Lean Leadership and Health Reform

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AME
11/16/10
The Rate of Spending on Healthcare is Fiscally Unsustainable**

Almost half of all Americans, (133 million) live with at least one **chronic condition**:  
- 81% of hospital admissions; 91% of all prescriptions; and 76% of all physician visits  
- Accounts for more than 75% of the nation’s $2 trillion medical care costs.  
  - Diabetes: $174 billion/yr  
  - Smoking: $193 billion/yr  
  - Heart disease and stroke: $448 billion/yr  
  - Obesity: $117 billion/yr  
  - Cancer: $89 billion/yr
Enacted Legislation

Patient Protection and Affordable Care Act ("PPACA")
- Contains “bulk” of health reform law

Health Care and Education Affordability Reconciliation Act
- Modifies/adds to PPACA

Health Reform
Impact of Coverage Expansion (excluding Medicare-eligible population)+

Current coverage

<table>
<thead>
<tr>
<th>Employer-Sponsored Coverage</th>
<th>Medicaid/CHIP</th>
<th>Exchanges</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 million covered through their employer</td>
<td>40 million covered by Medicaid &amp; CHIP</td>
<td></td>
<td>Currently 50 million are uninsured</td>
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</tbody>
</table>

By 2020

<table>
<thead>
<tr>
<th>Employer-Sponsored Coverage</th>
<th>Medicaid/CHIP</th>
<th>Exchanges</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>159 million will have coverage through their employer</td>
<td>51 million will be enrolled in Medicaid &amp; CHIP</td>
<td>24 million will purchase coverage through Exchanges</td>
<td>22 million nonelderly residents will remain uninsured (about 1/3 of whom are unauthorized immigrants)</td>
</tr>
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</table>
Financing Reform through Program Cuts, Higher Taxes/Fees

Over 10 years, despite $938 billion in additional spending, Health Reform actually reduces the deficit by cutting other programs and increasing revenues

<table>
<thead>
<tr>
<th>Cuts to Medicare/Medicaid</th>
<th>Revenue provisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market basket adjustments (including productivity adjustments) for certain hospitals and other providers - $196 billion</td>
<td>Industry fees (pharmaceutical industry fee, medical device fee, insurance industry fee) - $107 billion</td>
</tr>
<tr>
<td>Restructuring of payments to Medicare Advantage (MA) plans - $136 billion</td>
<td>Higher Medicare tax on high-income taxpayers - $210 billion</td>
</tr>
<tr>
<td>Reducing Medicare and Medicaid Disproportionate Share Hospital (DSH) payments to hospitals - $36 billion</td>
<td>“Cadillac tax” - $32 billion</td>
</tr>
<tr>
<td>Other cuts (e.g., home health payment rates) - $87 billion</td>
<td>Penalty payments by employers and uninsured individuals - $65 billion</td>
</tr>
</tbody>
</table>

Total = $455 billion

| Other revenue (e.g., indoor tanning tax) - $111 billion |

Total = $525 billion
Key Delivery Reform Provisions

- Center for Medicare and Medicaid Innovation
- Independent Payment Advisory Board (IPAB)
- Accountable Care Organizations (ACOs)
- Medical Homes
- Hospital Value-Based Purchasing Program
- Value-Based Payment Methods
- Pilot Program on Payment Bundling
- Reforms for Hospital Acquired Conditions and Hospital Readmissions
Implementation Timeline for Delivery Reforms

- Prohibition on federal Medicaid payments for hospital-acquired conditions (FY 2011)
- Deadline for Center for Medicare and Medicaid Innovation (January 1, 2011)

2010

- Deadline for establishing ACOs (January 1, 2012)
- Deadline for establishing Medicare medical homes (January 1, 2012)

- Hospital value-based purchasing program begins (FY 2013)
- Financial penalties imposed for hospital readmissions (FY 2013)
- Deadline for establishing pilot program on payment bundling (January 1, 2013)

2011

- Independent Payment Advisory Board to submit first recommendations to reform Medicare payments (January 15, 2014)

2012

- Reductions in Medicare hospital payments for hospital-acquired conditions (FY 2015)
- Physician value-based payment modifier applied to specific physicians (January 1, 2015)
• “You can count on Americans to do the right thing ... after they have tried everything else” (Winston Churchill)
Lessons from the Massachusetts Health Plan

