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Quick QI: A two-week, self-directed quality improvement curriculum

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BACKGROUND

- Quality improvement (QI) is an increasingly important part of graduate medical education.
- ACGME requires training in QI and engagement in QI activities¹.
- The approach to QI curriculum design is not standardized².
- Team-based projects and combinations of didactic and experiential learning are common elements of QI curricula³.
- Incorporation of adult learning theory elements is a successful method of teaching QI³.
- Adult students learn best when participating in real-life problems, drawing from past experience, self-directing in their learning, and reflecting on current practice⁴.

DESCRIPTION OF THE PROBLEM

- Physician trainees are busy, making integration of QI curricular requirements difficult.
- Restriction of resident duty hours by ACGME since 2003 creates a challenge in incorporating QI education into a training program.
- VCU Internal Medicine has a two-week rotation structure.
- Educators must be creative in developing a QI curriculum that is efficient and effective.

DESCRIPTION OF THE INNOVATION

- We created a short, self-directed QI curriculum.
- We aim to expose residents to QI theory and methods, existing program and institutional QI activities.
- Residents will create a QI project and develop teaching skills in the realm of QI and patient safety
- By completing this rotation, residents will:
 - Demonstrate the ability to break down a clinical problem, create a process map, form an interdisciplinary team, and brainstorm effective interventions to improve the identified clinical problem.
 - Participate in quality improvement activities at both the training program and the institutional level.
 - Practice educator skills by preparing and facilitating a Morbidity and Mortality conference.

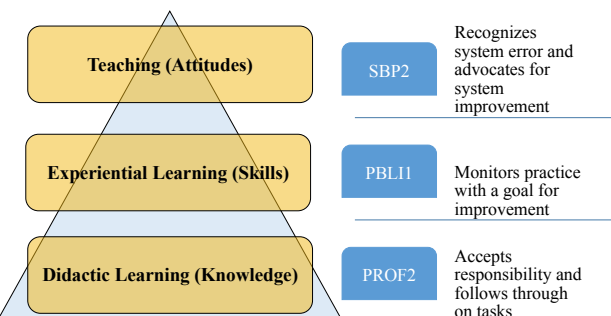


Figure 1. Hierarchy of Rotation Educational Goals and Milestones

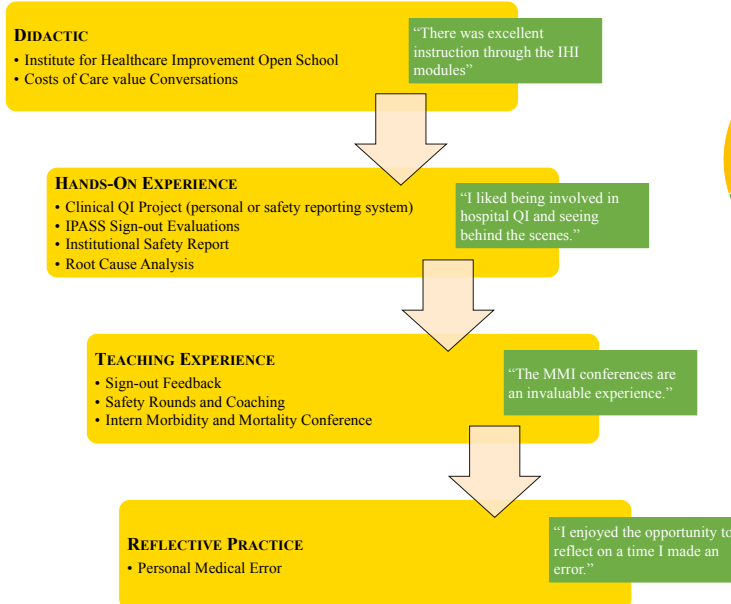
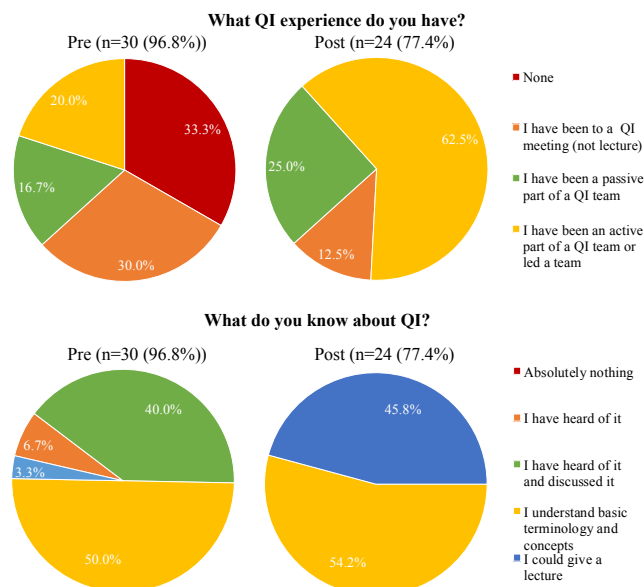
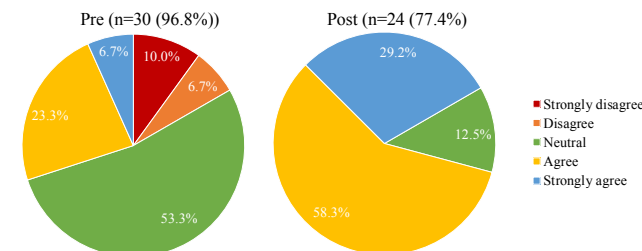


Figure 2. Description of the Innovation

ASSESSMENT OF THE INNOVATION



I can develop a QI Project.



DISCUSSION

- 31 residents have completed rotation as of March 2018. Every rotator is given a pre-rotation and post-rotation survey to assess perceptions of knowledge, skills, and attitudes.
- There is a marked increase in active QI experience after completing the rotation.
- Knowledge assessment shows many feel comfortable giving a lecture on QI after completing the rotation.
- Confidence in leading a QI project (i.e. “agree” or “strongly agree” on survey) increased from 30% before the rotation to 87.5% after completing the rotation.
- Six rotators (19.4%) completed the unrequired IHI Basic Certificate in Quality and Safety.
- Six rotators (19.4%) have chosen to continue their project or have pursued scholarship opportunities.

LESSONS LEARNED AND NEXT STEPS

- Learners gained substantial QI knowledge and skills efficiently.
- Despite reliance on self-motivation, all residents have completed all rotation requirements.
- Some residents complete extra QI training, continue their developed projects, or pursue scholarship opportunities.

Future steps include:

- Coordinate the QI projects to expedite institutional system change.
- Align QI projects with institutional safety priorities.

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