Practical Guidelines for QI in Your Practice with Added Benefits

**Disclosure**

Sandra Jo Ehlers, M.D. has no relationships with commercial companies to disclose.

**Learning Objectives**

At the end of this presentation the participant will be able to:

1. Describe basic steps of a QI Project: identify need; implement change; measure effect; reassess.
2. Identify area in your practice that needs QI; apply this process.
3. Discuss “added benefits” of QI Projects: earn MOC credit; meet ACGME requirements for resident training.

**True Purpose**

• NOT to give you one more thing “TO DO”
• IS to give you a set of practical tools and guidelines
• Empower you: “AHA!”

**My Journey in QI & How it Led to One Very Important “AHA!” Moment**

• My career path
• Clinical Safety & Effectiveness (CS&E) Course—Cohort #9 (2011)  
  -----“Decreasing number of hours on High Frequency Nasal Cannula in PIMC (CSRCH)”, with Michelle Shepherd, RN
• Return to Outpatient Pediatrics (1/2012): application of skills  
  -----“12 Steps to Success—Reducing Patient Visit Time in Pediatric Residents’ Continuity Care Clinic” (2012-13)
• “Transition” of Pediatric Resident Clinic from CSR to RBG (6/2013)

**My Journey, con’t.**

• One formidable task: paper charts -> Electronic Medical Records (EMR).
• many difficult facets
• One challenge: correspondence from DME, Home Health & Therapy companies.
My Journey, con’t.

- long delays; insurmountable workloads
- found stacks of paperwork in drawers
- SOMETHING had to be done, but WHAT?!?!

YES, I DID, know what to do! YES, I DID have the tools. “AHA! Yes, I CAN”

My Journey, con’t.

- “AHA Moment”: utility of QI tools
- not just a “project”, but a real means to a solution.
- Implemented QI steps
- Reduced pending requests by 78% & through-put time by 54%; integrated paper medical records into new EMR process

This is what it looks like today.

Practical QI Basics

QI is a TEAM SPORT

TEAM

- Teams: all inclusive & represent all parties
- Non-Punitive approach
- Capitalize on strengths
- Encourage communication
- Foster respect
- Empower team members
- Increase ownership
Practical QI Basics

1. Identify a Need (Plan)
   - Brainstorm—capture all contributing issues
   - Affinity Sorting—sort and organize issues into categories
   - Fishbone/Cause and Effect Diagram—visualize how issues relate to one another and effect the process
   - Flowchart—outline current process; identify potential areas for change

   *** multidisciplinary team of dedicated individuals ***

2. Implement Change (Do)
   - Create AIM STATEMENT: choose one thing want to change
   - Create Survey Tool to gather data (if needed)
   - Gather Pre-Intervention (Baseline) Data
   - Analyze Pre-Intervention Data
   - Plan and implement interventions

   AIM SMART
   - Specific
   - Measurable
   - Actionable
   - Realistic
   - Timely
Implement Change (Do)

EXAMPLES OF AIM STATEMENT:

• Our team (your name)_____________________
  intends to ___________________________
  for(population)____________________ by (date)__________
  by (%,amount)_______________.
• We aim to decrease the number of hours pediatric patients <18months
  are on HFNC at the CSHCH PIMC by February 15, 2012 by 10%.

Practical QI Basics

3. MEASURE THE EFFECT (Study)

• Gather Post-Intervention Data
• Present the data in a meaningful way

Measure the Effect

Data Presentation

Line Graph

Data Presentation

Basics Applied Through Example

Practical QI Basics

4. CIRCLE BACK TO REASSESS (Act)

• Did the intervention bring about the change you wanted?
• If not, why not?
• What other issues did this process bring to light; i.e. what do
  you want to do next?
Basics Applied Through Example

• The example I will use is one of my first QI projects—the one I was asked to do when I came back to the outpatient clinic. Dr. Parra, who was our Division Chief at the time asked me to use the information I had learned in my CS&E course to help increase the efficiency in the Pediatric Residents Continuity Clinic.

• I will touch on the main steps, using the framework we have established.

