

**2020 AHA Annual Survey
Information Technology Supplement File Layout**

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	
<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>40 = Department of Defense</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 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

Hospital Capacity Reporting

1. To which government entities is your hospital responsible for reporting this data? Note: This data could include availability and use of hospital beds, personal protective equipment (PPE), ventilators, staffing, and/or other medical supplies/resources.

	Survey Question Number	Database Field Name
a. City or local public health agencies	Q1_A	HCRLOCAL
b. State public health agencies	Q1_B	HCRSTATE
c. Federal entities (such as the CDC or HHS)	Q1_C	HCRFED
d. We are not responsible for reporting data associated with hospital capacity and utilization of resources to government entities	Q1_D	HCRNR
e. Do not know	Q1_E	HCRDNW

Key

1 = Yes

0 = No

2. To what extent are hospital capacity and utilization of medical supplies data and reporting requirements similar across Federal, State, or Local agencies?

	Survey Question Number	Database Field Name
To what extent are hospital capacity and utilization of medical supplies data and reporting requirements similar across Federal, State, or Local agencies?	Q2	SPDTASM

Key

1 = Completely similar

2 = Somewhat similar

3 = Not very similar

4 = Not at all similar

5 = Not applicable (we only report to one government entity)

6 = Don't know

3. Please indicate whether your hospital experienced any of the issues below when collecting or reporting hospital capacity and utilization of medical supplies data to Federal, State, or Local public health agencies.

	Survey Question Number	Database Field Name
a. Unclear instructions on how to complete and submit relevant data - Federal	Q3a_1	UNCLRFED
a. Unclear instructions on how to complete and submit relevant data - State	Q3a_2	UNCLRSTE
a. Unclear instructions on how to complete and submit relevant data - Local/City	Q3a_3	UNCLRLCL
a. Unclear instructions on how to complete and submit relevant data - None	Q3a_4	UNCLRNO
a. Unclear instructions on how to complete and submit relevant data - Do not know	Q3a_5	UNCLRDNK
b. Inconsistent or unclear definitions of reported data elements - Federal	Q3b_1	UDRDEFED
b. Inconsistent or unclear definitions of reported data elements - State	Q3b_2	UDRDESTE
b. Inconsistent or unclear definitions of reported data elements - Local/City	Q3b_3	UDRDELCL
b. Inconsistent or unclear definitions of reported data elements - None	Q3b_4	UDRDENO
b. Inconsistent or unclear definitions of reported data elements - Do not know	Q3b_5	UDRDEDNK
c. Lack of standard submission templates or file formats - Federal	Q3c_1	NOTMPFED
c. Lack of standard submission templates or file formats - State	Q3c_2	NOTMPSTE
c. Lack of standard submission templates or file formats - Local/City	Q3c_3	NOTMPLCL
c. Lack of standard submission templates or file formats - None	Q3c_4	NOTMPNO
c. Lack of standard submission templates or file formats - Do not know	Q3c_5	NOTMPDKN
d. Many data points required for capacity and utilization reporting were not available in the EHR or other IT systems and required significant effort to document/report - Federal	Q3d_1	DPNAFED

d. Many data points required for capacity and utilization reporting were not available in the EHR or other IT systems and required significant effort to document/report - State	Q3d_2	DPNASTE
d. Many data points required for capacity and utilization reporting were not available in the EHR or other IT systems and required significant effort to document/report - Local/City	Q3d_3	DPNALCL
d. Many data points required for capacity and utilization reporting were not available in the EHR or other IT systems and required significant effort to document/report - None	Q3d_4	DPNANO
d. Many data points required for capacity and utilization reporting were not available in the EHR or other IT systems and required significant effort to document/report - Do know know	Q3d_5	DPNADNK
e. Required measures do not accurately reflect our hospital capacity and utilization of medical supplies - Federal	Q3e_1	MSRNASFED
e. Required measures do not accurately reflect our hospital capacity and utilization of medical supplies - State	Q3e_2	MSRNASTE
e. Required measures do not accurately reflect our hospital capacity and utilization of medical supplies - Local/City	Q3e_3	MSRNALCL

e. Required measures do not accurately reflect our hospital capacity and utilization of medical supplies - None

Q3e_4

MSRNANO

e. Required measures do not accurately reflect our hospital capacity and utilization of medical supplies - Do not know

Q3e_5

MSRNADNK

Key

1 = Yes

0 = No

Prescribing Controlled Substances

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

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

Survey Question Number

Database Field Name

Q4

HEPCS

Key

1 = Yes

2 = No

3 = Do not know

4 = NA

Patient Engagement

5a. Does your hospital provide outpatient care to patients? Note: Outpatient care refers to both hospital based and satellite outpatient departments/sites.

