Electronic Health Record Adoption and Interoperability among U.S. Skilled Nursing Facilities and Home Health Agencies in 2017

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Importance

• Long-term and post acute care providers are major exchange partners of health care providers.
  
  » In 2015, 49% of hospitals reported that they electronically sent summary of care records to long-term care providers.
  
  » In 2017, hospitals report that a major barrier to electronic exchange is the fact that their exchange partners lack the capability to receive data.

• The IMPACT Act calls for reporting on measures related to transferring health information for skilled nursing facilities, inpatient rehabilitation facilities, long-term care hospitals and home health care agencies.
Methods

• IQVIA (formerly QuintilesIMS/ SK&A) performed a telephone based survey.

• The 10 question telephone survey was fielded between September and November of 2017.

• The survey was completed by 1,000 self-identified as a skilled nursing facilities (SNF) and 1,004 home health agencies (HHA).
EHR adoption rates were higher among HHAs compared to SNFs.

Figure 1: Percent of HHA and SNFs that used an EHR, 2017.
SOURCE: 2017 IQVIA Nursing Home, n=1,000 and 2017 IQVIA Home Health Agency, n=1,004. See Definitions for EHR description.
Notes: * Difference is statistically significant at $p<0.05$. 
Among facilities with an EHR, a majority of HHAs and SNFs used their EHR for medication management purposes.

Figure 2: Percent of SNFs and HHAs with an EHR that used medication management functions, 2017.

SOURCE: 2017 IQVIA Nursing Home, n=1,000 and 2017 IQVIA Home Health Agency, n=1,004.

Notes: * Difference is statistically significant at \( p < 0.05 \). The denominator includes HHAs and SNFs that adopted an EHR.
HHAs are more likely than SNFs to engage in each domain of interoperability.

Figure 3: Percent of SNFs and HHAs with an EHR that reported having the ability to electronically send, receive, find, and integrate patient health information, and have outside information available, 2017.

SOURCE: 2017 IQVIA Nursing Home, n=1,000 and 2017 IQVIA Home Health Agency, n=1,004 Census.

Notes: * Difference is statistically significant at p<0.05.
About one-third of HHAs and SNFs relied on EHRs alone to electronically exchange patient health information.

<table>
<thead>
<tr>
<th>Methods of Exchange</th>
<th>HHA</th>
<th>SNF</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHR alone</td>
<td>32%</td>
<td>37%</td>
</tr>
<tr>
<td>EHR and HIO and Read-only access</td>
<td>20%</td>
<td>8%*</td>
</tr>
<tr>
<td>EHR and Read-only access</td>
<td>19%</td>
<td>17%*</td>
</tr>
<tr>
<td>No EHR, HIO, or Read-only access</td>
<td>23%</td>
<td>32%*</td>
</tr>
<tr>
<td>EHR and HIO</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>HIO alone</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Read-only access alone</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>HIO and Read-only Access</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 1: Percent of HHAs and SNFs that used different methods of electronic exchange (EHR alone, health information organization (HIO), and read only access, 2017.

SOURCE: 2017 IQVIA Nursing Home, n=1,000 and 2017 IQVIA Home Health Agency, n=1,004.

Notes: *Difference is statistically significant between HHAs and SNFs at p<0.05. Read Only is defined as a permission to access files or directories where the user is only allowed to read, not make changes.
SNFs that used EHRs, HIOs, and RO access were twice as likely to have clinical information from outside organizations electronically available than SNFs that only used an EHR.

<table>
<thead>
<tr>
<th>Method used to exchange</th>
<th>Facility Type</th>
<th>Find/Query</th>
<th>Send</th>
<th>Receive</th>
<th>Integrate</th>
<th>Outside Information Available</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HHA</td>
<td>19%</td>
<td>51%</td>
<td>50%</td>
<td>32%</td>
<td>62%</td>
</tr>
<tr>
<td>EHR alone</td>
<td>SNF</td>
<td>24%</td>
<td>44%</td>
<td>42%</td>
<td>18%</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>HHA</td>
<td>55%</td>
<td>67%</td>
<td>70%</td>
<td>58%</td>
<td>67%</td>
</tr>
<tr>
<td>EHR and Read-only Access</td>
<td>SNF</td>
<td>51%</td>
<td>56%</td>
<td>56%</td>
<td>32%</td>
<td>41%</td>
</tr>
<tr>
<td></td>
<td>HHA</td>
<td>94%</td>
<td>76%</td>
<td>83%</td>
<td>60%</td>
<td>76%</td>
</tr>
<tr>
<td>EHR and HIO and Read-only Access</td>
<td>SNF</td>
<td>74%</td>
<td>82%</td>
<td>81%</td>
<td>46%</td>
<td>68%</td>
</tr>
</tbody>
</table>

Table 2: Interoperability domains (send, receive, find, integrate) by methods of exchange for HHAs and SNFs. SOURCE: 2017 IQVIA Nursing Home, n=1,000 and 2017 IQVIA Home Health Agency, n=1,004.
Almost three out of four HHAs used mobile technology during patient visits.

**Figure 4:** Use of mobile technology (e.g., laptops, tablets and smartphones) during patient visit.

SOURCE: 2017 IQVIA Home Health Agency, n=1,004.

Notes: Denominator of Mobile Technology Data Entry is among those who reported “Yes” to whether they use mobile technology.
About 4 out of 10 HHAs used telehealth technology to keep track of patients’ health between in-person visits.

Figure 5: Rates of telehealth technology use among HHAs by ownership type and location (rural vs. urban).

SOURCE: 2017 IQVIA Home Health Agency, n=1,004.

Notes: Telehealth includes video conferencing or remote patient monitoring devices that collect data such as vital signs or blood sugar levels and transmit the data back to the agency. *Difference is statistically significant at p<0.05.
Highlights

- EHR use is common among home health agencies (78%) and SNFs (66%).
- HHAs (32 %) and SNFs (37 %) most commonly used their EHR to exchange health information.
- HHAs and SNFs that use HIOs and read-only access in addition to EHRs are more likely to have information electronically available than the use of EHR alone.
- However, one-quarter of HHAs and one-third of SNFs do not use EHRs or other tools to enable electronic exchange of health information.
- Nearly 40 percent of HHAs used telehealth technology to keep track of patients’ health between in-person visits and 3 out of 4 HHAs used mobile technology to collect patient data during visits.