What is Your QI IQ?

Recognizing the Importance of Quality Improvement in the PA Curriculum

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Goal

• To increase participants' knowledge of Quality Improvement (QI) concepts and explain why QI should be thoughtfully integrated into PA curriculum
Health Care Spending per Capita

Adjusted for Differences in Cost of Living

Source: OECD Health Data 2009
* Japan data for 2006

Deaths Due to Surgical or Medical Mishaps per 100,000 Population

At the conclusion of this presentation participants will be able to:

1. Discuss the relationships between quality improvement, patient safety, and healthcare reform.

2. Review the new NCCPA requirements around performance improvement - continuing medical education (PI-CME).

3. Describe the rationale for introducing quality improvement concepts to physician assistant students.

4. Explore options for integrating quality improvement into the PA curriculum.
QUALITY IMPROVEMENT, PATIENT SAFETY
AND THE AFFORDABLE CARE ACT
What is Quality Improvement?

ISO definition (“Business” Model)
Actions taken throughout the organization to increase the effectiveness of activities and processes to provide added benefits to both the organization and its customers.

IOM definition (“Medicine” Model)
The extent to which health services provided to individuals and patient populations improve desired health outcomes. The care should be based on the strongest clinical evidence and provided in a technically and culturally competent manner with good communication and shared decision making.
Hospital tells of surgery on wrong side

By Stephen Smith

An experienced surgeon at Beth Israel Deaconess Medical Center operated on the wrong side of a patient this week, a serious medical mistake disclosed in an email that hospital administrators sent to staff members yesterday. State authorities are investigating the errant surgery, which has left the patient in critical condition.
What is Patient Safety?

Agency for Healthcare Research and Quality (AHRQ):
Freedom from accidental or preventable injuries produced by medical care.

World Health Organization (WHO):
Prevention of errors and adverse effects to patients associated with health care delivery.
1999...mistakes happen

“...Preventable medical errors in hospitals exceed attributable deaths to such feared threats as motor-vehicle wrecks, breast cancer, and AIDS.”

-Institute of Medicine (IOM, 1999), To Err is Human
2001... The “follow-up” report

Six Aims for Improvement
• 1. Safe
• 2. Effective
• 3. Patient-Centered
• 4. Efficient
• 5. Timely
• 6. Equitable
2010...Patient Protection and Affordable Care Act
National Quality Strategy will promote better health, quality care for Americans

1. **Better Care**: Improve the overall quality of care, by making health care more patient-centered, reliable, accessible, and safe.

2. **Healthy People/Healthy Communities**: Improve the health of the U.S. population by supporting proven interventions to address behavioral, social, and environmental determinants of health in addition to delivering higher-quality care.

3. **Affordable Care**: Reduce the cost of quality health care for individuals, families, employers, and government.

Value-Based Purchasing

• Links provider payments to improved performance by healthcare providers
• Holds providers accountable for cost and quality of care
• Goal is to reduce inappropriate care and identify and reward the best-performing providers
Sec. 10331 Public Reporting of Performance Information

Requires the Secretary to:

• develop a Physician Compare Website with information on physicians and other professionals participating in the Medicare PQRI

• implement public reporting of that information using quality and patient experience measures.
ACA Title III – Improving the Quality and Efficiency of Health Care

PART 1 – LINKING PAYMENT TO QUALITY OUTCOMES UNDER THE MEDICARE PROGRAM

- Sec. 3001 Hospital Value-Based Purchasing (VBP)
- Sec. 3002 Improvements to Physician Quality Reporting Incentive (PQRI)
- Sec. 3004 Quality reporting for LTC, SNF, Hospice, Psych
- Sec. 3006 Plans for VBP for SNF, home health & ambulatory surgical centers
- Sec. 3007 Value-based payment modifier under the physician fee schedule
- Sec. 3008 Payment adjustments for conditions acquired in hospitals (HAC)
- Sec. 3025 Hospital readmissions reduction program
“PA’s Roles Expected to Expand Under Value-Based Purchasing”

1. Shortage of physicians combined with higher emphasis on the provision of care outside the hospital
2. PAs in inpatient and procedure-based settings will play an important role in improving the overall care team’s performance.
3. Across all settings of care, PAs will play a crucial role in the delivery of outstanding patient experiences.

