Integrating Quality Improvement & Medical Education

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April 2014
Objectives

- Review the current medical education and clinical practice environments
- Create medical education programs aligned with systems’ quality improvement priorities
- Engage learners in effective quality improvement educational activities
- Implement clinical learning environment strategies for accreditation compliance
Motivators for this Session

- The end in mind: better patient care and outcomes
- Education reform across the continuum
- Adding Quality Improvement to Medical Education...and...
- Adding Medical Education to Quality Improvement
- The new Practice Environment: Sticks & Carrots
BACKGROUND
The clinical care gap....

Evidence

Ideal, evidence-based practice

Current practice

Practice
Paying for the Gaps

High Cost

Low Yield

Figure 1: Healthy Life Expectancy Total Population and Total Healthcare Expenditure/capita, 2003/2006

Size of bubbles indicate percentage share of total health expenditures that come from the private sector.

(Note: Relative differences between countries magnified (raised to the third power) to facilitate chart reading)

Source: OECD Health Database, June 2006 Version; WHO World Health Data 2008; EU-15 average is the GDP weighted average
And for this expenditure, what does the US get?

U.S. Comparison to Developed Nations

2009 Life Expectancy
- Bottom Third
  - (78.2 yrs compared to Japan at 83)

2008 Infant Mortality
- 4th Highest
  - (6.5% compared to average 4.6%)

2008 Adult Obesity*
- 1st
  - (Over 1/3 of U.S. population)

*Only 7 nations reported data on this indicator.
Training the Next Generation of Physicians
Big Changes in Med Ed
New Emphases in Med Education: Undergraduate

- Holistic Review—better admissions
  Experience/Attributes/Metrics
- Evidence-based Medicine
  Best evidence/ Clinician expertise/ Patient values
- Problem Based Learning
  Small groups/tutors/self-directed
- Earlier clinical experience
- Competency based curricula
  Milestones/Entrustable Professional Activities

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New Emphases in Med Education: Graduate

ACGME Next Accreditation System

Milestones

- Professionalism
- Interpersonal and Communication Skills
- Systems Based Practice
- Clinical Learning Environment (CLER)

CLER Focus Areas

**Patient Safety** – including opportunities for residents to report errors, unsafe conditions, and near misses, and to participate in inter-professional teams to promote and enhance safe care.

**Quality Improvement** – including how sponsoring institutions engage residents in the use of data to improve systems of care, reduce health care disparities and improve patient outcomes.

**Transitions in Care** – including how sponsoring institutions demonstrate effective standardization and oversight of transitions of care.

**Supervision** – including how sponsoring institutions maintain and oversee policies of supervision concordant with ACGME requirements in an environment at both the institutional and program level that assures the absence of retribution.

**Duty Hours Oversight, Fatigue Management and Mitigation** – including how sponsoring institutions: (i) demonstrate effective and meaningful oversight of duty hours across all residency programs institution-wide; (ii) design systems and provide settings that facilitate fatigue management and mitigation; and (iii) provide effective education of faculty members and residents in sleep, fatigue recognition, and fatigue mitigation.

**Professionalism**—with regard to how sponsoring institutions educate for professionalism, monitor behavior on the part of residents and faculty and respond to issues concerning: (i) accurate reporting of program information; (ii) integrity in fulfilling educational and professional responsibilities; and (iii) veracity in scholarly pursuits.
The Clinical Learning Environment

CLER Pathways to Success: Pt Safety

**Pathway 1:** Reporting of adverse events, close calls

**Pathway 2:** Education on patient safety

**Pathway 3:** Culture of Safety

**Pathway 4:** Resident/fellow experience in patient safety investigations and follow up

**Pathway 5:** Clinical site monitoring of resident/fellow engagement in patient safety

**Pathway 6:** Clinical site monitoring of faculty member engagement in patient safety

**Pathway 7:** Resident/fellow education and experience in disclosure of events

The Clinical Learning Environment

CLER Pathways to Success: HC Quality

**Pathway 1:** Education on quality improvement

**Pathway 2:** Resident/fellow engagement in QI activities

**Pathway 3:** Residents/fellow received data on QI metrics

**Pathway 4:** Resident/fellow engagement in planning for QI

**Pathway 5:** Resident/fellow and faculty member education on reducing health care disparities

**Pathway 6:** Resident/fellow engagement in clinical site initiatives to address health care disparities

The Clinical Learning Environment

CLER Pathways to Success: Care Transition

Pathway 1: Education on care transitions
Pathway 2: Resident/fellow engagement in change of duty hand-offs
Pathway 3: Resident/fellow and faculty member engagement in patient transfers between services and locations
Pathway 4: Faculty member engagement in assessing resident-related patient transitions of care
Pathway 5: Resident/fellow and faculty member engagement in communication between primary and consulting teams
Pathway 6: Clinical site monitoring of care transitions

The Clinical Learning Environment

CLER Pathways to Success: Supervision

Pathway 1: Education on supervision

Pathway 2: Resident/fellow perception of the adequacy of supervision

Pathway 3: Faculty member perception of the adequacy of resident/fellow supervision

Pathway 4: Roles of clinical staff members other than physicians in resident/fellow supervision