Does your hospital provide outpatient care to patients

Survey Question Number

Database Field Name

Q5a

OPCARE

Key

1 = Yes (go to 5b)

0 = No (skip to 6)

5b. Is there more than one primary EMR/HER system in use across your outpatient site(s)?

	Survey Question Number	Database Field Name
Is there more than one primary EMR/HER system in use across your outpatient site(s)?	Q5b	POPEHR

Key
 1 = Yes
 0 = No

6. Are patients who receive care provided by your hospital or outpatient sites able to do the following: (Check "Yes" only if the functionality has been "turned on" and is fully implemented and available to patients. Check both (1) and (2) if the functionality is turned on in both inpatient and outpatient settings)

	Survey Question Number	Database Field Name
a. View their health/medical information online in their portal - inpatient sites	Q6a_1	PEFVIIS
a. View their health/medical information online in their portal - some or all outpatient sites	Q6a_2	PEFVIOS
a. View their health/medical information online in their portal - no	Q6a_3	PEFVINO
a. View their health/medical information online in their portal - do not know	Q6a_4	PEFVIDNK
b. Download health medical information from their medical record from your portal - inpatient sites	Q6b_1	PEFDIIS
b. Download health medical information from their medical record from your portal - some or all outpatient sites	Q6b_2	PEFDIOS
b. Download health medical information from their medical record from your portal - no	Q6b_3	PEFDINO
b. Download health medical information from their medical record from your portal - do not know	Q6b_4	PEFDIDNK
c. Import their medical records from other organizations into your portal - inpatient sites	Q6c_1	PEFIRIS

c. Import their medical records from other organizations into your portal - some or all outpatient sites	Q6c_2	PEFIROS
c. Import their medical records from other organizations into your portal - no	Q6c_3	PEFIRNO
c. Import their medical records from other organizations into your portal - do not know	Q6c_4	PEFIRDNK
d. Electronically transmit (send) health/medical information to a third party from your portal (in any format) including scanned or structured documents - inpatient sites	Q6d_1	PEFRSIS
d. Electronically transmit (send) health/medical information to a third party from your portal (in any format) including scanned or structured documents - some or all outpatient sites	Q6d_2	PEFRSOS
d. Electronically transmit (send) health/medical information to a third party from your portal (in any format) including scanned or structured documents - no	Q6d_3	PEFRSNO
d. Electronically transmit (send) health/medical information to a third party from your portal (in any format) including scanned or structured documents - do not know	Q6d_4	PEFRSDNK
e. Electronically transmit (send) health/medical information to a third party from your portal (in a structured format such as CCDAs) - inpatient sites	Q6e_1	PEFSFIS
e. Electronically transmit (send) health/medical information to a third party from your portal in a structured format such as CCDAs - some or all outpatient sites	Q6e_2	PEFSFOS
e. Electronically transmit (send) health/medical information to a third party from your portal (in a structured format such as CCDAs) - no	Q6e_3	PEFSFNO
e. Electronically transmit (send) health/medical information to a third party from your portal (in a structured format such as CCDAs) - do not know	Q6e_4	PEFSFDNK

