please Specify)
- None
- Other description

Field Name

- Q8_1
- Q8_2
- Q8_3
- Q8_4
- Q8_5
- Q8_6

Key
 1 = Yes
 0 = No

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

IT supports two factor authentication

Field Name

Q9

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.

Hospital uses an EMR/EHR system(s)

Field Name

Q10

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

EMR/EHR initial year

Field Name

Q11

Do not know initial year

Q11_NA

Key
YEAR
1 = Do not know

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

Posses a certified system for meeting meaningful use requirements

Field Name

Q12

Key
1 = Yes
2 = No
3 = Do not know

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

Development framework/set-up of EHR

Field Name

Q13

Key
1 = A mix of products from different vendors
2 = Primarily one vendor
3 = Self-developed

14a. Who provides your primary inpatient EHR/EMR system?

Primary provider of inpatient EHR

Field Name

Q14_A

Q14_A_OTH

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

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

Primary provider of outpatient EHR

Field Name

Q14_B
Q14_B_OTH

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

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

	Field Name
Initial deployment	Q15_1
Major change in vendor	Q15_2
Change from enterprise architecture to best-of-breed	Q15_3
Change from best-of-breed to enterprise architecture	Q15_4
Significant additional functionalities	Q15_5
Do not know	Q15_6
No major changes	Q15_7

Key

1 = Yes
 0 = No

16. What is /would be the primary challenge in implementing an EMR/EHR system that meets each of the federal requirements for each of the 24 hospital objectives of Meaningful Use? (Check all that apply)

	Field Name
a. Upfront capital costs/lack to capital to install systems	Q16_1
b. Ongoing costs of maintaining and upgrading systems	Q16_2
c. Obtaining physician cooperation	Q16_3
d. Obtaining other staff cooperation	Q16_4
e. Concerns about security or liability for privacy breaches	Q16_5
f. Uncertainty about certification requirements	Q16_6
g. Limited vendor capacity	Q16_7
h. Lack of adequate IT personnel in the hospital to support implementation/maintenance	Q16_8
i. Challenge complexity of meeting all Meaningful Use criteria within implementation timeline	Q16_9
j. Complexity associated with coordinating decision with system-level leadership	Q16_10
k. Other specify	Q16_11
l. Other description	Q16_12

Key

1 = Yes
 0 = No