



**American Hospital  
Association™**

*Advancing Health in America*

# **AHA Annual Survey Information Technology Supplement™**

2019 File Layout



**AHA Data & Insights**

The 2019 *AHA Annual Survey Information Technology Supplement™* database contains facility-level responses to a survey administered by AHA in partnership with the Office of the National Coordinator (ONC). The purpose of the survey is to measure the adoption and implementation of the United States Department of Health and Human Services [Promoting Interoperability](#) initiative. The main categories on the survey are computerized system capabilities; patient engagement; regulatory burden; querying information from outside providers or sources; interoperability barriers; and EHR systems and IT vendors.

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**2019 AHA Annual Survey  
Information Technology Supplement File Layout**

Health Forum, LLC, an affiliate of the American Hospital Association

Note: Key FOLLOWS each Question set

Field Description	Database Field Name
AHA Identification Number	ID
Medicare Provider Number	MCRNUM
Hospital name	MNAME
Street Address	MLOCADDR
City	MLOCCITY
State	MSTATE
ZIP code	MLOCZIP
Total facility beds set up and staffed	BDTOT
Control/ownership	MCNTRL

Key	
<b>Government, nonfederal</b>	<b>Government, federal</b>
12 = State	40 = Department of Defense
13 = County	44 = Public Health Service other than 47
14 = City	45 = Veterans Affairs
15 = City-county	46 = Federal other than 41-45, 47-48
16 = Hospital district or authority	47 = Public Health Service Indian Service
<b>Nongovernment, not-for-profit</b>	48 = Department of Justice
21 = Church operated	
23 = Other	
<b>Investor-owned, for-profit</b>	
31 = Individual	
32 = Partnership	
33 = Corporation	

**Field Description**

Primary service code

**Database Field Name**

MSERV

**Key**

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  
82 = Alcoholism and other chemical dependency  
90 = Children's acute long-term  
91 = Children's cancer

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

	Survey Question Number	Database Field Name	Expanded Field Name
<b>Electronic Clinical Documentation</b>			
a. Physician notes	Q1_A1	CSEDPN	Physician notes (doc.)
b. Nursing notes	Q1_B1	CSEDNA	Nursing notes (doc.)
c. Problem lists	Q1_C1	CSEDPL	Problem lists (doc.)
d. Medication lists	Q1_D1	CSEDML	Medication lists (doc.)
e. Discharge summaries	Q1_E1	CSEDDS	Discharge summaries (doc.)
f. Advanced directives (e.g. DNR)	Q1_F1	CSEDAD	Advanced directives (doc.)
<b>Results viewing</b>			
a. Radiology images	Q1_A2	CSRVRI	Radiology images (view)
b. Diagnostic test results (e.g. EKG report, Echo report)	Q1_B2	CSRVDR	Diagnostic test results (view)
c. Diagnostic test images (e.g. EKG tracing)	Q1_C2	CSRVDI	Diagnostic test images (view)
d. Consultant reports	Q1_D2	CSRVCR	Consultant reports (view)
e. Laboratory tests	Q1_E2	CSRVLR	Lab tests (view)
f. Radiology tests	Q1_F2	CSRVRR	Radiology tests (view)
g. Consultation requests	Q1_G2	CSRVCC	Consultation requests (view)
<b>Computerized provider order entry (Provider (e.g., MD, APN, NP) directly enters own orders that are transmitted electronically)</b>			
a. Laboratory tests	Q1_A3	CSCPLT	Laboratory tests
b. Radiology tests	Q1_B3	CSCPRT	Radiology tests
c. Medications	Q1_C3	CSCPM	Medications
d. Consultation requests	Q1_D3	CSCPCR	Consultation requests
e. Nursing orders	Q1_E3	CSCPNO	Nursing orders
<b>Decision support</b>			
a. Clinical guidelines (e.g. Beta blockers post-MI, ASA in CAD)	Q1_A4	CSDSCG	Clinical guidelines
b. Clinical reminders (e.g. Pneumococcal vaccine)	Q1_B4	CSDSCR	Clinical reminders
c. Drug allergy alerts	Q1_C4	CSDSDA	Drug allergy alerts
d. Drug-drug interaction alerts	Q1_D4	CSDSDD	Drug-drug interaction alerts
e. Drug-lab interaction alerts	Q1_E4	CSDSDL	Drug-lab interaction alerts
f. Drug dosing support (e.g. renal dose guidance)	Q1_F4	CSDSDS	Drug dosing support
<b>Other functionalities</b>			
a. Bar Coding or Radio Frequency Identification (RFID) for Closed-loop Medication Tracking	Q1_A5	CSBCRFID	Bar Coding or Radio Frequency Identification (RFID) for Closed-loop Medication Tracking
b. Bar coding or Radio Frequency (RFID) for supply chain management	Q1_B5	CSOFRF	Bar coding or Radio Frequency (RFID) for supply chain management
c. Telehealth	Q1_C5	CSOFT	Telehealth
d. Remote patient monitoring	Q1_D5	CSRPM	Remote patient monitoring