f. Request an amendment to change/update their medical record online - inpatient sites	Q6f_1	PEFRAIS
f. Request an amendment to change/update their medical record online - some or all outpatient sites	Q6f_2	PEFRAOS
f. Request an amendment to change/update their medical record online - no	Q6f_3	PEFRANO
f. Request an amendment to change/update their medical record online - do not know	Q6f_4	PEFRADNK
g. Designate family member or caregiver to access their health/medical information on behalf of the patient (e.g., proxy access) - inpatient sites	Q6g_1	PEFPROXIS
g. Designate family member or caregiver to access their health/medical information on behalf of the patient (e.g., proxy access)- some or all outpatient sites	Q6g_2	PEFPROXOS
g. Designate family member or caregiver to access their health/medical information on behalf of the patient (e.g., proxy access) - no	Q6g_3	PEFPROXNO
g. Designate family member or caregiver to access their health/medical information on behalf of the patient (e.g., proxy access) - do not know	Q6g_4	PEFPROXDNK
h. View their clinical notes (e.g., visit notes including consultation, progress, history and physical) in their portal - inpatient sites	Q6h_1	PEFVCNIS
h. View their clinical notes (e.g., visit notes including consultation, progress, history and physical) in their portal - some or all outpatient sites	Q6h_2	PEFVCNOS
h. View their clinical notes (e.g., visit notes including consultation, progress, history and physical) in their portal - no	Q6h_3	PEFVCNNO
h. View their clinical notes (e.g., visit notes including consultation, progress, history and physical) in their portal - do not know	Q6h_4	PEFVCNDNK
i. Access their health/medical information using applications (apps) configured to meet the application programming interfaces (API) specifications in your EHR - inpatient sites	Q6i_1	PEFAPIIS

i. Access their health/medical information using applications (apps) configured to meet the application programming interfaces (API) specifications in your EHR - some or all outpatient sites	Q6i_2	PEFAPIOS
i. Access their health/medical information using applications (apps) configured to meet the application programming interfaces (API) specifications in your EHR - no	Q6i_3	PEFAPINO
i. Access their health/medical information using applications (apps) configured to meet the application programming interfaces (API) specifications in your EHR - do not know	Q6i_4	PEFAPIDNK
j. Access their health/medical information using applications (apps) configured to meet Fast Healthcare Interoperability Resource (FHIR) specifications - inpatient sites	Q6j_1	PEFFHIIS
j. Access their health/medical information using applications (apps) configured to meet Fast Healthcare Interoperability Resource (FHIR) specifications - some or all outpatient sites	Q6j_2	PEFFHIOS
j. Access their health/medical information using applications (apps) configured to meet Fast Healthcare Interoperability Resource (FHIR) specifications - no	Q6j_3	PEFFHINO
j. Access their health/medical information using applications (apps) configured to meet Fast Healthcare Interoperability Resource (FHIR) specifications - do not know	Q6j_4	PEFFHIDNK
k. Submit patient generated data (e.g., blood glucose, weight) - inpatient sites	Q6k_1	PEFSDIS
k. Submit patient generated data (e.g., blood glucose, weight) - some or all outpatient sites	Q6k_2	PEFSDOS
k. Submit patient generated data (e.g., blood glucose, weight) - no	Q6k_3	PEFSDNO
k. Submit patient generated data (e.g., blood glucose, weight) - do not know	Q6k_4	PEFSDDNK

l. Send/receive secure message with providers - inpatient sites	Q6l_1	PERSMIS
l. Send/receive secure message with providers - some or all outpatient sites	Q6l_2	PERSMOS
l. Send/receive secure message with providers - no	Q6l_3	PERSMNO
l. Send/receive secure message with providers - do not know	Q6l_4	PERSMDNK
m. Pay bills online - inpatient sites	Q6m_1	PEFPBIS
m. Pay bills online - some or all outpatient sites	Q6m_2	PEFPBOS
m. Pay bills online - no	Q6m_3	PEFPBNO
m. Pay bills online - do not know	Q6m_4	PEFPBDNK
n. Request refills for prescriptions online - some or all outpatient sites	Q6n_2	PEFRPOS
n. Request refills for prescriptions online - no	Q6n_3	PEFRPNO
n. Request refills for prescriptions online - do not know	Q6n_4	PEFRPDNK
o. Schedule appointments on-line - some or all outpatient sites	Q6o_2	PEFSAOS
o. Schedule appointments on-line - no	Q6o_3	PEFSANO
o. Schedule appointments on-line - do not know	Q6o_4	PEFSADNK

Key
 1 = Yes
 0 = No

Provider Burden Related to Reporting and Documentation

7a. Does your hospital receive or have access to measures from your EHR vendor that report the amount of time clinicians spend completing documentation? Such measures typically use EHR audit log data.

	Survey Question Number	Database Field Name
Use of EHR to track time clinicians spend completing documentation	Q7a	TRKDOC

Key
 1 = Yes (go to 7b)
 2 = No (go to 8)
 3 = Do not know (go to 8)
 4 = NA (go to 8)

7b. If yes, how are these data used?

