

Use of Certified Health IT and Methods to Enable Interoperability by U.S. Non-Federal Acute Care Hospitals, 2019

Talisha Searcy, Deputy Director, Technical Strategy and Analysis Division, ONC

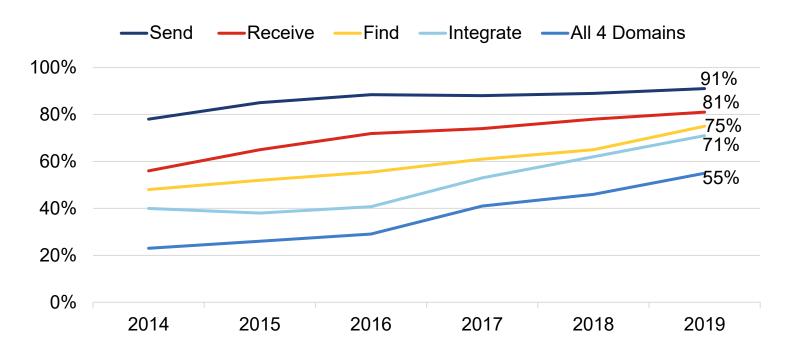






About 70% of hospitals reported integrating data into their EHR – a nearly 15% increase from 2018.

Figure 1: Percent of U.S. non-federal acute care hospitals that electronically find patient health information, and send, receive, and integrate patient summary of care records from sources outside their health system, 2014-2019.



SOURCE: 2014-2019 AHA Annual Survey Information Technology Supplement.

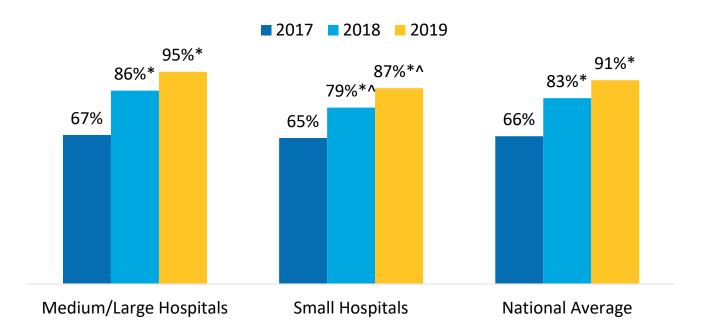
Note: See Appendix Table A2 for specific data points for all years.





About nine in 10 hospitals nationwide had a 2015 Edition Certified EHR in 2019.

Figure 2: Percent of U.S. non-federal acute care hospitals that have a 2015 Edition Certified EHR by hospital size, 2017-2019.



Source: 2017-2019 AHA Annual Survey Information Technology Supplement.

Note: *Significantly different from previous year (p<0.05). *Statistically significant from medium/large hospitals (p<0.05).





Health Information Service Providers (HISPs) were the most common electronic method for sending and receiving summary of care records used by hospitals in 2019.

Table 1: Percent of U.S. non-federal acute care hospitals that often or sometimes send or receive summary of care records with sources outside their hospital system by method, 2018-2019.

| | Send | | Receive | |
|---|------|------|---------|------|
| Methods | 2018 | 2019 | 2018 | 2019 |
| Non-Electronic Method | | | | |
| Mail or fax | 71% | 68%* | 76% | 76% |
| eFax using EHR | 66% | 70%* | 52% | 56%* |
| Electronic Method Not Using Third-Party or Network | | | | |
| Provider portal that enables viewing of another organizations' EHR system | 49% | 55%* | 37% | 41%* |
| Interface connection between EHR systems (e.g. HL7 interface) | 42% | 45% | 30% | 31% |
| Access to other organizations' EHR system using login credentials | 37% | 45%* | 26% | 26% |
| Electronic Method Using a Third-Party or Network | | | | |
| HISPs that enables messaging via DIRECT protocol | 61% | 65%* | 49% | 55%* |
| State, regional, or local HIE | 59% | 62%* | 46% | 51%* |
| EHR vendor-based network that enables exchange between users of a | | | | |
| single EHR vendor | 43% | 47%* | 41% | 47%* |
| National networks that enables exchange across different EHR vendors | | | | |
| (e.g. CommonWell, Carequality) | 35% | 41%* | 32% | 40%* |

Source: 2018-2019 AHA Annual Survey Information Technology Supplement.

