Lean for Healthcare
An Overview

Susan Sheehy, PhD, RN, FAAN
Lean Healthcare West
Lean does not light a fire under people... it lights a fire within them

Matthew May
Why Lean?

- It is a philosophy - a set of principles
- It’s a great fit for healthcare
- It produces meaningful, useful, important results
- It provides the power to change an organization’s culture
You must ask...

Is there a better way?

Lean is

- The systematic pursuit of perfection
- A discipline of incremental changes

Image: Wikimedia. Delwing. CC BY-SA
Lean transformation happens over time - 4, 5, 6 years or more

- There is no quick, easy way
- Lean is learned through experiences
  - Clinical and Operational
- It takes practice, practice, and more practice
In order for Lean to succeed

- The entire healthcare team has to own it
  - Administrators
  - Middle Managers
  - Staff
- It must be evident in everyday work
- It must be embraced and practiced by everyone in the organization
- It must be expected
- It is not just one or two activities
“The significant problems we face cannot be solved at the same level of thinking we were at when we created them.”

Albert Einstein
Why the Toyota Production System Model?

- Most successful auto manufacturer in the world
  - But, can it work for healthcare?
- Best record of introducing new technology
  - Healthcare has a technological imperative
- Best record of employee satisfaction
  - Important to have good employee retention in hc
- Relentless commitment to eliminating waste
  - We have LOTS of waste in healthcare
- One million suggestions a year/ 90% implemented
  - Who better to tell us what needs fixing than healthcare’s front line workers?
Features of TPS

- Management is not top-down
  - The traditional healthcare model is “command and control”

- Employees are on the value side of the ledger (no lay-offs)
  - When there are budget issues in healthcare, usually the first thing that is cut is positions

Very few long meetings!
Recognize people who do the work as experts and allow them to create!
Imagine what would happen if a hospital empowered all of its employees:

- to identify problems/issues
- to identify barriers to good work
- to allow them to make the needed changes

The power of 1000!! 2000!!! More!!
Lean gives employees

- A purpose
- A direction
- A sense of belonging
- A sense of contributing
- A different way to think and work
- An opportunity to build a better work environment
Why Lean for healthcare?

- **Largest industry in America**
  - Cost in 2002: $1.76 trillion
  - Cost in 2009: $2.5 trillion
  - Projected to be $4.5 trillion in 2019* (19.3% of GDP)

*Due to job losses and increased Medicaid recipients and growth in Medicare recipients as Baby Boomers retire. Medicare spending will grow 7.4% annually from 2011 to 2019.
Total Health Expenditure per Capita, U.S. and Selected Countries, 2008

<table>
<thead>
<tr>
<th>Country</th>
<th>Per Capita Spending (PPP Adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A.</td>
<td>$7,538</td>
</tr>
<tr>
<td>Norway</td>
<td>$5,003</td>
</tr>
<tr>
<td>Switzerland</td>
<td>$4,627</td>
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<td>Canada</td>
<td>$4,079</td>
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<td>Netherlands</td>
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<td>Austria</td>
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<td>$3,737</td>
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<tr>
<td>Belgium</td>
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<td>Spain</td>
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<tr>
<td>Italy</td>
<td>$2,870</td>
</tr>
<tr>
<td>Japan</td>
<td>$2,729</td>
</tr>
</tbody>
</table>


Notes: Data from Australia and Japan are 2007 data. Figures for Belgium, Canada, Netherlands, Norway and Switzerland, are OECD estimates. Numbers are PPP adjusted.
Demographics
76 million Baby boomers
42 million Gen-Xers
Millenials
Digital Natives
Why does Lean work for healthcare?

- Massive waste in healthcare
- Rock solid common sense
- Easy to learn/teach to frontline workers
- Easy to apply at the frontline where the work is really happening
- Improvement occurs with the first application
“Everything must be made as simple as possible…but not one bit simpler”

A. Einstein
What can we do with Lean in healthcare?

- Produce more **DEFECT FREE** healthcare

- Reduce/eliminate **WASTE** and have more time to take care of patients

- Improve **WORKPLACE APPRECIATION** → better staff retention

- **STRENGTHENS LEADERSHIP**
Lean Strengthens Leadership

- Consistent and reliable tools for middle and senior management
- Consistent communication of improvement efforts
Ask yourself...

- Are there things happening to patients that should not be happening?

