2018 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

Government, nonfederal
12 = State
13 = County
14 = City
15 = City-county
16 = Hospital district or authority

Nongovernment, not-for-profit

21 = Church operated
23 = Other

Investor-owned, for-profit
31 = Individual
32 = Partnership
33 = Corporation

Government, federal
40 = Department of Defense
41 =Air Force
42 = Army
43 = Navy
44 = Public Health Service other than 47
45 = Veterans Affairs
46 = Federal other than 41-45, 47-48
47 = Public Health Service Indian Service
48 = Department of Justice

Field Description	Database Field Name
Primary service code	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
Electronic Clinical Documentation			
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.)
Results viewing			
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	CSRVCQ	Consultation requests (view)
Computerized provider order entry (Provider (e.g., MD, APN, NP) directly enters own orders that are transmitted electronically)			
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
Decision support			
a. Clinical guidelines (e.g. Beta blockers post-MI, ASA in CAD)	Q1_A4	CSDSCG	Clinical guidelines
b. Clinical reminders (e.g. pneumovax)	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
Other functionalities			
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)
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

2a. 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)?	Q2a	HEPCS	Hospital enabled for electronic prescribing of controlled substances (EPCS)

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

2b. How do prescribers or their delegates in your hospital check your state's Prescription Drug Monitoring Program (PDMP)?

	Survey Question Number	Database Field Name	Expanded Field Name
How do prescribers or their delegates in hospital check state's Prescription Drug Monitoring Program (PDMD)	Q2b	PDMPCHK	Checking state's Prescription Drug Monitoring Program (PDMD)

Key
1 = Within hospital's EHR systems
2 = Outside of hospital's EHR systems (e.g. PDMP secure web portal or other external application)
3 = Do not know
4 = NA

2c. Does your hospital's EHR system integrate data retrieved from your state's PDMP? *Note: Integrate refers to incorporating data without the need for manual entry.*

	Survey Question Number	Database Field Name	Expanded Field Name
Does your hospital's EHR system integrate data retrieved from your state's PDMP?	Q2c	PDMPINT	Hospital EHR system integrates data retrieved from state's PDMP

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

2d. Are prescribers or delegates at your hospital able to check your state's PDMP via single sign-on (SSO)? *Note: single sign on does not require an additional login or password to access the PDMP*

	Survey Question Number	Database Field Name	Expanded Field Name
Are prescribers or delegates at your hospital able to check your state's PDMP via single sign-on (SSO)?	Q2d	PDMPSSO	Prescribers or delegates able to check state's PDMP via single sign-on

Key
1 = Yes
2 = No

Patient Engagement
3. Are patients treated in your hospital able to do the following:

	Survey Question Number	Database Field Name	Expanded Field Name
a. View their health/medical information online	Q3_A	PEFVI	View their health/medical information online
b. Download information from their medical record	Q3_B	PEFDI	Download information from their medical record
c. Import their medical records from other organizations into your portal	Q3_C	PEFIR	Import their medical records from other organizations into your portal
d. Electronically transmit (send) medical information to a third party	Q3_D	PEFRS	Electronically transmit (send) medical information to a third party
e. Request an amendment to change/update their medical record online	Q3_E	PEFRA	Request an amendment to change/update their medical record
f. Request refills for prescriptions online	Q3_F	PEFRP	Request refills for prescriptions online
g. Schedule appointments online	Q3_G	PEFSA	Schedule appointments online
h. Pay bills online	Q3_H	PEFPB	Pay bills online
i. Submit patient-generated data (e.g. blood, glucose, weight)	Q3_I	PEFSD	Submit patient-generated data
j. Secure messaging with providers	Q3_J	PEFSM	Secure messaging with providers
k. Designate family member or caregiver to access information on behalf of the patient (e.g., proxy access)	Q3_K	PEFPROX	Proxy access
l. View their clinical notes (e.g., complete notes written by provider) online	Q3_L	PEFVCN	View clinical notes online
m. Access their medical information using applications (apps) configured to meet the application programming interfaces (API) specifications in your EHR	Q3_M	PEFAPI	Access medical information using applications configured to meet the API specifications in your EHR

Provider Burden Related to Reporting and Documentation

4. 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 meaningful use requirements	Q4_A	CHPHDNK	We do not know to which public health agencies our hospital should send the information to meet meaningful use requirements
b. Public health agencies lack the capacity to electronically receive the information	Q4_B	CHPHNC	Public health agencies lack the capacity to electronically receive the information

