Health Information Technology use in Iowa Home Health Agencies: A Study for Iowa e-Health

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A study for Iowa e-Health

Background

Iowa e-Health is a public and private collaboration that seeks to improve health care quality, safety and efficiency through the use of health information technology (HIT). This includes electronic health records (EHRs) to collect and store patient health information, and a statewide health information exchange (HIE) to share health records across the boundaries of individual care settings.

To better understand HIT use by a variety of health care provider types, Iowa e-Health, in collaboration with the University of Iowa Public Policy Center (UI PPC), conducted an assessment of HIT issues facing health care providers in Iowa.

The current effort included five health provider settings: 1) home health, 2) long-term care, 3) pharmacies, 4) laboratories, and 5) radiology centers. This Brief presents information about the Home Health Agency Assessment.

The assessments gathered information about a range of HIT topics including: 1) provider HIT capabilities and preparedness to participate in a statewide HIE; 2) preferences for types of high-value clinical data exchange or HIE services; and 3) benefits and barriers to HIT adoption.

Methodology

An on-line survey assessment was used to evaluate the use of HIT in Iowa Home Health Agencies. The survey instrument was developed in collaboration with home health content experts from the e-Health Assessment Subcommittee and then pilot tested with several Iowa Home Health Agencies. A comprehensive list of Iowa Home Health Agencies was compiled based on lists from the Iowa Foundation for Medical Care, the Iowa Medicaid Enterprise. On-line resources were then used to identify contact information for the agencies and to obtain the email address for the person most knowledgeable about HIT in the agencies.

The on-line survey process included: 1) An e-vite from IDPH Director Tom Newton requesting participation in the assessment survey (including a link to the website for completion of the survey), 2) A follow-up email from UI PPC requesting participation, 3) Telephone follow-up calls to non-respondents from the UI Social Science Research Center to identify that the email reached the most appropriate person, 4) Closing of the survey process after about 6 weeks. The data were then cleaned and the analyses began.

Participation Rates

Of the 409 Home Health Agencies identified in Iowa, 72 completed a usable survey, for an 18% participation rate. While the participating agencies were well distributed around the state, they are likely to be biased toward agencies more interested in the topic of HIT (not necessarily more likely to have electronic systems). Thus, we suggest the results from this assessment be used to evaluate potential trends rather than focusing on the exact percentages for any particular questions.
HHAs and EHRs

About one-third of HHAs reported using an electronic health record (EHR) in their agency (Table 1). Urban agencies and larger agencies were significantly more likely to be using an EHR.

Table 1. Use of EHRs in Iowa HHAs

<table>
<thead>
<tr>
<th>Organizational Structure</th>
<th>Non-HER</th>
<th>EHR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility-based</td>
<td>12 (55%)</td>
<td>10 (45%)</td>
</tr>
<tr>
<td>Nonprofit (e.g., visiting nurse)</td>
<td>2 (50%)</td>
<td>2 (50%)</td>
</tr>
<tr>
<td>Proprietary (e.g., local provider)</td>
<td>8 (80%)</td>
<td>2 (20%)</td>
</tr>
<tr>
<td>Public health-based</td>
<td>19 (66%)</td>
<td>10 (34%)</td>
</tr>
<tr>
<td>Other</td>
<td>5 (83%)</td>
<td>1 (17%)</td>
</tr>
<tr>
<td>Total</td>
<td>46 (65%)</td>
<td>25 (35%)</td>
</tr>
</tbody>
</table>

The most common functions of ECDS/EHR in HHAs were:

- Listing patient problems
- Medications and allergies
- Care planning and outcomes
- Clinical notes and clinical documentation

Nine agencies were currently able to share some information with other providers electronically.

Perceived benefits of an EHR in Iowa HHAs

Most common potential benefits:

- The availability of clinical data in a timely manner,
- Less staff time to document patient care-related activities and
- The accuracy of clinical information.

For half, however, they believed that an EHR would provide the same or worse patient communication (61%) and agency profits (45%).

Most valuable information for sharing with other providers via an EHR:

- Continuity of Care Documents
- Medication list and medication alerts
- Lab results
- Progress reports
- Discharge summary
Future uses of an EHR in Iowa HHAs

Among those without an EHR

- Most were not planning to invest in an EHR in the near future
  - Financial cost (i.e. initial cost of product installation and operational cost) were the main reasons

Among those with an EHR

- About half were ‘very likely’ to invest in their system in next year
  - Cost of new modules and the ongoing operational costs were main concerns
    - Slightly less likely to be concerned about costs than those without an EHR

Health Information Exchange and HHAs

Interest in participating in a Health Information Exchange (HIE)

- 75% were very interested (36%) or somewhat interested (41%) in participating in an HIE

Table 2. HHAs interest in participating in an HIE

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very interested</td>
<td>25</td>
</tr>
<tr>
<td>Somewhat interested</td>
<td>29</td>
</tr>
<tr>
<td>Not at all interested</td>
<td>3</td>
</tr>
<tr>
<td>Don’t know yet</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
</tr>
</tbody>
</table>

Major concerns with participating in a HIE

- Initial cost of product/installation
- Operational cost of EHR system
- Need for new products to participate
- Potential liability
- Staffing-related issues
Summary
Overall, EHR use in Iowa HHAs was relatively low with about one in three agencies reporting the current use of an electronic health record. At this point, the more common functions of their EHRs were related to the collection of information rather than the sharing of information electronically. The availability and accuracy of clinical information were deemed as the benefits of an EHR, along with efficiencies in staff time. Costs (initial and operational) were the biggest concerns among both those with and without an EHR, though those with an EHR were more likely to indicate willingness to invest financial resources in the near future. About ¾ of the HHAs had interest in participating in a HIE with potential costs, liabilities and staffing needs the greatest concerns if they were to move in this direction.

Iowa e-Health
Iowa e-Health is a public/private collaboration designed to improve health care quality and efficiency through the use of HIT.

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