Health Information Exchange Networks: Understanding Stakeholder Views

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Abstract

As the National Health Information Infrastructure (NHII) gains momentum, regional health information exchange networks are developing as a means to support this structure. While successful networks exist, their sustainability is complicated by the existence of multiple stakeholders with differing incentives for participation. Interviews conducted regarding the development of the NMESH network produced several key areas of stakeholder focus, an important step in creating network sustainability.

Introduction

While support for the concept of a National Health Information Infrastructure is strong\(^1\), only a few regional health information exchanges exist. In order to address the problem of creating sustainable networks, it is important to understand the forces driving stakeholder participation.

The National Multi-Protocol Ensemble for Self-scaling Systems for Health (NMESH, I. Kohane, PI) aims to integrate patient records, laboratory and pathology results, and regional bio-surveillance. The University of Wisconsin-Madison team is providing an independent evaluation of this project.

Methods

To understand the views and concerns of NMESH project stakeholders, the evaluation team conducted 19 on-site interviews with project investigators, staff and individuals at affiliated health care facilities.

During these one-hour interviews, participants were asked open-ended questions based on the Balance Model with questions centering on five elements: (1) individual role and function within their work organization and the NMESH project, (2) tasks to be carried out by the participant for the project, (3) tools and technologies necessary for the project, (4) their work environment, and (5) the organization they are associated with.

The interview data were coded in NVIVO using the Balance Model elements and examined using content analysis to reveal recurrent themes.

Results

Table 1 shows major themes within each of the Balance Model components. The presence of diverse stakeholders makes assessment of individual needs too broad for this summary.

<table>
<thead>
<tr>
<th>Components</th>
<th>Relevant Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tasks</td>
<td>Policies, Development, Operation, Maintenance</td>
</tr>
<tr>
<td>Tools &amp; Technologies</td>
<td>Computer Applications, Functions, Patient Records</td>
</tr>
<tr>
<td>Environment</td>
<td>Geographic Area, Community, Workplace</td>
</tr>
<tr>
<td>Organization</td>
<td>Marketplace, Institution Policies and Procedures, Roles</td>
</tr>
</tbody>
</table>

Conclusion

Content analysis of interviews aided in understanding how those involved in developing a network for health information exchange are framing the project and can be used to track stakeholder thinking, drive discussion and align incentives for participation.

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References