	Survey Question Number	Database Field Name	Expanded Field Name
c. We lack the capacity (e.g., technical, staffing) to electronically send information.	Q4_C	CHPHSND	Lack capacity to electronically send information.
d. Difficulty extracting data from EHR	Q4_D	CHPHEXT	Difficulty extracting data from EHR
e. Interface-related issues (e.g., costs, complexity) make it difficult to send the information	Q4_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	Q4_F	CHPHDV	Use different vocabulary standards than the public health agency, making it difficult to exchange
g. Other - challenges	Q4_G	CHPHOTH	Other - challenges
Other description - challenges	Q4_G_OTH	CHPHOTH_DESC	Other description - challenges
h. NA (e.g. not participating in CMS EHR incentive program)	Q4_H	CHPHNP	NA - not participating
i. Have not experienced any major challenges	Q4_I	CHPHNMC	Have not experienced any major challenges

Key
1 = Yes
0 = No

5. 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)	Q5_A	AGMPCQM	Physician-specific electronic clinical quality measures (eCQMs)
b. Hospital-specific (eCQMS)	Q5_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

6. 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	Q6_A	BARIT	Lack of IT staff needed to generate reports
b. EHR does not possess capability to automatically generate measures	Q6_B	BARCAP	EHR does not possess capability to automatically generate measures
c. EHR data not mapping correctly, leading to missing or inaccurate information	Q6_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	Q6_D	BARDES	Poor EHR usability or design issues, leading to missing or inaccurate information
e. Poor EHR data quality that requires manual correction	Q6_E	BARQA	Poor EHR data quality that requires manual correction

f. Difficulty extracting data from EHR	Q6_F	BAREXT	Difficulty extracting data from EHR
g. Problems with clinical workflow leading to missing data or incorrect information being collected	Q6_G	BARWRKFL	Problems with clinical workflow leading to missing data or incorrect information being collected
h. Changing requirements make it difficult to automate reporting	Q6_H	BARREQ	Changing requirements make it difficult to automate reporting
i. Difficulty aggregating data from multiple EHR systems	Q6_I	BARAGG	Difficulty aggregating data from multiple EHR systems
j. Limited funds	Q6_J	BARFNDS	Limited funds
k. Other - barriers	Q6_K	BAROTH	Other - barriers
Other description - barriers	Q6_K_OTH	BAROTH_DESC	Other description - barriers
l. NA - barriers	Q6_L	BARNA	NA - barriers
m. Already generate measures using fully or primarily automated processes	Q6_M	BARGEN	Already generate measures using fully or primarily automated processes
n. Do not know - barriers	Q6_N	BARDNK	Do not know - barriers

Key
1 = Yes
0 = No

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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 use your EHR or other IT system data (e.g., log audit data) to track the amount of time clinicians spend completing documentation?

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

	Survey Question Number	Database Field Name	Expanded Field Name
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	Q8_B4	DUPRFMN	Performance/efficiency monitoring
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

Participation in health information exchange networks

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/RHIO

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 networks does your hospital participate in?

	Survey Question Number	Database Field Name	Expanded Field Name
a. CommonWell Health Alliance	Q10_A	CWHA	CommonWell Health Alliance
b. DirectTrust	Q10_B	DRTRST	DirectTrust
c. e-Health Exchange	Q10_C	HLTHXCH	e-Health Exchange
d. Sequoia Project's Carequality	Q10_D	SPCAREQ	Sequoia Project's Carequality
e. Strategic Health Information Exchange Collaborative (SHIEC)/Patient Centered Data Home (PCDH)	Q10_E	SHIEC	Strategic Health Information Exchange Collaborative (SHIEC)/Patient Centered Data Home (PCDH)
f. Surescripts	Q10_F	SRSCRPT	Surescripts
g. Your EHR vendor's network which enables exchange with vendor's other users (e.g. Epic's Care Everywhere)	Q10_G	VENNET	EHR vendor's network which enables exchange with vendor's other users (e.g. Epic's Care Everywhere)
h. Other national health exchange network	Q10_H	OTHNET	
Other national health exchange network description	Q10_H_OTH	OTHNET_DESC	Other health information network description
i. Do not participate in any national health information exchange networks (either via vendor or directly)	Q10_I	NETNO	Do not participate in any networks (either via vendor or directly)
j. Do not know	Q10_J	NETDNK	Do not know (health information network)

Querying information from outside providers or sources

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

	Survey Question Number	Database Field Name	Expanded Field Name
Providers able to query electronically for a patient's health information from sources outside organization or system	Q11a	EQPHIOS	Providers able to query electronically for a patient health info from sources outside

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

Electronic Methods	Survey Question Number	Database Field Name	Expanded Field Name
a. Provider portals to view records in another 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. Direct access to EHRs (via remote or terminal access)	Q11b_C	EMODIRAC	Direct access to EHRs (via remote or terminal access)
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