	Survey Question Number	Database Field Name
1. Vendor product improvement and trouble shooting	Q7_B1	DUPRDIMP
2. Identify providers in need of training and support	Q7_B2	DUIDPROV
3. Provider burden reduction initiatives	Q7_B3	DUPBRI
4. Performance/efficiency monitoring of clinicians	Q7_B4	DUPRFMN
5. Identify areas to improve clinical workflow	Q7_B5	DUCLWF
6. Other data uses	Q7_B6	DUOTH
Other description data uses	Q7_B6_OTH	DUOTH_DESC

Key
 1 = Yes
 0 = No

Participation in health information exchange networks

**8a. Please indicate your level of participation in a state, regional, and/or local health information exchange (HIE) or health information organization (HIO).
 Note: This does not refer to a private, enterprise network.**

	Survey Question Number	Database Field Name
Level of HIE or HIO participation	Q8a	RHIO_LVL1

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

8b. Please indicate which state, regional and/or local HIE/HIO(s) with whom your hospital participates and actively exchanges data as well as the first year that your hospitals actively participated in this HIE/HIO. (See HIO list)

	Survey Question Number	Database Field Name
8b1a. Name/reference number 1	Q8b1_A	NMREF1
8b1b. First year your hospital participated 1	Q8b1_B	YEAR1
8b1b.Name1 Other	Q8b1_OTH	NM1OTH
8b2a. Name/reference number 2	Q8b2_A	NMREF2
8b2b. First year your hospital participated 2	Q8b2_B	YEAR2
8b1b.Name2 Other	Q8b2_OTH	NM2OTH
8b3a. Name/reference number 3	Q8b3_A	NMREF3
8b3b. First year your hospital participated 3	Q8b3_B	YEAR3
8b1b.Name3 Other	Q8b3_OTH	NM3OTH

9. 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
a. CommonWell Health Alliance	Q9_A	CWHA
b. e-Health Exchange	Q9_B	HLTHXCH
c. Strategic Health Information Exchange Collaborative (SHIEC)/Patient Centered Data Home (PCDH)	Q9_C	SHIEC
d. Carequality (network-to-network trust/governance framework)	Q9_D	SPCAREQ
e. EHR vendor-based-network that enables record location and exchange within the EHR vendor's network of users (e.g., Epic's Care Everywhere)	Q9_F	VENNET
f. Other national health exchange network	Q9_G	OTHNET

Other national health exchange network description	Q9_G_OTH	OTHNET_DESC
g. Do not participate in any national health information exchange networks (either via vendor or directly)	Q9_H	NETNO
h. Do not know	Q9_I	NETDNK

Key
1 = Yes
0 = No

10. Does your hospital currently use Direct messaging that is enabled through DIRECT protocol and the DirectTrust?

	Survey Question Number	Database Field Name
Hospital uses Direct messaging enabled through DIRECT protocol and the DirectTrust	Q10	DRTMSG

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

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? *Note: Hospitals that auto-query should respond "Yes"*

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

Key
1 = Yes (go to 11b)
2 = No, but have the capability (go to 12)
3 = Do not know (go to 12)
4 = No, do not have capability (go to 12)

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
1. Provider portals that allow you to view records in another organization's EHR system	Q11b_1	EMOPORT
2. Interface connection between EHR systems (e.g. HL7 interface)	Q11b_2	EMOINTF
3. Access to other organizations' EHR system using login credentials	Q11b_3	EMODIRAC

4. Regional, state, or local health information exchange organization (HIE/HIO). <i>NOT local, proprietary, enterprise network</i>	Q11b_4	EMOREG
5. EHR vendor-based network that enables record location within the network (e.g. Care Everywhere)	Q11b_5	EMOVBN
6. EHR connection to national networks that enable record location across EHRs in different networks (e.g. Commonwell, e-health exchange, Carequality)	Q11b_6	EMONATNET
7. Other electronic methods	Q11b_7	EMOOTH
Other electronic methods description	Q11b_7_OTH	EMOOTH_DESC

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?

