A Systematic Approach to Process Improvement
Gregory J. Walker, FACHE
President & CEO
December 8, 2014

A multi-year cultural change journey through leadership and teamwork

Session Objectives

1. Describe a systematic executive led approach to process improvement (branded Operations Excellence).
2. Understand the key success factors in leading this cultural change initiative.
3. See the results achieved by engaging the Health System in this journey.
Organizational Overview

- 178 bed non-profit acute care hospital
- Located in the seacoast area of New Hampshire
- 2300 employees, 1700 FTEs
- 300 member medical staff
- Clinical Affiliations
  - Massachusetts General Hospital
  - Children's Hospital at Dartmouth
- Regional Cancer Center
- 50,000 Emergency Room visits
- 7,000 Admissions
- 1,100 Births
- “A” Bond Rated

Our Quality Journey

  - Successful but can be very slow

  1. Reducing Mortality
  2. TCAB - Transforming Care at the Bedside
  3. ED Flow
  4. 100,000 Lives Campaign
     - Enthusiasm and buy-in from medical staff and clinical staff

- What happened next?
Board Approved New Vision for our System in 2008

Be the highest quality, cost-effective integrated healthcare system in New Hampshire and Southern Maine

What do we need to do differently?

Our Quality Journey

- Test Lean Six Sigma utilizing outside consultant

- 2010 - 2011: 21 Lean Six Sigma projects
  1. Reduce Stroke/TIA Lab turnaround time
  2. Reduce ER Door to Triage time
  3. Improve Hand-Off Communication
     - Benefits of Quality, Satisfaction, and Cost
     - Created organizational "pull"
     - Engagement
     - Clinical and non-clinical processes

- Methodology and toolbox worked for us

Explored various approaches and selected Lean Six Sigma
Operations Excellence

• 2012 - Present: Branded “Operations Excellence”
  • Top down, organizational wide, strategic cultural transformation initiative.
  • A mind-set and thinking process on how we orient to project work and problem solving:
    o The way we get things done, data driven
    o Clearly define projects up front and in measurable terms
    o Efficient project execution and sustain the gains
  • Self-funded (2012 – Present)
    • Financial Value $5.5MM (Vetted by Finance)
    • Deployment Costs $1.5MM
    • ROI >3.6
      - Conservative, only count financial value for 1 year
      - Approximately 40% of projects have measured financial value

Operations Excellence is the outcome we want to achieve

Operations Excellence

• Standard methods and a single tool box to successfully (on-time and meeting goal) complete projects.

• “Problem Solving” Projects: Utilize Lean Six Sigma methods and tools:
  o Reduce variability and waste and eliminate defects

• “Known Solution” Projects: Utilize a standard Project Management method and tools:
  o Process to manage a project with a known solution to achieve its desired outcome on time

Use the right tool for the job - avoid square peg in round hole
Operations Excellence

**Leadership Commitment to Cultural Change Journey**

- Pick a methodology and tools and stay with it
- Establish clear measures of success (People, Projects, Results)
- Constantly monitor progress utilizing a monthly dashboard
- Hold leaders accountable
  - Own targets and timeframe for projects (priority)
  - Regardless of cause
- Create alignment and make it meaningful
  - Chief Performance Officer is a member of the Executive Team
  - Link OE accountability to compensation
    - Executive bonus for OE is 20%
    - Senior Management bonus is based on measurable goals
  - Champions and Belts - Rewards, Recognition, Celebrations

Success starts and ends with leadership commitment

---

**Medical Staff and Nursing Buy-In**

- Ensure Chief Medical Officer and Chief Nursing Officer are engaged and on-board.
- Identify and engage formal and informal leaders.
- Run projects important to them:
  1. Hospitalists: Reduce non-productive work burden
  2. Neurologists: Stroke care
  3. Medical Oncologists: Information systems and flow enhancements resulting in increased utilization of Infusion Room
  4. Nursing: Locating equipment when it is needed, staffing levels at best practice acuity standards and productivity standards
- Ensure collaboration between Chief Medical Officer, Chief Nursing Officer, and Chief Performance Officer:
  - Integration of OE with the Physician Education Leadership Institute (PELI) Program

