



Advancing Health in America

2022 AHA Annual Survey Information Technology Supplement

Please return to:
AHA Annual Survey
Information Technology Supplement
155 N. Wacker Drive
Suite 400
Chicago, IL 60606

HOSPITAL NAME: _____

CITY & STATE: _____

Please Note: This year we included new questions designed to capture interoperability and exchange, as well as public health reporting related to the ongoing pandemic. This information will provide important data on the state of interoperability in hospitals and progress on public health infrastructure.

GENERAL INSTRUCTIONS: Please respond to each of the following questions as of the day the survey is completed.

Patient Engagement

1a. Does your hospital provide outpatient care to patients? *Note: Outpatient care refers to both hospital-based and satellite outpatient departments/sites.*

1. Yes (go to 1b) 2. No (go to 2)

1b. Is there more than one primary EMR/EHR system in use across your outpatient site(s)?

1. Yes 2. No

2. 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)*

	(1) Yes, at some or all <u>inpatient</u> sites	(2) Yes, at some or all <u>outpatient</u> sites	(3) Not across outpatient or inpatient site(s)	(4) Do not know
a. View their health/medical information online in their portal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Download health/medical information from their medical record from your portal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Import their medical records from other organizations into your portal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Electronically transmit (send via email or secure message) health/medical information to a third party from your portal (in a structured format such as CCDA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Request an amendment to change/update their medical record online	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. View their clinical notes (e.g., visit notes including consultation, progress, history and physical) in their portal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Access their health/medical information using applications (apps) configured to meet the application programming interfaces (API) specifications in your EHR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Access their health/medical information using applications (apps) configured to meet Fast Healthcare Interoperability Resource (FHIR) specifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Submit patient-generated data (e.g., blood glucose, weight)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Submit patient-generated data (e.g., blood glucose, weight) through apps configured to meet FHIR specifications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Send/receive secure messages with providers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Social Determinants of Health

3. Does your hospital routinely collect data on individual patients' health related social needs (often referred to as social determinants of health) such as transportation, housing, food insecurity or other?

- a. Yes, routinely b. Yes, but not routinely c. No (go to 6)
d. Don't know (go to 6)

4a. How are data on individual patient's health related social needs recorded at your hospital? Check all that apply.

1. Structured electronic screening tool (including 'keying in' information from a paper form) (go to 4b)
2. Free text note (go to 5)
3. Diagnosis codes (e.g., ICD-10-CM Z codes) (go to 5)
4. Non-electronic methods (including those that are scanned into the EHR) (go to 5)

4b. If you use a screening tool, what type of screening tool?

1. Customized/home grown tool
2. An externally established tool such as PRAPARE, Recommended Social and Behavioral Domains for EHRs, Your Current Life Situation Survey
3. A combination (e.g., modification of externally established tool)
4. Don't know

5. How does your hospital use data on patients' health related social needs documented at your hospital? Check all that apply

- a. For referrals to social service organizations
b. For population health analytics
c. For quality management
d. To inform community needs assessment or other equity initiatives
e. To inform clinical decision making
f. To inform discharge planning
g. Other, please list:

6. From which sources outside your hospital/health system does your hospital electronically receive data on patients' social needs? Check all that apply

- a. Health information exchanges
b. Other healthcare organizations
c. Community/social service organizations
d. Social service or community-based referral platform (such as Unite Us or Aunt Bertha)
e. Other, please list:
f. Do not receive data on health-related social needs from any external sources (go to 8)

7. If you indicated receiving data on patients' health related social needs from external sources, how do you use these data? Check all that apply.

- a. For screening at our hospital (e.g., prompt screening, prepopulate screening tool)
b. For referrals to social service organization
c. For population health analytics
d. To inform community needs assessment or other equity initiatives
e. To inform clinical decision making
f. To Inform discharge planning
g. Other, please list:

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.

- 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 which your hospital participates and actively exchanges data as well as the first year your hospital actively participated in this HIE/HIO. Note: A list of known active HIEs is included in an attachment and numbered. Please either write the HIE name or its number on that list below.

8b1a. Name/reference number: _____

8b1b. First Year Your Hospital Participated: _____

8b2a. Name/reference number: _____

8b2b. First Year Your Hospital Participated: _____

8b3a. Name/reference number: _____

8b3b. First Year Your Hospital Participated: _____

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.

