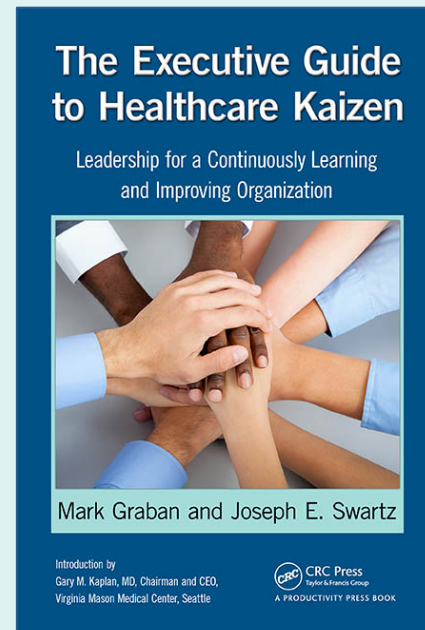
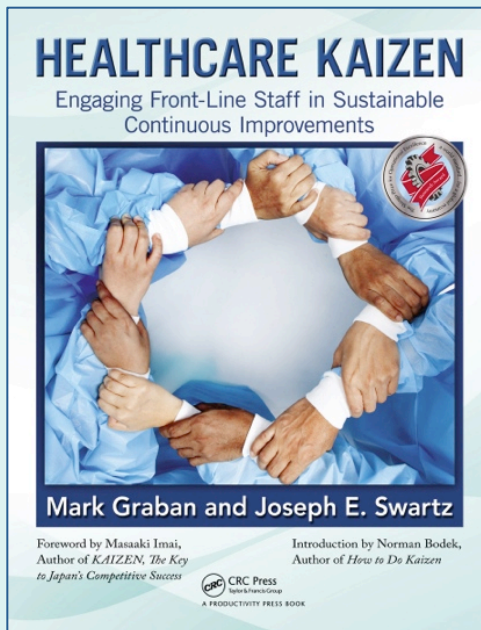
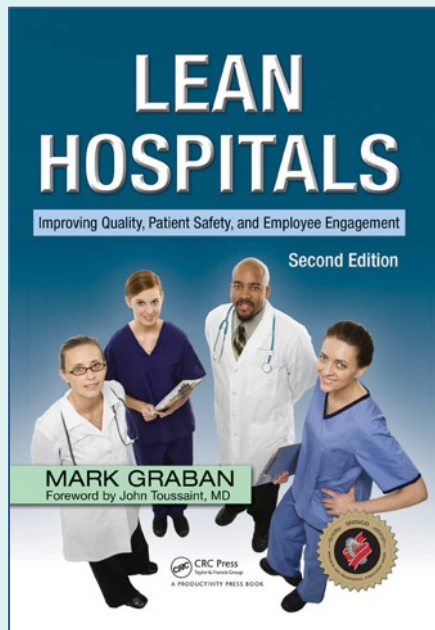


# Key Lean Mindsets for Healthcare

## Mark Graban

- President, Constancy, Inc.
- Faculty, Lean Enterprise Institute & ThedaCare Center for Healthcare Value