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

## Prescribing Controlled Substances

### 2. Is your hospital enabled for electronic prescribing of controlled substances (EPCS)?

	Survey Question Number	Database Field Name	Expanded Field Name
Is your hospital enabled for electronic prescribing of controlled substances (EPCS)?	Q2	HEPCS	Hospital enabled for electronic prescribing of controlled substances (EPCS)

**Key**  
 1 = Yes  
 2 = No  
 3 = Do not know  
 4 = NA

## Patient Engagement

### 3. Are patients who receive *inpatient* care provided by your hospital able to do the following: (Check "Yes" only if the functionality has been "turned on" and is fully implemented and available to patients.)

	Survey Question Number	Database Field Name	Expanded Field Name
a. View their health/medical information online <i>in your portal</i>	Q3_A	PEFVIIP	View their health/medical information online
b. Download <i>health medical</i> information from their medical record <i>from your portal</i>	Q3_B	PEFDIIP	Download information from their medical record
c. Import their medical records from other organizations into your portal	Q3_C	PEFIRIP	Import their medical records from other organizations into your portal
d. Electronically transmit (send) medical information to a third party <i>from your portal</i>	Q3_D	PEFRSIP	Electronically transmit (send) medical information to a third party
e. Request an amendment to change/update their medical record online	Q3_E	PEFRAIP	Request an amendment to change/update their medical record
f. Designate family member or caregiver to access information on behalf of the patient (e.g., proxy access)	Q3_F	PEFPROXIP	Proxy access
g. View their <i>inpatient</i> clinical notes (e.g., <i>discharge summary</i> ) <i>in their portal</i>	Q3_G	PEFVCNIP	View clinical notes online
h. Access their medical information using applications (apps) configured to meet the application programming interfaces (API) specifications in your EHR	Q3_H	PEFAPIIP	Access medical information using applications configured to meet the API specifications in your EHR
i. Pay bills online	Q3_I	PEFPBIP	Pay bills online

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

### 4a. Does your hospital provide outpatient care to patients? Note: Outpatient care refers to both hospital based and satellite outpatient departments/sites.

	Survey Question Number	Database Field Name	Expanded Field Name
Does your hospital provide outpatient care to patients	Q4a	OPCARE	Hospital provides outpatient care to patients

**Key**  
1 = Yes (go to 4b)  
0 = No (skip to #5)

**4b. Is there more than one primary EMR/EHR system in use across your outpatient site(s)?**

	Survey Question Number	Database Field Name	Expanded Field Name
Is there more than one primary EMR/HER system in use across your outpatient site(s)?	Q4b	POPEHR	More than one primary EMR/HER system in use across outpatient site(s)

**Key**  
1 = Yes  
0 = No

**4c. To what extent are patients who receive outpatient care provided by your hospital able to do the following: (Check "Yes" only if the functionality has been "turned on" and is fully implemented and available to patients.)**

	Survey Question Number	Database Field Name	Expanded Field Name
1. View their health/medical information online in their portal	Q4c_1	PEFVIOP	View their health/medical information online (outpatient)
2. Download health medical information from their medical record from your portal	Q4c_2	PEFDIOP	Download information from their medical record (outpatient)
3. Import their medical records from other organizations into your portal	Q4c_3	PEFIROP	Import their medical records from other organizations into your portal (outpatient)
4. Electronically transmit (send) health/medical information to a third party from your portal	Q4c_4	PEFRSOP	Electronically transmit (send) medical information to a third party (outpatient)
5. Request an amendment to change/update their medical record online	Q4c_5	PEFRAOP	Request an amendment to change/update their medical record (outpatient)
6. Designate family member or caregiver to access their health/medical information on behalf of the patient (e.g., proxy access)	Q4c_6	PEFPXOP	Proxy access (Outpatient)
7. View their inpatient clinical notes (e.g., visit notes including consultation, progress, history and physical) in their portal	Q4c_7	PEFVCNOP	View clinical notes online (Outpatient)

