Sharing Health Information for Treatment

Health care services are delivered across a spectrum of providers and settings of care, including physician offices, pharmacies, labs, imaging facilities, hospitals and health centers. Providers’ ability to electronically exchange patient information and share information with patients is critical to improving the quality of care delivery.

In recent years, hospitals and health systems have significantly expanded providers’ ability to share and receive patient information from a variety of care sources, both inside their own hospital/health system and with unaffiliated hospitals, health systems or other care settings. However, barriers, such as a lack of interoperability, continue to prevent universal sharing and effective use of information. Interoperability refers to the ability of electronic systems to efficiently and correctly transmit and receive information without the need for manual entry or other intervention by an individual. Interoperability is critical to effective use of shared information for core hospital activities such as care coordination, patient engagement, quality improvement and ensuring patient safety.

This is the second in a series of issue briefs highlighting data from the 2016 AHA Annual Survey Information Technology (IT) Supplement for community hospitals collected November 2016 – April 2017. This brief focuses on provider sharing and use of clinical data and barriers to effective use of shared information.

### Electronic sharing of health records with other hospitals and health systems has expanded rapidly.

Chart 1: Hospital/Health System Electronic Sharing of Clinical/Summary Care Record (in any format), 2012 - 2016/2017

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Hospitals In Same System</td>
<td>70%</td>
<td>71%</td>
<td>72%</td>
<td>74%</td>
<td>76%</td>
</tr>
<tr>
<td>With Hospitals Outside System</td>
<td>30%</td>
<td>36%</td>
<td>57%</td>
<td>74%</td>
<td>68%</td>
</tr>
<tr>
<td>With Ambulatory Providers In Same System</td>
<td>67%</td>
<td>70%</td>
<td>77%</td>
<td>81%</td>
<td>81%</td>
</tr>
<tr>
<td>With Ambulatory Providers Outside System</td>
<td>37%</td>
<td>45%</td>
<td>59%</td>
<td>69%</td>
<td>71%</td>
</tr>
</tbody>
</table>

Most hospitals and health systems report that they now electronically share clinical or summary of care records with hospitals and ambulatory care providers both inside and outside of their own system. Sharing of information with hospitals and ambulatory care providers outside of the system has increased dramatically over the past several years. Seventy-four percent of hospitals and health systems share clinical or summary of care records with hospitals outside their system, up from only 30 percent in 2012. Seventy-one percent of hospitals...
and health systems share clinical or summary of care records with ambulatory care providers outside their system, up from 37 percent in 2012.

Hospitals and health systems have increased sharing inside and outside of their four walls, as well as with other hospitals and ambulatory providers. Large hospitals (i.e., those with 300 or more beds) are more likely than small hospitals (those with fewer than 100 beds) to electronically share clinical or summary of care records with hospitals and ambulatory care providers both inside and outside of their own system. Ninety-one percent of large hospitals share a clinical/summary of care record with ambulatory providers inside their own system, and 85 percent share with ambulatory providers outside their system. However, only 71 percent of small hospitals share a clinical/summary of care record with ambulatory providers inside their system, and only 59 percent with outside ambulatory providers.

Ease of provider use of data received from outside sources for treatment

Automatic integration of patient information received from outside sources into a receiving hospital or health system’s electronic health record (EHR) enables more timely and effective use for patient care than if the information must be entered manually. Since 2014 (the first year the question was included in the AHA Annual Survey IT Supplement), an increasing number of hospitals and health systems report that their EHR had the capability to integrate clinical information without manual entry, up from 50 percent in 2014, although information is not routinely integrated in approximately half of those systems. Large hospitals are more likely than small hospitals to report that they have the capacity to integrate such information and that it is done routinely.
Barriers to sharing and use of received patient information for treatment

Hospitals and health systems report that barriers to the sharing and effective use of received patient information continue to exist at many levels, from timing of receipt and formatting of the information to technical issues in the exchange transaction or the EHR itself. These barriers limit provider use of patient health information received from outside sources. Fifty-eight percent of respondents indicated that providers at their facilities always or sometimes used patient health information received electronically from outside sources while treating a patient, while 33 percent responded that they rarely or never did. For those who rarely or never used such information, some of the reasons given were that information was not always available when needed; it was difficult to integrate the information in the EHR; information was not available to view in the EHR as part of clinicians’ workflow (i.e., typical process); or it was not presented in a useful format. Respondents from large hospitals were slightly more likely to identify these barriers to use of information than those from small hospitals.

