Educating Residents in Quality and Safety: A hands-on approach

Special Symposium

Moderator: Anjala V. Tess MD
Christopher S. Kim MD MBA
Eric J. Warm MD

May 11, 2012

Society of General Internal Medicine, National Meeting
May 2012
Orlando, Florida
Session agenda

AT THE CONCLUSION OF THIS SESSION, PARTICIPANTS WILL BE ABLE TO:

1) LIST KEY STAKEHOLDERS AND INCENTIVES FOR RESIDENT EDUCATION IN QI/PS
2) DESCRIBE EXAMPLES OF TEACHING METHODS AND ASSESSMENT TOOLS IN QI/PS EDUCATION
3) IDENTIFY LOCAL AND GENERAL BARRIERS TO CREATING, IMPLEMENTING, AND SUSTAINING QI/PS CURRICULA
4) DESCRIBE POTENTIAL STRATEGIES FOR OVERCOMING GENERAL AND LOCAL BARRIERS TO IMPLEMENTATION

SESSION AGENDA:

1) 10 minutes: Introductions
   “Why are you here?” Overview of needs and requirements in QI education

2) 45 minutes: Description of three programs:
   Anjala V. Tess, MD. (Beth Israel Deaconess Medical Center)
   Eric J. Warm, MD (University of Cincinnati)
   Christopher S. Kim MD MBA (University of Michigan)
   - curricular drivers,
   - organization of program
   - assessment tools
   - evaluation of program

3) 25 minutes: Facilitated discussion
   - Barriers and Strategies

4) 10 minutes: Session evaluation
Beth Israel Deaconess Medical Center: Quality and Safety Curriculum

- Years in Existence: 10

- Logistics:
  - All interns receive a QI/PS module in ambulatory curriculum
  - All residents take a three week elective in PS and QI (Stoneman Rotation)
    1. Didactics
    2. Hands on adverse event review which is presented at Department Committee
    3. Hands on QI group project
    4. Attendance at departmental and hospital committees
  - Seniors volunteer for week long QI retreat focused on Lean improvement

- Resources:
  - Learner time:
    - Intern year – two sessions in ambulatory curriculum
    - Residents years – one elective block
  - Started with three volunteer faculty (10-12 residents/year) → at year 5 went to 0.8 FTE divided among 8 faculty core faculty who mentor twice/year (total 50 residents/year);
  - Tight links with health care quality department ensure projects align with dept. and hospital goals
  - Support of department chair, residency program director, and health care quality

- What has worked well:
  - Very limited didactic and mostly hands on learning keeps them engaged
  - Committee attendance opens their eyes to the hospital as an organization
  - Having residents work on specific projects has increased buy-in on frontlines when trying to make programmatic changes
  - We now have grads who are taking on leadership roles in PS/QI around the country

- What we struggle with:
  - Finding projects that are doable in three weeks. Often have to link groups
  - Initial QI project selection (completely open vs. very prescriptive)

- Future directions: expansion to fellowships underway, have incorporated students as well

For more information, the curriculum has been published in two articles referenced below or email Anjala Tess atess@bidmc.harvard.edu

EDUCATING RESIDENTS IN QUALITY AND SAFETY
University of Cincinnati: Ambulatory Long Block

Background:
- The Long Block is a year-long continuous ambulatory block (part of an ACGME Educational Innovations Project) during second and third year of residency; we are now into Long Block 6
- The ambulatory group practice consists of residents, attendings, nurses (mostly RN), social worker, pharmacists, and administrators
- Residents see patients 3 half-days per week, but are responsive to patient needs at all times like attending physicians via the EMR and team structure; continuity is emphasized
- The entire team has a yearly retreat at the start of Long Block focusing on QI/PS
- The entire team meets weekly to review performance (patient care outcomes, satisfaction scores, throughput results, financial performance); meetings begin with a patient story, then a clinical pearl, then data review, then issues of the week (an open agenda on a white board for anyone to add to)
- Residents receive monthly data reports drilled down to their specific patients with relative rankings and measurement of change over time; data is compared to team as a whole and national benchmarks
- Data is used as part of resident formative and summative evaluation (examples to be shown during the presentation)
- A core improvement team (“QuILT” – Quality Improvement Leadership Training) consisting of self-selected residents (usually about 1/3 of entire Long Block class) meets with trained QI/PS faculty to drive major improvement initiatives; this team shares tools, techniques and progress with the larger team
- Didactic education is provided at a basic level for all, and an advanced level for core improvement team