8. Access their health/medical information using applications (apps) configured to meet the application programming interfaces (API) specifications in your EHR	Q4c_8	PEFAPIOP	Access medical information using applications configured to meet the API specifications in your EHR (Outpatient)
9. Submit patient generated data (e.g., blood glucose, weight)	Q4c_9	PEFSDOP	Submit patient generated data (Outpatient)
10. Send/receive secure message with providers	Q4c_10	PERSMOP	Send/receive secure messaging with providers (Outpatient)
11. Pay bills online	Q4c_11	PEFPBOP	Pay bills online (Outpatient)
12. Request refills for prescriptions online	Q4c_12	PEFRPOP	Request refills for prescriptions on-line (outpatient)
13. Schedule appointments on-line	Q4c_13	PEFSAOP	Schedule appointments on-line (outpatient)

**Key**  
1 = Yes, at all outpatient site(s)  
2 = Yes across some outpatient site(s)  
3 = No, across none of the outpatient site(s)  
4 = Do not know

**Provider Burden Related to Reporting and Documentation**

**5. What are some of the challenges your hospital has experienced when trying to submit health information to public health agencies to meet meaningful use requirements? (check all that apply)**

	Survey Question Number	Database Field Name	Expanded Field Name
a. We do not know to which public health agencies our hospital should send the information to meet CMS reporting requirements	Q5_A	CHPHDNK	We do not know to which public health agencies our hospital should send the information to meet CMS reporting requirements
b. Public health agencies lack the capacity to electronically receive the information	Q5_B	CHPHNC	Public health agencies lack the capacity to electronically receive the information
c. We lack the capacity (e.g., technical, staffing) to electronically send information.	Q5_C	CHPHSND	Lack capacity to electronically send information.
d. Difficulty extracting relevant information from EHR	Q5_D	CHPHEXT	Difficulty extracting relevant information from EHR
e. Interface-related issues (e.g., costs, complexity) make it difficult to send the information	Q5_E	CHPHINTF	Interface-related issues make it difficult to send the information
f. We use different vocabulary standards than the public health agency, making it difficult to exchange	Q5_F	CHPHDV	Use different vocabulary standards than the public health agency, making it difficult to exchange
g. Other - challenges	Q5_G	CHPHOTH	Other - challenges
Other description - challenges	Q5_G_OTH	CHPHOTH_DESC	Other description - challenges
h. NA (e.g. not participating in CMS EHR incentive program)	Q5_H	CHPHNP	NA - not participating
i. Have not experienced any major challenges	Q5_I	CHPHNMC	Have not experienced any major challenges

**Key**  
1 = Yes  
0 = No



**6a. To what degree does your hospital use automated EHR generated measures (versus using manual processes such as chart abstraction) for each of the following programs?**

	Survey Question Number	Database Field Name	Expanded Field Name
a. Physician-specific electronic clinical quality measures (eCQMs)	Q6a_A	AGMPCQM	Physician-specific electronic clinical quality measures (eCQMs)
b. Hospital-specific (eCQMS)	Q6a_B	AGMHCQM	Hospital-specific (eCQMS)

**Key**  
 1 = Fully or primarily automated  
 2 = Mix of automated and manual process  
 3 = Fully or primarily manual  
 4 = Do not know/NA

**6b. What barriers - if any - has your hospital experienced in the transition from manual to fully or primarily automated reporting? (check all that apply)**

	Survey Question Number	Database Field Name	Expanded Field Name
a. Lack of IT staff needed to generate reports	Q6b_A	BARIT	Lack of IT staff needed to generate reports
b. EHR does not possess capability to automatically generate measures	Q6b_B	BARCAP	EHR does not possess capability to automatically generate measures
c. EHR data not mapping correctly, leading to missing or inaccurate information	Q6b_C	BARMAP	EHR data not mapping correctly, leading to missing or inaccurate information
d. Poor EHR usability or design issues, leading to missing or inaccurate information	Q6b_D	BARDES	Poor EHR usability or design issues, leading to missing or inaccurate information
e. Poor EHR data quality that requires manual correction	Q6b_E	BARQA	Poor EHR data quality that requires manual correction
f. Difficulty extracting data from EHR	Q6b_F	BAREXT	Difficulty extracting data from EHR
g. Problems with clinical workflow leading to missing data or incorrect information being collected	Q6b_G	BARWRKFL	Problems with clinical workflow leading to missing data or incorrect information being collected
h. Changing requirements make it difficult to automate reporting	Q6b_H	BARREQ	Changing requirements make it difficult to automate reporting
i. Difficulty aggregating data from multiple EHR systems	Q6b_I	BARAGG	Difficulty aggregating data from multiple EHR systems
j. Limited funds	Q6b_J	BARFNDS	Limited funds
k. Other - barriers	Q6b_K	BAROTH	Other - barriers
Other description - barriers	Q6b_K_OTH	BAROTH_DESC	Other description - barriers
l. NA - barriers	Q6b_L	BARNA	NA - barriers
m. Already generate measures using fully or primarily automated processes	Q6b_M	BARGEN	Already generate measures using fully or primarily automated processes
n. Do not know - barriers	Q6b_N	BARDNK	Do not know - barriers