Barriers also exist and continue to expand as hospitals or health systems try to electronically send, receive, or find/query patient health information to or from other care settings or organizations. Respondents indicated the following challenges: information is not useful to recipients; workflow (i.e., steps) required to enter and send information from their EHR is cumbersome; identifying the correct patient between systems is difficult; and exchanging across different vendor platforms is difficult. There are no consistent trends over time or by hospital size in the issues identified by respondents, but it is clear that challenges persist. Lack of interoperability is a key area of concern, as almost half of respondents noted they experience greater challenges.
Looking Ahead

Over the past several years, U.S. hospitals and health systems have substantially increased their ability to share essential patient information, such as a summary of care, with providers outside of their own system. Seventy to 80 percent of hospitals and health systems now share that information with other hospitals and ambulatory care providers both inside and outside of their system. However, technical and operational challenges remain at both the system and provider levels that may prevent useful patient information from being shared and used most effectively. To realize all the benefits of health information exchange for the quality of patient care, the information being shared must be matched with the correct patient, made available to treating providers quickly and in an easily accessible format, integrated with other patient information, and be useful for patient care.

Hospitals and health systems support the creation of an efficient and effective infrastructure for health information exchange that facilitates the delivery of high-quality, patient-centered care across health care settings. A significant barrier to these efforts is the lack of consistent capabilities across health IT systems. One effort to address this issue at the federal level is the Office of the National Coordinator for Health Information Technology’s (ONC) Trusted Exchange Framework. The framework is designed to “bridge the gap between providers’ and patients’ information systems and enable interoperability across disparate health information networks (HINs).”

Continued attention to the complex issue of interoperability at the technical, operational, and policy levels is needed for hospitals and health systems to implement health IT systems that support excellent patient care.

Besides interoperability, another critical issue is the ease of provider use of shared information. Information must not only get from one system to another, but it must arrive when it's needed and be useful to the provider receiving the information. Hospitals and health systems dedicate significant resources, both money and personnel, to their health IT systems. This includes creating or adopting new systems, training providers to use those systems, and implementing interfaces to provide access to the variety of other systems that can share information with their health IT system. Those efforts are not serving their full purpose if the information being shared cannot be put to effective use for patient care. Addressing this issue may require attention to the processes in place for sending and receiving information. It needs to be easy for a provider to share relevant information in a meaningful way with a recipient provider, and the process of information sharing should not detract from providers’ core clinical responsibilities.
POLICY QUESTIONS

1. How might health IT vendors be encouraged to enhance exchange capabilities across different platforms?
2. What are operational and technical best practices for receiving patient information to maximize utility for treating providers?
3. How should the Trusted Exchange Framework be implemented in the field?
4. How can payment and delivery system reform efforts such as Accountable Care Organizations encourage more efficient and effective exchange of patient health information across care settings?
5. How can patient health data be presented in a more useful format for clinicians?

Sources

1. Interoperability is the “ability of a system or a product to work with other systems or products without special effort on the part of the customer. Interoperability is made possible by the implementation of standards.” Institute of Electrical and Electronics Engineers. “Standards Glossary.” September 2016. Accessed February 6, 2018. https://www.standardsuniversity.org/article/standards-glossary/.


3. Data from the American Hospital Association Annual Survey Information Technology Supplement conducted November 2016 – April 2017. Reported results are unweighted.