Engage and get buy-in from medical staff
Operations Excellence

- **People Selection:**
  - Best and brightest, pre-testing to quality candidates
  - Formal and informal leaders
  - Dedicated staff who can commit time to doing project work

- **Project Selection:**
  - Early wins to get buy-in; quality and safety projects first
  - Later include projects with financial benefits

- **Invest in Infrastructure:**
  - Pick strategic departments to train OE resources (Champions, Belts, Project Managers)
  - Train based on just in time needs, **not** for the sake of training:
    - Expectation of completing projects
  - Steering Committee with senior leadership including CEO

Make Conscious decisions on People and Project Selection

---

Operations Excellence
Mature Infrastructure

**OE Steering Committee**
(CEO, Select VPs and CPO - develop strategy, direct deployment)

**Chief Performance Officer**
Deployment Leader, Master Black Belt
(hired consultant as employee)

**Project Champions**
("Own" the Project, establish measurable goals, remove barriers)
> 35 Champions throughout the organization

- **Master Black Belts**
  - (high priority projects)
  - 2 Master Black Belts
- **Black Belts**
  - (cross-functional strategic projects)
  - 5 Black Belts
- **Green Belts**
  - (departmental projects)
  - 20 Green Belts
- **Project Managers**
  - ("known solution" projects)
  - 20 PMs

**Team Members**
(Process Owners, Subject Matter Experts, Users, 3-6 per team)

5 year role out - stable infrastructure
Summary of Results

<table>
<thead>
<tr>
<th>Year</th>
<th>Completed Projects</th>
<th>Avg Project Length (weeks)</th>
<th>“Successful” Completed Projects</th>
<th>Project Value ($M)</th>
<th>Deployment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>9</td>
<td>27</td>
<td>0 0%</td>
<td>$0.4</td>
<td>Test Lean Six Sigma. Champions and GBs infrastructure.</td>
</tr>
<tr>
<td>2011</td>
<td>12</td>
<td>37</td>
<td>4 33%</td>
<td>$0.6</td>
<td>Build competencies. Prove it works.</td>
</tr>
<tr>
<td>2012</td>
<td>20</td>
<td>22</td>
<td>7 35%</td>
<td>$0.8</td>
<td>Hire internal leader (CPO) Introduce Accountability. Projects with Financial Benefit.</td>
</tr>
<tr>
<td>2013</td>
<td>39</td>
<td>20</td>
<td>36 92%</td>
<td>$2.7</td>
<td>Accountability. Add PMs to infrastructure. Project Execution.</td>
</tr>
</tbody>
</table>

“Successful” = On-time (within 2 weeks) + Met Goal (within 20%)
**2012 to 2014 Year to Date**
**92 Completed OE Projects**

- **Service**: 14, 15%
- **Quality**: 38, 41%
- **Cost**: 46, 44%

**Summary of Results**

**2014 Operations Excellence Measurable Goals**

1. Complete 43 successful OE projects across organization (49 latest estimate)
2. Self-fund OE deployment with OE project savings of $1.0 MM budgeted reduction target ($2.2 MM latest estimate)
Project Example: Environmental Services

- Recipient of 2014 National Award from Health Facilities Management and the Association for the Healthcare Environment (AHE)
- Based on 3 OE Projects:
  1. Environmental Services Work Flow Design
  2. High Touch Point Cleaning
  3. Electronic Clean Bed Notification
Environmental Services Work Process Design

Project Objective:
• Design and implement streamlined, effective, and efficient work processes to clean an additional 100,000 net square feet of space using the same 2100 hrs/wk by February 22, 2013.

Results:
• Cost Avoidance of 14 FTEs ($450k salary & benefits annual expense)
• Below 50th percentile Truven productivity benchmark
• 99th percentile Press-Ganey (cleanliness)
• Sustaining the Gain!

Environmental Services

Productivity Before  
Building Opening  
Productivity After

Project Example: Express Care

Project Objective:
• Decrease the daily median visit duration from 73 minutes to 60 minutes by October 31, 2014.

Result:
• 46 minute visit duration!
Project Example: Stroke/TIA Lab Turn Around Time

Improvement from 58% to 90% labs turned around within 45 minutes

Reduction in the average turnaround time from 44 minutes to 29 minutes

- The question is not …. “Can I afford to do Quality Improvement”?
- The question is…. “Can I afford not to”?

Questions?