

Hospitals Advance Information Sharing, but External Barriers to Increased Data Exchange Remain

Hospitals are adopting health information technology (IT) to enable providers to capture and securely transmit and receive patient care and health data. This information supports clinicians in making more informed decisions at the point of care and increases efficiency by eliminating redundant tests

and streamlining administrative processes. Patients also benefit by gaining easier, automated access to their health data.

Hospitals are proactively developing the means to share information between departments as well as with other care partners, patients and public health agencies. While access to data has increased, critical infrastructure and technical barriers constrain the sharing of patient information across settings of care. As a result, information sharing requires significant work and expense. Between 2010 and 2014, hospitals collectively spent hundreds of billions of dollars on their IT systems.¹

Recent Data Show that Hospitals are Improving Their Ability to Share Information

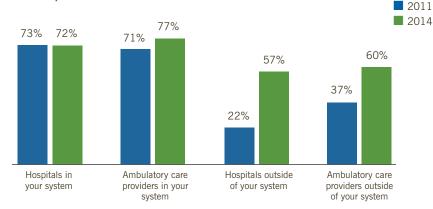
Information sharing is critical to support providers in their efforts to improve quality, engage patients, advance population health and reduce costs. Care models that strive to coordinate care across the continuum for an episode or patient population, such as accountable care organizations and bundled payments, rely on access to an up to date record of a patient's condition and history of care. Hospitals have invested substantially in health IT and electronic health records (EHRs), with a goal to increase their capacity for sharing data electronically with patients and care partners. Through the Medicare and Medicaid EHR Incentive Program, U.S. hospitals have been eligible for financial incentives for adopting and using EHRs in accordance with federal meaningful-use criteria.

Results from the AHA's Annual Survey Information Technology Supplement provide insights into hospitals' current capabilities to support information sharing. Hospitals have increased the ability to send and receive clinical care information through their EHRs (Chart 1). Between 2011 and 2014, during Stage 1

and the first year of stage 2 of the EHR Incentive Program, hospital information sharing in both inpatient and ambulatory care settings with providers outside the hospital's system improved markedly.

Hospitals show marked improvement in information exchange with care partners outside their system.

Chart 1: Percent of Hospitals that Electronically Exchange Clinical/Summary of Care Record in any Format, 2011 versus 2014



Source: AHA analysis of AHA Annual Survey IT Supplement data, 2011 and 2014, for community hospitals.



Hospitals increasingly share a summary of care with other care providers when a patient is discharged. There are multiple methods for sending data electronically, and a hospital may use one or more methods on a routine basis (Chart 2). Sharing patient information during transitions in care is an essential aspect of ensuring care is coordinated and limiting redundancy in testing. However, the standard information currently included in summary of care documents that are required in the EHR Incentive Program often does not meet the needs of clinicians. As a result, hospitals must rely on custom programming and additional configurations in order to ensure sufficient patient information is shared for care decisions. With the appropriate standards in place, providers could obtain the data they need without additional work-around solutions.

Hospitals also are participating in health information exchanges (HIEs). HIEs facilitate health data exchange and serve to aggregate and make available data about a patient's previous care to

Hospitals employ multiple means to share summary of care records with care partners.

Chart 2: Percent of Hospitals that Routinely Send a Summary of Care Record Through Indicated Channel, 2014



Source: AHA analysis of AHA Annual Survey IT Supplement data, 2014, for community hospitals.

clinicians at the point of care. In areas where HIEs are operational, 75 percent of hospitals participate. This is a significant increase over reported participation in 2011, when 22 percent of hospitals were active in an HIE. Fourteen percent of hospitals operate in a region not served by a HIE.²

Hospitals may participate in multiple

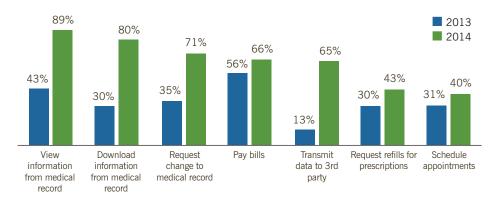
HIEs; however, the costs to participate in a HIE vary and may be substantial. At the same time, HIEs do not necessarily support all of the information sharing that hospitals want to do. In addition, they may not share information with other HIEs and there is not a national HIE network that ensures patient data is available across providers and localities.

Patients' Online Access to Health Data is Growing

Patients have gained widespread online access to their hospital medical records over the past few years. Eighty-nine percent of hospitals provided patients the ability to view information from their medical record online in 2014, up from 43 percent in 2013 (Chart 3). A growing percentage of hospitals also are offering the option for patients to perform functions outside of reviewing their medical record, such as requesting prescription refills and scheduling appointments.

Hospitals have greatly increased patients' online access to their health information.

