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# SHARP®

## LEAN Thinking (Toyota Production System)

Basic knowledge of leadership expectations for continuous improvement

### Module 10

Online or single module version  
Approximate time to complete: 30 minutes

Updated: May 2016

# COURSE INFORMATION

**Title:** Lean Thinking– Module 10: Basic Knowledge of Leadership Expectations for CPI

**Target Audience:** Sharp HealthCare affiliated physicians, pharmacists, and other healthcare providers interested in continuous process improvement

**Educational Objectives:** Following this activity, learners should be able to:

- Discuss “Lean Thinking”
- Expand observation skills
- Describe the 5S process
- Execute a 5S in your work area
- Discuss the value of having standard work
- Outline the basics of Active Daily Management
- List the key concepts of process perfection

**Principal Faculty:** *Kathy Summers*  
Director, Six Sigma Black Belt  
Sharp HealthCare

**Accreditation:** Sharp HealthCare is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

**CME Credit:** Sharp Healthcare designates this internet enduring activity for a maximum of .5 *AMA PRA Category 1 Credits™* after successful completion of the module with a minimum passing score of **100%**. Physicians should only claim credit commensurate with the extent of their participation in the activity.

**CA Nurse Credit:** The California Board of Registered Nursing recognizes the use of Category I Continuing Medical Education credit toward credit contact hours. Report “ACCME Category 1 Credit” as the BRN Number. No BRN slip will be given.

**Accreditation:** Sharp Healthcare is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education.

**CPE Credit:** Sharp HealthCare designates this live **knowledge** activity for a maximum of .5 contact hours . Partial credit will not be awarded.  
**UAN:** 0571-0000-016-027-H04-P or 0571-0000-016-027-H04-P

**Cultural and Linguistic Competency:** This activity is in compliance with California Assembly Bill 1195 which requires that all CME activities comprising a patient care element include curriculum addressing the topic of cultural and linguistic competency. The intent of this bill is to ensure that health care professionals are able to meet the cultural and linguistic concerns of diverse patient population through effective and appropriate professional development. Cultural and linguistic competency was incorporated into the planning of this activity.

**Type of Activity:** Internet Enduring Material with learning assessment and evaluation

**Release Date:** June 1, 2016

**Termination Date:** June 1, 2017



**Requirements:** Must pass learning assessment with 100% and complete evaluation to receive CME/CPE credit. **Estimated completion time:** 30 minutes

**Hardware/Software Requirements:** OS that supports modern web browser; Browser: IE 11; Google Chrome version 4 or higher; Safari version 10.8 or higher

**Contact Information:** Sharp HealthCare CME at [cme@sharp.com](mailto:cme@sharp.com)

**Tuition:** None

**Commercial Support:** None

# DISCLOSURE



**DISCLOSURE:** As an organization accredited by the ACCME, Sharp HealthCare requires everyone who is in a position to control the content of an education activity to disclose all relevant financial relationships with any commercial interest. The ACCME defines "relevant financial relationships" as financial relationships in any amount, occurring within the past 12 months, including financial relationships of a spouse or life partner, that could create a conflict of interest. Any individual who refuses to disclose relevant financial relationships will be disqualified from being a planning committee member, a teacher, or an author of CME, and cannot have control of, or responsibility for, the development, management, presentation or evaluation of the CME activity.

Sharp HealthCare, encourages faculty to identify investigational products or off-label uses of products regulated by the US Food and Drug Administration, at first mention and where appropriate in the content.

***Kathy Summers and the members of the planning committee have no relevant financial relationships to disclose.***

**ASSEMBLY BILL 1195:** As an accredited provider, Sharp HealthCare is required to comply with California Assembly Bill 1195, which states that all CME activities must address cultural or linguistic competency. At a minimum, cultural competency is recommended to include:

- Applying linguistic skills to communicate effectively with the target population.
- Utilizing cultural information to establish therapeutic relationships.
- Eliciting and incorporating pertinent cultural data in diagnosis and treatment.
- Understanding and applying cultural and ethnic data to the process of clinical care.

## Interested in receiving Continuing Education Credits?

**Nurses and Pharmacists – Use Learning Center**

**CME Portal** is for **Physicians ONLY**

Nurses will be awarded credits via the Learning Center.

Pharmacist credit will be addressed by the CME Department.