	Survey Question Number	Database Field Name
Methods without intermediaries		
a. Mail or fax	Q12_A	MAILSND
b. eFax using EHR	Q12_B	EFAXSND
c. Provider portals that allow outside organization to view records in your EHR system	Q12_C	PORTSND
d. Interface connection between EHR systems (e.g. HL7 interface)	Q12_D	INTCONSND
e. Login credentials that allow access to your EHR	Q12_E	DIRACCSND
f. Other methods without intermediaries	Q12_F	OTHNISND
Other description	Q12_F_OTH	OTHNISND_DESC
Methods with intermediaries		
g. HISPs that enable messaging via DIRECT protocol	Q12_G	HISPSND
h. Regional, state, or local health information exchange organization (HIE/HIO). Not local proprietary, enterprise network	Q12_H	HIOSND
i. EHR vendor-based network that enables exchange with vendor's other users. (e.g., Epic's Care Everywhere)	Q12_I	SEHRSD

- j. National networks that enable exchange across different EHR vendors (e.g. Commonwell, e-health exchange, Carequality)
- k. Other methods with intermediaries
- Other description

Q12_J	MEHRSND
Q12_K	OTHISND
Q12_K_OTH	OTHISND_DESC

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

Electronic Notifications

13a. 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
Provide electronic notification to primary care physician after ED visit	Q13a	ENED

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

reorder to match last year

13b. If yes, are electronic notifications provided to primary care physicians below? (Check all that apply)

	Survey Question Number	Database Field Name
a. Inside the system	Q13b_a	PCPENI
b. Outside the system	Q13b_b	PCPENO
c. Do not know	Q13b_c	PCPENDK

Key
 1 = Yes

Receive and integrate patient health information

14. 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
Methods without intermediaries		
a. Mail or fax	Q14_A	MAILRCV

b. eFax using EHR	Q14_B	EFAXRCV
c. Provider portals that allow you to view records in another organizations' EHR system	Q14_C	PORTRCV
d. Interface connection between EHR systems (e.g. HL7 interface)	Q14_D	INTCONRCV
e. Access to other organizations' EHR system using login credentials	Q14_E	DIRACCRCV
f. Other methods without intermediaries	Q14_F	OTHNIRCV
Other description	Q14_F_OTH	OTHNIRCV_DESC

Methods with intermediaries

g. HISPs that enable messaging via DIRECT protocol	Q14_G	HISPRCV
h. Regional, state, or local health information exchange organization (HIE/HIO). <i>NOT local proprietary enterprise network</i>	Q14_H	HIORCV
i. EHR vendor-based network that enables exchange with vendor's other users (e.g. Epic's Care Everywhere)	Q14_I	SEHRRCV
j. National networks that enable exchange across <u>different</u> EHR vendors (e.g. CommonWell, e-health exchange, Carequality)	Q14_J	MEHRRCV
k. Other methods with intermediaries	Q14_K	OTHIRCV
Other description	Q14_L_OTH	OTHIRCV_DESC

<p>Key</p> <p>1 = Often</p> <p>2 = Sometimes</p> <p>3 = Rarely</p> <p>4 = Never</p> <p>5 = Do not know/NA</p>
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15. 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
Integration of electronically received summary of care records	Q15	SOCINT

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

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
Clinical information available electronically from outside providers/sources	Q16	CIAOUT

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
Use electronic patient health information from outside providers	Q17a	PHIOUT

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

17b. Please indicate which of the following barriers reduce usage. Check all that apply.

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

Key
 1 = Yes
 0 = No

Information exchange related to COVID -19

18. To what extent do you agree with this statement: my hospital electronically received information from outside providers needed to effectively treat COVID-19?

	Survey Question Number	Database Field Name
My hospital electronically received information from outside providers needed to effectively treat COVID-19	Q18	CVDIOP

Key
 1 = Strongly agree
 2 = Agree
 3 = Neither agree nor disagree
 4 = Disagree
 5 = Strongly disagree
 6 = Don't know

19. How frequently is each type of clinical information that is necessary for treating patients with COVID-19 electronically available (not e-Fax) from outside providers or other sources at the point of care?