- Cost is twice the original estimate and growing faster than the US
  ...Looming $5.4 billion State deficit – 1/3 of the State budget is dedicated to Medicaid
- 35% of the FPs are not taking new patients, average wait for IM appointment is 50 days
  .....Overuse of ED by newly insured
- 61% of physicians rate their income level as “uncompetitive;”
- Hospital operating margins have trended down since 2006!
  .... The Boston Med. Center forecasts first loss in five years
  ... median operating margin for community hospitals in 2008 was .04%
- “The current fee-for-service system is a primary contributor the problem of escalating costs and pervasive problems of uneven quality”.
- Special Commission formed to recommend fundamental reform of the payment system.

Source: Massachusetts Commission Report, July 16, 2009
Core components of the public policy problem?

- Payment systems that do not reward healthcare providers to deliver better value
- Lack of transparency of performance
- Providers lack of a consistent methodology to improve care
Current Payment Systems Reward Bad Outcomes, Not Better Health

Healthy Consumer ➔ Continued Health ➔ Preventable Condition ➔ No Hospitalization ➔ Efficient Successful Outcome

- Acute Care Episode
- Complications, Infections, Readmissions
Comprehensive Care Payments
To Avoid Episodes

Healthy Consumer

Continued Health

Preventable Condition

No Hospitalization

Acute Care Episode

Efficient Successful Outcome

High-Cost Successful Outcome

Complications, Infections, Readmissions

Comprehensive Care Payment or “Global” Payment

A Single Payment For All Care Needed For A Condition
Transparency of Healthcare Performance
The purpose

- Develop performance measures for assessing the healthcare quality outcomes
- Guide the collection, validation, and analysis of measurement data
- Publicly report measurement results for healthcare providers, purchasers, and consumers
- Share best practices with the WCHQ community
Diabetes: Blood Sugar (A1c) Control

This measure assesses the care of 161,801 patients with Diabetes. More

Legend:
- Good Control
- Fair to Poor Control
- Uncontrolled
- Not Tested

Percentage of Patients Meeting the Criteria

Reporting Period: Q3 2007-Q2 2008

Monroe Clinic and Hospital
N=2537 n=365

ThedaCare Physicians
N=7951

Franciscan Skemp Medical Center Clinics
N=4645 n=400

Bellin Medical Group
N=4524

Marshfield Clinic
N=16265

Dean Health System
N=9593

Columbia St. Mary’s Community Physicians
N=7993 n=377

Prevea Health
N=4936

ProHealth Care Medical Associates
N=7194

Gundersen Clinic, Ltd.
N=8091

Wheaton Franciscan Medical Group
N=10835 n=10133

<table>
<thead>
<tr>
<th>Hospital</th>
<th>N</th>
<th>n</th>
<th>Good Control</th>
<th>Fair to Poor Control</th>
<th>Uncontrolled</th>
<th>Not Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monroe Clinic and Hospital</td>
<td>2537</td>
<td>365</td>
<td>66.85%</td>
<td>21.64%</td>
<td>7.1%</td>
<td></td>
</tr>
<tr>
<td>ThedaCare Physicians</td>
<td>7951</td>
<td></td>
<td>64.40%</td>
<td>28.63%</td>
<td>7.1%</td>
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<tr>
<td>Franciscan Skemp Medical Center Clinics</td>
<td>4645</td>
<td>400</td>
<td>63.5%</td>
<td>25.25%</td>
<td>7.1%</td>
<td></td>
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<tr>
<td>Bellin Medical Group</td>
<td>4524</td>
<td></td>
<td>59.9%</td>
<td>28.09%</td>
<td>7.6%</td>
<td></td>
</tr>
<tr>
<td>Marshfield Clinic</td>
<td>16265</td>
<td></td>
<td>57.04%</td>
<td>33.10%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Dean Health System</td>
<td>9593</td>
<td></td>
<td>55.92%</td>
<td>30.93%</td>
<td>7.38%</td>
<td></td>
</tr>
<tr>
<td>Columbia St. Mary’s Community Physicians</td>
<td>7993</td>
<td>377</td>
<td>55.17%</td>
<td>30.77%</td>
<td>9.28%</td>
<td></td>
</tr>
<tr>
<td>Prevea Health</td>
<td>4936</td>
<td></td>
<td>52.94%</td>
<td>33.81%</td>
<td>7.58%</td>
<td></td>
</tr>
<tr>
<td>ProHealth Care Medical Associates</td>
<td>7194</td>
<td></td>
<td>52.77%</td>
<td>33.89%</td>
<td>8.59%</td>
<td></td>
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<tr>
<td>Gundersen Clinic, Ltd.</td>
<td>8091</td>
<td></td>
<td>51.55%</td>
<td>34.69%</td>
<td>7.84%</td>
<td></td>
</tr>
<tr>
<td>Wheaton Franciscan Medical Group</td>
<td>10835</td>
<td>10133</td>
<td>50.73%</td>
<td>33.32%</td>
<td>9.96%</td>
<td></td>
</tr>
</tbody>
</table>
Wisconsin Health Information Organization