- Are there things not happening to patients that should be happening?
Defect Free

- *Exactly* what the patient needs when s/he needs it
- Without errors
- Safe for everyone
The 7 Mudas

- Confusion
- Motion
- Waiting
- Processing
- Inventory
- Defects
- Overproduction
Confusion

Clarifying physicians orders
Medication reconciliation
Wrong site surgery
Motion

Looking for supplies
Trying to find a chart
Multiple tests in various locations
Nonsensical staffing assignments
Not having all the equipment you need
Waiting

Waiting for appointments
Waiting for transport to arrive
Waiting for the surgeon to arrive so the case can start
Waiting in an ED waiting room
Waiting for discharge orders
Waiting for meds to arrive
Processing

Not having meds you need in the Pyxis Complex and redundant paperwork
Insurance nuances
Inventory

Too much
Too little
Not the right things
Not in the right places
Defects a.k.a. ERRORS

Over 100,000 hospital deaths due to errors each year

Medication errors
Failure to rescue errors
Incorrect identifications
Wrong site surgeries
Falls
Errors

Two large studies, one conducted in Colorado and Utah and the other in New York, found that adverse events occurred in 2.9 and 3.7 percent of hospitalizations, respectively.
Overproduction

Different people asking the same questions
Multiple forms requesting similar information
IDEAL HEALTHCARE

- Exactly what the patient needs - no more, no less
- On demand, *exactly as requested*
- No waste
- An immediate response to problems or changes
- Physically, professionally, emotionally safe for patients and staff
Rule 1: All activities of work are specified according to:

- Content
- Timing
- Sequence
- Outcome
Rule 2:
All connections in the request for a service or activity are simple and direct
Rule 3: Pathways in the process of delivering the request are simple and involve as few steps and people as possible.
4 Rules in Use

Rule 4: Improvement

- Direct response to a problem
- As close to the problem as possible (in time and person)
- All change is first tested as an experiment
- All redesign is done by those doing the work
- Supported by a coach
The Scientific Method

- All work redesign is based on **DIRECT OBSERVATION OF THE WORK**

- Changes done first as experiments
Observation includes asking the worker many questions:

- How do you know how to do your work?
- Are there clear signals that cue the work?
- Do all workers do a task the same way?
Deeply understanding how work currently happens is essential before trying to fix it!
To understand deeply, you must observe
GEMBA* WALKS - GO LOOK AND SEE

- See the situation with your own eyes
- Use your senses to absorb the qualitative side of the problem
- Experience the environment
- Immerse yourself in the issue

Gemba - The actual place; the real place
• Use an Observation Sheet
• Draw Spaghetti Diagrams
● The more spaghetti, like the diagram, the clearer the need for redesigned work!

● Easy to see wasted time/travel when diagram is complete
Nuclear Med - Treadmill

The Old Way

The New Way
Understanding the Work

Value Stream Mapping

- The view from 10,000 feet
- Looking at a specific process
- All activities are recognized as value added or non-value added
- Identifies where there are areas of inconsistency
- A springboard for a future state map
As soon as the request and process boxes are drawn we can start to see the flow of the work.

The objective is to fix problems with flow.
The Value Stream Map

- VSMs identify *every* way that a request can be made
Trauma patient coming to ED
The Value Stream Map

- When drawing a VSM, it is essential to follow the process at least once to understand how it really happens.

- Validate your map with other workers to assure accurate mapping.
Trauma Patient Flow in ED

Steps in the Workflow:

1. ER
2. BASE STATION
3. ED
   - TRAUMA ROOM
4. ASSESSMENT
5. PROCEDURES
6. BLOOD BANK LAB
7. DIAGNOSTICS
   - OR
     - ICU
     - FLOOR
Ways to use Value Stream Maps?

- To understand each step of a process
- To identify *where* there are problems
- To launch specific problem solving
- To orient new staff to the process
- To clearly describe the process to other departments/authorities
Future State Map

- Use your **CURRENT STATE VSM** as a springboard for drawing your **FUTURE STATE VSM**
  - What do you **want** the process to look like?
Project Management

Current state map

Future State Map

Future State Plan

New current state map

A3 #1

A3 #2

A3 #3
A3s

Learning to see the trees for the forest

Image: Wikimedia. Fir0002/Flagstaffotos. CC BY-NC.
“If you can’t get your thinking on one page, you haven’t really done your thinking.”