Information type:	Survey Question Number	Database Field Name
a. Diagnoses	Q19_a	DGNCVD
b. Problem lists	Q19_b	PLCVD
c. Lab results	Q19_c	LRCVD
d. Clinical notes	Q19_d	CNCVD
e. Medications	Q19_e	MEDCVD
f. Images	Q19_f	IMGCVD
g. Immunization Details	Q19_g	IDCVD

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

20. When patients who were admitted to your hospital had been tested for COVID-19 outside of your health system, to what extent did you receive results in an electronic, structured format (e.g. HL7 containing LOINC and SNOMED codes) from each type of entity outside of your healthcare system?

Entity:	Survey Question Number	Database Field Name
a. Large commercial labs	Q20_a	LCLSF
b. Small/independent/regional labs	Q20_b	SIRSF
c. Public health labs	Q20_c	PHLSF
d. Other hospitals	Q20_d	OTHHPSF
e. Point of care testing by traditional ambulatory providers	Q20_e	TAPSF
f. Point of care testing by emerging providers (e.g. pharmacies performing testing, 'pop up' testing)	Q20_f	EMPRSF

Key
 1 = Always
 2 = Often
 3 = Sometimes
 4 = Rarely
 5 = Never
 6 = Don't know
 7 = NA/Do not receive from this entity

Public Health Reporting

21a. What is your hospital's current stage of active engagement towards electronically submitting data for public health reporting related to activities listed below?

	Survey Question Number	Database Field Name
1. Syndromic surveillance reporting	Q21a_1	SSRAE
2. Immunization registry reporting	Q21a_2	IRRAE
3. Electronic case reporting	Q21a_3	ECRAE
4. Public health registry reporting	Q21a_4	PHRAE
5. Clinical data registry reporting	Q21a_5	CDRAE
6. Electronic reportable laboratory result reporting	Q21a_6	ERLAE

Key
 1 = Actively electronically submitting production data
 2 = In the process of testing and validating electronic submission of data
 3 = Completed registration to submit data
 4 = Have not completed registration
 5 = Don't know

21b. How does your hospital electronically submit data for public health reporting related to the activities listed below? *Note this is referring to data generated through clinical processes involving patient care (production data NOT test data).*

	Survey Question Number	Database Field Name
1. Syndromic surveillance reporting	Q21b_1	SSRES
2. Immunization registry reporting	Q21b_2	IRRES

3. Electronic case reporting	Q21b_3	ECRES
4. Public health registry reporting	Q21b_4	PHRES
5. Clinical data registry reporting	Q21b_5	CDRES
6. Electronic reportable laboratory result reporting	Q21b_6	ERLES
7. Hospital capacity and utilization of medical supplies	Q21b_7	HCUES

Key
1 = Electronic health record
2 = Health information exchange
3 = Other electronic method (besides EHR and HIE)
4 = Not electronically submitting data
5 = Don't know

21c. For each activity, how often is the data successfully submitted/sent to the public health entity in a timely manner and electronic, structured format? Successfully implies sending messages with few-to no errors in a form the public health agency can use, and when errors do occur they are resolved in a timely manner, transmitted within required timeframe.

	Survey Question Number	Database Field Name
1. Syndromic surveillance reporting	Q21c_1	SSRSPH
2. Immunization registry reporting	Q21c_2	IRRSPH
3. Electronic case reporting	Q21c_3	ECRSPH
4. Public health registry reporting	Q21c_4	PHRSPH
5. Clinical data registry reporting	Q21c_5	CDRSPH
6. Electronic reportable laboratory result reporting	Q21c_6	ERLSPH
7. Hospital capacity and utilization of medical supplies	Q21c_7	HCUSPH

Key
1 = Always
2 = Often
3 = Sometimes
4 = Rarely
5 = Never
6 = Not applicable (do not report)
7 = Don't know

21d. For each type of public health reporting, please indicate whether your hospital uses automated, manual, or a mix of both types of processes to transmit the data.

	Survey Question Number	Database Field Name
1. Syndromic surveillance reporting	Q21d_1	SSRSTRDT
2. Immunization registry reporting	Q21d_2	IRRSTRDT
3. Electronic case reporting	Q21d_3	ECRSTRDT
4. Public health registry reporting	Q21d_4	PHRSTRDT
5. Clinical data registry reporting	Q21d_5	CDRSTRDT
6. Electronic reportable laboratory result reporting	Q21d_6	ERLSTRDT
7. Hospital capacity and utilization of medical supplies	Q21d_7	HCUSTRDT

Key
 1 = Fully or primarily automated
 2 = Mix of automated and manual processes
 3 = Fully or primarily manual
 4 = Don't know/NA

21e. If you use an HIE to submit data for public health reporting activities, does the HIE perform value added services during submission (e.g. reformat message, add additional data to message, etc.)?