- a. CommonWell Health Alliance
- b. e-Health Exchange
- c. Civitas (formerly SHIEC)/Patient Centered Data Home (PCDH)
- d. Carequality (network-to-network trust/governance framework)
- e. 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)
- g. Other national health information exchange network _____
- h. Do not participate in any national health information exchange networks (either via vendor or directly)
- i. Do not know

10a. Does your hospital currently use Direct messaging that is enabled through the DIRECT protocol? Note: Your EHR vendor may refer to Direct by a different name/brand as shown in this table below. Health Information Service Providers (HISPs) may enable your hospital to implement and use messaging via the DIRECT protocol.

1. Yes 2. No (go to 11) 3. Don't know (go to 11)

10b. If yes, is it enabled by DirectTrust?

1. Yes 2. No 3. Don't know

EHR Vendor	EHR Branding/Naming for Direct
Allscripts	Direct
athenahealth	Direct, Direct Messaging, Secure Messaging, Direct Secure Messaging
Brightree	Direct Secure Messaging, eReferral
Cerner	Cerner Direct, Secure Messaging, Direct Referrals, Direct Email, Direct Secure Messaging, Direct
CPSI	Direct Message, Direct Messaging, Transition of Care, TOC
eClinicalWorks	eClinicalDirect, P2P, Provider to Provider, Direct, Direct Secure Messaging, Direct Plus
Epic	Direct Messaging, Direct Protocol
Evident (Centriq)	Secure Messaging
Glenwood Systems	Direct Messaging
Greenway	Direct messaging
MatrixCare	DIRECT

MEDITECH	Direct Messaging
NextGen	NextGen Share, Direct Messaging
PointClickCare	Integrated Direct Messaging
Wellsky	Wellsky IaaS, Wellsky IO, Wellsky Direct

Trusted Exchange Framework and Common Agreement

11. Are you aware of the Trusted Exchange Framework and Common Agreement (TEFCA)?

<https://www.healthit.gov/topic/interoperability/trusted-exchange-framework-and-common-agreement-tefca>

- a. Yes b. No (go to 13)

12. If yes, are you planning to participate in TEFCA exchange (such as through your HIE or other national network)?

- a. Yes b. No c. Don't know

Querying information from outside providers or sources

13a. 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"*

1. Yes (go to 13b) 2. No, but have the capability (go to 14) 3. No, do not have capability (go to 14) 4. Don't know (go to 14)

13b. 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? *Please indicate how often each method is used across each row below.*

Electronic Methods	(1) Often	(2) Sometimes	(3) Rarely	(4) Never	(5) Do not know/NA
1. Provider portals that allow you to view records in another organizations' EHR system	<input type="checkbox"/>				
2. Interface connection between EHR systems (e.g., HL7 interface)	<input type="checkbox"/>				
3. Access to other organizations' EHR system using login credentials	<input type="checkbox"/>				
4. Regional, state, or local health information exchange organization (HIE/HIO). <i>NOT a local proprietary, enterprise network</i>	<input type="checkbox"/>				
5. EHR vendor-based network that enables record location within the network (e.g., Care Everywhere)	<input type="checkbox"/>				
6. EHR connection to national networks that enable record location across EHRs in different networks (e.g., CommonWell, eHealth Exchange, Carequality).	<input type="checkbox"/>				
7. Other electronic _____	<input type="checkbox"/>				

Sending patient health information

14. When a patient transitions to another care setting outside of your organization or hospital system, how often does your hospital use the following methods to SEND a summary of care record? *Please indicate how often each method is used across each row below.*

Methods without intermediaries	(1) Often	(2) Sometimes	(3) Rarely	(4) Never	(5) Do not know/NA
a. Mail or fax	<input type="checkbox"/>				
b. eFax using EHR	<input type="checkbox"/>				
c. Provider portals that allow outside organization to view records in your EHR system	<input type="checkbox"/>				

d. Interface connection between EHR systems (e.g., HL7 interface)	<input type="checkbox"/>				
e. Login credentials that allow access to your EHR	<input type="checkbox"/>				
f. Other _____	<input type="checkbox"/>				
Methods with intermediaries	(1) Often	(2) Sometimes	(3) Rarely	(4) Never	(5) Do not know/NA
g. HISPs that enable messaging via DIRECT protocol	<input type="checkbox"/>				
h. Regional, state, or local health information exchange organization (HIE/HIO). <i>NOT local proprietary, enterprise network</i>	<input type="checkbox"/>				
i. EHR vendor-based network that enables exchange with vendor's other users. (e.g., Epic's Care Everywhere)	<input type="checkbox"/>				
j. National networks that enable exchange across <u>different</u> EHR vendors (e.g., CommonWell, eHealth Exchange, Carequality)	<input type="checkbox"/>				
k. Other _____	<input type="checkbox"/>				

Electronic Notifications

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

1. Yes, routinely 2. Yes, but not routinely (e.g., often missing information to route notification)
3. No, but have the capability (go to 16a) 4. No, don't have the capability (go to 16a)
5. Don't know (go to 16a) 6. Don't have ED (go to 16a)

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

1. Inside the system 2. Outside the system 3. Don't know

16a. Does your hospital provide electronic admission, discharge or transfer (ADT) notifications to long-term post-acute care providers?