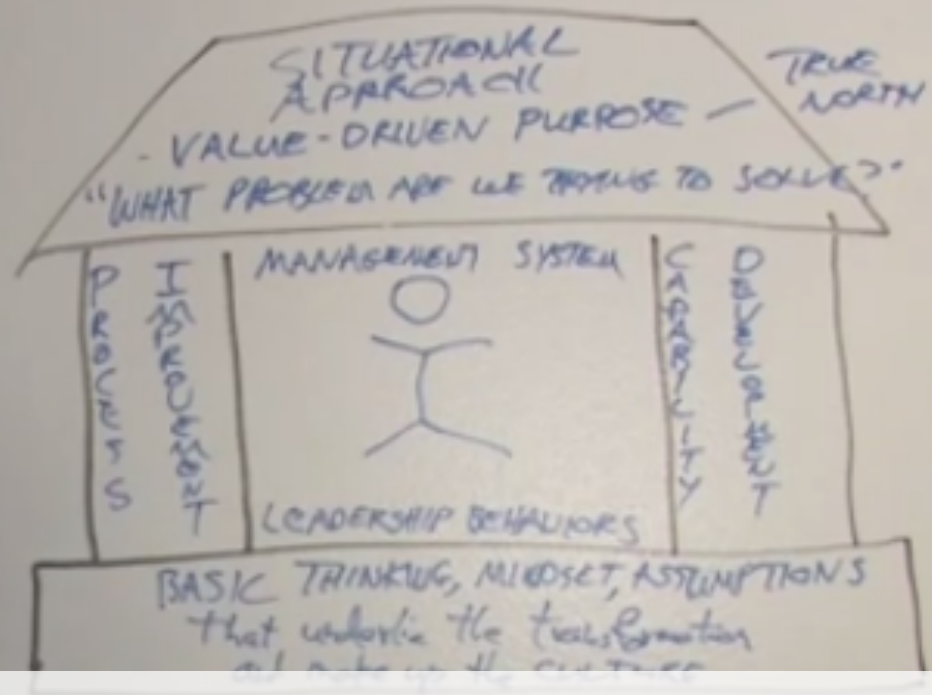
**WHY**

**LEAN?**





John Shook  
*Lean Enterprise Institute*

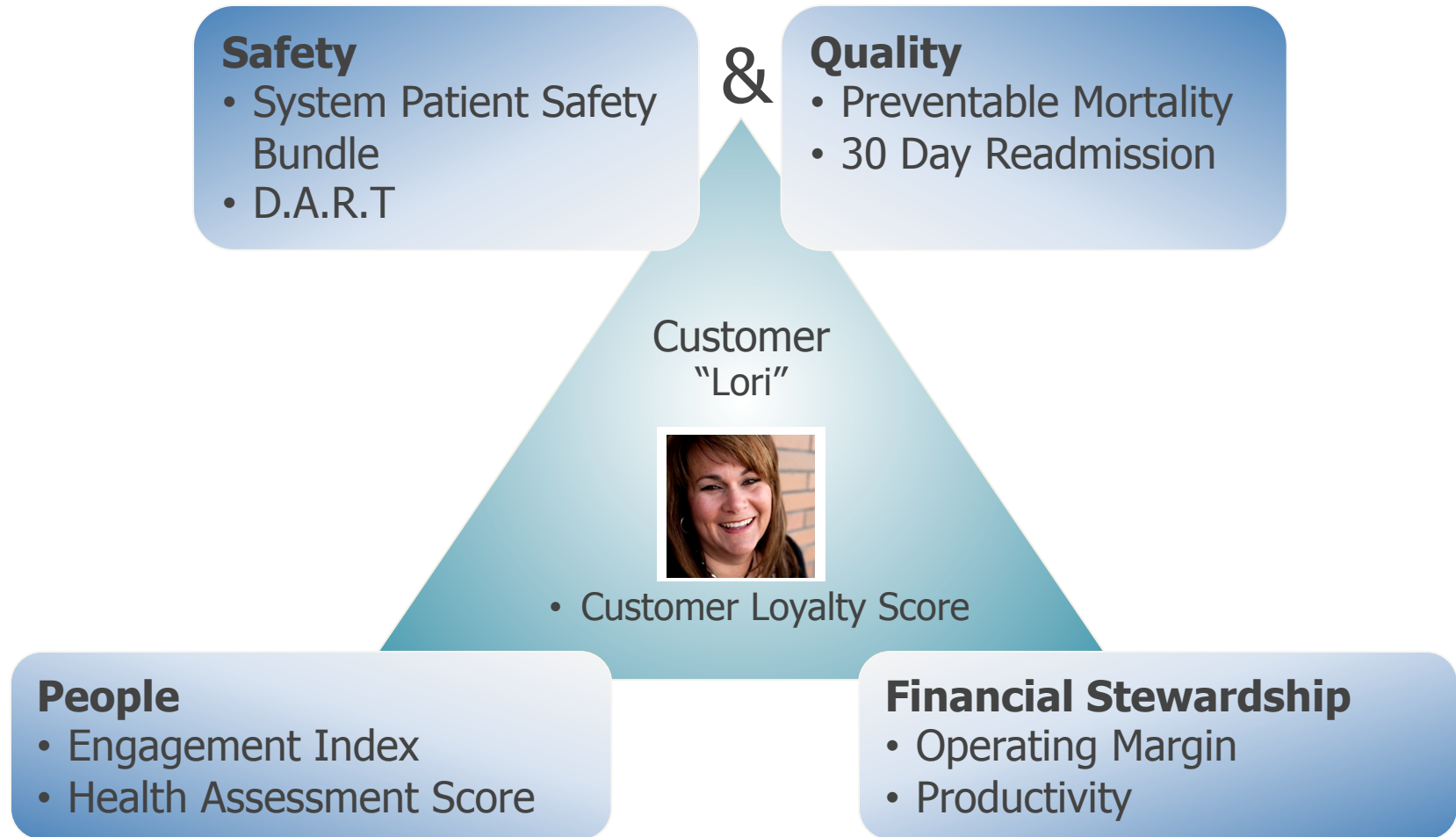


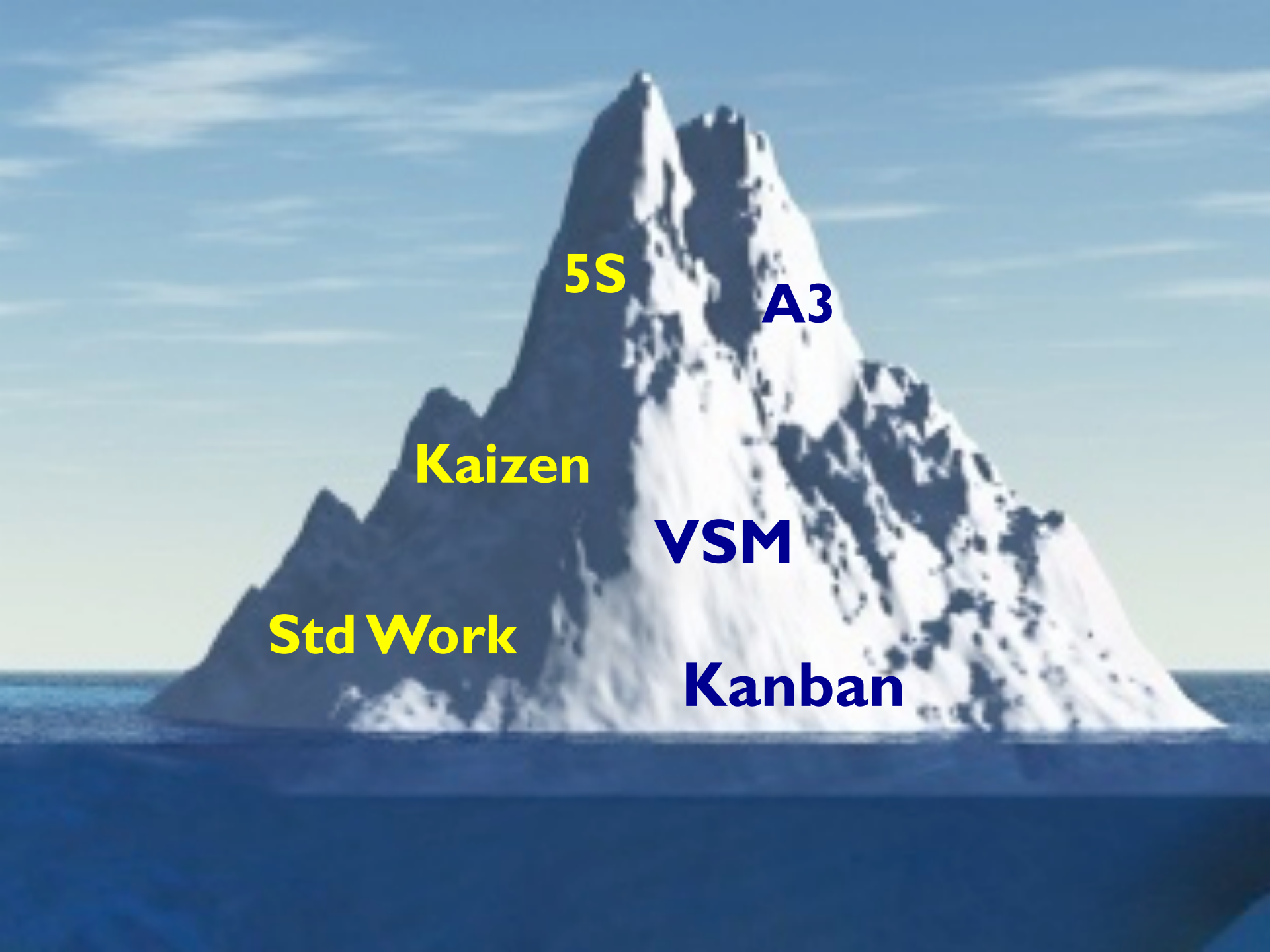
**What problem are we  
trying to solve?**

# Clear Purpose

## ThedaCare True North Metrics

Measuring the health of our organization





**5S**

**A3**

**Kaizen**

**VSM**

**Std Work**

**Kanban**



5S

A3

Kaizen

Kanban

Std Work

VSM

**Management System**  
**Philosophy**  
**Culture**  
**Thinking**  
**Mindsets**



A large, jagged iceberg floats in a calm blue sea under a clear sky. The iceberg's peak is sharp and reaches high into the air. The water is a deep blue, and the sky is a pale, clear blue.