**Key**  
 1 = Yes  
 0 = No

**7. Does your EHR system have the capability to export multiple records from its system?**

	Survey Question Number	Database Field Name	Expanded Field Name
EHR system able to export multiple records from system	Q7	EXPMREC	EHR system able to export multiple records from system

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

**8a. Does your hospital receive or have access to measures from your EHR vendor that reports the amount of time clinicians spend completing documentation? Such measures typically use EHR audit log data.**

	Survey Question Number	Database Field Name	Expanded Field Name
Use of EHR to track time clinicians spend completing documentation	Q8a	TRKDOC	Use of EHR to track time clinicians spend completing documentation

**Key**  
 1 = Yes  
 2 = No  
 3 = Do not know  
 4 = NA

**8b. If yes, how are these data used?**

	Survey Question Number	Database Field Name	Expanded Field Name
1. Vendor product improvement and trouble shooting	Q8_B1	DUPRDIMP	Vendor product improvement and trouble shooting
2. Identify providers in need of training and support	Q8_B2	DUIDPROV	Identify providers in need of training and support
3. Provider burden reduction initiatives	Q8_B3	DUPBRI	Provider burden reduction initiatives
4. Performance/efficiency monitoring of clinicians	Q8_B4	DUPRFMN	Performance/efficiency monitoring of clinicians
5. Identify areas to improve clinical workflow	Q8_B5	DUCLWF	Identify areas to improve clinical workflow
6. Other data uses	Q8_B6	DUOTH	Other data uses
Other description data uses	Q8_B6_OTH	DUOTH_DESC	Other description data uses

**Key**  
 1 = Yes  
 0 = No

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

	Survey Question Number	Database Field Name	Expanded Field Name
Level of HIE or HIO participation	Q9	RHIO_LVL1	Level of HIE or HIO participation

**Key**  
 1 = HIE/HIO is operational in my area and we are participating and actively exchanging data in at least one HIE/HIO  
 2 = HIE/HIO is operational in my area but we are not participating  
 3 = HIE/HIO is not operational in my area  
 4 = Do not know

**10. Which of the following national health information exchange networks does your hospital currently actively participate in (i.e., operational exchange)? Check all that apply**

	Survey Question Number	Database Field Name	Expanded Field Name
<i>National networks that enable record location and exchange across users of difference EHR vendors</i>			
a. CommonWell Health Alliance	Q10_A	CWHA	CommonWell Health Alliance
b. e-Health Exchange (operated by Sequoia Project)	Q10_B	HLTHXCH	e-Health Exchange
c. Strategic Health Information Exchange Collaborative (SHIEC)/Patient Centered Data Home (PCDH)	Q10_C	SHIEC	Strategic Health Information Exchange Collaborative (SHIEC)/Patient Centered Data Home (PCDH)
d. Carequality (network-to-network trust/governance framework operated by Sequoia Project)	Q10_D	SPCAREQ	Sequoia Project's Carequality
<i>Health information service providers (HISPs) supporting messaging via DIRECT protocol</i>			
e. DirectTrust	Q10_E	DRTRST	DirectTrust
f. EHR vendor-based-network that enables record location and exchange within the EHR vendor's network of users (e.g., Epic's Care Everywhere)	Q10_F	VENNET	EHR vendor's network which enables exchange with vendor's other users (e.g. Epic's Care Everywhere)
g. Other national health exchange network	Q10_G	OTHNET	Other national health exchange network
Other national health exchange network description	Q10_G_OTH	OTHNET_DESC	Other national health exchange network description
h. Do not participate in any national health information exchange networks (either via vendor or directly)	Q10_H	NETNO	Do not participate in any networks (either via vendor or directly)
i. Do not know	Q10_I	NETDNK	Do not know (health information network)

**Key**  
 1 = Yes  
 0 = No

**Querying information from outside providers or sources**

**11a. Does your hospital query electronically for patients' health information (e.g. medications, outside encounters) from sources outside of your organization or hospital system?**