1. Yes, routinely 2. Yes, but not routinely (e.g., often missing information to route notification)
3. No, but have the capability (go to 17) 4. No, don't have the capability (go to 17)
5. Don't know (go to 17)

16b. If yes, are electronic notifications provided to LTPAC facilities below? Check all that apply

1. Inside the same system as the hospital 2. Outside the hospital's system 3. Don't know

Receive and Integrate patient health information

17. 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? Please indicate how often each method is used across each row below.

Methods without intermediaries	(1) Often	(2) Sometimes	(3) Rarely	(4) Never	(5) Do not know/NA
a. Mail or fax	<input type="checkbox"/>				
b. eFax using EHR	<input type="checkbox"/>				
c. Provider portals that allow you to view records in another organizations' EHR system	<input type="checkbox"/>				
d. Interface connection between EHR systems (e.g., HL7 interface)	<input type="checkbox"/>				
e. Access to other organizations' EHR system using login credentials	<input type="checkbox"/>				
f. Other _____	<input type="checkbox"/>				
Methods with intermediaries	(1) Often	(2) Sometimes	(3) Rarely	(4) Never	(5) Do not know/NA
g. HISPs that enable messaging via DIRECT protocol	<input type="checkbox"/>				
h. Regional, state, or local health information exchange organization (HIE/HIO). <i>NOT local proprietary, enterprise network</i>	<input type="checkbox"/>				
i. EHR vendor-based network that enables exchange with vendor's other users. (e.g., Epic's Care Everywhere)	<input type="checkbox"/>				
j. National networks that enable exchange across <u>different</u> EHR vendors (e.g., CommonWell, eHealth Exchange, Carequality)	<input type="checkbox"/>				
k. Other _____	<input type="checkbox"/>				

18. Does your EHR integrate the information contained in summary of care records received electronically (not eFax) without the need for manual entry? *Note: This refers to the ability to add or incorporate the information to the EHR without special effort (this does NOT refer to automatically adding data without provider review). This could be done using software to convert scanned documents into indexed, discrete data that can be integrated/included in EHR.*

- a. Yes, routinely b. Yes, but not routinely c. No d. Don't know e. NA

19. Does your EHR integrate health insurer real-time prescription benefit information?

- a. Yes, for all or almost all payers b. Yes, for a limited set of payers c. No
d. Don't know

Availability and usage of data that is exchanged

20. 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?

- a. Yes b. No c. Don't know

21. 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?

- a. Often b. Sometimes c. Rarely d. Never e. Do not know

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

- a. Strongly Agree b. Agree c. Neither Agree nor disagree d. Disagree
e. Strongly disagree f. Don't know

Public Health Reporting

23a. What is your hospital’s current stage of active engagement towards electronically submitting data for public health reporting related to the activities listed below? For each row, please select the response that represents the most progress towards submission of production data.

	(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
1. Syndromic surveillance reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Immunization registry reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Electronic case reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Public health registry reporting (i.e., registry maintained by or for a public health agency NOT including immunization registry)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Clinical data registry reporting (i.e., registry maintained by non-public health agency, such as specialty society)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Electronic reportable laboratory result reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23b. How does your hospital submit data for public health reporting related to the activities listed below? Please respond for each activity listed below that you indicated actively electronically submitting production data. Select **all** options used in each row. Note: this is referring to data generated through clinical processes involving patient care (production data NOT test data).