Pathway 5: Patients and families, and GME supervision

Pathway 6: Clinical site monitoring of resident/fellow supervision and workload

New Emphases in Med Education: Continuing Professional Development

- Traditional CME is dead
- New emphasis on Continuing Professional Dev.
- Performance based CPD
- Alignment with ‘new’ physician accountability
  - Maintenance of Licensure (MOL)
  - Maintenance of Certification (MOC)
  - Ongoing Professional Performance Evaluation (OPPE)
  - Value-based purchasing (P4P)
Aligning Medical Education and QI: some general principles and a way forward....
Our Faculty are not Ready

Demographics—Age Distribution in 1980 & 2010

Faculty age: 40-55+ y/o
26-41+y/o in 2000
‘To Err is Human’--IOM
Forces for change

Research about effective CME, QI, implementation
Outcomes-based education, recertification, MOC
ACGME/CLER
Comparative Effectiveness Research
ACA
Accreditation req’ts
HHS initiatives
EHR, feedback and learning
Medicaid, COI and Commercial support issues
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A new emphasis on QI...

...and QI in Medical Education
Some general thoughts about education in QI/PS:

1) Agree on QI/PS content; decide where its fits - in UME, GME, CME/FD, team-based learning

2) Think about faculty first

3) Apply some general QI principles to educational formats

4) Align clinical/QI needs with educational programs and vice versa

5) Evaluate outcomes

6) Make it count more than once
Some QI/PS Content Basics

- Professionalism, Providing a Just Culture
- Teamwork
- Communication skills
- Risk Assessment, Root Cause Analysis & Management
- Systems Thinking & Design
- Patient Safety & Family Centered Care
- Healthcare Inequities
- Leadership
- Informatics/Data analysis
- Quality measurement & improvement
- Patient Safety/Human Errors Science
- Value-based healthcare delivery

Collected from numerous post-graduate QI/PS training programs
The Faculty Dilemma

AAMC’s Teaching for Quality Report: 2013

The Goal:

Every academic health center will have a critical mass of faculty ready, able and willing to engage in, role model, and teach about patient safety and the improvement of health care.

Quality Improvement is core to what it means to be a physician

www.aamc.org/te4q
Te4Q Recommendation

“Every academic health center will have a critical mass of faculty ready, able and willing to engage in, role model, and teach about patient safety and the improvement of health care”
## Faculty Competencies

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<th></th>
<th>Proficient</th>
<th>Expert</th>
<th>Master</th>
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<td>Core knowledge of QI/PS</td>
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<td>Proficient, plus…</td>
<td>Expert, plus…</td>
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<td>Common language</td>
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<td>Increased experience in QI/PS projects (eg, lead)</td>
<td>Curricular reform and/or clinical leadership roles related to QI/PS</td>
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<td>Doing basic improvement in practice</td>
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<td>Leader in education and curricular implementation</td>
<td>Scholarship in QI/PS</td>
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<td>Modeling w/learners</td>
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<td>Able to create experiential and didactic learning activities for students, residents, others</td>
<td>Career focus in QI/PS</td>
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<td>Prepared as good improvement team member</td>
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<td>Able to understand and create metrics to assess learner progress</td>
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<td>Participating in MOC Part IV</td>
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Te4Q
General Principles for Educational Experiences in Healthcare Improvement

1. Combine didactic and project-based work
2. Link with health system improvement efforts
3. Assess education outcomes
4. Model QI in educational processes
5. Think outside the ‘lecture’

Think outside the lecture....
An aligned Academic Health System Model

Data Sources: quality, utilization, other data

Educational Resources: grand rounds, team/staff/organizational development, internal and external CME programs, faculty development

Alignment: using quality data to drive rounds, M&M, team training,

Evaluation/Feedback to system

AAMC’s Aligning & Educating for Quality (ae4Q) model
Comparing Educational Planning with Quality Improvement

Educational Planning Cycle

1. Problem Identification & Needs Assessment
2. Goals & Objectives
3. Educational Strategies
4. Implementation
5. Evaluation & Feedback

Quality Cycle

PLAN
ACT
STUDY
DO

Kern: Curriculum Development for Medical Education 2009
Fostering Change in Practice
Developing Improvement Initiatives Using Pathman/PRECEED Models

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Developing Improvement Initiatives Using Pathman/PRECEED Models

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- **Conferences**
- **Lecture**
- **Rounds**
- **Print material**
- **Small group learning**
- **Champions**
- **Interactivity in lectures**
- **Workshop Tools -flowsheets -protocols**
- **Audit & feedback**
- **Audit & feedback Reminders Rewards--or penalties**
Let’s Practice
A Plan for Engaging Learners in Quality Improvement and Patient Safety
MOC or OCC

I: Professionalism & Professional Standing

II: Self Assessment & Life Long Learning

III: Knowledge, Judgment & Skills (Board Exam)

IV: Improvement in Medical Practice

MOC/OCC
Institutional Maintenance of Certification

- The Multispecialty MOC Portfolio Approval Program
- 17/24 ABMS Boards currently participate
- 30 current sponsors

Institutional QI activities ‘count’ for MOC Part IV

mocportfolioprogram.org
### Make it Count More Than Once

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<th>System QI/PS</th>
<th>Continuing Professional Development</th>
<th>MOC</th>
<th>VBP</th>
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THE MONDAY MORNING QUESTION:
What will you do?
For More...

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Continuing Education & Improvement: www.aamc.org/cei
Teaching for Quality: www.aamc.org/te4q
Aligning & Educating for Quality: www.aamc.org/ae4q