Lean Applications to Healthcare: Transforming Care and Care Delivery

Suneela Nayak
Director of Operational Excellence, MMC

September 29th, 2017
In our time together

• A brief history of Lean
• Why Lean Transformations now at MMC?
• Getting started: Engagement, Daily Management, Infrastructure and Operations
• Caring for a Transforming Culture: The role of leaders and frontline teams
• Transforming Care Delivery: How this translates to value for patients and for ourselves
• Q & A
A Brief History of Lean
A History of Improvement

FIGURE 2.4 Important Events in Performance Improvement

Arsenal of Venice
Arsenal of Venice
A History of Improvement

FIGURE 2.4  Important Events in Performance Improvement

- **1300**
  - Henry Gantt charts

- **1900**
  - A. Erlang Queueing

- **1925**
  - Walter A. Shewhart, Grandfather of Quality movement

- **1950**
  - W. Edwards Deming
  - Kaoru Ishikawa
  - Genichi Taguchi
  - Cost of variation

- **1975**
  - TQM
  - JIT
  - Avedis Donabedian
  - TPS

- **2000**
  - ThedaCare
  - Virginia Mason
  - Begin exploring Lean

- **2008**
  - Founding of Virginia Mason Institute teaching the Virginia Mason Production System AND ThedaCare Institute for Healthcare Value teaching lean and daily management

- **2013**
  - MaineHealth OpEx PenBay

- **2014**
  - SMHC, LCH

- **2015**
  - MH Corp, MMC, NorDx, Memorial, IS

- **2016**
  - MBH, MMP, Franklin

**TOOLS EXIST TO SUPPORT THE CULTURE**

- DATA BASED DECISION MAKING
- VISUAL MANAGEMENT
- WORKFLOW MATTERS
- REDUCE VARIATION
- REDUCE MOTION
- BUILD QUALITY INTO YOUR CULTURE

**CULTURE OF QUALITY = COMPETITIVE EDGE (TAKES TIME)**

- HEALTHCARE ORGANIZATIONS THAT SUCCEED GO BEYOND THE TOOLS

**HEALTH CARE QUALITY CAN BENEFIT FROM THESE TOOLS**

- HEALTHCARE ORGANIZATIONS THAT SUCCEED GO BEYOND THE TOOLS

Why now?
Healthcare Reform Tidal Wave

Healthcare Reimbursement Reform

Public Reporting

Demand for Healthcare Redesign
We are at the end of an unsustainable trend line....this is not a tempest in a teapot
How best to improve quality?

The Hard Work of Health Care Transformation

Unfortunately, in the longer term, the prolonged hard work of repetitive, incremental, and often small-scale rebuilding of local operating systems probably cannot be avoided.

Daily Management System at Maine Medical Center
Daily Management System

- A disciplined, daily process of gathering data and assessing performance to key metrics in real-time.

- The assessment process is done with the same intent to take immediate action that corrects performance issues – not just an information sharing session.

- Without fail, this creates a culture of seeing and solving the organization’s daily issues in a quality and timely manner.
Daily Management System

Daily Huddle

- Attendance
- Team Report Outs
- Huddle Board

Gemba Walks

- Leadership, Physician Participation
- Walk Etiquette

KPI Boards

- Staff Report Outs
- Data Collection & Action Plans
- Consistent Visual Presentation
The Gemba Walk is a central element of our Daily Management System at MMC. Leaders “walk” to the place where value is created for patients and families, and interact with the people and process in the spirit of changing for the better.
Caring for a Transforming Culture: The role of leaders and frontline teams
<table>
<thead>
<tr>
<th>TRADITIONAL CULTURE</th>
<th>CULTURE of Operational Excellence</th>
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</thead>
<tbody>
<tr>
<td>Functional Silos</td>
<td>Interdisciplinary Teams</td>
</tr>
<tr>
<td>Managers direct</td>
<td>Frontline Leaders coach, enable,</td>
</tr>
<tr>
<td>Benchmark to justify performance</td>
<td>Seeks improved performance, reduce waste</td>
</tr>
<tr>
<td>Punitive, Blaming</td>
<td>Seeks root cause</td>
</tr>
<tr>
<td>Rewards individuals</td>
<td>Rewards group</td>
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<tr>
<td>Guards information</td>
<td>Shares information</td>
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<tr>
<td>Volume reduces cost per unit</td>
<td>Adds value, removes waste, ↓cost,</td>
</tr>
<tr>
<td>Internal focus</td>
<td>Customer focus</td>
</tr>
<tr>
<td>Expert driven</td>
<td>Process driven</td>
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</tbody>
</table>
Aligning People and Process

Leading and Managing your Team

PURPOSE

“We aren’t just solving problems, we’re developing problem solvers”

Matt Long
Herman Miller Company
### Patient Care Team Members

#### PRINCIPLES
- Create value for the patient
- Create constancy of the purpose
- Think Systemically

#### Leaders
- Establish Direction
  - Develop a vision and strategies to achieve that vision.
  - Set high but reasonable targets.
  - Communicate the direction on a regular basis.