- The WHIO Health Analytics Exchange At-a-Glance
  -- The Exchange contains claims data that spans multiple care systems and services provided statewide
  -- The Exchange holds a rolling 27 months of claims data on the majority of people in Wisconsin
  -- The Exchange contains 7.3 million “episodes of care” which capture the patient quality and cost experience over time with conditions such as pneumonia, diabetes, congestive heart failure and 750 others.
## Provider Detail – Diabetes Cost Index List

<table>
<thead>
<tr>
<th>Provider</th>
<th>Number of Episodes</th>
<th>Total Cost</th>
<th>Hospital Services</th>
<th>ER</th>
<th>Primary Care</th>
<th>Specialty Care</th>
<th>Laboratory</th>
<th>Radiology</th>
<th>Pharmacy</th>
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<tr>
<td></td>
<td>15</td>
<td>0.97</td>
<td>0.58</td>
<td>0.66</td>
<td>0.92</td>
<td>0.52</td>
<td>0.96</td>
<td>0.29</td>
<td>1.13</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0.61</td>
<td>0.97</td>
<td>-</td>
<td>0.69</td>
<td>0.73</td>
<td>0.83</td>
<td>2.90</td>
<td>0.26</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>0.85</td>
<td>2.18</td>
<td>1.15</td>
<td>0.75</td>
<td>1.05</td>
<td>0.67</td>
<td>0.09</td>
<td>0.78</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>1.21</td>
<td>-</td>
<td>4.62</td>
<td>0.87</td>
<td>1.77</td>
<td>0.72</td>
<td>-</td>
<td>1.24</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0.27</td>
<td>-</td>
<td>-</td>
<td>0.70</td>
<td>0.06</td>
<td>-</td>
<td>-</td>
<td>0.23</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0.66</td>
<td>0.54</td>
<td>-</td>
<td>0.91</td>
<td>0.42</td>
<td>1.57</td>
<td>-</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>0.95</td>
<td>1.19</td>
<td>-</td>
<td>1.28</td>
<td>2.79</td>
<td>0.31</td>
<td>-</td>
<td>0.65</td>
</tr>
</tbody>
</table>
Provider Overview – Cost Ranking

Cost Index minimum 20 episodes - High 20 (DMV3)

Providers de-identified
WHIO Cost vs WCHQ Clinical Quality
We must revolutionize healthcare delivery but how?
Results using Lean

• Group Health of Puget Sound reduced E.R. visits by 29% using their medical home redesign resulting in a $10/pm premium reduction to customers
• Bolton U.K., reduced Stroke mortality by 23% over 18 months
• ThedaCare’s redesigned inpatient Collaborative Care unit has achieved 0 medication reconciliation errors for 3 years running and the cost of inpatient care dropped by 30%
  www.createhealthcarevalue.com
• St. Boniface Winnipeg, Canada has the best cost/weighted case (Canadian measure for inpatient cost efficiency) for an academic medical center in Manitoba, and is second in all of Canada

Source: Health Affairs 2009, Volume28, No: 5:1343-1350, America Journal of Managed Care, September 2009
The Methodology of Lean
TRUE NORTH METRICS

Safety/Quality
- Preventable Mortality
- Medication Errors

Customer Satisfaction
- Access
- Turnaround Time
- Quality of Time

People
- OSHA Recordable Injuries
- HAT Scores
- Employee Engagement Index

Financial Stewardship
- Operating Margin
- Productivity
Hoshin Kanri

• Hoshin
  – ho – method or form
  – shin – shiny needle or compass
  “method for strategic direction setting”

