Creating a Ten Steps QI Framework--in 10 Easy [or sometimes hard] steps

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New Hampshire’s Ten Steps to Successful Breastfeeding: Step by (baby) Step
Objectives

At the end of this 30 minute session, the participant will be able to:

– Conceptualize and operationalize the Ten Steps as areas for rapid-cycle quality improvement (in 10 steps)
– Compare and contrast different QI frameworks that are commonly used in healthcare institutions, in order to speak QI language
What is improvement?

- Clinical improvement is change from the current system to a system that is more effective, patient-centered, timely, efficient, equitable and safer.

- IMPROVEMENT ≠ CHANGE

- CHANGE ≠ IMPROVEMENT
How do you know when a change is an improvement?

- MEASUREMENT

- Improvement and measurement are simultaneous
Quality Improvement Team

- Core group of < 10 people
- People who are doing the “frontline” work
- People who have the authority to make changes
Step 1: Pick a Topic

- What is your vision?
- What do you want to improve?
  - Gather data about your own practice
    - Discharge feeding data (TJC)
    - Supplements
    - Pacifiers
    - Benchmarking
Step 2: Define an aim

- An aim defines a goal, a population, and a time period.

  - Example: “We will decrease pacifier use by breastfed newborns* to at most 20% for Happy Hospital newborns in the next three months.”
Step 2: Define an aim

- An aim deals with a process

- Identify eligible patients
- Discuss pacifier appropriateness
- Limit pacifier distribution

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Step 3: Pick a measurement

# breastfed newborns w/paci
- # w/ medical indications

______________________________ = % paci usage

Total # breastfed newborns
Step 4: Map the process

1. Family asks for pacifier
2. Nurse to room
3. Nurse brings pacifier

4. Pacifier left in Bassinette from circ
5. Provider rounds
6. Provider does not address
Step 5: Brainstorm!

- Patient calls for pacifier
- Nurse to room
- Nurse provides BF education
- Alternate calming techniques
- Pre-admit packet addresses pacifiers
- Pacifier left in Bassinette from circ
- Provider rounds
- BF physiology explained
- Family tosses pacifier
- Provider removes pacifier
- LNA removes pacifier
Step 6: Identify process measures

- Real time measurements as the process is going along.
- Good process measures are easy to record and review
  - Example:
    - Number of pacifiers out of supply bin each week
    - Number of pacifier requests successfully dissuaded
    - Number of families who know proper pacifier Introduction time
THE PDSA CYCLE

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Step 7: Plan the process change

- Map the new process

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Step 7: Plan the process change

- Define new work roles for frontline workers if necessary
- Communicate the change
Step 8: Do the new process

- Gather data about how it is going

- Stick with the new process
  - Even failures give valuable information
  - Why is it not working?
Step 9: Study the data

- All data needs context for interpretation
  - Run Charts
  - Control Charts
  - Analysis of Means
  - Benchmarking
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Step 10: Act on the Data

- Revise the process based on feedback
- Expand the scope
- Plan the next steps
  - Example: “The week we had a 15% pacifier in crib rate, Mary Smith worked as the LNA 5 nights in a row. She always tells mothers that using a pacifier might lead to more painful breastfeeding. Let’s put that statement into our standard education.”
Step 7: Plan the process change

- Map the new process

Patient calls for pacifier → Nurse to room → Nurse discusses → Nurse plays Calming video

Talks about pain

Newborn leaves Procedure room With paci → LNA removes paci → Baby back to room Without paci

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Step 8: Do the new process

- Gather more data
Step 9: Study the Data

% exclusive breastfeeding

PDSA 1  PDSA 2  PDSA 3

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Step 10: Act on the Data

- Quality improvement becomes continuous when PDSA cycles are repeated.

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NEW HAMPSHIRE’S TEN STEPS TO SUCCESSFUL BREASTFEEDING: STEP BY (BABY) STEP
Types of QI frameworks

• Microsystems

Process mapping, stats and measurement

• IHI

More time focused, outcomes

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Clinical Microsystems

- **Clinical** reflects the essential priorities of health and care giving
- **Micro** reflects the smallest replicable unit of health care delivery
- **System** reflects that this frontline unit has an aim, specific personnel, and specific function.
- The clinical microsystem is “the sharp end,” and “the place where patients, families, and caregivers meet.”
- It is the **locus of value creation** in health care
High performing clinical microsystems

Leadership
- Leadership
- Organizational support

Information & Information Technology

Staff
- Staff focus
- Education & Training
- Interdependence of care team

Performance
- Performance results
- Process improvement

Patients
- Patient Focus
- Community & Market Focus

New Hampshire’s Ten Steps to Successful Breastfeeding: Step by (baby) Step
Another framework for microsystems

Better patient (population) outcome

Better professional development

Better system performance

Everyone

New Hampshire’s Ten Steps to Successful Breastfeeding: Step by (baby) Step
Generalizable Scientific evidence + Particular Context → Measured Performance Improvement

Generalizable Scientific evidence:
- Clinical practice guidelines
- Meta-analysis
- Randomized controlled trials

Particular Context:
- Microsystems
- Culture

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Batalden (2003)
Types of QI frameworks

- LEAN
- Six Sigma
Types of QI frameworks

- LEAN Six Sigma
Conclusions:

- Change becomes improvement through measurement.
- Improvement is done as a team.
- Improvement is the result of repeated PDSA cycles leading towards an aim.

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RESOURCES ON THE WEB

www.ihi.org/IHI/Topics/Improvement/ImprovementMethods/Tools/

http://www.ihi.org/offerings/IHIOpenSchool/Pages/default.aspx

www.aqaalliance.org/files/RevisedStarterSetApril2006.doc

www.qualityforum.org/

www.ama-assn.org/ama/pub/category/4837.html

http://clinicalmicrosystem.org/
CREATE YOUR AIM STATEMENT

“We aim to ___________(goal)__________________________
for __________(target population)__________________ in
__________(time frame)__________________.

The expected benefit is ________________.

It is important to work on this now because ___
_________________________________________.

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