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

Q11a

EQPHIOS

Hospital able to query electronically for a patient health info from sources outside

**Key**  
 1 = Yes  
 2 = No, but have the capability  
 3 = Do not know  
 4 = No, do not have capability

**11b. How often are the following electronic methods used to search for (e.g., query or auto-query) and view patient health information from sources outside your organization or hospital system?**

Electronic Methods	Survey Question Number	Database Field Name	Expanded Field Name
a. Provider portals that allow you to view records in another organization's EHR system	Q11b_A	EMOPORT	Provider portals to view records in another EHR system
b. Interface connection between EHR systems (e.g. HL7 interface)	Q11b_B	EMOINTF	Interface connection between EHR systems (e.g. HL7 interface)
c. Access to other organizations' EHR system using login credentials	Q11b_C	EMODIRAC	Access to other organizations' EHR system using login credentials
d. Regional, state, or local health information exchange organization (HIE/HIO). Not local, proprietary, enterprise network	Q11b_D	EMOREG	Regional, state, or local health information exchange organization (HIE/HIO). Not local, proprietary, enterprise network
e. EHR vendor-based network that enables record location within the network (e.g. Care Everywhere)	Q11b_E	EMOVBN	EHR vendor-based network that enables record location within the network (e.g. Care Everywhere)
f. EHR connection to national networks that enable record location across EHRs in different networks (e.g. Commonwell, e-health exchange, Carequality)	Q11b_F	EMONATNET	EHR connection to national networks that enable record location across EHRs in different networks (e.g. Commonwell, e-health exchange, Carequality)
g. Other electronic methods	Q11b_G	EMOOTH	Other electronic methods
Other electronic methods description	Q11b_G_OTH	EMOOTH_DESC	Other electronic description methods

**Key**  
 1 = Often  
 2 = Sometimes  
 3 = Rarely  
 4 = Never  
 5 = Do not know/NA

***Sending patient health information***

**12. When a patient transitions to another care setting organization outside of your organization or hospital system, how often are the following methods used to SEND a summary of care record?**

Methods without intermediaries	Survey Question Number	Database Field Name	Expanded Field Name
a. Mail or fax	Q12_A	MAILSND	Mail or fax (send)
b. eFax using EHR	Q12_B	EFAXSND	eFax using EHR (send)

c. Provider portals that allow outside organization to view records in your EHR system	Q12_C	PORTSND	Provider portals that allow outside organization to view records in your EHR system (send)
d. Interface connection between EHR systems (e.g. HL7 interface)	Q12_D	INTCONSND	Interface connection between EHR systems (e.g. HL7 interface) (send)
e. Login credentials that allow access to your EHR	Q12_E	DIRACCSND	Login credentials that allow access to your EHR (send)
f. Other methods without intermediaries	Q12_F	OTHNISND	Other methods without intermediaries (send)
Other description	Q12_F_OTH	OTHNISND_DESC	Other description - methods without intermediaries (send)
<b>Methods with intermediaries</b>			
g. HISPs that enable messaging via DIRECT protocol	Q12_G	HISPSND	HISPs that enable messaging via DIRECT protocol (send)
h. Regional, state, or local health information exchange organization (HIE/HIO). Not local proprietary, enterprise network	Q12_H	HIOSND	Regional, state, or local health information exchange organization (HIO) (send)
i. EHR vendor-based network that enables exchange with vendor's other users. (e.g., Epic's Care Everywhere)	Q12_I	SEHRSND	EHR vendor-based network that enables exchange with vendor's other users (e.g., Epic's Care Everywhere) (send)
j. National networks that enable exchange across different EHR vendors (e.g. Commonwell, e-health exchange, Carequality)	Q12_J	MEHRSND	National networks that enable exchange across different EHR vendors (send)
k. Other methods with intermediaries	Q12_K	OTHISND	Other methods with intermediaries (send)
Other description	Q12_K_OTH	OTHISND_DESC	Other description - methods with intermediaries (send)

**Key**  
1 = Often  
2 = Sometimes  
3 = Rarely  
4 = Never  
5 = Do not know/NA

**Receive and integrate patient health information**

**13. When a patient transitions from another care setting outside your organization or hospital system, how often does your hospital use the following methods to RECEIVE a summary of care record?**

