Making Sense of the Quality Framework for Nursing Students

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QSEN National Forum

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Describe a framework developed for a pilot to introduce baccalaureate nursing students to quality improvement concepts.
The Pilot

Goals
1. Informal Post-Conference (90 minutes)
2. Big-Picture View
3. Create Visual Teaching Tool
4. Include Key QI Concepts:
   a. Regulatory Oversight
   b. The Organization
   c. QM Department
   d. Quality Improvement

Purpose is to connect all 4 Parts
Figure. The Quality Framework within a Healthcare Organization

### Part I: Regulatory Oversight

- The Joint Commission
  - "Voluntary? WHAT" vs. "HOW"
  - Focus on Safety
  - Who/When/Notice
  - Chapters/Standards/EPs/Scoring
  - Method: TRACERS

### Part II: The Organization

- Chief Quality Officer
- Readiness Coordinator
- Patient Safety
- Risk Manager
- Systems Redesign
- Support Staff
- Infection Control & Prevention
- Utilization Review

### Part III: Quality Management

- Patient Flow? Staff & Patient Satisfaction?
- Severity of Illness
- Intensity of Service
- 3rd Party Reimbursement
- Utilization MGMT

### Part IV: Quality Improvement

- Improvement Processes
- Internal/External Measures

<table>
<thead>
<tr>
<th>Improvement Processes</th>
<th>Internal/External Measures</th>
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</thead>
<tbody>
<tr>
<td>System Redesign</td>
<td>Performance Measures</td>
</tr>
<tr>
<td>Microsystems Redesign</td>
<td>Patient/Staff Satisfaction</td>
</tr>
<tr>
<td>Lean Six Sigma</td>
<td>NDNQI</td>
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<tr>
<td>Quality Work/Councils</td>
<td>Project Outcomes</td>
</tr>
<tr>
<td>Dashboards/Control Charts/Data Analysis</td>
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</tbody>
</table>

- MACROSYSTEM
- MESOSYSTEM
- MICROSYSTEM

- Met the Aim or Benchmark? Yes or No

- BSN Essentials & QSEN
(Part I) Regulatory Oversight

Many Oversight agencies...

Purpose?
Outcomes?

The Joint Commission (JC)
*Logistics
*Scoring
*Tracer Methodology

*Interprofessional training is needed on QI/Safety:
1. Safety
2. Effectiveness
3. Patient-Centeredness
4. Timeliness
5. Efficiency
6. Equity

JC: Sentinel Event Stats- First 3Qts-2010 (about 270 days)
- Unintended retention of foreign body (91) **EVERY 3 Days**
- Wrong-site surgery (66) **EVERY 4 Days**
- Operative/Post-op complications (54)
- Delay in Tx (54)
- Suicide (47)
(Part II) The Organization

Regulations Impact the Entire Organization

MICROSYSTEM

Mesosystem

Macrosystem

QSEN & BSN Essentials
(Part III) The QM Department

Credentials & Certification

Roles

UR/UM and Case Management

InterQual Criteria (handout)

– Admission & Continued Stay Review

– Severity of Illness

– Intensity of Service

Link between regulations, the organization, QI and QM using UM/UR
(Part IV) Quality Improvement

Systems Redesign
Microsystems Redesign
Lean Six Sigma

*Lean* (Toyota-1990’s) GOAL: Eliminate waste, efficiency, customer value

*Six Sigma* (Motorola-1980’s) GOAL: Remove defects, minimize variability

Quality Improvement (Unit Based Councils)

Data/Dashboards/Benchmarks

Organization Performance Measures/NDNQI
PDSA

Sound like a familiar process?

Link between QI, regulations, the organization, & QM
# Undergraduate Pilot Findings

<table>
<thead>
<tr>
<th>Time</th>
<th>Groups and Modifications</th>
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</thead>
</table>
| **Spring-2010** (90-minutes) | 4 Groups: (n=30)  
  Anecdotal Outcomes:  
  No Formal Evaluation  
  Minimal time to discuss data  
  Student Feedback – level dependent |
| **Fall-2010** (120-minutes) | 1 Group (n=8)  
  Modifications:  
  Mainly ↑ Time  
  Framework edited, no formal evaluation  
  Student Feedback-all positive/use slides |
| **Spring-2011** (120-minutes) | 2 Groups (n=15)  
  Modifications:  
  Informal with slides  
  Framework edited to current version  
  Evaluation process |
Student Evaluation (Spr-11)

Pre-Post Pilot Participant Self Reported Change in QI Knowledge, Skills & Attitudes
Lickert Scale where 0 is lowest and 10 is highest

<table>
<thead>
<tr>
<th>Undergraduate¹</th>
<th>Group 1 (n=7)</th>
<th>Group 2 (n=8)</th>
<th>Groups 1&amp;2 (n=15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Pilot Range</td>
<td>0-2</td>
<td>0-4</td>
<td>0-4</td>
</tr>
<tr>
<td>Post-Pilot Range</td>
<td>3-7↑</td>
<td>6-8↑</td>
<td>3-8↑</td>
</tr>
<tr>
<td>Pre-Pilot Mean</td>
<td>1.3</td>
<td>2.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Post-Pilot Mean</td>
<td>5.3↑</td>
<td>7.5↑</td>
<td>6.4↑</td>
</tr>
</tbody>
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¹N375-Transitions (Last Semester Undergraduate Seniors)

Summary Evaluations
Faculty Presentation
Clinical QI Adjuncts

Consider observational experiences differently

Consider formal papers differently
# Curricular Considerations

## Using the QI Framework

<table>
<thead>
<tr>
<th>Sophomore Sequence</th>
<th>Junior Sequence</th>
<th>Senior Sequence</th>
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</thead>
<tbody>
<tr>
<td>Curriculum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N222 Regulatory &amp; Organizational Content</td>
<td>No Curricular Content</td>
<td>N374 QM Department &amp; QI/Data Content</td>
</tr>
<tr>
<td>Clinical</td>
<td>Clinical</td>
<td>Clinical</td>
</tr>
<tr>
<td></td>
<td>All courses with emphasis on observational experiences on QI/Microsystem teams. (Interprofessional)</td>
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Summary

Significant Gaps Exist

Student Observations
Organizational Expectations
Faculty Expertise
Operationalizing QSEN

Next Steps

Curricular Revisions
Clinical Partnerships
(e.g. DEU Model)
Do We Need a QI Train the Trainer Program?
(e.g. ELNEC)
Co-QIM (Curriculum on Quality Improvement Methods)
Interprofessional in scope/Faculty centered
THANK YOU!

Comments?
Questions?