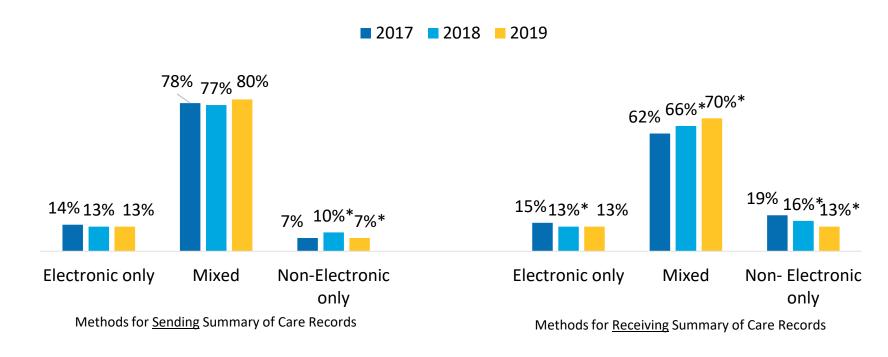
Notes: *Significantly different from previous year (p<0.05).





A majority of hospitals reported using a mix of electronic and non-electronic methods for exchanging summary of care records in 2019.

Figure 3: Percent of U.S. non-federal acute care hospitals that often or sometimes receive/send summary of care records by method type, 2017-2018.



Source: 2017-2019 AHA Annual Survey Information Technology Supplement.

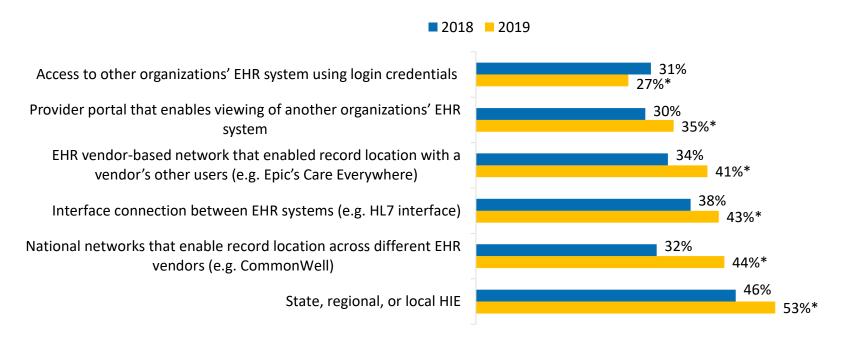
Notes: *Significantly different from a corresponding category in previous year (p<0.05).





The proportion of hospitals that used a national network to find (or query) patient health information increased by nearly 40% in 2019.

Figure 4: Methods used to electronically find (or query) for patients' health information, 2018-2019.



Source: 2018-2019 AHA Annual Survey Information Technology Supplement.

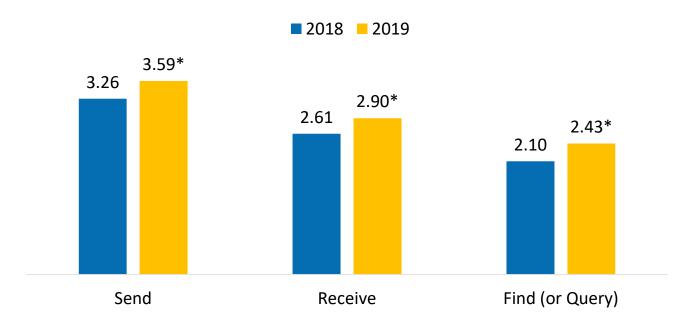
Notes: *Significantly different from previous year (p<0.05).





The average number of electronic methods hospitals use to send, receive, and find (or query) health information increased between 2018 and 2019.

Figure 5: Average number of electronic methods hospitals use to send, receive, and find (or query) health information, 2018-2019.



Source: 2018-2019 AHA Annual Survey Information Technology Supplement.

Notes: *Significantly different from a corresponding category in previous year (p<0.05).



Nearly half of hospitals participated in more than one national network in 2019.

Table 2: Hospitals' participation in national networks, 2018-2019.

| Overall National Network Participation | 2018 | 2019 |
|--|---------|---------|
| Percent of Hospitals that Participate in Any Network | 57% | 69%* |
| Percent of Hospitals that Participate in More than One Network | 33% | 48%* |
| Average Number of Networks | 1.21 | 1.67* |
| National Network | Percent | Percent |
| Single-EHR vendor network | 32% | 41%* |
| e-Health Exchange | 25% | 27%* |
| DirectTrust | 21% | 38%* |
| Sequoia Project's Carequality | 20% | 31%* |
| CommonWell Health Alliance | 19% | 26%* |

Source: 2018 AHA Annual Survey Information Technology Supplement.