	Survey Question Number	Database Field Name	Expanded Field Name
<b>Methods without intermediaries</b>			
a. Mail or fax	Q13_A	MAILRCV	Mail or fax (receive)
b. eFax using EHR	Q13_B	EFAQRCV	eFax using EHR (receive)
c. Provider portals that allow you to view records in another organizations' EHR system	Q13_C	PORTRCV	Provider portals to view records in another organizations' EHR system (receive)
d. Interface connection between EHR systems (e.g. HL7 interface)	Q13_D	INTCONRCV	Interface connection between EHR systems (e.g. HL7 interface) (receive)
e. Access to other organizations' EHR system using login credentials	Q13_E	DIRACCRCV	Access to other organizations' EHR system using login credentials (receive)

f. Other methods without intermediaries	Q13_F	OTHNIRCV	Other methods without intermediaries (receive)
Other description	Q13_F_OTH	OTHNIRCV_DESC	Other description - methods without intermediaries (receive)
<b>Methods with intermediaries</b>		<b>Methods with intermediaries</b>	
g. HISPs that enable messaging via DIRECT protocol	Q13_G	HISPRCV	HISPs that enable messaging via DIRECT protocol (receive)
h. Regional, state, or local health information exchange organization (HIE/HIO). Not local proprietary enterprise network	Q13_H	HIORCV	Regional, state, or local health information exchange organization (HIE/HIO). Not local proprietary enterprise network (receive)
i. EHR vendor-based network that enables exchange with vendor's other users (e.g. Epic's Care Everywhere)	Q13_I	SEHRRCV	EHR vendor-based network that enables exchange with vendor's other users (e.g. Epic's Care Everywhere) (receive)
j. National networks that enable exchange across different EHR vendors (e.g. CommonWell, e-health exchange, Carequality)	Q13_J	MEHRRCV	National networks that enable exchange across different EHR vendors (receive)
k. Other methods with intermediaries	Q13_K	OTHIRCV	Other methods with intermediaries (receive)
Other description	Q13_L_OTH	OTHIRCV_DESC	Other description - methods with intermediaries (receive)

**Key**  
1 = Often  
2 = Sometimes  
3 = Rarely  
4 = Never  
5 = Do not know/NA

**14. Does your EHR integrate the information contained in summary of care records received electronically (not eFax) without the need for manual entry?**

	Survey Question Number	Database Field Name	Expanded Field Name
Integration of electronically received summary of care records	Q14	SOCINT	Integration of electronically received summary of care records

**Key**  
1 = Yes, routinely  
2 = Yes, but not routinely  
3 = No  
4 = Do not know  
5 = NA

**Electronic Notifications**

**15a. When a patient visits your Emergency Department (ED), do you routinely provide electronic notification to the patient's primary care physician?**

	Survey Question Number	Database Field Name	Expanded Field Name
Provide electronic notification to primary care physician after ED visit	Q15a	ENED	Provide electronic notification to primary care physician after ED visit

**Key**  
1 = Yes  
2 = No, but have the capability  
3 = No, don't have the capability  
4 = Don't know  
5 = Don't have ED

**15b. If yes, are electronic notifications provided to primary care physicians below? (Check all that apply)**

	Survey Question Number	Database Field Name	Expanded Field Name
a. Inside the system	Q15b_a	PCPENI	Are electronic notifications provided to primary care physicians inside the system?
b. Outside the system	Q15b_b	PCPENO	Are electronic notifications provided to primary care physicians outside the system?
c. Do not know	Q15b_c	PCPENDK	Are electronic notifications provided to primary care physicians (do not know)?

**Availability and usage of data that is exchanged**

**16. When treating a patient that was seen by a provider outside your organization or hospital system, 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 healthcare provider/setting?**

	Survey Question Number	Database Field Name	Expanded Field Name
Clinical information available electronically from outside providers/sources	Q16	CIAOUT	Clinical information available electronically from outside providers

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

**17a. 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?**

	Survey Question Number	Database Field Name	Expanded Field Name
Use electronic patient health information from outside providers	Q17a	PHIOUT	Use electronic patient health information from outside providers