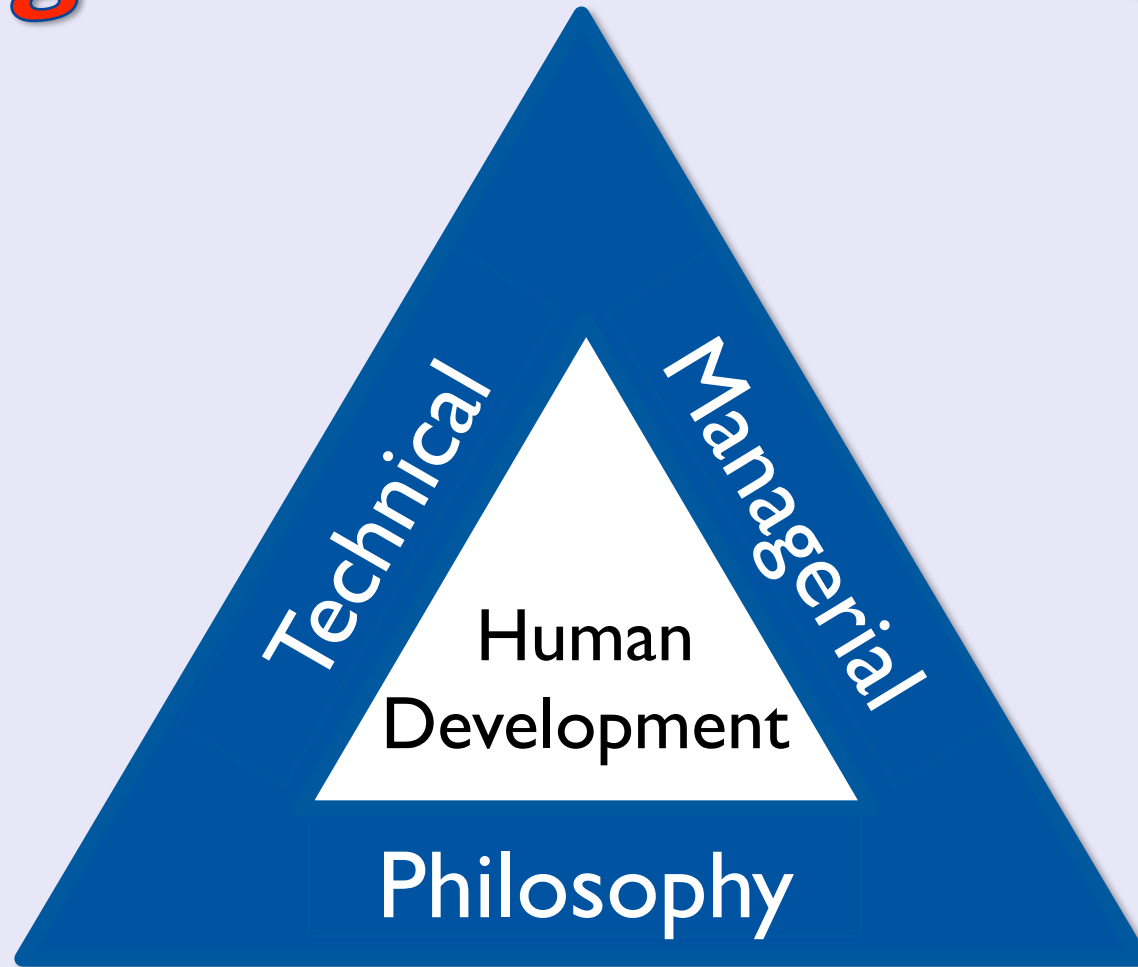
# THE TOYOTA WAY



**CONTINUOUS  
IMPROVEMENT**

**RESPECT  
FOR PEOPLE**

# Organizational Culture



... An Integrated System

"It is of critical importance that if you start this journey, that it starts with the top, the administration. If you don't hardwire Lean thinking into your routine, then it will just become a 'flavor of the month.'"



Rebecca Smith, VP & COO  
Caldwell UNC Health Care

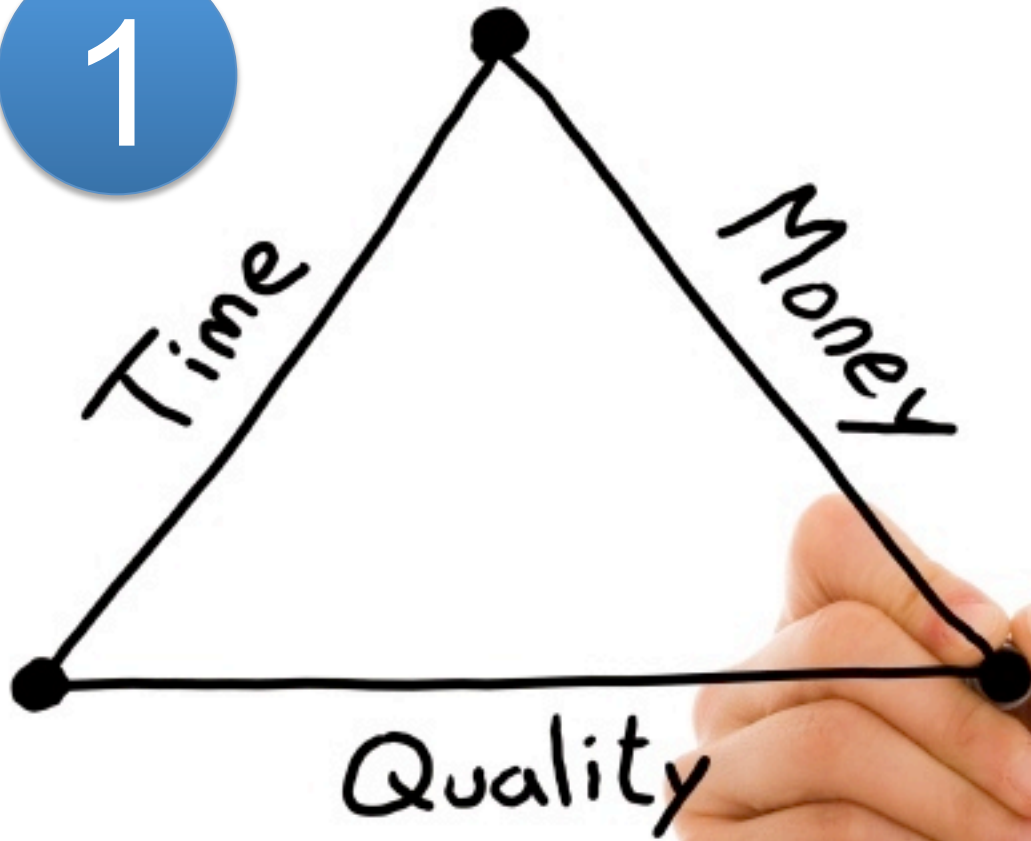


## PHILOSOPHY AND VALUES



- We respect the dignity and worth of each person and strive to promote the rights of our patients.
- We are dedicated to caring and compassion for all whom we serve. Their needs of body, mind and spirit are our first priority.
- We are committed to quality service through continuous quality improvement, teamwork and collaboration.
- We encourage innovation through an empowered workforce as a way of achieving healthcare services that embrace our philosophy, values and mission.
- We believe in community stewardship and will work in collaborative partnership with others to help assure affordable and accessible services for all people of this region.