• Kanri
  – control or management

• Strategy Deployment = Hoshin Kanri
  – process to embed strategy
  – Target and Means
A3

• As a standard process, it becomes easier for you
  – To describe key ideas to others, and
  – to understand others
• It fosters dialogue within the whole organization
• It develops problem-solvers
• It encourages front-line initiative
• Teaches scientific method
**A3 or PDSA: What Are Talking About?**

<table>
<thead>
<tr>
<th><strong>Background</strong></th>
<th></th>
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<tbody>
<tr>
<td>Why are you talking about it?</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th><strong>Current Situation</strong></th>
<th></th>
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<tbody>
<tr>
<td>Where do we stand?</td>
<td></td>
</tr>
<tr>
<td>→ What’s the problem?</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Goal</strong></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Where we need to be?</td>
<td></td>
</tr>
<tr>
<td>What is the specific change you want to accomplish now?</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Analysis</strong></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>- What is the root cause(s) of the problem?</td>
<td></td>
</tr>
<tr>
<td>- What requirements, constraints and alternatives need to be considered?</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Recommendations</strong></th>
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</thead>
<tbody>
<tr>
<td>What is your proposed countermeasure(s)?</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th><strong>Plan</strong></th>
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</thead>
<tbody>
<tr>
<td>What activities will be required for implementation and who will be responsible for what and when?</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Follow-up</strong></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>How we will know if the actions have the impact needed? What remaining issues can be anticipated?</td>
<td></td>
</tr>
</tbody>
</table>
Title: System Safety A3 (Hospitals, TCP, Senior Svcs. Support Areas)
Sponsor: Leader: Greg Long, MD, CMO
Facilitator: Sense:
Revision #4, Date: 03/30/09

1. Background
- Our paradigm tolerates risk & errors.
- Healthcare nationally harms 5 million pts/yr and kills nearly 100,000 pts/yr minimal change since original IOM report (To Err is Human) released in 1999.
- Our employees are at risk in the workplace.
- Sub-optimal safety – avoidable cost ($$$) to ThedaCare and the national healthcare system.
- Our expectations of safety are unclear.
- We lack a true culture of safety limiting our awareness of the problem and effective interventions...“not my problem”.
- Safety resource needs unclear.
- ThedaCare leadership’s behaviors and actions do not always align with safety as a top priority.

2. Current Conditions
3. Goals and Targets
4. Analysis (Initial thoughts)
5. Proposed Countermeasures
6. Plans:

4. Analysis (Initial thoughts)
Safety A3 Gap Analysis

People
- No clear expectations for safety
- We don't know what an error-free environment looks like
- Lack of culture of safety
- Leadership inconsistent in safety message
- Providers/staff don’t buy it
- We don’t give feedback for positive behaviors
- No prompts to remind
- Fear of challenging and punishment
- Injuries are accepted
- Near misses accepted
- Disruptive behavior
- Not all sys addressed
- Don't consider safety while making purchasing decisions
- Lack of incentive to improve
- Old policy not reflected new practice
- New policy deployment time consuming process

Process
- Physician data not shared
- No easy, effective reporting
- Standard work/guidelines not always followed
- Not anticipating problems
- Risk on lagging indicators
- Safety externally focused/compliance
- Dedicated safety rounds not done
- RCA doesn’t focus on behaviors
- Not enough safety training

Patient
- Don’t involve patients families in safety efforts
- Patients don’t take ownership of promoting safety


6. Plans:

7. Follow-up
“Measurably Better Value”

Deploying Level 1 Priorities to Level 2

ThedaCare’s Strategic Plan

ThedaCare’s Breakthrough Objectives

People A3 (level 1) Plan

People level 2 A3

Safety A3 (level 1) Plan

Safety level 2 A3

Shared Growth A3 (level 1) Plan

Shared Growth level 2 A3

Productivity A3 (level 1) Plan

Productivity level 2 A3

Problem statement, background and targets deployed

Cross Functional Team

Cross Functional Team

Cross Functional Team
VIDEO
The Patient/Process Matrix

Care Delivery Process Steps

Episode Treatment Groups

1. Health Maintenance Prevention
   Example: Physical + preventive care

2. Minor Episodic Illness/Injury
   Example: Sore Throat

3. Major Acute Distress
   Example: Heart Attack

4. Elective/Restorative Procedures
   Example: Hip Replacement

5. Chronic Disease Management
   Example: Diabetes

Potential Value Streams

Imaging
Collaborative Care
Ambulatory Patient Experience
The 7-Week Cycle of an R.I. Event