**Key**  
1 = Often

2 = Sometimes  
 3 = Rarely  
 4 = Never  
 5 = Do not know

**17b. If rarely or never used, please indicate the reason(s) why. Check all that apply.**

	Survey Question Number	Database Field Name	Expanded Field Name
1. Information not always available when needed (e.g. not timely)	Q17b_1	PHI_INFONA	Not available when needed (PHI)
2. Information is not trusted	Q17b_2	PHI_NOTRUST	Information is not trusted (PHI)
3. Information available but not within EHR	Q17b_3	PHI_DIFF	Information available but not within EHR (PHI)
4. Information available within EHR but not part of clinicians' workflow	Q17b_4	PHI_NOVIEW	Not part of clinicians' workflow (PHI)
5. Information not presented in a useful format (e.g. too much information, redundant, or unnecessary information)	Q17b_5	PHI_FORMAT	Format not useful (PHI)
6. Information that is specific and relevant is hard to find	Q17b_6	PHI_CNTFND	Hard to find relevant information (PHI)
7. External data uses different standards (e.g., vocabulary and/or semantic representation differs)	Q17b_7	PHI_VOCAB	External data uses different standards (PHI)
8. Other	Q17b_8	PHI_OTH	Other (PHI)
Other description	Q17b_8_OTH	PHI_OTH_DESC	Other (PHI) description

**Key**

1 = Yes  
 0 = No

**Barriers to exchange and interoperability**

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

**Barriers related to electronically sending patient health information**

	Survey Question Number	Database Field Name	Expanded Field Name
a. We lack the technical capability to electronically send patient health information to outside providers or other sources	Q18_A	ESPHI	No technical capability to electronically send to outside providers
b. Providers we would like to electronically send patient health information to, do not have an EHR or other electronic system with capability to receive the information	Q18_B	NPEHR	Providers do not have EHR
c. Providers we would like to electronically send patient health information to have an EHR; however, it lacks the technical capability to receive the information	Q18_C	PEHRNRI	Providers have EHR but lacks technical capability to receive information



d. Difficult to locate the address of the provider to send the information (e.g. lack of provider directory)	Q18_D	NOPA	Lack provider address
e. Many recipients of our electronic care summaries (e.g. CCDA) report that the information is not useful	Q18_E	NU ECS	Information is not useful to recipients
f. Cumbersome workflow to send (not eFax) the information from our EHR system	Q18_F	CSEHR	Cumbersome workflow to send information from EHR system
g. The complexity of state and federal privacy and security regulations makes it difficult for us to determine whether it is permissible to electronically exchange patient health information	Q18_G	COMREG	Complexity of privacy and security regulations
<b>Barriers related to electronically receiving patient health information</b>			
h. We lack the technical capability to electronically receive patient health information from outside providers or other sources	Q18_H	ERPHI	No technical capability to receive from outside providers
i. Difficult to match or identify the correct patient between systems	Q18_I	NOIDP	Difficult to match/identify the correct patient between systems
j. There are providers whom we share patients with that don't typically exchange patient data with us	Q18_J	PRVNOEX	Some providers don't typically exchange patient data
<b>Other barriers related to exchanging patient health information</b>			
k. Experience greater challenges exchanging (e.g. sending/receiving data) across different vendor platforms	Q18_K	DIFVEND	Exchanging across different vendor platforms
l. We have to pay additional costs to send/receive data with outside organizations/hospital systems	Q18_L	ADCOST	Pay additional costs to send/receive data with outside organizations
m. We had to develop customized interfaces in order to exchange (e.g., send/receive) data with outside organizations/health systems	Q18_M	CUSTINT	Developed customized interfaces exchange health information with outside organizations

**Key**  
1 = Yes  
0 = No

**EHR System and IT Vendors**  
**19. Does your hospital use an EHR system that has been certified?**

	Survey Question Number	Database Field Name	Expanded Field Name
Does your hospital use an EHR system that has been certified?	Q19	EMRHRCRT	Hospital uses certified EHR system

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

**20. Which vendor below provides your primary inpatient EHR/EMR 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 the vendor name rather than product.(Check only one)**

	Survey Question Number	Database Field Name	Expanded Field Name
Primary provider of inpatient EHR	Q20	PIEMR	Primary inpatient EHR/EMR vendor
	Q20_OTH	PIEMRO	Primary inpatient EHR/EMR vendor - other

Key
1 = Allscripts
2 = Cerner
3 = eClinical works
4 = Eclipsys
5 = Epic
6 = GE
7 = McKesson
8 = MED3000
9 = Meditech
10 = NextGen
11 = Harris Healthcare/QuadraMed
12 = Sage
13 = Siemens
14 = Self-developed
15 = Other (specify)
Other described
16 = Would prefer not to disclose
17 = CPSI/Evident
18 = HMS
19 = Healthland
20 = Vitera/Greenway
21 = Evident
22 = MEDHOST
23 = Allscripts
24 = Prognosis
25 = Athenahealth
26 = MedWorx
27 = Health Care System
28 = Azalea Health/Prognosis