1



**Don't Accept Tradeoffs**

# **Traditional Thinking**

**MORE People**

**MORE Space**

**MORE Money**

# ThedaCare Coronary Bypass Patients



# Learn, But Don't Copy



Edit	View	History	Bookmarks
Undo			⌘Z
Redo			⇧⌘Z
Cut			⌘X
Copy			⌘C
Paste			⌘V
Paste and Match Style			⇧⌘V
Delete			
Select All			⌘A

2

# “Thinking Production System”

“An environment where people have to **think** brings with it wisdom, and this wisdom brings with it kaizen...

Perhaps the greatest strength of the Toyota Production System is the way it develops people.

This is why the T actually stands for **‘Thinking’** as well as for ‘Toyota.’”

– Teruyuki Minoura, Toyota







Safe Work

Reliable Work

Skilled Work

Safe Work is "the door" to all work

Let us always pass through this door first

Eiji Toyoda

安全な作業  
確実な作業  
熟練した作業

安全な作業は、作業の入口である。  
わたくしらは、まずしっかりとこの  
入口を通りましょう。

豊田英二

# **Dean Gruner, MD**

## **CEO of ThedaCare**

“If we can’t do things safely, why should we be doing them in the first place?”





Goal: ZERO lost work time injuries

“People should not be hurt who work for Alcoa. It’s not a priority. It’s a precondition.”

- 1/20<sup>th</sup> of the national average
- 30x safer than hospitals

**Paul O’Neill**

- CEO of Alcoa
- Pittsburgh Regional Health Initiative
- U.S. Treasury Secretary

## **Push to Zero**

Saint Francis has introduced a Lean campaign that targets quality improvement and waste reduction throughout the healthcare system. “Lean is not just a one-time project,” explains Diemer. “It is a part of our culture that is built into the organization.”

# Lean Improves Safety

- Virginia Mason Medical Center
  - Cut the incidence of pressure ulcers to 2% from 8%, preventing a projected 838 per year
  - 75% fall in the number of litigation claims it received between 2004-05 and 2012-13
- Seattle Children's Hospital
  - 66% reduction in TPN medication error rates
  - 50% reduction in ICU bloodstream infections
  - 20% fewer ventilator days for patients.



**Problems Are Treasure**



I was **‘creating a negative work environment.’**  
It said that in my performance review.”

RN, 20 years experience











## **“Patient Safety Alerts”**

- 15,000 in 10 years
- Reducing falls, DVT, chemo errors, sentinel events
- Professional liability insurance fell 26%, then 12% more

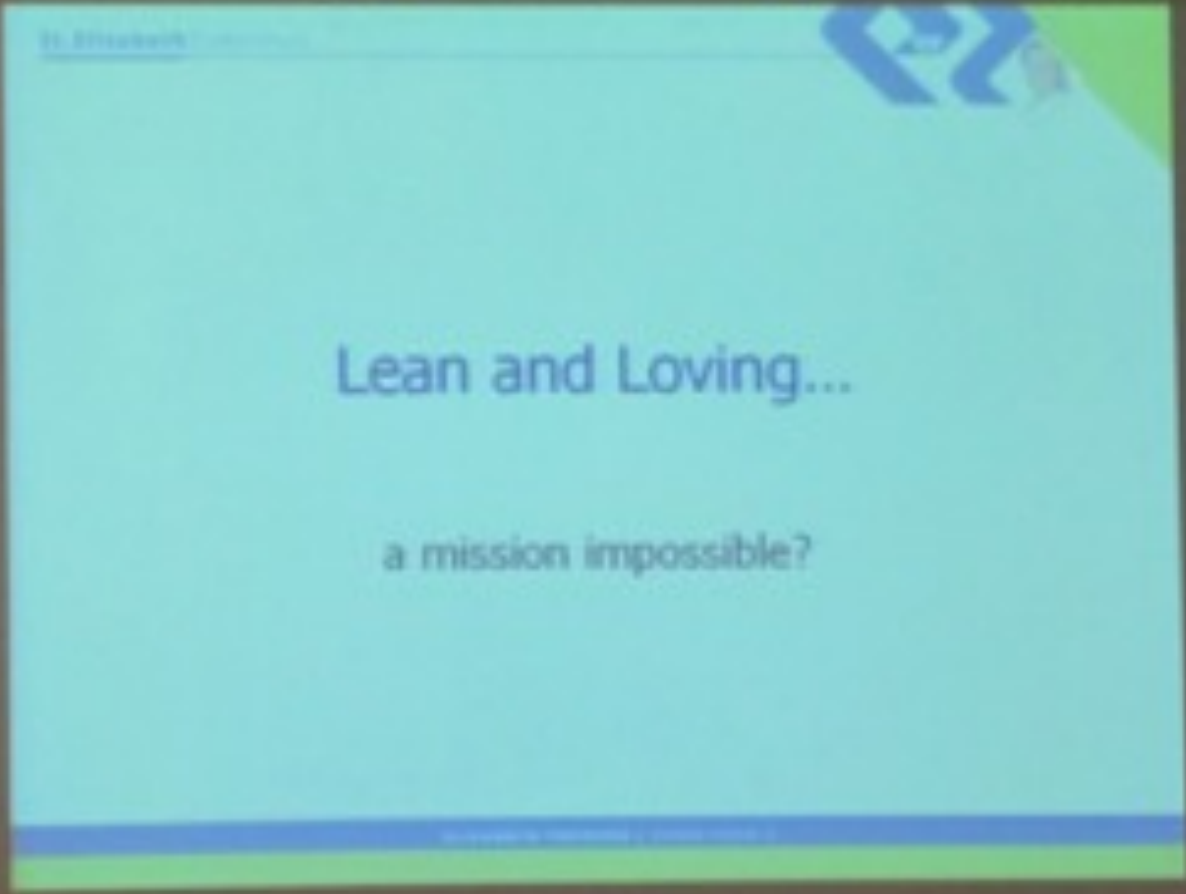


Gary Kaplan, MD  
Virginia Mason Medical Center



A healthcare professional, a woman in a white lab coat, is smiling and holding the hand of an elderly man lying in a hospital bed. The man is also smiling and looking up. Behind him, a woman and a young boy are watching the interaction with smiles. A bouquet of yellow and white flowers is visible in the background.

**Be Patient Focused**



Lean and Loving...

a mission impossible?