	Survey Question Number	Database Field Name
1. Syndromic surveillance reporting	Q21e_1	SSRSHIE
2. Immunization registry reporting	Q21e_2	IRRSHIE
3. Electronic case reporting	Q21e_3	ECRSHIE
4. Public health registry reporting	Q21e_4	PHRSHIE
5. Clinical data registry reporting	Q21e_5	CDRSHIE
6. Electronic reportable laboratory result reporting	Q21e_6	ERLSHIE
7. Hospital capacity and utilization of medical supplies	Q21e_7	HCUSHIE

Key
 1 = Value added services (e.g. adding information from another source)
 2 = Simple modifications (e.g. code translation)
 3 = Pass Through/transmit only
 4 = Don't know
 5 = Not applicable (do not report)

22. To what extent do you agree with this statement: We have been successfully submitting vaccine related adverse events to relevant State and Federal agencies (e.g. CDC Vaccine Adverse Event Reporting System)?

	Survey Question Number	Database Field Name
Successfully submitting vaccine related adverse events to relevent State and Federal agencies	Q22	ADVEVNTS

Key
 1 = Strongly agree
 2 = Agree
 3 = Neither agree nor disagree
 4 = Disagree
 5 = Strongly disagree
 6 = Don't know

23. Does your HIE charge your hospital additionally to submit data for public health reporting activities?

	Survey Question Number	Database Field Name
HIE charges your hospital additionally to submit data for public health reporting activities.	Q23	HIECHRGE

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

24. Does your EHR developer charge your hospital additionally to submit data for public health reporting activities?

	Survey Question Number	Database Field Name
EHR developer charges your hospital additionally to submit data for public health reporting activities	Q24	EHRCHRGE

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

Barriers to exchange and interoperability

25a. 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
1. Providers we would like to electronically send patient health information to, do <u>not</u> have an EHR or other electronic system with capability to receive the information	Q25a_1	NPEHR
2. Providers we would like to electronically send patient health information to <u>have</u> an EHR; however, it lacks the technical capability to receive the information	Q25a_2	PEHRNRI
3. Difficult to locate the address of the provider to send the information (e.g. lack of provider directory)	Q25a_3	NOPA
4. Many recipients of our electronic care summaries (e.g. CCDA) report that the information is not useful	Q25a_4	NUECS
5. Cumbersome workflow to send (not eFax) the information from our EHR system	Q25a_5	CSEHR
6. It is difficult to locate the Direct address of the provider to send the information	Q25a_6	NODPA
7. We frequently receive error messages when attempting to send Direct messages to recipients	Q25a_7	ERRMSG

Key

1 = Yes

0 = No

25b. Barriers related to electronically receiving patient health information

	Survey Question Number	Database Field Name
1. Difficult to match or identify the correct patient between systems	Q25b_1	NOIDP

2. There are providers whom we share patients with that don't typically exchange patient data with us	Q25b_2	PRVNOEX
3. There are providers whom we electronically share patient information with that don't typically share patient information with us	Q25b_3	EPRVNOEX
4. There are providers who share data with us but do not provide that data in the format that we request	Q25b_4	NFMTRQST
5. There are providers who state that they cannot exchange information with us due to privacy laws (e.g. HIPAA) in situations where that does not seem appropriate	Q25b_5	NAPRVLWS

Key
1 = Yes
0 = No

25c. Other barriers related to exchanging patient health information

	Survey Question Number	Database Field Name
1. Experience greater challenges exchanging (e.g. sending/receiving) data across different vendor platforms	Q25c_1	DIFVEND
2. We have to pay additional costs to send/receive data with outside organizations/hospital systems	Q25c_2	ADCOST
3. We had to develop customized interfaces in order to exchange (e.g., send/receive) data with outside organizations/health systems	Q25c_3	CUSTINT
4. Contractual constraints between healthcare providers and health vendors limit our ability to exchange data with providers using certain systems	Q25c_4	CNTRTCST

Key
1 = Yes
0 = No

25d. In what form(s) have you observed or experienced information blocking by Enterprise EHR vendor(s)?

