The George Washington University Hospital & Graduate Medical Education

Quality & Patient Safety
Recap of Previous Discussions

• September 2013
  – Culture of Safety
  – Just Culture
  *Reporting errors

• December 2013
  – Communication
    • Critical language
    • Hand-offs
    • Verbal vs. Non-verbal communication
  – Patient perception
Human Error

Product of Our Current System Design and Behavioral Choices
Manage through changes in:
- Choices
- Processes
- Procedures
- Training
- Design
- Environment

At-Risk Behavior

A Choice: Risk Believed Insignificant or Justified
Manage through:
- Removing incentives for at-risk behaviors
- Creating incentives for healthy behaviors
- Increasing situational awareness

Reckless Behavior

Conscious Disregard of Substantial and Unjustifiable Risk
Manage through:
- Remedial action
- Punitive action

Console
Coach
Punish
Case of the Month

- **Case Summary**
  - Colchicine 6mg instead of 0.6mg
  - Amlodipine 10mg vs Amiloride 10mg
  - Radiology exam without an order

- **Trends**
  - Many responses focus on individual accountability
  - Focus on a punitive response to the error
February Case of the Month

- Patient admitted with cough and shortness of breath. In addition to being treated for pneumonia, patient was placed in an isolation room to r/o TB. As a result, the door was closed causing limited visibility of the patient. The patient was assessed as a high fall risk and appropriate interventions were put into place. The patient was informed to utilize the call light whenever she needed to get out of bed. Throughout the day, the patient had been utilizing the call light for assistance. Shortly after the patient’s family member left, the patient attempted to get out of bed unassisted. The patient was found on the floor with the bed alarm going off. Following a complaint of shoulder pain, it was found that the patient had sustained a clavicle fracture as a result of the fall.

In review of this event, it was determined that the Medicine team had consulted Geriatrics the morning of admission. Geriatrics, having had previous encounters with this patient, recognized her high risk for falls and had set up a home caretaker for assistance with activities of daily living and safety. This information was never communicated to the nursing staff at the time of admission and additional safety measures (safety sitter) were never put in place.
Traditional Research

- Randomized Control Trial
- Cohort Study
- Null hypothesis
- Blinding
- Confounding variables
Rapid Response Teams

- Only 10-15% of non-ICU patients survived cardiac arrest
- Rapid Response teams were created
- Thought to improve teamwork, reduce staff anxiety, decrease code blues, and possibly reduce mortality
- MERIT trial (2005): RRT had no beneficial effect
  - Cluster randomized prospective trial
  - Study was underpowered
  - Potentially cross-contaminated
  - Claimed to be a negative trial but inconclusive at best
- Quality data is not well measured when using classic science research techniques

# Measuring for Research vs. Quality

<table>
<thead>
<tr>
<th></th>
<th>Measurement for Research</th>
<th>Measurement for Process Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td>Discover new knowledge</td>
<td>Bring knowledge into practice</td>
</tr>
<tr>
<td><strong>Tests</strong></td>
<td>One large blind test</td>
<td>Many sequential observable tests</td>
</tr>
<tr>
<td><strong>Biases</strong></td>
<td>Control for as many biases as possible</td>
<td>Stabilize the biases from test to test</td>
</tr>
<tr>
<td><strong>Data</strong></td>
<td>Gather as much as possible</td>
<td>Gather enough to learn and adjust for new cycle</td>
</tr>
<tr>
<td><strong>Duration</strong></td>
<td>Long periods of time</td>
<td>Short duration to accelerate change</td>
</tr>
<tr>
<td><strong>Examples</strong></td>
<td>Comparative efficacy of treatment, Clinical outcomes*</td>
<td>Improving cycle time (throughput, turn-around-time, etc.), Waste reduction, Clinical outcomes*</td>
</tr>
</tbody>
</table>
Quality Improvement

• Traditional Methodologies
  – Plan, Do, Study, Act (PDSA)
  – Lean & Six Sigma
  – Root Cause Analysis (RCA)
  – Failure Modes & Effects Analysis (FMEA)

• Is it important to choose the correct methodology?
Model for Improvement Questions

• Aim
  – What are we trying to accomplish?
  – Be specific: How good? By when? For whom?