**Dr. Jacob Caron, Orthopedic Surgeon**  
Chairman of the medical staff



**“It’s kinda all about you.”**



**“Where care comes to you.”**

Park Nicollet Frauenshuh  
Cancer Center



6



**Don't Rely On Layoffs**



# A Clear Comparison, 2011

## General Motors lays off workers at NY plant

**AP** Associated Press



AP — FILE - In this Dec. 18, 2009 file photo, the entrance to the General Motors Powertrain plant in Tonawanda, ...

By DEE-ANN DURBIN, AP Auto Writer — Mon Mar 21, 4:58 pm ET

DETROIT — General Motors Co. on Monday is halting some production and temporarily laying off workers at a Buffalo, N.Y., engine plant, another sign that Japan's disaster is affecting automakers around the globe.

GM is suspending production of engines built at its Tonawanda plant for the Chevrolet Colorado and GMC Canyon compact pickups, which are assembled at a GM factory in Shreveport, La. GM shut down its Shreveport operation this week because of a shortage of parts from Japan.

## Toyota shutdown looming

By QMI AGENCY

Last Updated: April 6, 2011 7:50am

WOODSTOCK - A shutdown is looming at Woodstock's Toyota plant, but officials say there will be no layoffs.

The move comes in the wake of a parts shortage from Japan after the country was paralyzed by a devastating earthquake and tsunami.

"We do anticipate some non-production days," Toyota Motor Manufacturing Canada spokesperson Pat Clement said.

# “No Layoffs Due to Lean”

FierceHealthcare

NEWS TOPICS ANALYSIS FEATURES

## How lean management helped hospitals avoid layoffs

October 1, 2010 | By Mark Graban

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TOOLS



Comment

Despite the  
based on the  
hospitals or  
several lead  
saving or cr

Traditionally,  
organization  
costs and at  
strengthened  
improvement  
organization  
setting.

Here are four  
layoffs due to

BECKER'S

## Hospital Review

BUSINESS & LEGAL ISSUES FOR HEALTH SYSTEM LEADERSHIP

### Lean as an Alternative to Mass Layoffs in Healthcare

Written by Mark Graban, Lean Expert and Chief Improvement Officer, KaiNexus | September 06, 2012

Social Sharing         6

Tags: [lean](#) | [Mark Graban](#) | [mass layoffs](#)

When faced with financial pressures, hospital leaders often try to reduce costs by laying off hospital employees. This is, in a way, understandable, since payroll makes up 60 to 70 percent of a typical hospital's overall costs.

An increasing number of hospitals, however, are questioning the long-term impact of layoffs on morale, cost and quality. As a result, many are turning to "Lean management" practices, based on the Toyota Production System, as an alternative. The Lean methodology reduces costs, with lower costs being the end result of higher staff engagement and better patient care. Denver Health is one such health system with a "no-layoffs philosophy," having saved over \$150 million through their Lean program. Without those savings, Denver Health would "absolutely have had to cut jobs," said CEO Patricia Gabow, MD, in a [Denver Post](#) report.

# CEO-Level Plan, Do...



Gary Passama, president and CEO of NorthBay Healthcare, draws on his 40-plus years in administration to comment

- Old Mindset:
  - NorthBay has “unfortunately had to deal with various cost crises by laying off staff” during his tenure
  - Senior leaders sometimes “really have no choice” about layoffs.

# CEO-Level Study, Adjust...



Gary Passama, president and CEO of NorthBay Healthcare, draws on his 40-plus years in administration to comment

- New Mindset:
  - “After a year or so, the employee count is back up and the savings evaporate,” adding, “There has to be a better, longer lasting and less traumatic way to deal with such fiscal situations.”
  - Lean is a journey, not a destination. It requires a long-term time horizon and long-term commitment.

# Lack of Time for Kaizen?



“Mikki Gremp, RN, left one hospital because a number of policies, including its practice of 'flexing down,' left her feeling that nurses weren't valued.”

*AJN Report: The Other Side of Mandatory Overtime*  
Roxanne Nelson BSN, RN  
Maureen Shawn Kennedy MA, RN, editorial director

*AJN, American Journal of Nursing*  
April 2008, Volume 108 Number 4, Pages 23 - 24





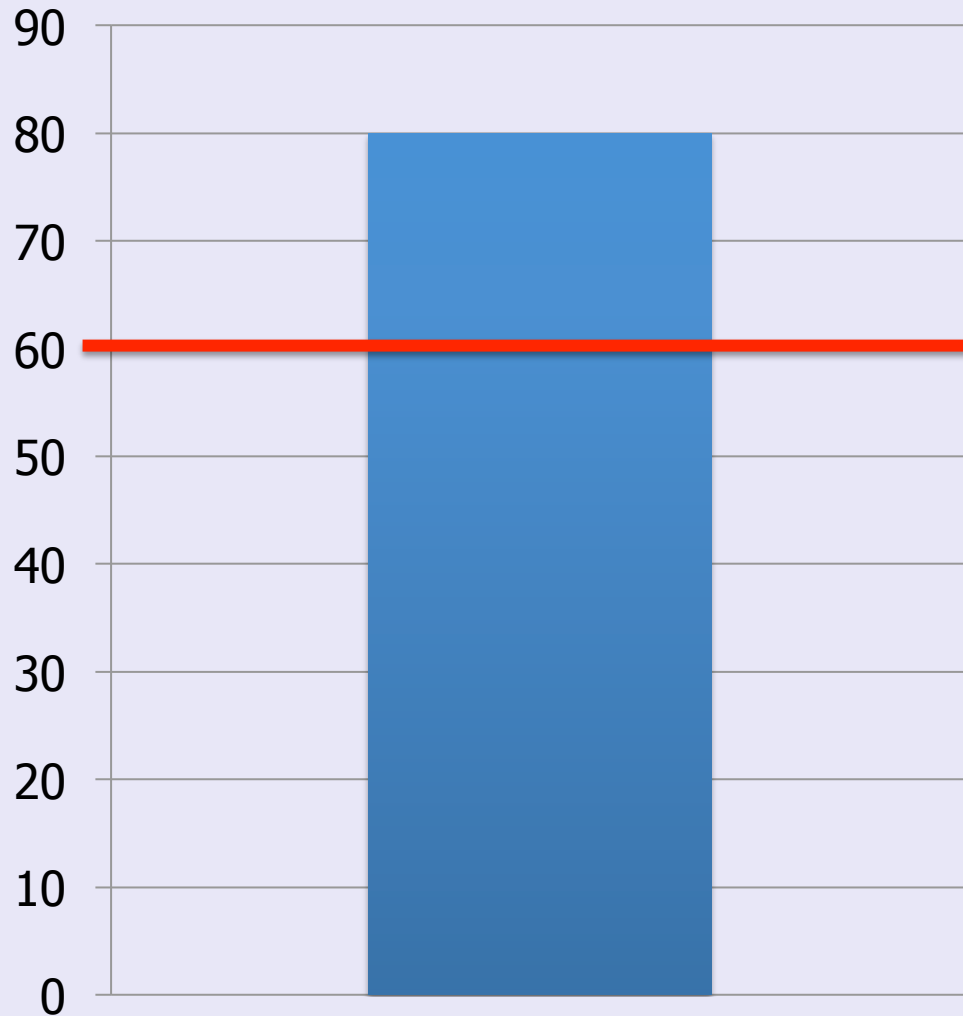
**Stop Overburdening  
People**

# Overburden (“Muri”)

- Overburden isn't respectful
- Two types:
  - Too much work
  - Work too difficult
- Work is uneven (mura)



# Nursing Unit Analysis



“Which 20 minutes of work are you going to skip in an hour?”