Sending patient health information

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

	Survey Question Number	Database Field Name	Expanded Field Name
Methods without intermediaries			
a. Mail or fax	Q12_A	MAILSND	Mail or fax (send)
b. eFax using EHR	Q12_B	EFAXSND	eFax using EHR (send)
c. Provider portal for view only access to EHR system	Q12_C	PORTSND	Provider portal for view only access to 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. Direct access to EHRs (via remote or terminal access)	Q12_E	DIRACCSND	Direct access to EHRs (via remote or terminal access) (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)
Methods with intermediaries			
g. Standalone HISP or HISP provided by a third party that enables secure messaging (such as DIRECT)	Q12_G	HISPSND	Standalone HISP or HISP provided by a third party that enables secure messaging (such as DIRECT) (send)
h. Regional, state, or local health information exchange organization (HIE/HIO). Not local proprietary, enterprise network	Q12_H	HIOSND	Community (regional, state, or local) health information exchange organization (HIO).
i. EHR vendor-based network that enables exchange with vendor's other users. (e.g. Epic's Care Everywhere)	Q12_I	SEHRSND	Single EHR vendor network (use your EHR vendor's network that enables connection to vendor's other users such as 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	Multi-EHR vendor networks, like CommonWell Health Alliance
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 organization outside your 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
Methods without intermediaries			
a. Mail or fax	Q13_A	MAILRCV	Mail or fax (receive)

	Survey Question Number	Database Field Name	Expanded Field Name
b. eFax using EHR	Q13_B	EFAXRCV	eFax using EHR (receive)
c. Provider portals to view records in another EHR system	Q13_C	PORTRCV	Provider portals to view records in another 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. Direct access to EHRs (via remote or terminal access)	Q13_E	DIRACCRCV	Direct access to EHRs (via remote or terminal access) (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)

Methods with intermediaries

			Methods with intermediaries
g. Standalone HISP or HISP provded by a third party that enables secure messaging (such as DIRECT)	Q13_G	HISPRCV	Standalone HISP or HISP provded by a third party that enables secure messaging (such as DIRECT) (receive)
h. Regional, state, or local health information exchange organization (HIE/HIO). Not local proprietary enterprise network	Q13_H	HIORCV	h. 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	i. 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	j. National networks that enable exchange across different EHR vendors (e.g. CommonWell, e-health exchange, Carequality) (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

Availability and usage of data that is exchanged

15. 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	Q15	CIAOUT	Clinical information available electronically from outside providers

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

16a. 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	Q16a	PHIOUT	Use electronic patient health information from outside providers

Key
1 = Often
2 = Sometimes
3 = Rarely
4 = Never
5 = Don't know

16b. 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)	Q16_B1	PHI_INFONA	Not available when needed (PHI)
2. Do not trust accuracy of information	Q16_B2	PHI_NOTRUST	Do not trust accuracy (PHI)
3. Information is available but not integrated into EHR	Q16_B3	PHI_DIFF	Not integrated (PHI)
4. Information available and integrated into EHR but not part of clinicians' workflow	Q16_B4	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)	Q16_B5	PHI_FORMAT	Format not useful (PHI)
6. Information that is specific and relevant is hard to find	Q16_B6	PHI_CNTFND	Hard to find relevant information (PHI)

	Survey Question Number	Database Field Name	Expanded Field Name
7. Vocabulary and/or semantic representation differences limit use	Q16_B7	PHI_VOCAB	Vocabulary differences limit use (PHI)
8. Other	Q16_B8	PHI_OTH	Other (PHI)
Other description	Q16_B8_OTH	PHI_OTH_DESC	Other (PHI) description

Barriers to exchange and interoperability

17. 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 care settings or organizations? (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	Q17_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	Q17_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	Q17_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)	Q17_D	NOPA	Lack provider address
e. Many recipients of our electronic care summaries (e.g. CCDA) report that the information is not useful	Q17_E	NUECS	Information is not useful to recipients
f. Cumbersome workflow to send (not eFax) the information from our EHR system	Q17_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	Q17_G	COMREG	Complexity of privacy and security regulations

Barriers related to electronically receiving patient health information

	Survey Question Number	Database Field Name	Expanded Field Name
h. We lack the technical capability to electronically receive patient health information from outside providers or other sources	Q17_H	ERPHI	No technical capability to receive from outside providers
i. Difficult to match or identify the correct patient between systems	Q17_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	Q17_J	PRVNOEX	Some providers don't typically exchange patient data

Other barriers related to exchanging patient health information

k. Experience greater challenges exchanging (e.g. sending/receiving data) across different vendor platforms	Q17_K	DIFVEND	Exchanging across different vendor platforms
l. We have to pay additional costs to send/receive data with care settings/organizations outside our system	Q17_L	ADCOST	Pay additional costs to send/receive data
m. We had to develop customized interfaces in order to electronically exchange health information	Q17_M	CUSTINT	We had to develop customized interfaces in order to electronically exchange health information