Results
- The resident practice is currently an NCQA Level III Patient-Centered Medical Home
- Patient, resident, and staff satisfaction have improved considerably over the past 6 years
- Most process measures are much higher than other practices in the related primary care network despite a more complex case mix; many process measures are currently much greater than national averages
- Many intermediate outcomes of care are improved; getting patients with hemoglobin A1C <9 has not improved
- Several residents have decided on careers in primary care as a result of the Long Block; other residents have gone on to include QI/PS as a major component of their working life; the current ‘resident of the year’ won in large part due to his QI work as part of the Long Block core improvement team
- Nursing-resident-staff relationship is among the best in the hospital (no other nurse has won ‘nurse of the year’ award other than ambulatory nurses since Long Block started)
- We have been site visited by a sitting Governor, two sitting members of Congress, as well as many academic institutions and groups

Caveats
- Getting consistent data streams as information systems constantly changeover is difficult (we are on 3rd EMR/registry in 6 years)
- Having a faculty member in the IT department is an invaluable resource
- Not every resident likes QI/PS, and morale can lag when it seems to be ‘forced’

Future directions
- We will continue to refine our data registry and measures
- We hope to expand to include transitions of care measures (interfacing with in-hospital improvement teams for unplanned readmissions and ED visits)
- We will use lessons learned from the ambulatory site regarding measuring patient care outcomes as a function of educational outcomes into inpatient medicine
Patient Safety Learning Program: A Longitudinal Curriculum for Internal Medicine and Med/Peds Residents

University of Michigan, Department of Internal Medicine

➢ Description of Program:
  o All interns attend 2 foundational seminars on patient safety and quality improvement during their ambulatory block.
    ▪ Session 1: What is patient safety and quality improvement in health care, and why is it important? An approach to a differential diagnosis (The POET Model).
    ▪ Session 2: Evidence based principles of therapy in patient safety and quality improvement.
  o All 2nd year residents participate in a month long patient safety/quality improvement project during their ambulatory rotation.
    ▪ Team of 3-5 residents, with four half days dedicated to project.
    ▪ Each team is guided by 1-2 faculty mentors.
    ▪ Team presents their findings during a noon conference at the end of the month. All internal medicine residents, and key institutional stakeholders related to the project are invited to attend.
    ▪ IHI Open School student part of the resident team.
  o Academy of faculty mentors are the backbones to the program.
    ▪ 7 faculty mentors, along with residency program directors, supported to guide 2nd year resident teams.
    ▪ Faculty development sessions provided for mentors on “the diagnosis and treatment to patient safety.”

➢ Assessment of Program:
  o First year didactic sessions not evaluated.
  o Second year patient safety project: Mentor guidance generally rated high: 4.5-4.7 on 5 point scale of faculty mentor availability and effectiveness in guiding team.
  o Qualitative comments about mentors and month long experience very positive.
  o Great job of detailing the crux of the problem, through literature review, interviews, observations and surveys; however countermeasure idea development and implementation plans will need to be further developed.

➢ Future Direction:
  o Standardized approach to structured problem solving through the use of Lean based method of “A3 Thinking” will be taught to faculty mentors, who in turn will be assisted by a “Lean expert” as they mentor the resident teams.

For more information, the curriculum has been published in 2 articles referenced below or email Christopher Kim: seoungk@med.umich.edu


Teaching QI and Safety – Resources for the Medical Educator

AHRQ Web M and M: Morbidity and Mortality Rounds on the Web

http://webmm.ahrq.gov/


Boonyasai R; Windish D; Chakraborti C; Feldman L; Rubin H; Bass E. Effectiveness of Teaching Quality Improvement to Clinicians: A Systematic Review. JAMA. 2007;298(9):1023-1037.


Ogrinc, G, MD, MS et al. A Framework for Teaching Medical Students and Residents about Practice-based Learning and Improvement, Acad. Medicine 2003, 78: 748-756


VA Patient Safety Curriculum

http://www.patientsafety.gov/curriculum/

