Learning Organizations, Lean, and Leadership.

Lean Principles = Better Patient Care?

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Results Washington 2015
October 21, 2015

DISCLOSURE
I have no financial relationships with commercial support to disclose.
Learning Objectives

- Patient
- Engaged Staff
- Leadership
- Lean Tools
Better Patient care
The new health care law aims to reform the health care industry by cutting out waste, reallocating where government funding goes, fixing what doesn't work, and most of all ensuring health care for Americans.

Report to President Obama Endorses Lean & Systems Engineering in Healthcare

http://obamacarefacts.com/whatis-obamacare.php
Lean and Healthcare

- Creating Value for Patient
  - Using less resources to do more work

- Reducing waste
  - Minimize non-value added activities
VMPS House

Virginia Mason Production System

To Make things in the Right Way

JUST IN TIME

People

Standard Work

Takt Time Production

Materials

Standard Work in Process Kanban

One Place Flow Production Supermarket System

Machines

Andon Operational Availability

Pull System Production

Leveled Production (Heijunka)

Cost Reduction Through The Elimination of Muda (Waste or Non-Value Added)

Jidoka

One-by-one confirmation to detect abnormalities.
Stop and respond to every abnormality.
Separate machine work from human work.
Enable machines to detect abnormalities and stop autonomously.

Operate with the minimum resource required to consistently deliver:
- Just what is needed.
- In just the required amount.
- Just where it is needed.
- Just when it is needed.
Tools – only the surface

### 2012 Gallup Poll
National Employee Engagement

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<tr>
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<tbody>
<tr>
<td>Managers, executives, and officials</td>
<td>26%</td>
<td>36%</td>
<td>51%</td>
<td>13%</td>
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<tr>
<td>Professional workers: physicians</td>
<td>*</td>
<td>34%</td>
<td>57%</td>
<td>9%</td>
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<tr>
<td>Professional workers: nurses</td>
<td>*</td>
<td>33%</td>
<td>52%</td>
<td>15%</td>
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<tr>
<td>Professional workers: teachers</td>
<td>*</td>
<td>31%</td>
<td>56%</td>
<td>13%</td>
</tr>
<tr>
<td>Professional workers: other categories except physicians, nurses, and teachers</td>
<td>*</td>
<td>30%</td>
<td>55%</td>
<td>15%</td>
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<tr>
<td>Clerical or office workers</td>
<td>27%</td>
<td>30%</td>
<td>51%</td>
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<tr>
<td>Construction or mining workers</td>
<td>29%</td>
<td>30%</td>
<td>52%</td>
<td>18%</td>
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<td>Government worker</td>
<td>28%</td>
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<tr>
<td>Sales workers</td>
<td>24%</td>
<td>29%</td>
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<td>20%</td>
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<tr>
<td>Installation or repair workers</td>
<td>25%</td>
<td>29%</td>
<td>51%</td>
<td>20%</td>
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<tr>
<td>Service workers</td>
<td>32%</td>
<td>29%</td>
<td>50%</td>
<td>22%</td>
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<tr>
<td>Transportation workers</td>
<td>21%</td>
<td>25%</td>
<td>47%</td>
<td>28%</td>
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<tr>
<td>Manufacturing or production workers</td>
<td>18%</td>
<td>24%</td>
<td>50%</td>
<td>26%</td>
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</tbody>
</table>
### 2012 Gallup Poll
National Employee Engagement

<table>
<thead>
<tr>
<th></th>
<th>Engaged 2012</th>
<th>Not Engaged 2012</th>
<th>Actively Disengaged 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>36%</td>
<td>51%</td>
<td>13%</td>
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<tr>
<td>Physicians</td>
<td>34%</td>
<td>57%</td>
<td>9%</td>
</tr>
<tr>
<td>Nurses</td>
<td>33%</td>
<td>52%</td>
<td>15%</td>
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</tbody>
</table>
Gallop Poll 2014
Actively Disengaged Healthcare Providers

- 9% Physicians
- 14% Nurses
- 15% Managers
Traditional Management

- Executive
  - Engineer
    - Operator
  - Engineer
    - Operator
  - Operator
Train Wreck Management

Brittle systems

**Figure 1: Basic stress-strain or demand-stretch state-space.**

“The significant problems we face cannot be solved at the same level we were at when we created them”

Albert Einstein
Figure 2: Expanded stress-strain state-space.
Nurture new and expansive patterns of thinking

Collective aspirations set free

Expand their capacity to create the results they desire

Learn to see the whole together

Learning Organizations
Alternate Leadership Model

Leadership – Communicating to people their worth and potential so clearly they are inspired to see it in themselves.
Daily Kaizen

http://s-media-cache-ak0.pinimg.com/736x/3c/95/8c/3c958c30e20a48e06ffadac3805025ac.jpg
Figure 3: Sub-regions within the extra-region of the stress-strain state-space.
Transformational Leadership

- Inspirational Motivation
- Individualized Consideration
- Idealized Influence
- Intellectual Stimulation
Individual Resilience

Confidence
Having feelings of competence, effectiveness in coping with stressful situations and strong self esteem are inherent to feeling resilient. The frequency with which individuals experience positive and negative emotions is also key.

Purposefulness
Having a clear sense of purpose, clear values, drive and direction help individuals to persist and achieve in the face of setbacks.

Social Support
Building good relationships with others and seeking support can help individuals overcome adverse situations, rather than trying to cope on their own.

Adaptability
Flexibility and adapting to changing situations which are beyond our control are essential to maintaining resilience. Resilient individuals are able to cope well with change and their recovery from its impact tends to be quicker.

http://idyia.co.uk/perch/resources/4areas.png
Daily Kaizen Activities

- Mock codes
  - Quarterly mock codes
  - Identify areas of improvement
  - PDSAs
    - Visual standard work for MH and airway carts
- Improved accuracy of OR pick lists
- Kitting of supplies for wound care
Success = innovation

Elegant Machines

Local knowledge

Useful Products

System Resilience

Operator Resilience

Better Patient Care
Better Patient Care
Great Barrier Reef

Continuous Daily Improvements
References


- Schein, .


- Hu, Q et al. The connection between organizational learning and lean production. POLS 23rd Annual conference. Paper No. 025-0234

- http://www2.warwick.ac.uk/fac/soc/economics/staff/epROTO/Workingpapers/happinessproductivity.pdf