	Survey Question Number	Database Field Name
1. Price	Q25d_1	EVPRCE

2. Contract language	Q25d_2	EVCNTLNG
3. Artificial technical, process, or resource barriers	Q25d_3	EVARTF
4. Refusal	Q25d_4	EVRFSL
5. Other	Q25d_5	EVOTH
Other description (EHR vendor blocking)	Q25d_5_OTH	EVOTH_DESC

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

25e. In what form (s) have you observed or experienced information blocking by healthcare providers?

	Survey Question Number	Database Field Name
1. Artificial technical, process, or resource barriers	Q25e_1	HCPARTF
2. Refusal	Q25e_2	HCPRFSL
3. Strategic affiliations	Q25e_3	HCPSTAFI
4. Other	Q25e_4	HCPOTH
Other description (healthcare provider blocking)	Q25e_4_OTH	HCPOTH_DESC

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

25f. To what extent have you observed the following stakeholders engaging in information blocking behaviors?

	Survey Question Number	Database Field Name
1. Certified Health IT Developers (e.g. Enterprise EHR vendors)	Q25f_1	SHCERTDV
2. Healthcare Providers	Q25f_2	SHHCPROV
3. National Networks	Q25f_3	SHNTLNTW
4. State, regional, and/or local health information exchange	Q25f_4	SHSRLHIE
5. Other	Q25f_5	SHOTH
Other description (stakeholder blocking)	Q25f_5_OTH	SHOTH_DESC

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

EHR System and IT Vendors

26a. Does your hospital use an EHR system that has been certified?

	Survey Question Number	Database Field Name
Does your hospital use an EHR system that has been certified?	Q26a	EMRHCRT

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

26b. If yes, has your hospital switched to a 2015 certified EHR system?

	Survey Question Number	Database Field Name
Hospital switched to a 2015 certified EHR system	Q26b	EHR2015CRT

Key
 1 = Yes
 2 = No
 3 = Don't know

27. 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)

Primary provider of inpatient EHR

Survey Question Number	Database Field Name
Q27	PIEMR
Q27_OTH	PIEMRO

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

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

	Survey Question Number	Database Field Name
Satisfaction with primary inpatient EHR system	Q28	SATISEHR

Key
 1 = Very satisfied
 2 = Somewhat satisfied
 3 = Somewhat dissatisfied
 4 = Very dissatisfied
 5 = Neither satisfied nor dissatisfied

29. 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
a. Initial deployment	Q29_A	CHNG_ID
b. Vendor switch	Q29_B	CHNG_VEN
c. Change from enterprise architecture to best-of-breed	Q29_C	CHG_ARCA
d. Change from best-of-breed to enterprise architecture	Q29_D	CHG_ARCB
e. Optimizing functionality of new releases	Q29_E	CHG_FCTNR
f. Significant additional functionalities	Q29_F	CHNG_FUNC
g. Do not know	Q29_G	CHNG_UNKN
h. No major changes planned	Q29_H	CHNG_NUN

Key
 1 = Yes
 0 = No

30a. Does your primary inpatient EHR system have the capability to export multiple records from its system?

	Survey Question Number	Database Field Name
Primary inpatient EHR system able to export multiple records from system	Q30a	PIEXMREC

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

30b. If you answered YES to 30a: Have you used this capability to support any of the following uses?

	Survey Question Number	Database Field Name
1. Analytics and reporting	Q30b_1	ARCAP
2. Population health management	Q30b_2	PHMCAP
3. Switching EHR systems	Q30b_3	SWTSYCAP
4. Have not used the capability yet	Q30b_4	NOUSECAP

Key
 1 = Yes
 0 = No

31a. 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
Same primary inpatient EHR/EMR system vendor (noted above) for primary outpatient EMR/EHR system	Q31_A	SIOPV

Key
 1 = Yes, share single instance (skip to 32)
 2 = Yes, but do not share the single instance/version (proceed to 31b)
 3 = No (proceed to 31b)
 4 = Do not know (skip to 32)
 5 = NA (skip to 32)

31b. Is information needed to inform treatment of patients with COVID-19 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
Information needed to inform treatment of patients with COVID-19 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	Q31b	CVDEHX

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