M May
Ask the right questions and the answers will come **easily**

Sue Sheehy
The Jefferson Memorial Story

Frontline Workers and A3S

- Allows your organization to experiment more
- Get faster, meaningful results
- Learning occurs in the course of work
- Generator of ideas → clusters and possibilities
- Opportunities to cluster ideas into bigger ones
- A3s can be organization-changing
Selecting A3 Topics

- Select first priority area from value stream (current state) map
- Observe!
- Identify specific issues
- Prioritize and begin!
The A3 Process

- A view with a microscope
- A tool for “drilling” down into variation in the process
- Documentation of problem solving activity
- It tells the story visually
Common sense may be your enemy

- Always temper immediate “knee jerk” action with root cause analysis
- Resist drawing conclusions based on emotions
- Question hear-say
- Draw from experience, but do not rely on it

Taiichi Ono, Toyota
The A3 and The Pencil

- Lead is erasable. It gives you the opportunity to look at what you drew and make changes quickly.

- You can focus on problem solving - not on how to use the tool.

- It’s non-threatening when used as a boundary tool.
Selecting A3 Topics

- Select from your *current state map*
  or...
- As soon as possible after a problem occurs
<table>
<thead>
<tr>
<th>ISSUE</th>
<th>TARGET CONDITION</th>
<th>TITLE</th>
<th>TO</th>
<th>BY</th>
<th>DATE</th>
</tr>
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<tbody>
<tr>
<td>BACKGROUND</td>
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<tr>
<td>CURRENT CONDITION</td>
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<tr>
<td>PROBLEM ANALYSIS</td>
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<tr>
<td>TARGET CONDITION</td>
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<tr>
<td>COUNTERMEASURES</td>
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<tr>
<td>IMPLEMENTATION PLAN</td>
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</tr>
<tr>
<td>WHAT</td>
<td>WHO</td>
<td>WHEN</td>
<td>OUTCOME</td>
<td></td>
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<tr>
<td>COST</td>
<td>COST BENEFIT/WASTE RECOGNITION</td>
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<tr>
<td>TEST</td>
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<tr>
<td>FOLLOW UP</td>
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</tbody>
</table>
Always state the issue through the eyes of the customer/patient

**ISSUE** Fiberoptic Endoscopes (FEs) are unavailable when needed because they are frequently broken or being repaired.
Background

Explain why this is an issue
Include some measurements

BACKGROUND
From June 2003-June 2004, $48,400 was spent repairing and replacing FEs
The Current Condition

Draw how the work happens now, from your observations.
Validate your drawing with affected parties for accuracy and buy-in.
What’s wrong with the way this work happens now? What about this work is not Ideal?
Problem (Root Cause) Analysis

- Review the storm clouds; Consolidate the ones that are related to each other
- Use outline format and ask **WHY?** 5 times to get to the root cause

PROBLEM ANALYSIS

1. Anesthesiologists waste time searching for fiber optic endoscopes
   a. Why? Fiber optic endoscopes are not always available
      Why? FEs broken when slammed in drawers, dropped on floor, etc.
      Why? No designated place for endoscopes
   b. Why? They are placed on top of cart before and after procedures
      Why? There is no way to tell if they are clean or dirty
      Why? No designated location for clean scopes and dirty scopes

2. Potential danger to patients
   Why? Confusion as to which endoscopes are clean and which are dirty
   Why? No designated location for clean scopes and for dirty scopes
Root Causes

Root causes are *actionable* items

Most of the time root causes can be attributed to something *not* being specified (Lean Rule #1)
Why the left side is completed first

- Stupidity is having an answer for everything
- Wisdom is having a question for everything
Thousands of people saw the apple fall...

only Newton asked “Why?”
**ISSUE**
Fiberoptic Endoscopes (FEs) are unavailable when needed because they are frequently broken or being repaired.

**BACKGROUND**
From June 2003 to June 2004, $48,400 was spent repairing and replacing FEs.

**CURRENT CONDITION**
- FEs are broken when slammed in drawers, dropped on the floor, etc.
- Anesthesiologists don't know if FEs are clean or used.
- Anesthesiologist has to search for available FEs.
- Potential danger to the patient.

**PROBLEM ANALYSIS**
1. Anesthesiologists waste time searching for fiberoptic endoscopes
   - Why? FEs are not always available.
   - Why? FEs are broken when slammed in drawers, dropped on the floor, etc.
   - Why? They are placed on top of the anesthesia cart before and after surgery.
   - Why? There is no secure location to put them on the anesthesia cart.
2. There is potential danger to the patients' health
   - Why? There is confusion over whether or not FEs are clean or used.
   - Why? There is no designated location for clean FEs and used FEs on the anesthesia cart.