## Physicians– Use **CME Portal**

1. Complete the Test/Quiz
2. Complete the Course Evaluation
3. CME Portal will generate a certificate for you – save for your records
4. CME credits will also be noted on your transcript

### **QUESTIONS?**

Contact Heather Clemons, CME Department  
(858) 499-3518

[heather.clemons@sharp.com](mailto:heather.clemons@sharp.com)

# Leading Performance Excellence

## Lean Six Sigma basics for every leader



### White Belt

#### #1 Introduction

LSS awareness, roles and responsibilities

#### #2 LEAN Basics

How we eliminate waste in our work

#### #3 A3 Daily Problem Solving

Reporting tool for resolving daily issues / defects

#### #4 Team and Meeting Facilitation

How we collaborate and engage talent



### Yellow Belt

#### #5 Change Management

Assuring acceptance and accountability

#### #6 Project Management

Managing time and resources for continuous improvement

#### #7,8,9 DMAIC

'Six Sigma' How we reduce variation and Defects

#### #10 LEAN Thinking and Intermediate A3 Skills

How we eliminate waste and create flow

#### Yellow Belt Workshop

Hands on use of the tools and concepts





# Objectives

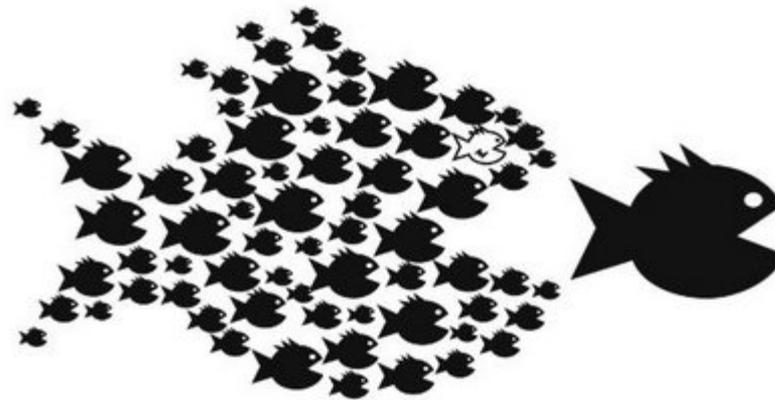
At the conclusion of this module, participants should be able to:

- Discuss “Lean Thinking”
- Expand observation skills
- Describe the 5S process
- Execute a 5S in your work area
- Discuss the value of having standard work
- Outline the basics of Active Daily Management
- List the key concepts of process perfection

# Reflection

**Sometimes working on the small problems first, the big problems go away.**

- Chinese Proverb



# What is Lean Thinking?



A Lean organization needs to understand and work towards customer value and to focus all its key processes to continuously increase it. The ultimate goal is to provide perfect Value to the customer through a perfect value creation process that has 'Zero Waste'.



## MUSINGS FROM A LEAN THINKER



The Optimist



The Pessimist



The Lean Thinker

[lean.org/leanpost](http://lean.org/leanpost)

# What is Lean Thinking?



The world you live in is constantly changing and therefore your processes need to continue to meet the changing requirements and demands. Through building in proper review mechanisms you ensure that you deliver what your customer needs not only now but in the future.



*Lean thinking may be termed as a five-step thought process proposed by James Womack and Daniel Jones in their book [Lean Thinking](#) to guide executives and managers through a lean transformation.*



# Lean Thinking Principles

**1. Customer Value** – understand from the customers' viewpoint what is of value to them. Specify value from the standpoint of the end customer by product family.

Go to the work place (Gemba) to see our patients.

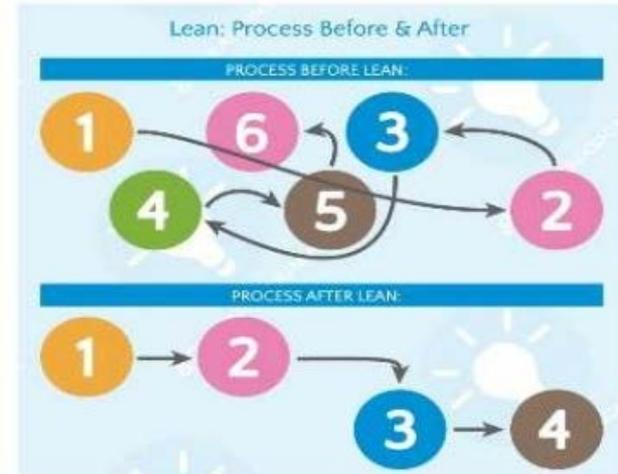
Role play what it is like for our customers/patients.

