Attitudes and Readiness for Adoption of an Electronic Medical Records System: A Preliminary Case Study

Introduction
We present preliminary results of future EMR users assessing the impact of EMR adoption at a major academic medical center on:

- record-keeping
- clinical and organizational practices
- work efficiency
- patient care

Methods & Demographics
Our conceptual model for facilitators and barriers to implementation and adoption informed by literature on EMR deployments, HIT adoption, and morale and change in hospital settings drove the development of our survey instrument.

Baseline Survey
- Administered September 2009, prior to deployment of new EMR system
- 15-minute online survey, 19 questions
- n = 789

Findings

Comfort with Electronic Devices
- 20% are "early adopters"  
- 52% take "only a little time" to learn about new technologies  
- 38% are eager to try new technologies after others report success

Technology at Work
- Participants report using a wide variety of technology  
- 84% use email very often  
- 67% have never used a PDA or Smartphone at work

Current Challenges
- Incomplete or inaccurate charts  
- Time spent locating charts  
- Lack of integrated data systems  
- Patients seen without charts

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Conclusion
- Survey data confirms observations that personnel are prepared for and optimistic about this transition  
- Data reported here represent only one aspect of the overall EMR project  
- Follow-up surveys will be administered every 6 months

Current Problems at UniHospital

<table>
<thead>
<tr>
<th>Problem</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incomplete or inaccurate charts</td>
<td>30</td>
</tr>
<tr>
<td>Time spent locating charts</td>
<td>25</td>
</tr>
<tr>
<td>Lack of integrated data systems</td>
<td>20</td>
</tr>
<tr>
<td>Patients seen without a chart</td>
<td>15</td>
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<tr>
<td>Inadequate inclusion of clinicians in technology decisions</td>
<td>10</td>
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<tr>
<td>Lack of transparency in leadership decisions regarding information technology</td>
<td>8</td>
</tr>
<tr>
<td>Confusing strategic plan for implementing EMR</td>
<td>6</td>
</tr>
<tr>
<td>Lack of physical reminders for disease management for individual patient</td>
<td>4</td>
</tr>
<tr>
<td>Duplicate test ordering</td>
<td>3</td>
</tr>
<tr>
<td>Coding visits and capturing of charges</td>
<td>2</td>
</tr>
<tr>
<td>Inefficiency in scheduling exam rooms</td>
<td>1</td>
</tr>
</tbody>
</table>

Reported problems in current work practices and tools, ordered by severity.