**TARGET CONDITION**
Title: Fiberoptic Endoscope Repairs

**COUNTERMEASURES**
1. Put two tubes (PVC pipe) on the anesthesiologists' cart for FEs. Designate one tube for clean FEs and one for dirty FEs.
2. Contact sterile processing about tubes on the carts.

**IMPLEMENTATION PLAN**

<table>
<thead>
<tr>
<th>What</th>
<th>Who</th>
<th>When</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buy supplies for anesthesia cart tubes</td>
<td>Joe</td>
<td>July 15</td>
<td>All supplies available</td>
</tr>
<tr>
<td>Put tubes on cart and label 'clean' and ...</td>
<td>Joe</td>
<td>July 18</td>
<td>Tubes ready for use</td>
</tr>
<tr>
<td>Talk to sterile processing and OR staff</td>
<td>Joe</td>
<td>July 22</td>
<td>Sterile processing aware of new system</td>
</tr>
</tbody>
</table>

**COST / BENEFIT**

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC Pipe</td>
<td>$5.50</td>
<td></td>
</tr>
<tr>
<td>Hardware</td>
<td>$1.10</td>
<td></td>
</tr>
<tr>
<td>Total Cost</td>
<td>$6.60</td>
<td></td>
</tr>
<tr>
<td>No repair/ replacement of FE</td>
<td></td>
<td>$18.400</td>
</tr>
<tr>
<td>Increase patient safety</td>
<td></td>
<td>Quality and Compliance</td>
</tr>
</tbody>
</table>

**TEST**
One anesthesiologist will retrofit cart with inexpensive, marked tubing x two weeks, and report back.

**FOLLOW UP**
February 1, 2005 - Anesthesiologists have been using this system for six months, and have had no FEs.
Where you can use A3 thinking

1. Specific problem-solving
2. Process redesign
3. Documentation of changes for regulatory bodies
4. Capital equipment purchase justification
5. Lean meetings
6. Employee evaluations
7. ????
Future State VSM

**TRAUMA ASSESSMENT**

**Goal = ≤ 60"**

**X-RAY / CT**

**Goal = ≤ 10"**

**TOTAL TIME = 70" or less**

- No extra people
- All roles defined
- Scribe
- Exchange carts
- Extra phones / intercom
- Pre-numbered John / Jane Doe MAs
- X-Ray Tech role integrated into team roles
- Real-time reads
- No return to ED / decision in Radiol.
- OR room always ready
- All transport equipment available
- ICU + Floor beds always ready
### Issue

Delay registering John/Jane Doe trauma patients

### Background

Major trauma patients often arrive without identification. Backlog of identification causes major delay in registering patient. Without hospital registration number, labs, blood bank, x-rays, etc. cannot be completed. Occurs 50% of year.

### Current Condition

- **John Jane Doe**

### Problem Analysis

1. **Delayed urgently needed dx + tx**
   - **Who:** Pt. has no ID, therefore unable to register.
   - **Why:** Hospital policy - all patients must be registered.
   - **Probable cause:** Patient getting right dx + tx.

2. **Unable to register patient due to patient being John Jane Doe**
   - **Why:** Hospital requires all patients have identification in order to register.
   - **Probable cause:** To assure right patient getting right dx + tx.

### Countermeasures

1. Develop way to urgently register patients when pt. id not available
2. Initiate “Trauma Numbers” to sequentially register id patients

### Implementation Plan

<table>
<thead>
<tr>
<th>What</th>
<th>Who</th>
<th>When</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess for a sequence of trauma numbers</td>
<td>Director of Reg.</td>
<td>Feb 15, 2004</td>
<td>Sequencing of trauma numbers be made available</td>
</tr>
<tr>
<td>Prepare trauma packets that contain trauma numbers and patient ID</td>
<td>Trauma Nurse</td>
<td>Feb 17, 2004</td>
<td>Complete, labeled packets available, at all times</td>
</tr>
<tr>
<td>Purchase emergency containers for trauma teams</td>
<td>Trauma Nurse Coordinator</td>
<td>Feb 19, 2004</td>
<td>Containers purchased and placed in trauma teams</td>
</tr>
<tr>
<td>Gather ED staff trauma teams</td>
<td>Trauma Nurse Coordinator</td>
<td>Feb 27, 2004</td>
<td>Supports trauma team readiness</td>
</tr>
</tbody>
</table>

### Cost

- Equipment: $2,500
- Payroll: $2,000
- Total: $4,500

### Cost Benefit/Waste Recognition

- Expedites patient care
- Reduces waiting time
- Reduces mortality

### Follow Up

- Review trauma protocols
- To assure all information documented correctly

---

**Delay registering John/Jane Does**
Too many people in trauma room

ISSUE Too many people in Trauma Room

BACKGROUND Many people respond to a trauma I page/alert. Not everyone who responds have a specific role in the resuscitation. In fact, sometimes there is a trauma alert makes it difficult to do effective patient care.

