Quality Terms

- Quality Assurance (QA)
- Quality Improvement (QI)
- Performance Improvement (PI)
- Quality measures (QM)
- Quality Indicators (QIs)
- Continuous Quality Improvement (CQI)
- Total quality management TQM
What is QA?

• Donabedian – Father of Quality Medicine
• How does Donabedian define QA?
• How does that different from QI or PI?
• What were Donabedian’s “components” of quality?
Improvement of the quality of care provided is and always has been the fundamental goal of health care quality assurance

QAPI
QA vs PI/QI

• **QA** - demonstrate service or product fulfills or meets a set of requirements or criteria.
  - Actual processes/outcomes are compared to pre-define criteria or pre-selected requirements

• **PI/QI** - enhancement of product or service.
  - When enhancements are ongoing or occur repeatedly over time, process is known as continuous quality improvement
Domains of Quality

Donabedian
- Efficacy
- Effectiveness
- Efficiency
- Optimality
- Acceptability
- Legitimacy
- Equity

IOM
- Safety
- Effectiveness
- Efficiency
- Equity
- Patient Centeredness
- Timeliness
Define SPO

• Structures – foundational elements
  • Human & material resources
  • Organizational characteristics
• Processes – what we do
  • Diagnosis, treatment, education
  • Policies & procedures
• Outcomes – what happens
  • Desirable (& undesirable) changes in health status
  • Satisfaction

Structure → Process → Outcome
Bakerjian Model
SPO Conceptual Framework

**STRUCTURE**
- **Resources**
  - Trained staff
  - Sufficient treatment supplies
  - Adequate time
- **Clinical Info Systems**
  - Appropriate documentation forms
- **Facility Characteristics**
  - Culture supports QI/PI
- **Organizational Support**
  - Administrative support for process
- **Patient characteristics**
  - Risk Factors
  - Complicating diagnoses
- **Policies & Procedures**
  - System-wide policy for management of pressure ulcer
  - Evidence based procedures
  - Consistent with Federal regs
  - QI/PI System Structure/Guidance

**PROCESS**
- **Resources**
  - Pressure Ulcer education
- **Care Coordinator**
  - Integration between departments
  - Coordination with hospitals
- **Collaboration**
  - Multi-disciplinary care
  - Team-work
- **Communication**
  - Internal/External
  - Standing Committees – weight loss, skin
- **Transparency**
  - Truthful reporting
- **Quality Monitoring/Sustainment**
  - Planning
  - Monitoring
  - Accountability
- **Integrated QI Systems**
  - Method – Focused PDCA,
  - Measures
  - Tracking

**OUTCOMES**
- **Safety**
  - Improved Patient Safety Culture
  - Lower incidence of pressure ulcers
- **Effectiveness**
  - Lower prevalence
  - Faster healing
- **Efficiency**
  - Decreased system waste - supplies
  - Decreased cost
- **Equitability**
  - Access to appropriate level care
  - Equal access for all beneficiaries
- **Timeliness**
  - Full assessment within 8 hrs
  - Timely communication with PCP
- **Patient Centeredness**
  - Patient/family involvement
  - Patient driven/Satisfaction
  - Culturally, linguistically appropriate care

Bakerjian 2006 SPO Model Adapted from Donabedian A; *Evaluating the quality of medicine*; Millbank Qtly44(3) 166-203) and IOM “Aims for Improvement”; *Crossing the Quality Chasm* (2001), Academies Press
Quality/Process Improvement
Types of QI/PI

- TQM/CQI
- Six Sigma
- Lean Six Sigma
  - Lean methods
  - Six Sigma approaches
- PDSA/DMAIC
- Rapid Cycle Performance Improvement
- ISO 9000
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<th>Plan</th>
<th>Do</th>
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<td>Data measurement and</td>
<td>Implement the change and</td>
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<td>process change</td>
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<td>Maintain the change</td>
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Continuous Quality/Performance Improvement

• Systematic use of process & outcome data to improve results
  • Improve process
  • Make process more consistent (reduce variation)
  • Outcomes will improve
The way to actually know there is a problem is to identify potential places where a problem COULD occur based on known standards of care.

