The HSQIC Experience: Creating a Quality Improvement Education Curriculum for House Staff

The Problem
The HouseStaff Quality Improvement Council (HSQIC) at BIDMC is comprised of 72 residents and fellows from 16 unique departments. The goal of HSQIC is to better engage all house-staff at BIDMC in quality improvement (QI) and patient safety (PS) projects.

- QI & PS teaching is variable among different departments
- Housestaff at BIDMC want to learn more and be adept at QI
- QI training for residents is an ACGME requirement
- Augmented QI education among house staff has the potential for broad impact on engaging residents and fellows in QI topics during their training, and facilitates a “culture of safety” at BIDMC

Aim/Goal
HSQIC sought to create a QI Education Curriculum to improve understanding and provide a QI toolset among house staff at BIDMC. The curriculum was targeted towards residents and fellows at HSQIC meetings, which are open to all house staff and regularly have 20-30 attendees. Educational topics were engineered to teach housestaff the tools to setup their own projects. Our goal is to teach QI tools during project workflow, to enhance learning via the “teach-and-do” concept.

The Team (HSQIC Leadership)
- Chair: David Lucier, MD, MBA, QI Fellow, Department of Medicine
- Vice Chair: Andrew Hale, MD, Fellow in Infectious Disease
- Vice Chair: Samir Jani, MD, Resident in Anesthesia
- Vice Chair: Luisa Solis-Cohen, MD, Resident in Neurology
- Vice Chair: John Torous, MD, Resident in Psychiatry
- Faculty Mentor: Anjala Tess, MD, Department of Medicine
- Faculty Mentor: David Feinbloom, MD, Department of Medicine

The Interventions
- Created a list of topics interesting and pertinent to housestaff
  Examples: IOM’s 6 Dimensions of Quality; Nominal Group Technique; 7 Steps of Continuous QI; How-To Create a Project Charter; Stakeholder Analysis; Fishbone Diagram; Impact/Effort Grids; Affinity Diagrams; Change Management Principles and Spread
- Incorporated QI Education topics into project workflow of HSQIC meetings
  Example: When selecting interventions to improve adverse event error reporting, created an affinity diagram, and an impact/effect grid with housestaff, teaching the concepts while advancing the project in real time.

The Results/Progress to Date (Examples)

Adverse Event Reporting interventions

<table>
<thead>
<tr>
<th>High Impact</th>
<th>Low Impact</th>
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<tbody>
<tr>
<td>&quot;Make a list of all potential areas for improvement&quot;</td>
<td>&quot;Identify the most common areas for improvement&quot;</td>
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<tr>
<td>&quot;Develop a project charter that includes key stakeholders&quot;</td>
<td>&quot;Identify the key stakeholders for the project&quot;</td>
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<td>&quot;Create a Fishbone diagram to analyze potential causes&quot;</td>
<td>&quot;Use a Pareto chart to prioritize issues&quot;</td>
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<tr>
<td>&quot;Identify potential solutions and prioritize them&quot;</td>
<td>&quot;Evaluate the feasibility of solutions&quot;</td>
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Responses from an internal, anonymous survey of residents and fellows in HSQIC about what has been successful in this group:
- “I love the QI curriculum”
- “Very educational”
- “The educational component [of HSQIC] has been very successful”
- “There should be more education”

Lessons Learned
HSQIC meetings are voluntary, usually at 6pm, and housestaff have busy schedules. Thus, teaching a curriculum in the standard didactic format and having time for other HSQIC affairs is a challenge. Our “teaching-while-doing” format is timely, active, and accomplishes both education and project work. It has been well received by HSQIC members.

Next Steps
- Continue to build on the educational curriculum
- Conduct a formal survey of other institutions’ HSQIC’s education components
- Identify members of the BIDMC community with QI expertise to come to meetings and add educational value

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