• September 6, 2012 JAAPA article by Sanjay K. Saha, MHS
RECERTIFICATION IN THE QI ERA
New NCCPA Recertification Process

- From a six-year to a ten-year PANRE cycle
- Still based on two-year CME cycles
- The first four CME cycles will involve the new process:
  - Each will require 100 hours of CME
    - 50 Category 1
    - 50 Category 2
  - 20 of the 50 hours of Category 1 CME must be:
    - Self-assessment CME
    - Performance Improvement CME (PI-CME)
  - During the span of these four cycles, at least two self-assessment and two PI-CME activities must be completed
- The fifth CME cycle will be like the old process
During each cycle, earn 100 CME credits including 50 Cat. I credits with 20 earned through self-assessment or PI-CME activities.

Complete at least two self-assessment and two PI-CME activities during this 8-year period.

Earn 100 CME credits including 50 Category I, and pass PANRE.
What is Self-Assessment CME?

An active process involving:

- conducting a systematic review of one’s performance, knowledge base, or skill set
- feedback to help you change the way you learn or practice

Example:

- American College of Physicians’ Medical Knowledge Self Assessment Program (MKSAP)
What is PI - CME?

An active process involving three steps:

1. **Comparison** of some aspect of practice to:
   - National benchmarks
   - Performance guidelines
   - Other evidence-based metric or standard

2. Development and implementation of a **plan for improvement** in that area

3. **Evaluation** of the impact of the plan by comparing the results from step 1 with the outcomes of step 2
PI – CME Examples

• American Academy of Family Physicians’ METRIC Program:
  • Currently 10 modules available:
    - Adolescent Immunization
    - Asthma
    - Childhood Immunization
    - COPD
    - Coronary Artery Disease
    - Depression
    - Diabetes
    - Geriatrics
    - High-Risk Adult Immunization
    - Hypertension
  • Each module offers up to 20 hours of CME and costs $25

• American Academy of Pediatrics’ EQIPPP Program
  • Currently 6 modules available with more coming on line soon
PI – CME Module Example

METRIC Hypertension Module

Step 1: Practice Assessment
- Complete practice assessment questionnaire, answering general questions about your practice

Step 2: Review patient charts (n=10)
- Use evidence-based practice performance measures

Step 3: Create an Action Plan
- Practice-based interventions based on the performance measures you need to improve
PI – CME Module Example

Step 4: **Implement** your Action Plan
- Minimum of one month using resources from METRIC

Step 5: **Re-evaluate** patient charts
- Typically, several months after initiating Action Plan
- Repeat practice assessment questionnaire
- Re-measure data from patient charts

Step 6: **Evaluate** for improvements based on interventions
- Compare data to baseline and reflect on practice experience
WHY INTRODUCE QI TO PA STUDENTS?
ARC-PA Standards

• B1.03 – “The curriculum must be of sufficient breadth and depth to prepare the student for the clinical practice or medicine.”

• B2.04 – “The program curriculum must include instruction in interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families and other health professionals.”

• B2.13 – “The program curriculum must include instruction in patient safety, quality improvement, prevention of medical errors and risk management.”
Why now?

• Are new grads prepared to implement and follow quality improvement practices?

• Are experienced PAs well positioned to become organizational leaders in the QI movement?
How do we plan to tackle this?

DIDACTIC:

CLINICAL:
The Model for Improvement

What are we trying to accomplish?
How will we know that a change is an improvement?
What change can we make that will result in improvement?

Act
Plan
Study
Do
Institute for Healthcare Improvement (IHI):

• An independent not-for-profit organization focused on improving care in all settings, from home to hospital.

• The IHI Open School for Health Professions:
  – Interprofessional educational community that gives students the skills to become change agents in health care improvement
  – Skills include quality improvement, patient safety, teamwork, leadership, and patient-centered care
  – Basic Certificate of Completion: Formal recognition for completing a set of online courses (16 total)
    • Has been implemented in medical professions schools and the healthcare workplace
IHI charges a modest subscription fee for health professionals who would like to complete the IHI Open School courses. Scholarships may be available based on need.

The courses are completely free for students, medical residents, university faculty who teach courses, and users from the Least Developed Countries. All other IHI Open School resources – including the Chapter Network – are free for all.