Understand from the patients perspective why there are regulatory requirements.



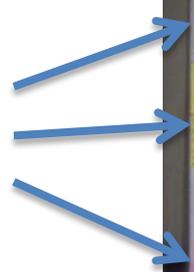
# Lean Thinking Principles

**2. Value Stream** – to be able to remove the waste from processes, It is essential that all the activities involved in delivering that product or service are understood. Then eliminate whenever possible those steps that do not create value.



**Actual SHARP Value Stream Map (Prior to transformation)**

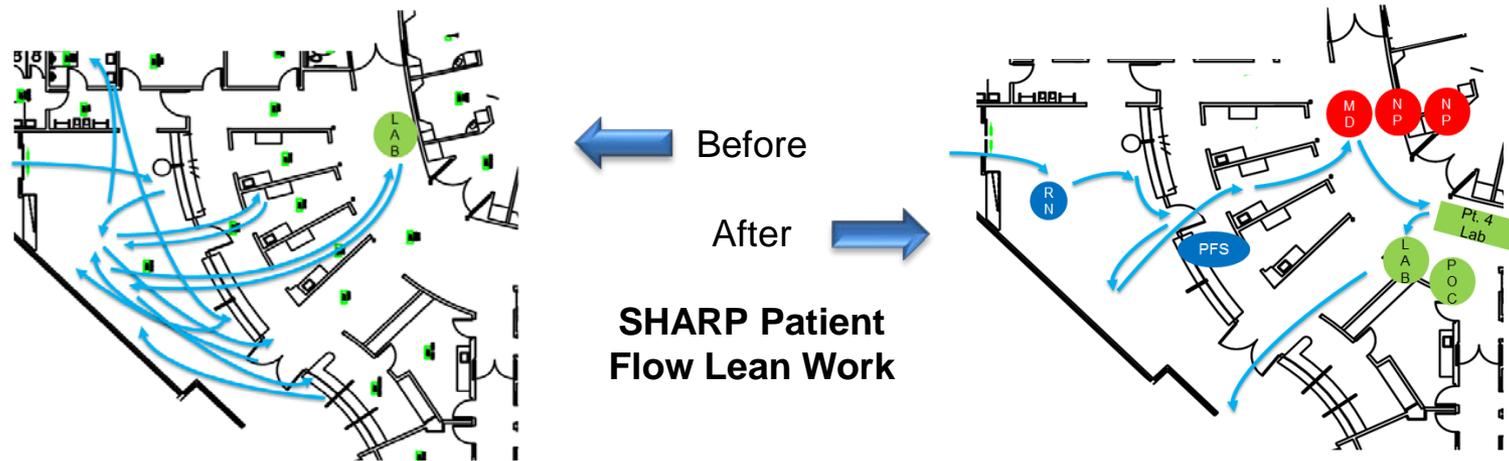
Communication Flow  
Patient Flow  
Identified Waste



# Lean Thinking Principles

**3. Create Flow** – in order to eliminate the waste, processes need to be changed and re-organized so that the product or service flows through all the value-adding steps in the most effective and efficient way possible.

Make the value creating steps occur in tight sequence so that you will have smooth flow in the process.





# Lean Thinking Principles

**4. Customer Pull**— by understanding the demand that customers put on your processes you can build your processes to meet that demand. Therefore, delivering what your customer needs, when they need it to the place that they need it.

**5. Pursue Perfection** – As value is specified, value streams are identified, wasted steps are removed, and flow and pull are introduced, begin the process again and continue it until a state of perfection is reached in which perfect value is created with no waste.





# Start and end with observation

Knowing when to break from the conference room and go to look at a process first hand is important.

Module 2 discussed going to where the work is being done (Gemba) to observe for waste. Consider walking a process:

- When scoping a project
- To better understand how the defect was created
- To find out what is really understood by staff
- To learn how the work is really done



Make observation part of your project plan, meeting agenda and daily management.



# What are you looking for?

## Gemba Walk / Observation

Define the specific steps that make up the process

A way to discover non-value added activities

Observe the hidden processes and workarounds

Observe variation across operators

Observe how the process fits into its physical environment

Real grasp of the processes- not guessing at the process from a meeting room

Is a forum for validating your observations and the documented process with the people performing the process



# Use your eyes and ears (80%) Ask questions (20%)



*Observe with  
Big Eyes,  
Big Ears and  
Little Mouth*

“Why do we do that step?”