CURRENT CONDITION

COUNTERMEASURES

1. Trauma Team members carry trauma pagers; no overhead pages
2. Define roles of all trauma team members
   a. Create bin outside trauma room labeled with each trauma code; bins contain universal code
   b. Each team member signs up for bin; when bin is empty, role is taken over from unassigned
3. Patients take shower before resuscitation
4. Blue outfit (Digital Tech)
5. Mount overhead JVC Camera in Trauma Room & Monitor in ED classroom where students can watch

IMPLEMENTATION PLAN

what who when outcome
1. Trauma Team members carry trauma pagers All trauma team members April 15, 04 All trauma team members carry trauma pagers
2. Define roles of all trauma team members
   a. Create bin outside trauma room
   b. Assign roles based on trauma code
   c. Mount trauma resuscitation
   d. Bins obtained
3. Mount overhead JVC Camera in Trauma Room
4. Assign roles
   a. Trauma Team members carry trauma pagers
5. Implement changes

COST

- No cost for pagers or in staff
- $175 for JVC Camera
- $30 for digital tech
- $150 for digital tech

BENEFIT

- Reduced risk of errors
- Improved patient outcomes
- Decrease in ED volume

TEST

Trauma Team members outside the trauma room

FOLLOW UP

Monthly review/report at Trauma Conference
Needed supplies/equipment not in room
Much excessive movement in room
Delays in obtaining O-negative blood
Delays obtaining portable x-rays - CTL, CXR, KUB

TARGET CONDITION

TITLE Delay obtaining portable x-rays

TO Ch Trauma
BY TSC + Dis, Radiology
DATE April 18, 09

COUNTERMEASURES
1. Integrate x-rays into early assessment routine so appropriately embedded

IMPLEMENTATION PLAN

<table>
<thead>
<tr>
<th>what</th>
<th>when</th>
<th>outcome</th>
</tr>
</thead>
</table>
| 1. Obtain 4"x4"x3 ft | April 10 | Available for use in \nbeard, under head
front of backboard
film placement |
| 2. Work with x-ray tech TSC | April 20 | x-ray tech knew
when film should be
film processed |
| 3. Inform trauma team that TSC x-ray tech will be responsible in obtaining films | April 10-20 | All trauma teams were
members aware |

COST BENEFIT/WASTE RECOGNITION
- 2 4"x4"x3 ft boards $14.98
- Varnish for boards $6.00
- Total $21.98
- X-rays done in timely manner
- Timely diagnosis based on x-rays

TEST
Monitor 15 trauma cases to assess for timeliness of x-rays

FOLLOWUP
Over 6 month period, monitor timeliness of x-ray results
Breakdown in communication between ED and OR, ICU, Blood Bank, CT
**ISSUE**  The amount of money being spent in the NICU on rental equipment exceeded the demand for rental equipment.

**BACKGROUND**
The NICU has 10 isolettes and the capacity of 12 newborns. The normal census is eight newborns. When the census exceeds ten newborns NICU rents isolettes.
In six months $68,000 was spent on rental isolettes.

**CURRENT CONDITION**

**PROBLEM ANALYSIS**
1. Rental isolettes are being used when hospital isolettes are available
   - why? Rental isolettes are stored in the utility room after use
   - why? All isolettes are the same model and look the same
   - why? Rental isolettes aren’t clearly marked as rentals
2. Rental isolettes aren’t returned to Bio-med after use
   - why? RN’s can’t easily recognize rental vs. hospital owned isolettes
   - why? No clear identification as rental
   - why? No defined process for returning isolettes

**TARGET CONDITION**

**COUNTERMEASURES**
1. Attach bright orange tags to rental isolettes when checked out of the bio-med department
2. Print directions for returning the isolettes on the orange tag
3. Half of the orange tag is retained in the bio-med department to track the rental equipment