IMPLEMENT A QI PROJECT
12 Steps to QI

1) Identify important QI problem – Set Goal
2) Assemble the team
3) Identify a champion
4) Gather leadership support
5) Conduct a root cause analysis
6) Design measurable intervention
7) Establish achievable & time limited goals
8) Implement the plan
9) Collect data
10) Evaluate the data
11) Revise or continue the plan
12) Continue collecting data
EARLY STEPS
Identify Important Issue

- How to identify a problem
  - Survey
  - Complaints
  - Staff identified
- What needs to be improved immediately?
- Set priorities
Assemble the Team

• Multidisciplinary
• Representative
• Knowledge base
Identify a Champion

- Who will “rally the troops”?
- Who feels passionate about this issue?
Leadership Support

• QI projects will not succeed without leadership support
  • Permission to take staff off duty
  • Protected time for meetings
  • Support in collecting data
  • Support to recognize success
  • Support in desire to “respond” to findings
Goal Setting

• Have clear reason why this goal is very important
  • Are we really willing to do what it takes to make this change?
  • Is this a high risk, problem prone issue?
  • Is this the most important quality issue now?
  • Are there other reasons why this goal is important?
  • Will we really be & celebrate when we achieve this goal?
Goal Setting: Set SMART Objectives

- **Specific** (How many, how much?)
- **Measurable** (Need data collection)
- **Actionable** (Can you control outcome?)
- **Realistic** (but also set a *stretch* goal that challenges you to get going right away!)
- **Time limited** (Set a target date)
Complexity comes free, its simplicity you have to work for...

ROOT CAUSE ANALYSIS
I'm going to need a little more for the root cause than, Who'da thunk.
Root Cause Analysis (RCA)

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.
Fishbone Diagram
(cause and effect)

Equipment/Materials
- Cause
- Cause
- Cause

Policies, Processes
- Cause
- Cause

Human Factors
- Cause
- Cause

Environment
- Cause
- Cause

Effect

Why? because...
Why? because...
Why? because...
Why? because...
Steps to Using a Cause and Effect Diagram

Define the Effect - Be specific.

Choose Categories:
  Fishbone template is set up with most common set of categories - You can add or remove categories based on your specific case

Brainstorm Possible Causes:
  Using fishbone diagram while brainstorming

Ask Why?:
  You really want to find the root causes
  Use the 5 Whys technique: asking "Why?" or "Why else?"

Investigate:
  Now that you've come up with possible causes, it is time to go gather data to confirm which causes are real or not.
“The goal is to transform data into information, and information into insight”.... Carly Fiorina

MEASUREMENT AND DATA COLLECTION
Measurable Intervention

- Can you measure the outcomes of the intervention
  - Systematic
  - Reliable
  - Valid
- Does the measure tell you what you want to know?
Rapid Cycle Continuous Quality Improvement

• Focus on “just enough data”
• Focus on action and learning-- “what change can I make today that will make a positive impact?”
• Focus on small scale trials before widespread implementation
• Create learning organizations with involvement of all staff in improving outcomes
WHERE TO GET DATA...
Data Collection Issues

- What data to collect
  - Does it answer the question?
  - Can it be found
- How to collect it
- Who collects data
- Ensuring standardization - reliability
  - Tools
  - Training
Data Sources

- Charts
- Policies, procedures, standards
- Observations
- Interviews
- Surveys
- Secondary Data
Types of Data

- Qualitative
  - Experiences
  - Observations
  - Expert panels
- Quantitative
  - Numbers and counts
Data Collection for QAPI

- Start with baseline
- Establish process for “audits”
  - Develop audit tool
  - Develop tool for reporting
- Timing of audits
- Be realistic in data collection
Where to get ideas, data and measures

- Advancing Excellence
  - [www.nhqualitycampaign.org](http://www.nhqualitycampaign.org)
- National Patient Safety Goals
- MDS reports (QI/QMs)
- National Quality Forum (NQF)
  - [www.qualityforum.org](http://www.qualityforum.org)
IMPLEMENT THE PLAN
Plan Implementation

- Educate staff prior to implementation
- Follow up regularly
- Provide feedback
DATA EVALUATION
Interpretation Challenges

- Cannot always assume cause and effect
- Results may be negative
- Results may be positive
- Results may be “mixed”
What Next?

- If data outcomes improve – continue the plan
  - Expand to other units
  - Expand to add more data
- If data outcomes poor – consider revising the implementation plan
Continue Data Collection

- Continue collecting data monthly for at least 6 months after it is stable
- Reduce to quarterly for 12 mos
- Reduce to semi-annually
- Reduce to annually
Timing

- Most QI projects take a minimum of 6 mos to show improvement
- QI takes at least a year of ongoing data collection for stability
QUESTIONS, THOUGHTS...