# Systemic Global “Waste”

What % of time do “med/surg” unit RNs spend directly with patients?

A: 21%

B: 33%

C: 50%

D: 65%

New Zealand 33%

Virginia Mason 32%

NHS England 34%

Illinois 31%

Cinci Children's 29%

It is possible to double this time with patients  
More time to do the “right things”



8

# Focus



# How Many Top Priorities?

Another way that people are disrespected, perhaps unwittingly, is when initiatives and projects are piled on, leaving them with a sense that little can be accomplished against a mountain of needs. I see this all the time. In a hospital in North Carolina, for instance, I asked a hospital's 17 top executives to name every critical initiative that they were tracking. I gave them pads of yellow sticky notes and said, "One initiative per note."

At the end of 15 minutes, those executives had 222 sticky notes plastered over the walls of that conference room. Guess who was going to do that work required by those initiatives—gathering data, researching various possibilities? I can tell you it was not those executives. Launching new initiatives is easy; it gives us the illusion that something positive is about to happen. Subtracting them requires hard work, honest debates, and—there's no other word for it—leadership.

# Strategy Deployment

- Encourages focus
- What key measures?
- What key initiatives?



# HEALTH SYSTEM

# TRUE NORTH WALL

**SAFETY &  
QUALITY**

**PEOPLE**

**PATIENT  
SERVICE**

**FINANCIAL**

**MOTHER  
A3**

**MOTHER  
A3**

**MOTHER  
A3**

**MOTHER  
A3**

**MEASURE  
1**

**MEASURE  
3**

**MEASURE  
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**MEASURE  
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**MEASURE  
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**MEASURE  
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**MEASURE  
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**MEASURE  
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**MEASURE  
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**MEASURE  
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**MEASURE  
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**MEASURE  
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**MEASURE  
5**

**MEASURE  
3**

 HEALTH SYSTEM

## FOCUS A3s

**FOCUS  
A3  
#1**

**FOCUS  
A3  
#2**

**FOCUS  
A3  
#3**

**FOCUS  
A3  
#4**

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9

# Break Down Silos

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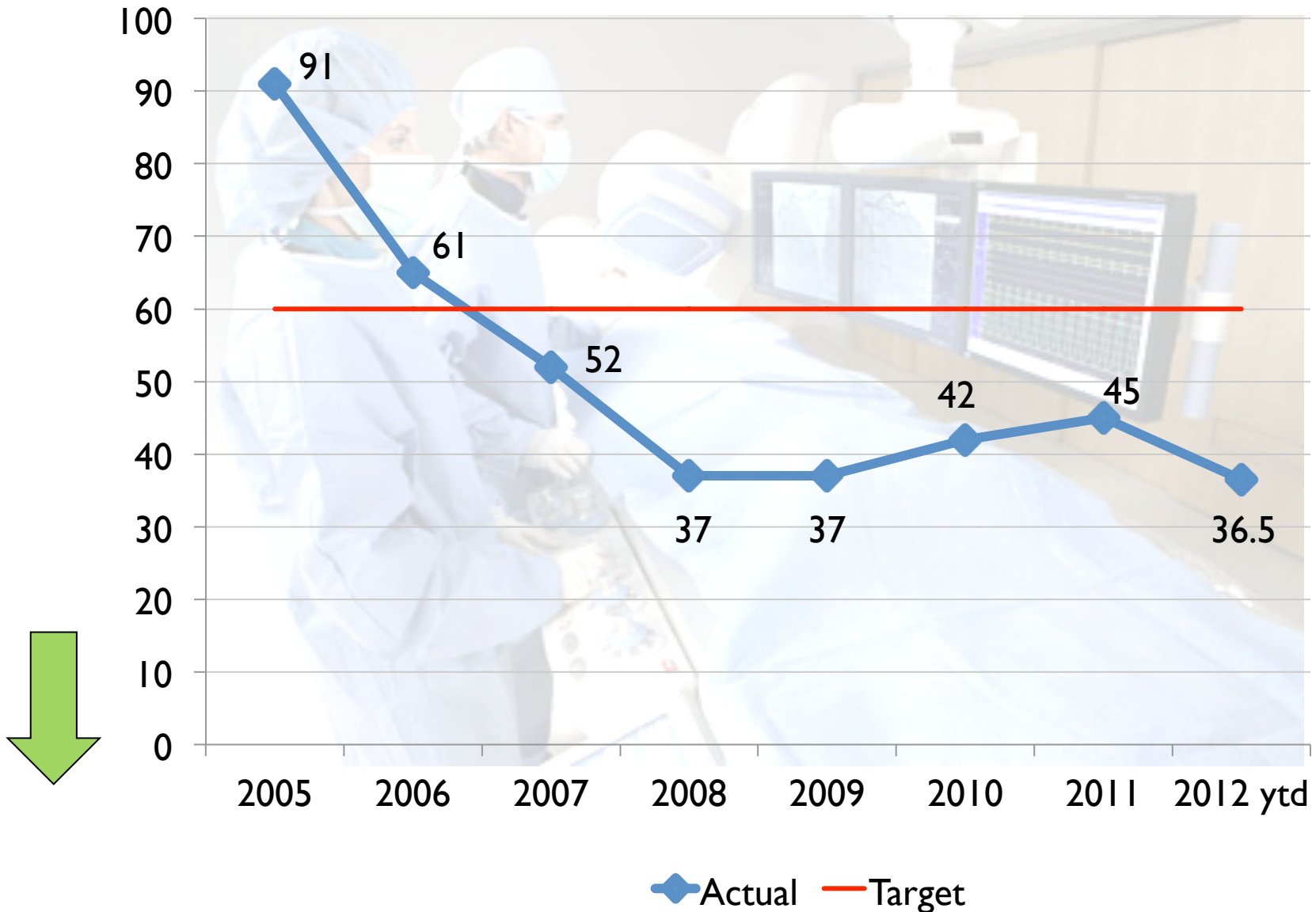
DM YCner

YOO-Oi-DR

YOO-Oi-DRaC

balthatC

# ThedaCare “Door to Balloon”





# Value Stream Mapping





“I know we’re  
not doing the  
right thing, but  
I have to hit my  
department  
budget.”



10

A man in a white dress shirt and a dark tie with a light-colored diamond pattern is pointing his right index finger directly at the viewer. The background is plain white.

