Strategy, Action and Outcome in the Deployment of Lean and Six Sigma

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Who We Are

Charlton Memorial Hospital  
Fall River

St. Luke’s Hospital  
New Bedford

Tobey Hospital  
Wareham

Southcoast Health System  
800+ physicians & 6,000+ employees  
serving 719,000 people in 33 communities  
dating back to 1884.
Why & How We Got Started

• Seek sustainable methods & processes — not just cuts
  
  • A lifestyle change — not just a diet
  
  • Increased focus on “real-time accountability”
  
  • Use data to drive decision-making

Fall 2008: Why & How We Got Started

• Why do both Lean & Six Sigma?
  
  • Improve the way we do things — not just to generate cuts/savings
  
  • Create immediate savings through elimination of waste & hard-wiring improved processes with Six Sigma
**Action**

**Mobilize the entire organization**
- Board
- Senior Leadership
- Middle Management
- Physicians
- Front line staff

**Activate engagement**
- Set targets and deadlines up front – month 1
- Set financial targets – month 2
- **All** levels held accountable
- Include front-line staff
- Communicate

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**Getting Started / Infrastructure**

1. Sr Management Oversight Committee for project selection & overall stewardship of activities
2. Consultant for initial education, teaching materials & coaching
3. Administrative support for scheduling & clerical functions: **Critical Need!**
4. System for tracking projects & results
5. Strong ties to and support from Finance
Jan 2009: Initial Improvement Cycle

- 120-day cycle with 30-day check-ins
- Disciplined, focused engagement

**Lean**

Every director/manager expected to present Waste Walk efforts

**Six Sigma**

Every Six Sigma team presented one DMAIC phase every 30 days

- Built database tracker to promote accountability & adherence to timelines

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Outcome: Lean Waste Walks

- Lean Waste Walks (department based)
  - Goal: $3 million
  - Actual: $7M
    - 1% = 6 days
  - In 120 days

Change Examples
- B/W vs color printing
- Stop unneeded reports
- Consolidate deliveries
- Fax vs mail reports
- Eliminate face to face meetings: use technology
- Reduce over time
- Contracts/supplies: better pricing options
- Control purchase options

Outcome: Waste Walk Pods – Jan 2010

- Phase 2: Organization-wide waste walks
  - Five Director or VP-led, financially incented pods with 5-6 members each – leadership only
  - Assigned categories per pod: Contracts, Supplies, Utilization, Energy, IT, IQS, Lab, Pharmacy, Implants, Benefits
  - Goal: $1M/pod identified within 120 days
  - Actual: $9.6M
Outcome: In-Quality Staffing

- Tradition: Steady staffing & variable demand
- Now: Flex staff & shape demand
- Outcome: “In-Quality” Staffing

- **$2M** opportunity identified in 120 days

- Use to prove need for new & replacement FTEs
- Use in 2011 FTE budget to validate:
  - Leadership understanding of the tool
  - Identify possible improvements in FTEs

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“In-Quality” Staffing / Before

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"In-Quality" Staffing / After

Six Sigma ...

- **Certified Belts**
  - 24 Green Belts
  - 4 Black Belts
  - 1 Master Black Belt
  - Yellow Belt training for ALL leadership

- Bringing the resources in-house is necessary for expanding and maintaining the Six Sigma culture
Outcome: Six Sigma

- Initial: Some projects for learning
- Now: Align to strategic plan or annual operations goals

- Patient throughput (IP, ED and OP)
- Patient/Staff safety
- Revenue cycle
- Decreased observation hours for OBV admissions

- Financial gain: $1M+ in 120 days

Six Sigma Process Improvements

- Reduced elective endoscopy time to discharge; created capacity
- Reduced “door-to-needle-in” time for elective caths
- Improved medication reconciliation process
- Decreased time from decision to admit from ED to time to occupy inpatient bed
- Decreased observation hours for OBV admissions
- Financial gain: $1+ million
Driving Accountability

• 30-day check-ins
  • VPs, C-suite, Directors, team members
  • Select presenters at random
• “Completed” projects still check in until goals met or process turned over to daily department operations or project is discontinued for other reasons
• Local, assigned project owner and an executive champion (VP)
• Lean/Six Sigma/IQS Project Tracker

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Six Sigma Project Tracker
Summary to-date

<table>
<thead>
<tr>
<th>Waste Walk Activity</th>
<th>Internal Goal</th>
<th>Hard Dollars Realized</th>
<th>Actual Impact on Total Operating Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department focus</td>
<td>$3M</td>
<td>$7.0M</td>
<td>1%</td>
</tr>
<tr>
<td>Org-wide focus</td>
<td>$5M</td>
<td>$9.6M*</td>
<td>1.4%</td>
</tr>
<tr>
<td>Six Sigma</td>
<td>$1M++</td>
<td></td>
<td>NOTE: Plus several other projects employing Green Belts</td>
</tr>
<tr>
<td>Total</td>
<td>$8M</td>
<td>~$20M</td>
<td>Over two years</td>
</tr>
</tbody>
</table>

* Still tracking some projects for validation

Current

- **Yellow Belt** ‘certification’ for Leadership, physician leaders, including office practices and VNAs
- **Kaizen Events**: Four run weeks completed; three more projects to come.
- **Project Management** tools to deploy broad-scope projects across the organization.
  - 40 directors received introductory training in 2011
- **Use Lean tools to meet FY12 budget goals**:  
  - Find $25M between April 22 and June 10  
    - Implement by Sept 30  
  - Each director to identify cost improvements:  
    - Excellence: 3%  
    - Target: 2.5%  
    - Base: 2.0%