Chart 3: Percent of Hospitals where Patients are Able to Perform the Indicated Services Online, 2013 and 2014



 $Source: AHA\ analysis\ of\ AHA\ Annual\ Survey\ IT\ Supplement\ data,\ 2013\ -\ 2014,\ for\ community\ hospitals.$

Despite Progress, Critical Barriers Still Impede the Effective Flow of Information

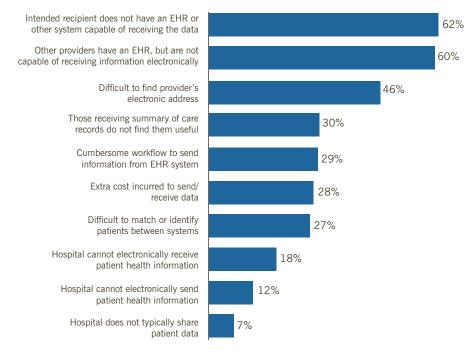
Despite significant hospital investment in IT infrastructure and EHRs, barriers to information sharing still exist. The lack of compatibility of products across vendors makes the effective and efficient exchange of health data needed to provide care an ongoing challenge. Hospitals also have the responsibility of ensuring the privacy and security of sensitive information.

Health care providers have an obligation to share information needed for care. Too often, however, systems do not yet support effective and efficient data sharing. Policymakers have recently expressed concerns around "information blocking" the intentional interference with the sharing of electronic health information. According to the Office of the National Coordinator (ONC) for Health IT, most complaints of information blocking are directed at vendors and developers, some of whom charge high fees for users to send or receive data or for development of the interfaces necessary to allow two different IT systems to exchange data. Additional concerns relative to vendors relate to development practices that prevent or make it difficult for EHRs to connect with products and IT systems made by other companies.³

Because of these and other issues, barriers to sharing information across care settings are widespread (Chart 4). The most prominent barriers are the lack

Hospitals face many barriers to the exchange of information necessary to efficiently manage patient care.

Chart 4: Percent of Hospitals Reporting Issues when Trying to Electronically Send, Receive or Find Patient Health Information with Other Care Settings, 2014



Source: AHA analysis of AHA Annual Survey IT Supplement data, 2014, for community hospitals.

of EHRs among other care partners or compatibility between EHR systems. In addition, directories or other tools to locate other providers are not widely available. Further, more than a quarter of hospitals are required to pay additional costs to send or receive health data, which provides a disincentive to information sharing.

Action is Needed to Remove These Barriers

Hospitals have invested heavily in health IT and EHRs that support the exchange of health data. Stage 2 of the EHR Incentive Program increases the requirements for information sharing, while Stage 3 rules require use of standards that are not yet in common use. Hospitals face significant challenges in achieving success in either stage

without support to overcome the barriers to universal information exchange. Providers need the technology and infrastructure that will allow their IT systems to communicate effectively. For example, providers must often create a separate interface for each department's IT system to allow information to flow into the hospital's EHR, even within

the same hospital. The average cost of a typical interface may range from \$10,000-\$20,000, while interfaces for more complex functions, such as pharmacy dispensing, may cost as much as \$75,000.⁴ In addition, a highly-skilled workforce must be deployed to maintain fragile interfaces. Hospitals may be required to use hundreds or even

thousands of interfaces to share data across departments and care settings.⁵ These costs, in addition to selected vendor practices such as charging a fee to send or receive data, make it difficult for some hospitals to afford the investments necessary to enable seamless information sharing.

Mature, nationally used data and exchange standards for information exchange are critical for data to flow. Due to a lack of clarity and specificity, vendors can interpret and implement standards differently, which makes it difficult and expensive to share and integrate data across EHRs.

Hospitals are required to purchase

and use EHRs that have been certified by ONC as meeting all standards and support the sharing of health data. 2015 was the first year that all providers were required to use the most recent version of the certified EHR. However, these products often fail to operate in an interoperable way, despite certification. Vendors must be held accountable for the design and marketing of these products in order to ensure hospitals are able to share data. Additionally, ONC should fix the certification program to ensure that EHRs are able to support interoperability in a real-world environment. Starting in 2015, providers now face financial penalties for not meeting the information exchange

and other requirements of the EHR Incentive Program.

Health information cannot be seen as belonging to an individual organization. Improved clinical care will come when the right information is available to the right provider at the right time, so that it can be used effectively at the point of care and beyond. Hospitals are actively promoting the exchange of data, but additional technology and infrastructure solutions are needed to ensure that health IT products are able to readily and easily communicate with one another to support the sharing of information critical to ensuring high-quality, efficient care delivery that is coordinated across the continuum.

POLICY QUESTIONS

- 1. How can health IT vendors be encouraged to support efficient and effective information sharing across products?
- 2. Can modifications to the EHR certification process be made to ensure products support interoperability on an ongoing basis?
- 3. What governance framework would support more seamless sharing of health data?
- 4. What capabilities are most essential for patients and families to be able to accomplish online in order to engage in activities to improve their health status and support their participation in the care process?
- 5. Is it reasonable or advisable to move to Stage 3 of the EHR Incentive Program without first addressing barriers to information sharing?

ENDNOTES

- 1. AHA analysis of AHA Annual Survey data, 2011-2014, for community hospitals.
- 2. AHA analysis of 2011-2014 AHA Annual Survey Health IT Supplement data.
- ONC. 2015 Report to Congress on Health Information Blocking. April 2015.
 American Hospital Association. Why Interoperability Matters. October 2015.
- 5. American Hospital Association. Why Interoperability Matters. October 2015.

American Hospital