Health Information Technology use in Iowa Long-Term Care Facilities: A Study for Iowa e-Health

Damiano C. Peter
University of Iowa

Ki Park
University of Iowa

Kristi Law
University of Iowa
Health Information Technology use in Iowa Long-Term Care Facilities

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 Long-Term Care (LTC) Facility Assessment.

The assessments gathered information about a range of HIT topics including: 1) provider health IT 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 LTC facilities. The survey instrument was developed in collaboration with LTC content experts from the e-Health Assessment Subcommittee and then pilot tested with several Iowa LTC facilities. A comprehensive list of Iowa LTC facilities was compiled based on lists from the Iowa Dept. of Inspections and Appeals, the Iowa Foundation for Medical Care, and the Iowa Medicaid Enterprise. On-line resources were then used to identify contact information for the facilities and to obtain the email address for the person most knowledgeable about HIT in the facilities.

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 453 long-term care facilities identified in Iowa, 90 completed a usable survey, for a 20% participation rate. While the participating facilities were well distributed around the state, they are likely to be biased toward those 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 exact percentages for any particular questions.
Long Term Care Facilities and EHRs

About one quarter of LTC facilities reported using an electronic health record (EHR) (Table 1). Larger facilities were significantly more likely to be using an EHR.

<table>
<thead>
<tr>
<th>Type of LTC facility</th>
<th>Non-EHR</th>
<th>EHR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>37 (80%)</td>
<td>9 (20%)</td>
</tr>
<tr>
<td>Affiliated</td>
<td>23 (70%)</td>
<td>10 (30%)</td>
</tr>
<tr>
<td>Other</td>
<td>3 (75%)</td>
<td>1 (25%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>63 (76%)</td>
<td>20 (24%)</td>
</tr>
</tbody>
</table>

The most common functions of EHR in LTC facilities were:
- Patient identification information (95%)
- Patient medication (95%) and allergy (90%) lists
- Patient problems, risks and conditions (79%)
- Patient plan of care (79%)

Seven facilities were currently able to share some information with other providers electronically.

Perceived benefits of EHR in Iowa LTC facilities

**Most common potential benefits:**
- Billing and coding
- Timely availability of clinical information
- Accuracy of clinical information
- Patient monitoring and follow-up
- Patient safety
- Communication with clinicians

**Most valuable information for sharing with other providers via an EHR:**
- Continuity of Care Documents,
- Eligibility verification
- Prescriptions, medication management and alerts
- Management in transition
- Discharge summary
Future uses of an EHR in Iowa LTC facilities

Among those without an EHR

• Most were not planning to invest in an EHR in the next two years
• The main reasons were:
  – Financial cost (i.e. initial cost of product installation and operational cost)
  – Support staffing
  – Data security

Among those with an EHR

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

Health Information Exchange and LTC facilities

Interest in participating in a Health Information Exchange (HIE)

• Half were very interested (26%) or somewhat interested (29%) in participating in an HIE (Table 2).

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Valid percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very interested</td>
<td>22</td>
</tr>
<tr>
<td>2 Somewhat interested</td>
<td>25</td>
</tr>
<tr>
<td>3 Not at all interested</td>
<td>8</td>
</tr>
<tr>
<td>4 Don't know yet</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
</tr>
</tbody>
</table>

Major concerns with participating in a HIE

• Initial cost of product/installation
• Operational cost of EHR system
• Potential liability
• Client privacy

Most Iowa LTC facilities without an EHR system were not planning to install one in the next 2 years

Among the barriers to installing an EHR system, LTC facilities listed concerns about financial cost, staff support and data security
Summary

Overall, EHR use in Iowa LTC facilities was relatively low with about one in four facilities reporting the current use of an electronic health record. At this point, the more common functions for their EHRs were the collection of information rather than the sharing of information electronically. Improved care quality (i.e., availability and accuracy of clinical information, monitoring and follow up and patient safety), provider communication and billing coding were deemed as the benefits of an EHR. 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 1/2 of the LTC facilities had interest in participating in a HIE with potential costs, liabilities and client privacy 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.

For more information, contact:
Iowa e-Health
Email: ehealth@idph.state.ia.us
Website: www.IowaeHealth.org
Toll-Free Number: 866-924-4636
Iowa Department of Public Health, Office of Health IT

About these policy briefs

The University of Iowa's Public Policy Center’s Policy Briefs are designed to provide our research findings in a succinct and accessible format. The nature of the Briefs does not allow for extensive explanation regarding the methods used in our research. More information about specific methodologies used in any particular study can be obtained by contacting researchers at the Center and/or by downloading reports from our website. We hope you find these policy briefs helpful to your discourse on some of the most challenging societal issues.

About the Public Policy Center

The University of Iowa's Public Policy Center’s mission is to provide policymakers with information that can make our lives and communities thrive in sustainable ways through academic research. The vibrant Center that brings together researchers from a variety of fields and disciplines to impact policy at the local, state and national level through sound academic scholarship.