Technology Mediated Collaborations in Healthcare

Souren Paul  
Nova Southeastern University  
Souren.paul@gmail.com

Arkalgud Ramaprasad  
University of Illinois at Chicago  
prasad@uic.edu

Nilmini Wickramasinghe  
Deakin University & Epworth HealthCare  
n.wickramasinghe@deakin.edu.au

Collaboration technologies are being used in healthcare research, practice, and management. However, they have potential for even greater use especially in the light of healthcare reforms which emphasize the key enabling role for technology to facilitate superior health care delivery currently occurring throughout many countries.

Geographically dispersed health professionals can use collaboration technology to communicate with each other, review patient records, manage workflows, and improve the delivery of patient care. Similarly, geographically non-collocated researchers can collaborate with each other. The challenges being addressed by this mini-track are encapsulated in the ontology in the figure below.

The three papers in the mini-track address different components of the ontology. The paper “Detailed Perceptions by Health Service Providers Around EHRs: A Case Study of Australia’s e-health Solution” focuses on the importance of e-health implementations in healthcare services and delivery settings of Australia and it identifies the key success factors for the successful implementation and adoption of the MyHealth Record by examining the health service providers’ perceptions and expectations. The paper “Social Media as a Tool to Detect Depression” reports on a key medical issue mental health and how social media can provide a new and potentially superior way for many individuals to address their mental health problems. The final paper “What are the Gaps in Mobile Patient Portal? Mining Users Feedback using Topic Modeling” espouses on the benefits for care delivery of analyzing the data captured in patient portal solutions.

Ideally, one would hope to realize all the possible collaborations envisaged in the ontology. There is a need for these collaborations. The three papers are a sample, albeit not representative, of the research on technology mediated collaboration in healthcare. The papers in the past years have covered many other aspects of the ontology. The three papers are signifiers of the state-of-the-practice and the state-of-the-aspiration. With the increasing emphasis on translational research, cost containment, safety, and quality in healthcare the collaborations underrepresented in these papers would be equally important for effective delivery.

Over many years, many topics encapsulated in the framework have been covered in this mini-track. There are many that are unexplored. We hope these ‘blind’ spots will be covered in the future. There is a need for a systematic and systemic approach to technology mediated collaboration in healthcare.

<table>
<thead>
<tr>
<th>Technology</th>
<th>Partners</th>
<th>Content</th>
<th>Media</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture</td>
<td>Researcher [and] Researcher</td>
<td>Data Analysis</td>
<td>Personal</td>
<td>Care</td>
</tr>
<tr>
<td>System</td>
<td>Clinician</td>
<td>Diagnosis</td>
<td>FTF*</td>
<td>Research</td>
</tr>
<tr>
<td>Strategy</td>
<td>Nurse</td>
<td>Treatment</td>
<td>PHR***</td>
<td>Administration</td>
</tr>
<tr>
<td></td>
<td>Patient</td>
<td></td>
<td>E-mail</td>
<td>Education</td>
</tr>
<tr>
<td></td>
<td>Administrator</td>
<td></td>
<td>Social</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agent/Est</td>
<td></td>
<td>Blog</td>
<td></td>
</tr>
</tbody>
</table>

* Face-to-Face
** Personal Health Record
*** Electronic Medical Record
**** Health Information Exchange

URI: http://hdl.handle.net/10125/49957
ISBN: 978-0-9981331-1-9
(CC BY-NC-ND 4.0)