“Is it necessary?”

“What process change might eliminate it?”

“Does this step exist for the exception rather than the rule?”

Are there other things I am observing in this process that the customer would not find valuable (i.e. a waste)?

*Transportation, Defects, Overproduction, Inventories, Movement,  
Excessive Processing, Waiting, Confusion*



# What you might find

## Examples of what you might find when going to the Gemba to observe:

What it really takes for one to do their job

Non-value added activities

Hidden workarounds

Different ways different people complete the same task

How the process fits into its physical environment

Real grasp of the processes- not guessing at the process from a meeting room

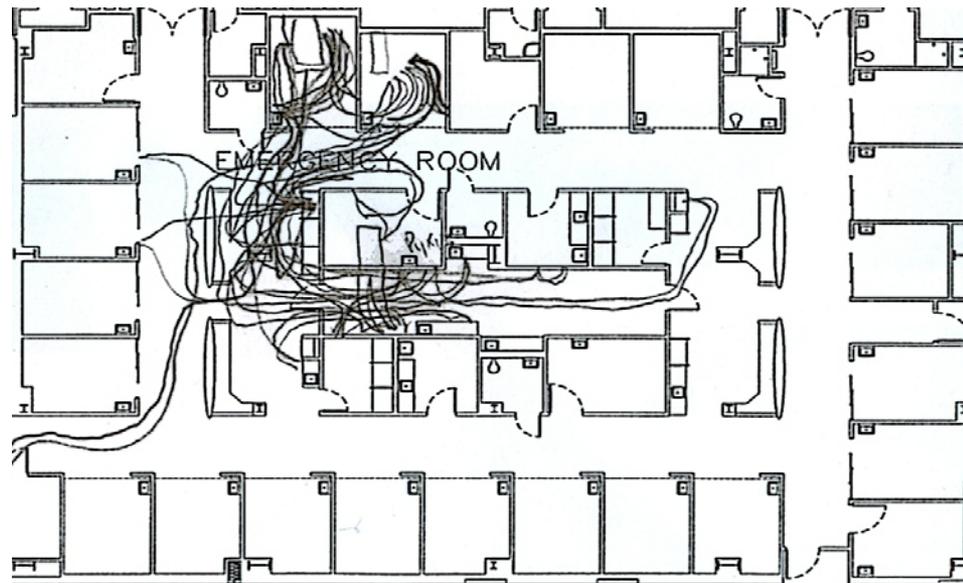


# Spaghetti Diagram: Observation tool

This is a fun exercise that will help you see the waste.

Get a layout of the Gemba and without lifting a pencil off the page, trace the walking path of a patient, Nurse, Doctor, etc.

What wastes do you think are happening in this 30 minute “Spaghetti” diagram of a Nurse in the Emergency Room?





# Spot Quiz

Think about your answer and go to the next slide.

- 1) You just observed a nurse searching for the right cable for a piece of equipment in a drawer full of random cords and attachments. What would you do?
  - a. Ignore such a minor thing
  - b. Do an A3 to solve the issue right away
  - c. Let everyone know how messed up the supplies are
  - d. Tell someone to add it to a list of problems
  - e. Do nothing because it that would be below your pay grade

**Hint: What tool did you learn about in the A3 module?**



# Spot Quiz

Point to the best answer

- 1) You just observed a nurse searching for the right cable for a piece of equipment in a drawer full of random cords and attachments. What would you do?
- a. Ignore such a minor thing
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*Great Job!*  
*We will not make you repeat the White Belt Modules.*

# '5S' = Best Place To Work



During your time observing the workplace you may question why it takes time to find things or why mistakes are made.

Perhaps it is because of the clutter and the arrangement of supplies and equipment. Consider organizing a 5S event to :

Sort	Identify what you do not need
Shine	Clean and straighten up
Set In Order	Organize to help make the work easier
Standardize	Make it the same in like areas
and Sustain	Audit and continuously improve!

# 5S Video with sound



View 5S video: [HERE](#)

# 5S Event:



You ask yourself these questions:

What do I need to do my job?

Where should I locate this item?

How many of this item do I really need?

**Now remove what gets in your way!**

Follow the link [HERE](#) to review our tool kit for conducting a 5S. It can take 2, 4, 8 hours or more depending on the scope of the area.

It is fun, rewarding and a win for the staff.