Take a Course Now

- MHO 101: Achieving Breakthrough Quality, Access, and Affordability
- PFC 101: Dignity and Respect
- L 101: So You Want to Be a Leader in Health Care
- PS 100: Introduction to Patient Safety
- PS 101: Fundamentals of Patient Safety
- PS 102: Human Factors and Safety
- PS 103: Teamwork and Communication
- PS 104: Root Cause and Systems Analysis
- PS 105: Communicating with Patients after Adverse Events
- PS 106: Introduction to the Culture of Safety
- QI 101: Fundamentals of Improvement
- QI 102: The Model for Improvement: Your Engine for Change
- QI 103: Measuring for Improvement
- QI 104: Putting It All Together
- QI 105: The Human Side of Quality Improvement
- QI 106: Level 100 Tools
- EPS1: Partnering to Heal: Teaming Up Against Healthcare-Associated Infections
- PH 101: Introduction to Population Health
What is the Model for Improvement?

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

Plan

Act

Do

Study
Step 1

What are we trying to accomplish?
• Set Aim
  – Time specific and measurable
  – Should define the specific population or system

How will we know that a change is an improvement?
• Establish Measures
  – Use quantitative measures to determine if a change leads to an improvement

What changes can we make that will result in improvement?
• Select Changes
  – Based on insights of those within the system OR
  – Creative thinking techniques OR
  – Borrowing from experience of others
The Plan-Do-Study-Act (PDSA) cycle to test changes in real work settings.

1. **Plan**
   - Objective
   - Questions and predictions (why)
   - Plan to carry out the cycle (who, what, where, when)

2. **Do**
   - Carry out the plan
   - Document problems and unexpected observations
   - Begin analysis of the data

3. **Study**
   - Complete the analysis of the data
   - Compare data to predictions
   - Summarize what was learned

4. **Act**
   - What changes are to be made?
   - Next cycle?
Step 2

• **Testing Changes (PDSA cycles)**
  • Change in the real work setting — by planning it, trying it, observing the results, and acting on what is learned.
    – Small changes, planning for multiple cycles

• **Implement Changes**
  – Learn from each PDSA cycle
  – Implement change on a broader scale

• **Spread Changes**
  – Disseminate successful change within the organization and beyond
LET'S DO A MOCK QI PROJECT
The case of Peter*

Peter, a patient with atrial fibrillation is placed on warfarin by his cardiology PA. Peter goes to clinic weekly to have his INR drawn. One week he does not get a call with his bloodwork results. The following week he is admitted to the hospital with a bleeding ulcer. His INR that night is 8.0.

What is the problem???

*(presented with permission from IHI)
Root Cause Analysis

Root Cause Analysis Basics

Symptom of the problem.
“The Weed”
Above the surface
(obvious)

The Underlying Causes
“The Root”
Below the surface
(not obvious)

The word root, in root cause analysis, refers to the underlying causes, not the one cause.
RCA - “Ask Why 5 Times” Technique

The simplest way to perform a root cause analysis is to ask why 5 times. In the case above, the answers might read as follows:

- Peter was admitted with a bleeding ulcer. WHY?
- His INR was high. WHY?
- His warfarin dose was incorrect. WHY?
- He was not seen in a timely manner. WHY?
- Patient was not notified of abnormal INR. WHY?
Peter’s case

- A team conducts an RCA. One root cause the team identifies is that the cardiology clinic does not have a specific method to make sure they reach all patients with INRs and communicate their results and actions promptly.
The RCA team findings

Which of the following is likely to have the strongest impact?

a) Assign more staff to the job of calling patients with their INR results.
b) Post signs reminding the staff to call patients with their INR results.
c) Work with the lab to automatically generate a list of patients who had INRs drawn that day and fax to the nurse responsible for patient follow-up.
d) Create a policy that specifies that patients with INRs must be called with their results within one week.
Now create your own QI project to improve patient care and health outcomes

Diagram:

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What change can we make that will result in improvement?

Circle:

- Act
- Study
- Plan
- Do
Other Ideas for Integrating QI into Your Curriculum:

• TeamSTEPPS
• Lean and Six Sigma Methodologies
• WHO Patient Safety Resources
• Patient Safety Videos
• Risk Management Lectures
• Mock QI Projects
Closing Definition

• Clinical Quality Improvement is an interdisciplinary process designed to raise the standards of the delivery of preventive, diagnostic, therapeutic, and rehabilitative measures in order to maintain, restore or improve health outcomes of individuals and populations.
Or, Put more simply...

Doing the right thing,  
the right way,  
at the right time,  
in the right amount,  
for the right patient,  
with no harm to the patient
Questions?

“To address this mistake we must use root-cause analysis. I’ll begin by saying it’s not my fault.”
References


• Varkey P. Educating to Improve Patient Care: Integrating Quality Improvement into a Medical School Curriculum. American Journal of Medical Quality. 2007;(2):112-116