Key
1 = Yes
0 = No

EHR System and IT Vendors

18. Do you possess an EHR system that has been certified?

	Survey Question Number	Database Field Name	Expanded Field Name
Posses a certified system for meeting meaningful use requirements	Q18	EMRHRCRT	Certified EHR for Meaningful Use

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

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19. 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	Q19	PIEMR	Primary inpatient EHR/EMR vendor
	Q19_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

20. Overall, how satisfied or dissatisfied are you with your EHR system?

	Survey Question Number	Database Field Name	Expanded Field Name
Satisfaction with EHR system	Q20	SATISEHR	Satisfaction with EHR system

21. 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	Q21	CERTEHR	Expected completion of switch to 2015 certified EHR system

22. 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	Q22_A	CHNG_ID	Initial deployment
b. Major change in vendor	Q22_B	CHNG_VEN	Major change in vendor
c. Change from enterprise architecture to best-of-breed	Q22_C	CHG_ARCA	Enterprise architecture to best-of-breed
d. Change from best-of-breed to enterprise architecture	Q22_D	CHG_ARCB	Best-of-breed to enterprise architecture
e. Optimizing functionality of new releases	Q22_E	CHG_FCTNR	Optimizing functionality of new releases
f. Significant additional functionalities	Q22_F	CHNG_FUNC	Significant additional functionalities
g. Do not know	Q22_G	CHNG_UNKN	Changes Unknown
h. No major changes planned	Q22_H	CHNG_NUN	No major changes planned

Key
1 = Yes
0 = No

23a. 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	Q23_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
3 = No
4 = Do not know
5 = NA

23b. Is patient health information electronically exhanged or made electronically avaliable between your primary inpatient and outpatient systems so that data is easily available to clinicians?

	Survey Question Number	Database Field Name	Expanded Field Name
Is patient health information electronically exchanged/available between primary inpatient and outpatient systems so data are easily available to clinicians	Q23_B	PHIXCHG	Patient health information exchanged between primary inpatient and outpatient systems

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

24. 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	Q24_A	FEDCST	Upfront capital costs, or lack of capital
b. On-going costs of maintaining and upgrading systems	Q24_B	FEDUS	On-going costs of maintaining/upgrading
c. Obtaining physician cooperation	Q24_C	FEDPHY	Obtaining physician cooperation
d. Obtaining other staff cooperation	Q24_D	FEDSTF	Obtaining other staff cooperation
e. Concerns about security or liability for privacy breaches	Q24_E	MNGFL_SEC	Concerns about security/liability for privacy breaches
f. Uncertainty about certification requirements	Q24_F	MNGFL_CERT	Uncertainty about certification process
g. Limited vendor capacity	Q24_G	MNGFL_VEN	Lack of vendor capacity
h. Lack of adequate IT personnel in hospital to support implementation/maintenance	Q24_H	MNGFL_IT	Lack adequate IT staff
i. Challenge/complexity of meeting all meaningful use criteria within implementation timeframe	Q24_I	MNGFL_TIME	Meeting all meaningful use criteria on time
j. Pace and extent of other regulatory requirement changes	Q24_J	MNGFL_REGS	Pace and extent of other regulatory requirement changes
k. Other specify (PI)	Q24_K	MNGFL_OTH	Other reason (PI)
k. Other description (PI)	Q24_K_OTH	MNGFL_OTHD	Other reason specified (PI)

Key
1 = Yes
0 = No

25. 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)

	Survey Question Number	Database Field Name	Expanded Field Name
a. Create a dashboard with measures of organizational performance	Q25_A	ECDMOP	Create a dashboard with measures of organizational performance
b. Create a dashboard with measures of unit-level performance	Q25_B	ECDMUP	Create a dashboard with measures of unit-level performance
c. Create individual provider performance profiles	Q25_C	ECDIPP	Create individual provider performance profiles
d. Create an approach for clinicians to query the data	Q25_D	ECDCQD	Create an approach for clinicians to query the data
e. Assess adherence to clinical practice guidelines	Q25_E	ECDICG	Assess adherence to clinical practice guidelines
f. Identify care gaps for specific patient populations	Q25_F	ECDCGP	Identify care gaps for specific patient populations
g. Generate reports to inform strategic planning	Q25_G	ECDISP	Generate reports to inform strategic planning
h. Support a continuous quality improvement process	Q25_H	ECDCQI	Support continuous quality improvement process
i. Monitor patient safety (e.g. adverse drug effects)	Q25_I	ECDMPS	Monitor patient safety
j. Identify high risk patients for follow-up care using algorithm or other tools	Q25_J	ECDHRP	Identify high risk patients for follow-up care using algorithm or other tools
k. None of the above	Q25_K	ECDNONE	None (ECD)

Key
1 = Yes
0 = No