**21. Overall, how satisfied or dissatisfied are you with your primary inpatient EHR system?**

	Survey Question Number	Database Field Name	Expanded Field Name
Satisfaction with primary inpatient EHR system	Q21	SATISEHR	Satisfaction with primary inpatient EHR system

Key
1 = Very satisfied
2 = Somewhat satisfied

3 = Somewhat dissatisfied  
 4 = Very dissatisfied  
 5 = Neither satisfied nor dissatisfied

**22. When does your hospital expect to complete the switch to a 2015 certified EHR system?**

	Survey Question Number	Database Field Name	Expanded Field Name
Expected completion of switch to 2015 certified EHR system	Q22	CERTEHR	Expected completion of switch to 2015 certified EHR system

**Key**  
 1 = Completed switch to 2015 certified EHR system  
 2 = Implementation of 2015 certified EHR system is in place  
 3 = Switch to 2015 certified EHR system is planned  
 4 = Switch to 2015 certified EHR system is not planned

**23. What changes, if any, are you planning for your primary inpatient EMR/EHR system within the next 18 months?**

	Survey Question Number	Database Field Name	Expanded Field Name
a. Initial deployment	Q23_A	CHNG_ID	Initial deployment
b. Vendor switch	Q23_B	CHNG_VEN	Vendor switch
c. Change from enterprise architecture to best-of-breed	Q23_C	CHG_ARCA	Enterprise architecture to best-of-breed
d. Change from best-of-breed to enterprise architecture	Q23_D	CHG_ARCB	Best-of-breed to enterprise architecture
e. Optimizing functionality of new releases	Q23_E	CHG_FCTNR	Optimizing functionality of new releases
f. Significant additional functionalities	Q23_F	CHNG_FUNC	Significant additional functionalities
g. Do not know	Q23_G	CHNG_UNKN	Changes Unknown
h. No major changes planned	Q23_H	CHNG_NUN	No major changes planned

**Key**  
 1 = Yes  
 0 = No

**24a. Do you use the same primary inpatient EHR/EMR system vendor (noted above) for your primary outpatient EMR/EHR system?**

	Survey Question Number	Database Field Name	Expanded Field Name
Same primary inpatient EHR/EMR system vendor (noted above) for primary outpatient EMR/EHR system	Q24_A	SIOPV	Same primary inpatient/outpatient EHR/EMR system vendor

**Key**  
 1 = Yes, share single instance  
 2 = Yes, but do not share the single instance/version  
 3 = No  
 4 = Do not know  
 5 = NA

**24b. Is patient health information electronically exchanged or made electronically available between your primary inpatient and outpatient EHR systems so that data is easily available to clinicians across care settings?**

	Survey Question Number	Database Field Name	Expanded Field Name
Is patient health information electronically exchanged/available between primary inpatient and outpatient EHR systems so data are easily available to clinicians across care settings?	Q24_B	PHIXCHG	Patient health information exchanged between primary inpatient and outpatient systems

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

**25. What are your primary challenge(s) in implementing and using an EMR/EHR system that meets the requirements for the Promoting Interoperability (PI) program?**

	Survey Question Number	Database Field Name	Expanded Field Name
a. Upfront capital costs/lack of access to capital to install systems	Q25_A	FEDCST	Upfront capital costs, or lack of capital
b. On-going costs of maintaining and upgrading systems	Q25_B	FEDUS	On-going costs of maintaining/upgrading
c. Obtaining physician cooperation	Q25_C	FEDPHY	Obtaining physician cooperation
d. Obtaining other staff cooperation	Q25_D	FEDSTF	Obtaining other staff cooperation
e. Concerns about security or liability for privacy breaches	Q25_E	MNGFL_SEC	Concerns about security/liability for privacy breaches
f. Uncertainty about certification requirements	Q25_F	MNGFL_CERT	Uncertainty about certification process
g. Limited vendor capacity	Q25_G	MNGFL_VEN	Lack of vendor capacity
h. Lack of adequate IT personnel in hospital to support implementation/maintenance	Q25_H	MNGFL_IT	Lack adequate IT staff
i. Challenge/complexity of meeting all PI program criteria within implementation timeframe	Q25_I	MNGFL_TIME	Meeting all PI program criteria on time
j. Pace and extent of other regulatory requirement changes	Q25_J	MNGFL_REGS	Pace and extent of other regulatory requirement changes
k. Other specify (PI)	Q25_K	MNGFL_OTH	Other reason (PI)
k. Other description (PI)	Q25_K_OTH	MNGFL_OTHD	Other reason specified (PI)

**Key**  
 1 = Yes  
 0 = No