	(1) Electronic health record	(2) Health information exchange	(3) Portal submission	(4) Flat files (e.g., CSV/XML Files)	(5) Not electronically submitting data (e.g., Fax)	(6) Don't know
1. Syndromic surveillance reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Immunization registry reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Electronic case reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Public health registry reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Clinical data registry reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Electronic reportable laboratory result reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Hospital capacity and utilization of medical supplies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23c. 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. *Automated refers to EHR generated data sent electronically/automatically to the public health agency. Manual refers to chart abstraction with data faxed or re-input into a portal. A mix of both types of processes refers to files electronically generated from the EHR but manual steps required to transmit to public health agency.*

	(1) Fully or primarily automated	(2) Mix of automated and manual process	(3) Fully or primarily manual	(4) Don't know
1. Syndromic surveillance reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Immunization registry reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Electronic case reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Public health registry reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Clinical Data registry reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Electronic reportable laboratory result reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Hospital capacity and utilization of medical supplies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23d. What are some of the challenges your hospital has experienced when trying to submit health information to public health agencies to meet CMS reporting requirements for Promoting Interoperability Program? (Please check all that apply)

	Syndromic surveillance reporting	Immunization registry reporting	Elect. case reporting	Public health registry reporting	Clinical data registry reporting	Electronic reportable laboratory result reporting
1. We feel that public health agencies lack the capacity (e.g., technical, staffing) to electronically <u>receive</u> the information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. We do not have the capacity (e.g., technical, staffing) to electronically <u>send</u> the information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Technical complexity of interfaces, transmission, or submission process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Cost related to interfaces, transmission, or submission.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. We use different vocabulary standards than the public health agency, making it difficult to submit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Difficulty extracting relevant information from EHR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Data are not stored in a discrete format within the EHR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. The onboarding process for electronic reporting is too cumbersome	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Barriers to exchange and interoperability

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? (Please check all that apply)

24a. Barriers related to electronically sending patient health information

1. Providers we would like to electronically send patient health information to do not have an EHR or other electronic system with the capability to receive the information
2. Providers we would like to electronically send patient health information to have an EHR; however, it lacks the technical capability to receive the information
3. Difficult to locate the address of the provider to send the information (e.g., lack of provider directory)
4. Many recipients of our electronic care summaries (e.g., CCDA) report that the information is not useful
5. It is difficult to locate the Direct address of the provider to send the information

24b. Barriers related to electronically receiving patient health information

1. Difficult to match or identify the correct patient between systems
2. There are providers whom we share patients with that don't typically exchange patient data with us
3. There are providers who share data with us but do not provide those data in the format that we request
4. There are providers who state they cannot exchange information with us due to privacy laws (e.g., HIPAA) in situations that do not seem appropriate

24c. Other barriers related to exchanging patient health information

1. Experience greater challenges exchanging (e.g., sending/receiving) data across different vendor platforms
2. We have to pay additional costs to send/receive data with outside organizations/hospital systems
3. We had to develop customized interfaces in order to exchange (e.g., send/receive) data with outside organizations/hospital systems
4. Contractual constraints between healthcare providers and health vendors limit our ability to exchange data with providers using certain systems.

Information Blocking Practices

Information blocking practices have been defined in rules that went into effect on April 5, 2021. The following set of questions ask about practices that may constitute information blocking based on your understanding of the rules.

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

	(1) Often/ Routinely	(2) Sometimes	(3) Never/ Rarely	(4) Don't Know
1. Price – for example: <ul style="list-style-type: none"> • Using high fees to avoid granting third-parties access to data stored in the vendor's EHR system • Charging unreasonable fees to export data at a provider's request (such as when switching vendors) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Contract language – for example: <ul style="list-style-type: none"> • Using contract terms, warranty terms, or intellectual property rights to discourage exchange or connectivity with third-party • Changing material contract terms related to health information exchange after customer has licensed and installed the vendor's technology 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Artificial technical, process, or resource barriers – for example: <ul style="list-style-type: none"> • Using artificial technical barriers to avoid granting third-parties access to data stored in the vendor's EHR system 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Refusal – for example: <ul style="list-style-type: none"> • Refusing to exchange information or establish connectivity with certain vendors or HIOs • Refusing to export data at a provider's request (such as when switching vendors) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Other (please list):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

	(1) Often/ Routinely	(2) Sometimes	(3) Never/ Rarely	(4) Not Applicable (i.e., we have not tried to get information from this source)	(5) Don't Know
1. Developers of Certified Health IT (e.g., Enterprise EHR vendors)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. National Networks (e.g., CommonWell, eHealth Exchange)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. State, regional, and/or local health information exchange	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

	(1) Often/ Routinely	(2) Sometimes	(3) Never/ Rarely	(4) Don't Know
1. Artificial technical, process, or resource barriers – for example: <ul style="list-style-type: none"> Requiring a written authorization when neither state nor federal law requires it Requiring a patient to repeatedly opt in to exchange for treatment, payment, and operations (TPO) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Refusal – for example: <ul style="list-style-type: none"> Refusing to exchange information with competing providers, hospitals, or health systems 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Strategic affiliations – for example: <ul style="list-style-type: none"> Promoting alternative, proprietary approaches to information exchange Exchanging only within referral network or with preferred referral partners 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Other (please list):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25d. To what extent have you observed healthcare providers engaging in information blocking behaviors?