• The first thing we did, was to form a multidisciplinary TEAM, with members representing the various areas of the clinic, to include Front Desk Staff, Nursing Staff, Faculty and Residents—every group that played a part in the patient’s clinic experience.

Practical QI Basics—Review

1. Identify a Need (Plan)
2. Implement Change (Do)
3. Measure the Effect (Study)
4. Circle Back to Reassess (Act)

Basics Applied Through Example

Identify Need: Increased Efficiency in Residents’ Continuity Clinic

• Team Brainstormed any/all causes that delayed patient flow—post it notes (one cause per note)
• Sorted causes into categories
• Organized and displayed on Fishbone/Cause & Effect Diagram
•Outlined current clinic process on Flow Chart

Fishbone/Cause & Effect Diagram

Team Brainstorming and Affinity Sorting
Basics Applied Through Example

2. Implement Change—

- Aim Statement:
  "We aim to reduce the Clinic Visit Time from Check-In to Dismissal by 30% at the Children’s Health Center Continuity Clinic, by February 28, 2013."
- Formulated Survey Tool; Collected Pre-Intervention Data.
- Groups specific to clinic areas (Front Desk, Nursing Staff and Faculty/Residents): tasked to analyze data and formulate area-specific interventions
- In-services: educate everyone about interventions
- Interventions were implemented for 3 months.

Our Interventions:

FRONT DESK—
- No "new" patient appointments for the first time slot
- Give known complex patients 2 appointment slots
- Only one teen sibling for Well Child Check on the same day
- Use a dry erase board to keep track of the number of patients each resident had registered.

NURSING STAFF—
- Bring patients back in such an order to maximize resident availability
- Appoint “Hall Monitor” to assist with flow

RESIDENTS—
- Triage patients ready for them; perhaps seeing a quick easy follow up prior to complex one, if both were ready at the same time
- Seeing each others’ patients if they are waiting for their own to be registered

Our Survey Tool

Survey Tool

**PLEASE DOCUMENT THE FOLLOWING TIMES AND INITIAL**

1. Front Desk starts check-in process @ ________.
2. Front Desk completes check-in process, chart placed in the black box @ ________.
3. Nursing Staff picks up chart from the black box @ ________.
4. Nursing Staff completes vitals/hearing/vision/etc. @ ________.
5. Nursing Staff places chart in the exam room door @ ________.
6. Resident picks up chart and prepares to go see patient @ ________.
7. Resident is ready to check out to Faculty @ ________.
8. Faculty has heard presentation and/or seen the patient @ ________.
9. Resident places the chart with orders at the Nurse’s Station or resident dismisses from room @ ________.
10. Nursing Staff picks up the orders and prepares for vaccines, blood draws, etc. @ ________.
11. Nursing Staff goes back into the exam room @ ________.
12. Nursing Staff is done and patient is discharged home @ ________.

Comments: ______________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Basics Applied Through Example

3. Measure the Effect

- Gathered our Post-Intervention data after the 3 months of interventions
- Plotted our data using Bar and Line Graphs
Basics Applied Through Example

4. Circle Back to Reassess—
   - Data Analysis showed a reduction in the total clinic visit time by 16%; ranging from 7% to 28% in the different clinic areas.
   - We did not meet our overall goal of 30% reduction; however, we felt that the insight we had gained and the empowerment of the staff were priceless.

Basics Applied Through Example

Yes! It is OK to say “Done is Better than Perfect” in Quality Improvement:
   - If you are striving for absolute perfection, you will become overwhelmed and frustrated and much more likely to give up.
   - This is where the PDSA cycle comes into play
     - continually tweaking the process
     - allows you to concentrate on different aspects that need correcting/improvement
     - happens over time.
   - THIS IS ESSENTIAL TO A SUCCESSFUL QI PROJECT
Basics Applied Through Example

Take Home Message: Continual Improvement Over Time

Basics Applied Through Example

There have been two large scale PDSA cycles to follow our initial QI project to increase clinic efficiency:

• 2013 — Second cycle led by Dr. Robert Sanders with resident participation
  Interventions:
  - Parent paperwork/vaccine records available to resident prior to visit
  - Team huddles
  - 2 rooms per resident
  Results:
  - 29% Reduction in both “Total Visit Time” and “Total Provider Time”

• 2014 — Third Cycle led by Dr. Janet Williams with resident involvement
  Interventions:
  - Teamwork Orientation/communication
  - 1:1 staffing of Resident to Medical Assistant
  - "Knock and Talk" action
  - 2 rooms per provider
  Results:
  - Reduced the average Total Clinic Day by 1.4 hours, or 14%

ADDED BENEFITS

Added Benefits (Return on Investments)

• PRIMARY GOAL:
  - Improve any outward process/accomplish the goal you set in your Aim Statement (be it improved efficiency, safer practices, leaner operations, etc.)