• Measures
  – How will we know the change is an improvement?
  – Outcome measures
  – Process measures
  – Balancing measures

• Changes: What changes can we make that will result in an improvement
Components of a Successful PI project

- Define your problem
- Forming your Team
- Setting Aims
- Establishing Measures
- Understanding Root Cause
- Selecting Change
- Testing Changes (PDCA)
- Implementing Change
- Celebrate Successes
PDSA Cycle

- Tests should be small and specific
- Predict what you would do if the test succeeds
- Each test should influence the next one
- Expand conditions if a test will work under different circumstances
- Results should evaluate if a test is promising

Root Cause Analysis

- Systematic approach to understanding the causes of an adverse event and identifying system flaws that can be corrected
- Retrospective
- Not appropriate in cases of negligence or willful harm
- Important to group contributing factors into categories
- Focus on system causes, not blame
Steps of a Root Cause Analysis

- Identify what happened
- Determine what should have happened
- Determine causes “ask why five times”
- Develop causal statements
- Generate a list of recommended actions to prevent recurrence of this type of event
- Implement recommended actions
- Write a summary and share it
RCA categories

- Patient Characteristics
- Task Factors
- Individual Staff
- Work Environment
- Organizational & Management Factors
- Institutional Context
- Team Factors
Examples of Current Projects

- Postoperative hip & knee infections
- *Door-to-balloon* time for STEMI patients
- ED Boarders with a focus on improving transition of care
- Physician-Nurse communication
Future Projects - Ideas to Consider

• Midas report trends
  – Adverse Events
  – Near Misses

• ABIM’s Choosing Wisely Campaign

• Clinical outcomes (readmissions, HAIs, etc.)

• Benchmarking – successful projects at similar institutions
Choosing Wisely

“An initiative of the ABIM Foundation, Choosing Wisely is focused on encouraging physicians, patients and other health care stakeholders to think and talk about medical tests and procedures that may be unnecessary, and in some instances can cause harm.

To spark these conversations, leading specialty societies have created lists of ‘Things Physicians and Patients Should Question’ — evidence-based recommendations that should be discussed to help make wise decisions about the most appropriate care based on a patient’s individual situation.”

www.choosingwisely.org
Why is change so hard?

Good is the enemy of great.....

vs.

Good Enough + Change is Difficult = No Change
Eight Steps to Transforming Your Organization

- Establishing sense of urgency
- Forming a guiding coalition
- Creating a vision
- Communicating the vision
- Empowering others to act on the vision
- Planning for and creating short-term wins
- Consolidating movements and producing more change
- Institutionalizing more approaches

Effective Guiding Coalitions

• Include **ALL** stakeholders
  – Physicians – residents, attendings
  – Nurses
  – Techs
  – Transport staff
  – Rehab therapists
  – Case management
Practice Innovation Initiative

• Rewards resident physicians for innovative approaches to improving care of patients
• Focus areas include:
  – Innovation in Quality Improvement/Patient Safety
  – Innovation in Care Transitions
  – Innovation in Communication & Hand-off
  – Innovation in Reducing Disparities
  – Innovation in Patient Experience
• A total of three (3) awards will be granted
  – Priority will be given to those that are (1) multi-disciplinary in nature and (2) potential impact on clinical outcome improvement
Practice Innovation Initiative

- **Timeline:**
  - Application due no later than May 1, 2014
  - Winners will be notified at Resident Appreciation Day on May 23, 2014
- **Winner(s) will receive a monetary stipend and travel expenses to present at a conference**
- **Innovation Day 2015**
  - Showcase clinical practice innovation
  - Sponsored by GWUH and OCPI
  - Provides 2014 winners an opportunity to present their project
  - Will feature presentations, moderated panel discussion & guest speaker(s)