#### Frontline Leaders
- Organizing & Translating
  - Establish a structure to achieve the plan.
  - Organize and allocate resources.
  - Monitor structure to ensure consistency and alignment to plan.

#### Frontline Team
- Setting & Achieving Goals
  - Identify meaningful goals that directly affect the overall vision and strategy.
  - Daily report on status and needed support.

#### EMPOWER
- Lead with humility
- Respect every individual
- Learn continuously

#### IMPROVE
- Focus on process
- Embrace scientific thinking
- Understand & manage variation
- Assure quality at the source

#### Break- through Thinking
- Continuously learn by listening, seeing and translating observations.
- Support new models of care delivery developed by frontline.

#### Monitor & Maintain Predictability
- Monitor systems to ensure standard outcome.
- Continuously challenge the process to identify areas of improvement.

#### Motivate, Mentor, Inspire
- Energize people to develop and overcome barriers to change. Daily be in the work area to listen to understand. Embrace failure; celebrate success.

#### Empower, Involve & Coach

#### Develop & Share
- Be a self-developer. Find opportunities to grow and develop to better support the organization.
- Share what is working and what is not.

#### Adapt & Adjust
- Making incremental adjustments that all agree with. Tools are not a solution. Structurally solve area problems.

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**Taken from: Institute for Enterprise Excellence**
Transforming Care Delivery: How does this translates to value?
MMC: Our Purpose

**MISSION**
Caring for our community
Educating tomorrow’s caregivers
Researching new ways to provide care

**VISION**
Together we can build a healthier community.

**VALUES**
Patient Centered
Respect
Integrity
Excellence
Ownership
Innovation

**AIP**
Care Team Well Being
Healthy Communities
Affordable Care
Patient Centered Care

**OPERATIONAL EXCELLENCE**
Program Status To Date

Data updated September 6th, 2017

Engagement
- 411 Champions Trained
- 4000+ Activated Employees
- 315 Leaders Trained
- 600 Closed Action Items

Daily Management
- 855 Closed KPIs
- ~235 Open KPIs
- 20+ Gemba Coaches
- Patient Advisor on Walks

Infrastructure & Operations
- 18 Training Waves, 3 Campuses
- 90 KPI Boards, 100 Teams
- 11 Gemba Walks
- 0500 Walk

Real time responsiveness to the needs of the frontline!
Sustained Strategic Alignment
AIP Alignment in Action

• Dept: Palliative Care  
  • Driver: Employee Engagement  
  • KPI: A daily afternoon “gratitude gathering” will be held to share positive experiences from the day, providing peer-to-peer support

• Dept: Inpatient Pharmacy  
  • Driver: Financial Performance  
  • KPI: 100% of the time, there will be zero duplicate ipratropium and budesonide/fomoterol inhalers sent daily

• Dept: Mother Baby  
  • Driver: Department Specific  
  • KPI: 100% of the time, breast pump parts will be cleaned and dried by patients according to recommendations

• Dept: Gibson  
  • Driver: Communication between Team Members  
  • KPI: 100% of the time, RNs will not be interrupted during medication safety hour
Values in Action
Embodying Core Values

**SCU 2, 3, 4**
100% of the time, quiet hour will be observed from 1300-1400

**SPD, Bramhall & SSC**
Leaders in fostering interdepartmental KPIs

**Facilities Development & Engineering**
Removing barriers to care: responding to 20% of all Action Items!

**Nutrition & Food Services**
100% of the time, there will be no missing items on patient meal trays

**Patient Access & ED Registration**
“Admitting with precision, compassion, & getting patients to where they need to be!”

**Interpreter Services**
Daily interpreter rounds for Limited English Proficient (LEP) inpatients
Gemba Coaches

Corey Fravert, MHPM
**Director, Neuroscience**

Sarah Thompson, MSN, RN, CPN
**Nurse Manager, BBI & Pediatric Short Stay**

Cristy M. Koffler, RN
**Float Nurse, Unit Based Educator**

Justin Michaud, BSN, RN
**Nurse Manager, PICU**

Mohit Shukla
**Healthcare Management Engineer, CPI**
Operational Excellence Fellow

Amy Sparks
Operational Excellence Fellow
Program Coordinator, Psychiatry
Same Day Closure of Action Items

Closed Action Items by Core Value:
Provider Engaged Clinical KPI Boards

- 12/75 Clinical Teams are led by providers
Core Values- Closed KPI
(YTD by FY Quarter)
Closed KPI by Strategic Priority

Making Care Personal
KPI Assessed for ROI

- Quarter 4 (to date): 1.3%
Questions?