1. Often/Routinely 2. Sometimes 3. Never/Rarely (go to 25f)
4. We have not tried to get information from this source (go to 25f) 5. Don't know (go to 25f)

25e. To what extent have you observed the following types of healthcare providers engaging in information blocking behaviors, as described in the question above?

	(1) Often/ Routinely	(2) Sometimes	(3) Never/ Rarely	(4) Not Applicable (i.e., We have not tried to get information from this source)	(5) Don't Know
1. Health Systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Independent Hospitals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Independent physician or physician groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Other (please list):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25f. If you have experienced practices that you believed constituted information blocking in the past year, how often did you report the information blocking to ONC/HHS using the Report Information Blocking Portal?

<https://www.healthit.gov/report-info-blocking>

1. Often/Routinely 2. Sometimes 3. Never/Rarely
4. Did not experience information blocking within the past year 5. Don't know

EHR System and IT Vendors

26a. Does your hospital use an EHR system that has been certified? *Certified refers to meeting federal requirements per the Office of the National Coordinator for Health Information Technology (ONC). Certified EHRs are necessary to*

meet the objectives of Meaningful Use; however, certified EHRs can be used by all hospitals regardless of whether they participate in that program. If unsure, see if your system meets the requirements here: <https://chpl.healthit.gov/#/search>

1. Yes 2. No 3. Don't know

26b. If yes, has your hospital switched to a 2015 certified EHR system? *This refers to fully implementing the 2015 certified EHR system.*

1. Yes 2. No 3. Don't know

For this next set of questions, please indicate whether your hospital uses a proprietary API, standards-based API, or data integrator to do each of the following activities. *Note: Example of a proprietary API includes one provided by your EHR developer; Example of a standards-based API includes FHIR; Examples of a data integrator include Redox, Health Gorilla and 1uphealth.*

27a. Does your hospital integrate data into your EHR from third-party software (e.g., patient monitoring devices, telehealth)?

1. Yes 2. No (Go to 27c) 3. Don't know (Go to 27c)

27b. If yes, how?

1. Proprietary API 2. Standards-based API 3. Data integrator service 4. Don't know

27c. Does your hospital provide data from your EHR to third-party applications used by clinicians at your hospital/health system?

- Yes No (Go to 27e) Don't know (Go to 27e)

27d. If yes, how?

1. Proprietary API 2. Standards-based API 3. Data integrator service 4. Don't know

27e. Does your hospital provide data from sources other than your EHR to third-party applications used by clinicians at your hospital/health system?

1. Yes 2. No (Go to 28) 3. Don't know (Go to 28)

27f. If yes, how?

1. Proprietary API 2. Standards-based API 3. Data integrator service 4. Don't know

28. Which vendor below provides your primary inpatient EMR/EHR system? (Please check only one) *"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 vendor name rather than product.*

- a. Allscripts g. Harris Healthcare/QuadraMed i. Other (please specify):
b. Athenahealth h. McKesson
c. Azalea Health/ Prognosis i. MEDHOST m. Would prefer not to disclose EHR vendor
d. Cerner j. Meditech
e. CPSI/Evident k. Self-developed
f. Epic

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

- a. Very satisfied d. Very dissatisfied
b. Somewhat satisfied e. Neither satisfied nor dissatisfied
c. Somewhat dissatisfied

30. Have you used the capability to export multiple records from your primary inpatient EHR system to support any of the following uses? *Sometimes referred to as "bulk" export, this functionality enables analytics and reporting, population management, or switching EHR systems.*

1. Analytics and reporting 2. Population health management 3. Switching EHR systems.
4. Have not used the capability yet 5. Do not have this capability

31. Do you use the same primary inpatient EMR/EHR system vendor (noted above) for your primary outpatient EMR/EHR 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 vendor name rather than product.*

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

32. Thank you for your cooperation in completing this survey. If you are not the CIO, or person responsible for information technology, has he or she reviewed your answers to this survey?

- 1. Yes
- 2. No

Respondent Name (please print) Circle CIO or Print Title if other (Area Code) Telephone #

_____/_____/_____
Date of Completion Name of CIO (if other than respondent) Email Address

NOTE: PLEASE PHOTOCOPY THIS INFORMATION FOR YOUR HOSPITAL FILE BEFORE RETURNING THE ORIGINAL FORM TO THE AMERICAN HOSPITAL ASSOCIATION. THANK YOU.