**IMPLEMENTATION**

<table>
<thead>
<tr>
<th>What</th>
<th>Who</th>
<th>When</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create rental return instructions</td>
<td>Bio-med/RN</td>
<td>4/5/06</td>
<td>Instructions ready to print on tag</td>
</tr>
<tr>
<td>Create orange tags to be attached to rentals</td>
<td>Bio-med/RN</td>
<td>4/10/06</td>
<td>Tags ready for use</td>
</tr>
<tr>
<td>Orient bio-med/NICU staff on new process</td>
<td>Bio-med/NICU</td>
<td>4/15/06</td>
<td>New process implemented</td>
</tr>
</tbody>
</table>

**COST / BENEFIT**

<table>
<thead>
<tr>
<th>Cost</th>
<th>$400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomed and RN staff time</td>
<td>4 hours</td>
</tr>
<tr>
<td>Tag materials</td>
<td>$60</td>
</tr>
<tr>
<td>Benefit</td>
<td>$35,200</td>
</tr>
<tr>
<td>Reduced rental fees ($68,000 - $29,800)</td>
<td>$38,200</td>
</tr>
</tbody>
</table>

**TEST**
Use tags for six weeks. Monitor weekly for possible revisions.

**FOLLOW UP**
October 22, 2003: Two tag revisions made in six weeks. In the six months after implementation, $48,000 was spent on rental isolettes.
Using Lean for Facility Design
# Experience: Process

**PLAN:** LEAN Process Application Examples

## EMERGENCY DEPARTMENT

<table>
<thead>
<tr>
<th>CURRENT STATE PROBLEMS</th>
<th>OPERATIONAL ISSUES</th>
<th>POTENTIAL FACILITIES SOLUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door-to-doctor wait times</td>
<td>No patient beds available</td>
<td>Transition-to-Admission Unit</td>
</tr>
<tr>
<td>Diagnostic testing and result delivery wait times</td>
<td>Waiting for diagnostic results</td>
<td>Chair-centric waiting (in both Nursing Units for discharges and in ED for diagnostic results)</td>
</tr>
<tr>
<td>Boarding of patients in the Emergency Department</td>
<td>Inpatient discharge scheduling</td>
<td>Teleconferencing for consultations to reduce turn-around</td>
</tr>
<tr>
<td>Leaving without seeing a doctor (due to unacceptable wait times)</td>
<td>Waiting for specialist consultation</td>
<td>Real-time bed tracking to identify ready rooms</td>
</tr>
<tr>
<td>Infection control</td>
<td>Equipment availability</td>
<td>Selection of finishes to expedite cleaning / patient room turn around</td>
</tr>
</tbody>
</table>
Experience: Process

PLAN: LEAN Process Application Examples

PERIOPERATIVE

CURRENT STATE PROBLEMS

- Delayed start times
- Case cart picks
- Room turn-around
- Pre-operative to post-operative transitioning
- Operating room to PACU transitioning

OPERATIONAL ISSUES

- Anesthesia not ready for next case
- Unsure if room is available for housekeeping / turn-around procedures
- Equipment set-up for next case
- Patient transfer from Pre-operative unit
- Housekeeping procedural efficiency

POTENTIAL FACILITIES SOLUTIONS

- Proximity of lounge and office space to Pre-operative unit and Operating rooms
- Flow / proximity of Pre-operative unit to Operating rooms
- Flow / proximity of Family Waiting to Operating rooms

Image: Wikimedia. Ardfern. CC BY-SA.
Encourage Your Staff to Be Innovative

“Try to figure out a way to do something better that has ever been done before.”

Dan Needham
Former CEO Jet Blue
Identify Leadership Champions

- Senior Leadership Team member responsible for Lean activities
  - Who on your team will own this work?
- Physician champions
  - An Individual? A Committee?
- Informal Leaders
  - Managers, Supervisors, Staff
The Ideal Lean Coordinator

- Coordinates all Lean activities
- Based in the Quality/PI Department
- Has a deep understanding of the organization’s philosophy, strategic plan, administration and management styles
- Communicates to SLT/Middle Managers/Staff
- Has great coaching and interpersonal skills
Instead of saying

Say, “No one knows this job better than you do! How can I help?”
Ideal Leadership Behaviors

- Coach and engage in the work
- Respect for all people
- Focus on the process
- Recognize and reward staff
- Lead by example
- Create a vision and make it happen!
- Commit to achievement of Ideal
- Stick to it for the long run
- Ignite a culture change in the organization
Healthcare

Where “good enough” never is
Lean does not light a fire under people ... it lights a fire within them

M May
“It’s kind of fun...

to do the impossible”

Walt Disney
So let’s attempt the impossible...

Let’s fix what’s wrong with Healthcare!!!