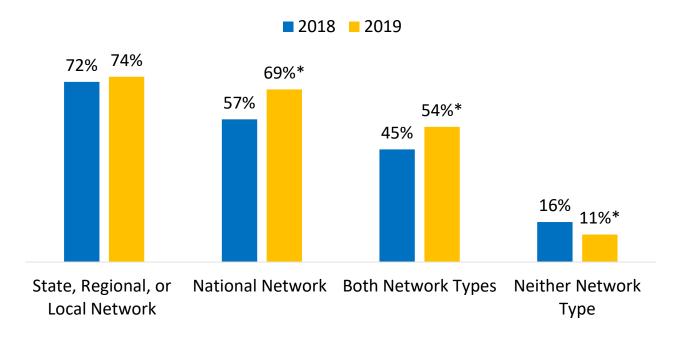
Notes: *Significantly different from previous year (p<0.05). This table presents the top 5 national networks that hospitals reported participating in most frequently, additional networks were included in the calculation of the overall participation metrics





More than half of hospitals participated in both a national network and a state, regional, or local HIE – a statistically significant increase from 2018.

Figure 6: Percent of U.S. non-federal acute care hospitals that participate in national and state, regional, or local health information networks, 2018-2019.



Source: 2018-2019 AHA Annual Survey Information Technology Supplement.

Notes: *Significantly different from previous year (p<0.05).





The proportion of small, rural, and CAHs that participated in both national and state, regional or local health information networks was lower compared to their counterparts.

Table 3: Percent of U.S. non-federal acute care hospitals that participate in national and state, regional, or local health information networks by hospital type, 2019.

| Type of Network | Medium-Large | Small | Suburban-Urban | Rural | Non-CAH | CAH |
|-----------------------------------|--------------|-------|----------------|-------|---------|------|
| State, Regional, or Local Network | 80% | 68%* | 78% | 68%* | 76% | 68%* |
| National Network | 75% | 63%* | 74% | 62%* | 73% | 59%* |
| Both Network Types | 61% | 47%* | 59% | 46%* | 57% | 46%* |
| Neither Network Type | 5% | 17%* | 7% | 17%* | 8% | 19%* |

Source: 2019 AHA Annual Survey Information Technology Supplement.

Notes: *Significantly different from a corresponding category presented in the column to the left (p<0.05).



More than 70 percent of hospitals reported challenges exchanging data across different vendor platforms.

Table 4: Percent of U.S. non-federal acute care hospitals that experienced barriers when trying to electronically send, receive, or find health information to/from other care settings or organizations, 2019.

| Barriers related to electronically sending patient health information | Percent |
|---|---------|
| Difficult to find providers' Direct address | 58% |
| Exchange partners' EHR system lacks capability to receive data | |
| Exchange partners' we would like to send data to do not have an EHR or other electronic system to receive data | 48% |
| Many recipients of care summaries report that the information is not useful | 40% |
| Cumbersome workflow to send the information from our EHR system | 24% |
| 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 | 12% |
| Lacking the technical capability to electronically send patient health information to outside providers or other sources | 8% |
| Barriers related to electronically receiving patient health information | |
| There are providers whom we share patients with that don't typically exchange patient data with us | 66% |
| Difficult to match or identify the correct patient between systems | 46% |
| We lack the technical capability to electronically receive patient health information from outside providers or other sources | 17% |
| Other barriers related to exchanging patient health information | |
| Greater challenges exchanging data across different vendor platforms | 73% |
| Paying additional costs to exchange with organizations outside our system | 42% |
| Develop customized interfaces in order to electronically exchange health information | 48% |

Source: 2019 AHA Annual Survey Information Technology Supplement.



Highlights

- About 70% of hospitals reported integrating data into their EHR a nearly 15 percent increase from 2018.
- A majority of hospitals used a mix of electronic and non-electronic methods to exchange summary of care records, however use of electronic third party methods (HISPs, HIEs, and vendor networks) increased in 2019.
- The proportion of hospitals that used a national network to find (or query) patient health information increased by nearly 40% between in 2019.