• INTANGIBLE EFFECTS:
  - Increased Teamwork
  - Improved Communications
  - Sense of Empowerment
  - Increased Mutual Respect and Understanding
  - Enhanced Job Satisfaction
  - Sense of belonging/valued

• ACGME (Accreditation Council for Graduate Medical Education)

• MOC (Maintenance of Certification)

ADDED BENEFITS

Added Benefits

ACGME REQUIREMENTS

As per ACGME requirements on QI, Residents must:

• Systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement [IV.A.5.c),(4)]

• Be integrated and actively participate in interdisciplinary clinical quality improvement and patient safety programs [VI.A.3.]
 Pediatric Grand Rounds - UT Health San Antonio

Added Benefits

ACGME REQUIREMENTS

UT Health San Antonio Pediatric Residency Program has instituted a formal curriculum consisting of:

• Five 2-hour QI education sessions; residents presenting their projects during final session
• Six QI projects—3 based in hospital setting and 3 in outpatient setting—residents select project and work alongside faculty mentors.
• Residents submit their projects in abstract and poster formats to present at local conferences.

Added Benefits

MOC Four-Part Structure

• Professional Standing (Part 1)
  Pediatrics hold a valid, unrestricted medical license.
• Lifelong Learning and Self-assessment (Part 2)
  Pediatrics assess and enhance knowledge in areas important to their practice using activities developed by the ABP and other organizations such as the American Academy of Pediatrics (AAP).
• Cognitive Expertise - Secure Exam (Part 3)
  Pediatrics pass a secure examination administered at testing centers worldwide.
• Improving Professional Practice (Part 4)
  Pediatrics participate in a range of ABP-approved quality improvement (QI) projects designed to assess and improve the quality of patient care.

*The MOC four-part structure is the same for general pediatrics and pediatric subspecialties.

website: https://www.abp.org

Added Benefits

MOC PART 4

SMALL GROUP QI PROJECT

• Group of 1-10 pediatricians
• Targeting pediatricians that want to address a quality gap in their practice or setting
• ABP provides a guide and multiple resources to walk you through the process
• Application Checklist
• Attestation of Meaningful Participation Form for each member to fill out
• MOC Part 4 Points earned—25 points
• Processing Fee –$75

QI Project Requirements

• A QI Project that sought to improve a known gap in quality, not acquire new knowledge.
• It had quantified goals within a specific time frame.
• Measures were used to track the progress of the QI project.
• At least 3 points of de-identified aggregate data were gathered over time.

Measures:

• Elements tracked through this project
• Graphic displaying AT LEAST 3 points of data over time (Pre, Post, Sustain OR Baseline, Improvement 1, Improvement 2)

Attestation: This will be required for each physician seeking credit.

• ABP ID#
• Birth date
• Email Address
• Completed attestation form

Summary

1. We have outlined the Basic Steps of a Practical QI Project
   • Identifying a Need (Plan)
   • Implementing Change (Do)
   • Measuring the Effect (Study)
   • Circling Back to Reassess (Act)

   While emphasizing the importance of:
   • PDSA cycle and Continual Improvement
   • Teamwork

2. You now have the tools you need to have your own “AHA” moment, and to improve your corner of the world!

3. We discussed the multiple benefits of QI, including ways to earn MOC credit while improving your own world.
Soapbox Moment

- By virtue of our profession, we strive for quality in the care we give
- Imperative that we maintain excellence and take active roles in QI initiatives
- Must embrace this opportunity and claim ownership of this responsibility
- By accepting this, we maintain leadership and guide changes in positive and meaningful ways

Thank you