The Problem
BIDMC’s Information Systems (IS) Department invested the majority of their efforts in supporting routine maintenance and enhancements to support federal mandates such as ICD-10 and Meaningful Use. As a result, limited bandwidth was available for innovations to position BIDMC for the Electronic Health Record (EHR) of the future.

Following completion of an organization-wide IS strategic planning effort that included a gap analysis between current state and desired future state, stakeholders recognized a mix of core, innovative, and advanced gaps. Focusing on enhancing internal systems to fill core gaps was a priority. However, stakeholders recognized the importance of an innovation agenda to lay a foundation for the future.

Throughout a series of discussions, we realized there were BIDMC clinicians and non-IS staff throughout the organization with innovative ideas and programming skills. Periodically some of these non-IS colleagues would present solutions for integration with BIDMC solutions. Why not formalize what was already occurring with innovative projects that positively affect the IOM Dimensions of Quality Care: Effectiveness, Efficiency, Timeliness, Equitability, Safety or Patient Centeredness?

Aim/Goal
Bring IS and non-IS clinicians and staff together to create innovative solutions that integrate with the core EHR and align with organizational priorities. Qualified non-IS programmers receive support and guidance from IS while IS programmers remain focused on enhancing internal systems to fill core gaps. Working together, BIDMC team members throughout the organization can provide solutions that provide the most benefit to BIDMC.

The Team
Governance and Oversight Committee:
• John Halamka, MD - BID Enterprise Chief Information Officer
• Larry Markson, MD - BIDMC Chief Medical Information Officer
• Larry Nathanson, MD - BIDMC Director of Emergency Informatics
• Manu Tandon - BIDMC Chief Information Officer

The Interventions
- Participated in IS Strategic Planning effort
- Identified opportunity to link efforts of non-IS programmers to strategic plan
- Aligned non-IS programming efforts to innovative strategic plan projects

The Results/Progress to Date
This effort was unanimously approved at the December 4, 2015 IT Steering Committee Meeting based upon the track record of the founding non-IS programmers and their support of this program as a formal effort. The table below reflects the current innovative efforts of this program. The IS Strategic Planning team is in the process of recruiting additional participants and projects.

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Impact</th>
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<tbody>
<tr>
<td>Full text search of webOMR notes</td>
<td>Opportunity to leverage unstructured data in operational decision support</td>
</tr>
<tr>
<td>Real-time, automated risk assessment</td>
<td>Alerts providers of a change in risk assessment based on real-time data</td>
</tr>
<tr>
<td>Secure home capture and upload of patient measures</td>
<td>Extends existing efforts to collect, validate, and act upon patient generated data</td>
</tr>
<tr>
<td>Secure mobile capture and upload of patient photos</td>
<td>Provides a HIPAA-compliant solution for capturing patient photos</td>
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Lessons Learned
IS Crowdsourcing was formalized by bringing representatives together from across the BIDMC organization through the IS Strategic Planning process. The organizationally diverse group of participants shared challenges and successes in an open forum that sparked additional thought and conversation leading to the formalization of the IS Crowdsourcing Program as a means by which to advance an innovative agenda while closing core gaps in EHR functionality.

Next Steps/What Should Happen Next
The IS Strategic Planning Team will continue to support and grow the IS Crowdsourcing Program through:
- Socialization of the existing solutions and identification of additional use cases that could benefit from something that already exists
- Recruitment of additional non-IS qualified programmers to participate in the IS Crowdsourcing Program
- Consideration of innovative ideas collected from throughout the organization and prioritization of those ideas that align best with BIDMC’s organizational goals

For more information, contact: ISStrategicPlanningTeam@bidmc.harvard.edu