# Avoid Blame

“American management is quick to assign blame to an individual when the problem, is in fact, a fault in the system.”

W. Edwards Deming (1900-1993)





“When language skills develop, one of the first practical things that can be done with them is to blame others for one’s misdeeds.”



ACCORDING TO [REDACTED] POLICY  
ANY PATIENT WEIGHING 250 LBS  
OR OVER SHOULD USE A HOVER-  
MATT FOR LATERAL  
TRANSFERS.  
USE THIS EQUIPMENT FOR  
TURNING AND TRANSFERS TO

KEEP  YOU AND THE  
PATIENT SAFE FROM INJURY.

THANK YOU

IF YOU DO NOT KNOW WHERE  
THE KEY IS ON YOUR UNIT, ASK  
YOUR TEAM LEADER,  
MANAGER, OR DIRECTOR.

# The Quaid Case

## Heparin/Hep-Lock



### Hospital CMO:

“This was a preventable error, involving a failure to follow our standard policies and procedures, and there is no excuse for that to occur at Cedars-Sinai.”

Was this the first time the policies and procedures were not followed?



# End Command and Control

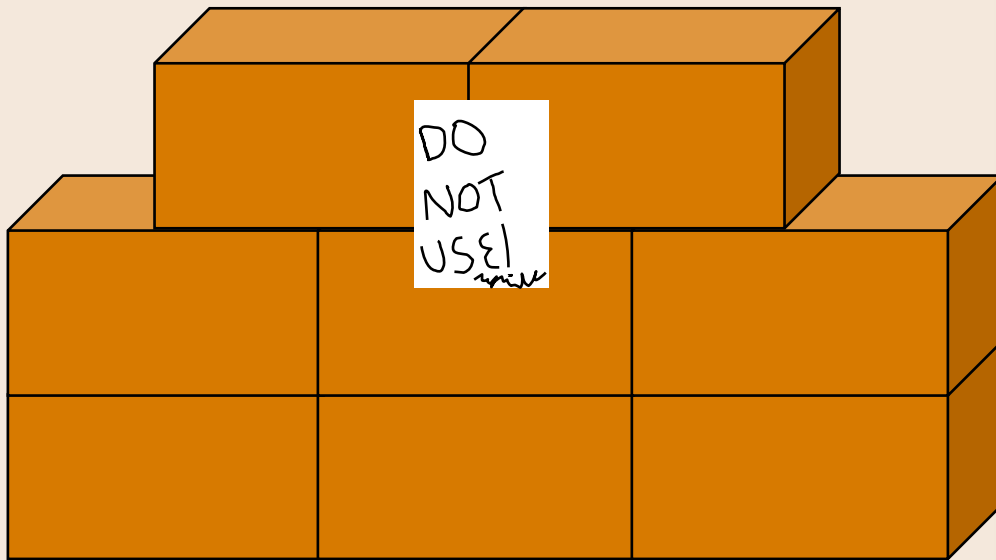




**“You Can’t  
Make Anybody  
Do Anything”**



# “The Power of Why”



DO NOT USE

Use of these parts  
could result in brake  
failure and possible  
customer injury

# Explaining “Why” to Patients

**NO FOOD  
OR DRINK**

No Food or  
Drinks in this  
Area.



In consideration of our patients who are not allowed to eat or drink while waiting for their appointment no food or drinks are allowed in this area.

*No se permite comida ni bebidas en esta area.*

*En la consideración de nuestros pacientes no se permita que comer o beber mientras que esperan su cita no se permite ningún alimento o bebidas en esta área.*

12



**Go to the Gemba**

# Three Keys to Lean Leadership

- **Go See**
- **Ask Why**
- **Show Respect**



Toyota Chairman Fujio Cho



“Toyota managers should be sufficiently engaged on the factory floor that they have to wash their hands at least **three times a day.**”

Taiichi Ohno



**“...Kaplan tours the hospital daily** looking for problems and solutions. Everyone is encouraged to look for changes to make work more efficient.”

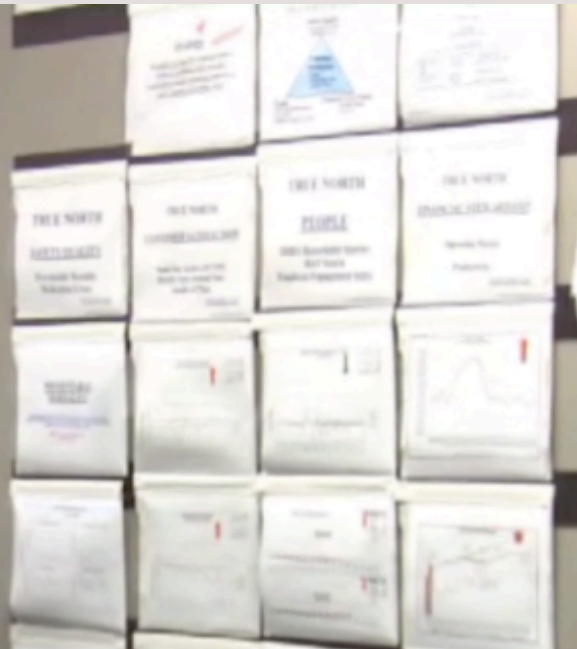
- Virginia Mason CEO Gary Kaplan, MD



# Manage Visually

# Not Just Charts on the Wall

1. Safety/Quality
2. Customer Satisfaction
3. People
4. Financial Stewardship





# Managing a Best Practice Solution

**“Hourly Rounding”**



# **Problem statements:**

- Length of stay is too long
- Too many patients fall and get injured
- Patient satisfaction scores are too low



# Are We Managing the System?

Date:	12am	2 am	4am	6am	7am	8am	9am	10am	11am	12pm	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9 pm	10pm
<b>Intentional rounds completed by:</b> (place initials in box indicating time of rounds, check all items below that apply for that time)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
<b>3 P-s</b>																				
Pain Assessment	✓	✓	✓					✓					✓							
Toileting (potty) - assist patient to restroom								✓					✓							
Positioning	✓	✓	✓					✓					✓							
<b>Environmental scan</b>																				
Fall risk hazards: bed in low position, cords are secured	✓	✓	✓					✓					✓							
Phone, water, tissue, urinal, bedside table, trashcan, and call light are within reach	✓	✓	✓					✓					✓							
Temperature of room, blankets, pillows	✓	✓	✓					✓					✓							
<b>Prior to leaving room</b>																				
Ask, "Is there anything else I can do for you? I have the time."								✓					✓							
Remind the patient that a staff member ( <b>let them know who</b> ) will be back in about an hour to round on them again.								✓					✓							
<b>Document the round on the patient's chart.</b>																				

# Are We Managing the System?





# Are We Managing the System?



Why?