- 3 weeks before – Value Stream review, Event Selection, Select Team Leader/Co-Leader and team members estimated financial, quality and staff impact
- 1-2 weeks before – RI Checklist, preparation .. Cell Communication, aim statement, measures

- day 1 - current conditions
- day 2 – create the future
- day 3 - run the new process
- day 4 - standard work
- day 5 - presentation

- 1st week after - Capture the savings
- 2nd week after – Update Standard Work
- 3rd week after – CFO validation

• Step 1 “Identify” waste
• Step 2 “Eliminate” waste
Continuous Daily Improvement

- Front line workers and supervisors able to solve problems, and sustain improvements.
- PDSA Process
- No. of defects identified (front line staff defect huddles)
- Number of Staff ideas implemented
Color Coding on Tracking Tools

Same colors used – light red/light green for tracking information.
What is a lean management system?
The Toyota Way

Best Quality - Lowest Cost - Shortest Lead Time
Best Safety - Highest Morale

Continuous Improvement

Respect for People

PDCA Learning Cycles

LEAN ENTERPRISE INSTITUTE
Can you say yes to these three questions every day?

• Are my staff and doctors treated with dignity and respect by everyone in our organization?
• Do my staff and doctors have the training and encouragement to do work that gives their life meaning?
• Have I recognized my staff and doctors for what they do?
White coat leadership vs. Improvement leadership

- All knowing
- “In charge”
- Autocratic
- “Buck stops here”
- Impatient
- Blaming
- Controlling

- Patient
- Knowledgeable
- Facilitator
- Teacher
- Student
- Helper
- Communicator
- Guide
Thoughts For the Day
- The ones you love!

PICK CHART

Idea's

- Celebrations
- Queen's Grad.
- Come Tia to Killin'
- He's Grad!
A Community of Problem Solvers
Delivering MBV

100% of employees are problem solvers improving something every day!!!
Lean management pilot Managers - Productivity
2009 Year End Percent Improvement Over 2008

- AMC Inpt Oncology: 1%
- AMC 2S: 4%
- TC 2nd Floor: 4%
- Radiation Oncology: 5%
- AMC 3SW: 11%
Lean Management Pilot Managers Percent
Safety/Quality Driver Improvement over 2008 Baseline

Note: Each unit with between 3-6 drivers / All units have different drivers

- AMC Inpt Oncology
- AMC 2S
- TC 2nd Floor
- AMC 3SW

- Falls
- Coumadin
- Education
- Pain Assessment
- 1st Call Bed Access
- Turnover
- Staff competency
- Delays in access
- Interactions within 4 days of DC
Employee Engagement

2009 Employee Opinion Survey Percent Improvement
Lean Management Pilot Units
2008 vs 2009
NEW DELIVERY MODEL RESULTS

Safety/Quality
- from 80% to 93% within safe range
- from 20% to 96% Plan of Care first pass
- from 5% to 80% labs within 15 min.

Customer Satisfaction
- 100% option to be seen today

People
- ↑ employee & physician satisfaction

Financial Stewardship
- ↑ visit encounters per HRS worked .05
- ↓ AR days by 10
Network Purpose

• Accelerate the lean transformation journey for each organization
• Multiple small learning communities
• Spread of current best practices
• Drive change in the larger healthcare system

• [www.healthcarevalueleaders.org](http://www.healthcarevalueleaders.org)
First Network

- Gunderson Lutheran
- Group Health Cooperative
- Hotel-Dieu Grace
- Iowa Health System
- Johns Hopkins Medical
- Lawrence & Memorial Hospital
- Lehigh Valley Hospital and Health Network
- McLeod Health
- Mercy Medical Center – Cedar Rapids
- Park Nicollet Health Services
- St. Boniface Hospital
- ThedaCare
- University of Michigan Health System
- UCLA
Second Network

- Alberta Health Services
- Akron Children’s Hospital
- Beth Israel Deaconess
- BJC Healthcare
- Christie Clinic
- Harvard Vanguard Medical Associates
- Kaiser Permanente
- Provena Covenant Medical Center
- Seattle Children’s Hospital
- St. Joseph Health System (Orange, CA)