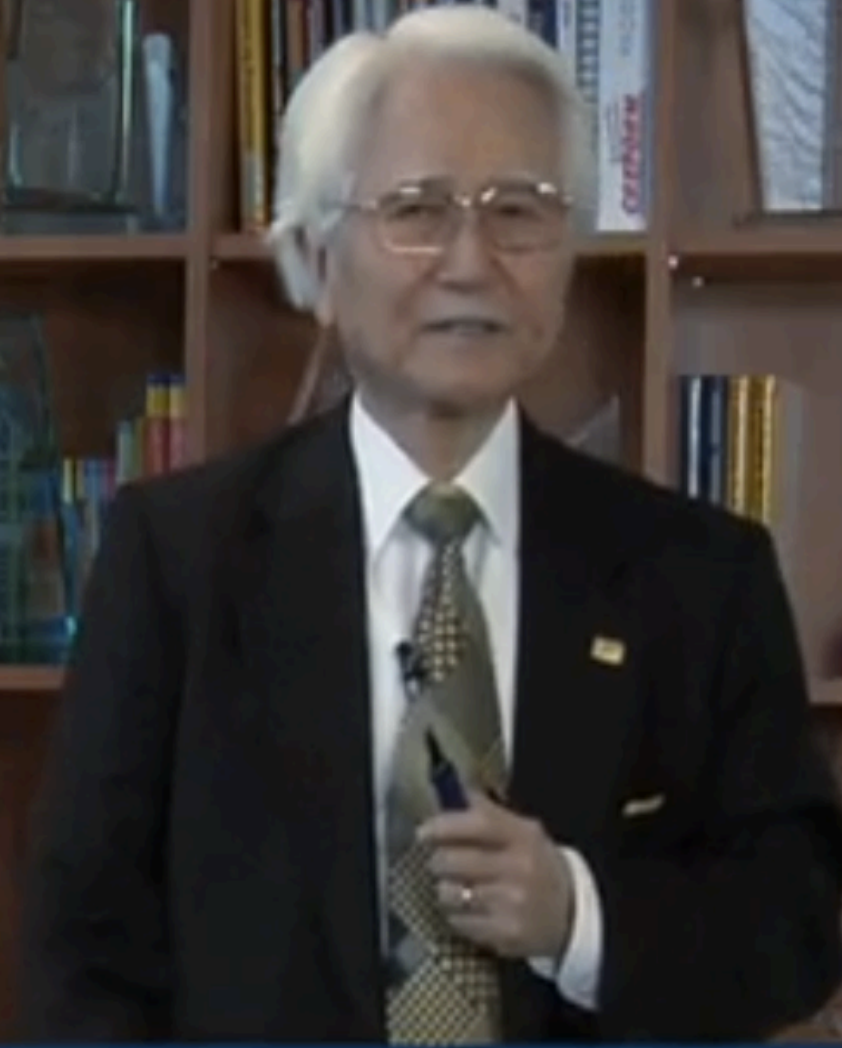


**Involve Everybody**

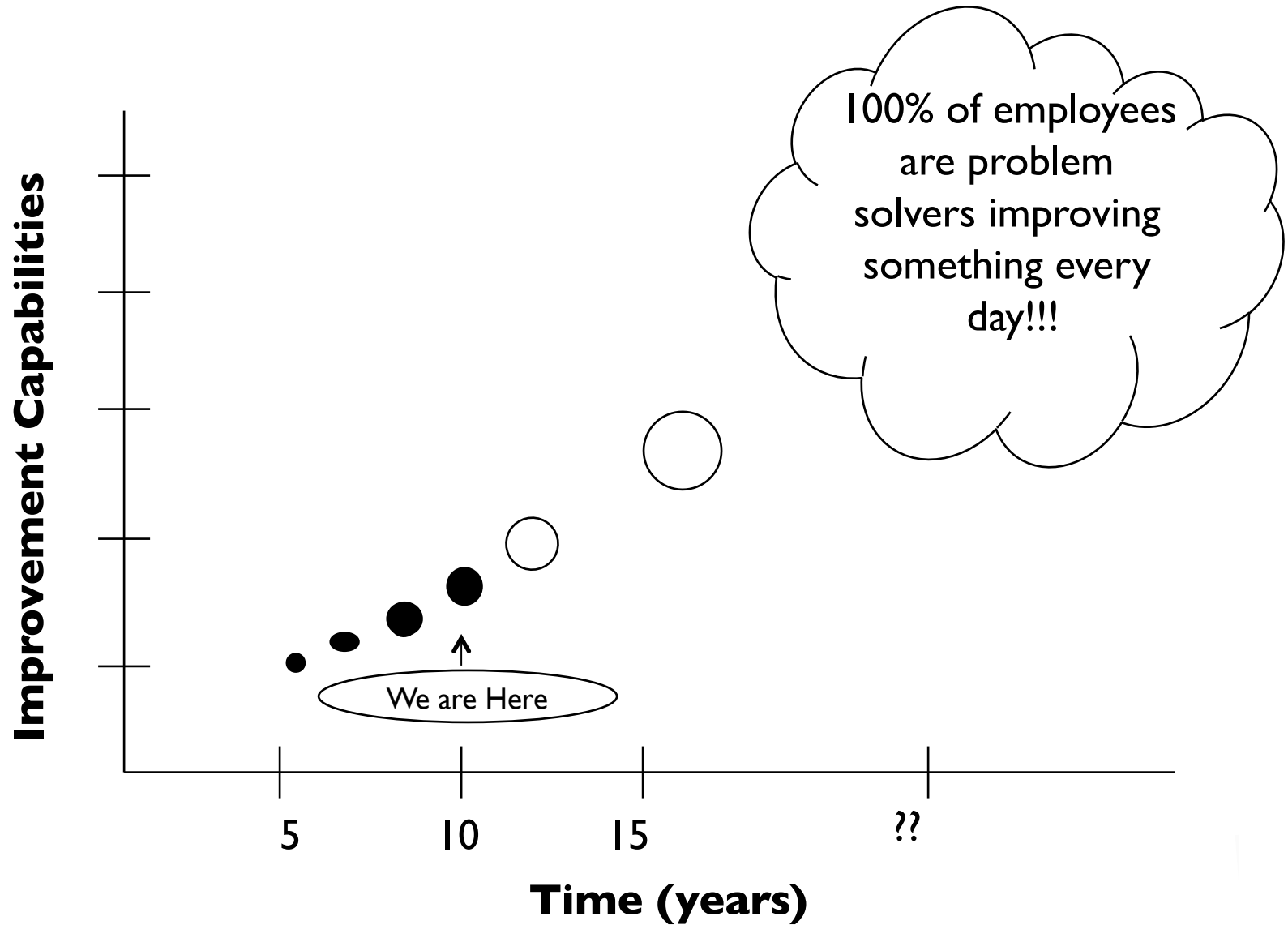


改善

**“everybody  
improving,  
everywhere,  
and every day”**



Masaaki Imai - Founder KAIZEN Institute





# Q&A / Contact Info

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