# 5S



Make equipment placement easy to see and easy to see what is missing.



Outline so equipment returns to the right spot



Color Code, label, limit to right amount and locate at point of use.

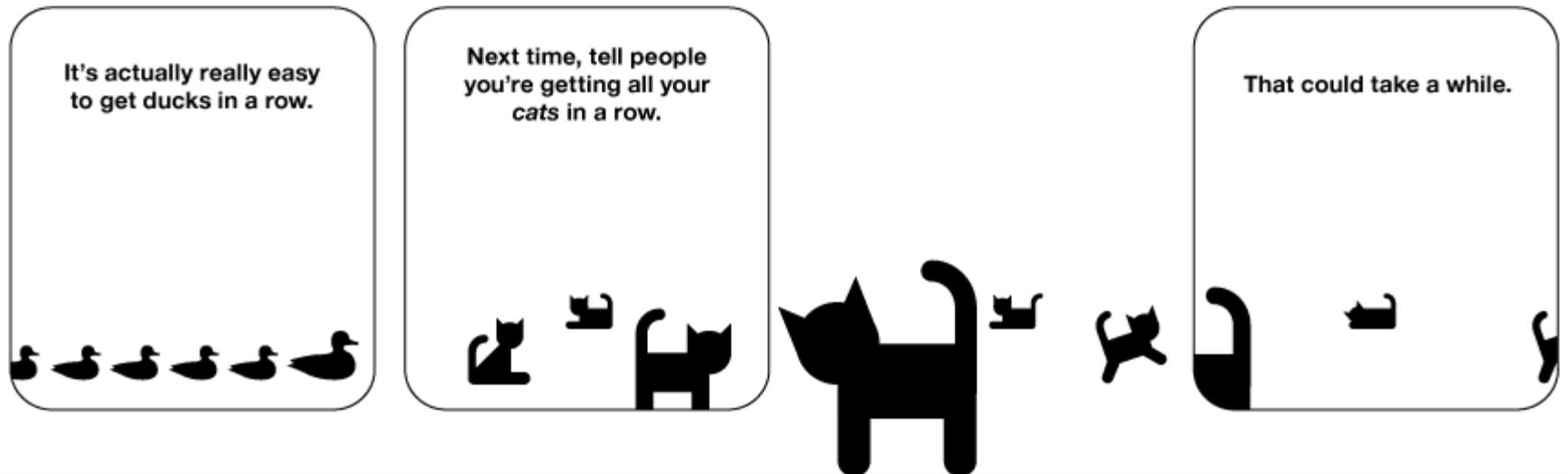
# Standard Work



“Without Standard Work there can be  
No Standard Process and No Standard Output”

The System

[www.systemcomic.com](http://www.systemcomic.com)



# Standard Work



Have you heard a comment like this one?

“How we work depends on who the  
(Charge Nurse, Physician, Technician) is”

Perhaps, “They do it different on nights”.

Standard work is about documenting how it should be done, all the time, predictably and reliably.

# Why Standard Work?



All critical processes should have a written account of how the work should be done and include the expectation for what good work looks like.

Too often, departments rely on **'tribal knowledge'** or random on the job training.

Improvement is therefore difficult because everyone has their own way of doing the work.

**Often the improvement is to establish a consistent process, rather than to create a new one.**

*Check List*

*How to Operate Sign*

*Process Map*

*Notebook of roles and responsibilities*

# Why Standard Work?



Think about the meaning behind this 'Premise':

***As long as work is done  
in a chaotic system where random decision  
making prevails, system learning and  
improvement cannot occur.***

How do you make a change stick?



**How long does it take to  
change a tire?**

**1 hour?**

**25 minutes?**

**How about 17 seconds?**

# NASCAR Video with sound



Video link coming soon – video file can be sent by request to [heather.clemons@sharp.com](mailto:heather.clemons@sharp.com)

# Standard Work



WHAT IF?

Each Patient, Specimen, Order, Appointment, Entry, etc. had a process like a Pit Crew.

Just think of what you could do with the in between time!  
Shifting your time to what matters.



## Types of Waste Eliminated

- Searching
- Finding
- Selecting
- Transportation
- Waiting

# Lean Management



Now that you are thinking Lean

Looking for waste to eliminate

Taking action to solve problems (A3)

And have standard work to follow

You need to complete the system to keep the continuous improvement ongoing, daily and timely!

You need a Daily Management System...



© Kaufman Global

# Active Daily Management



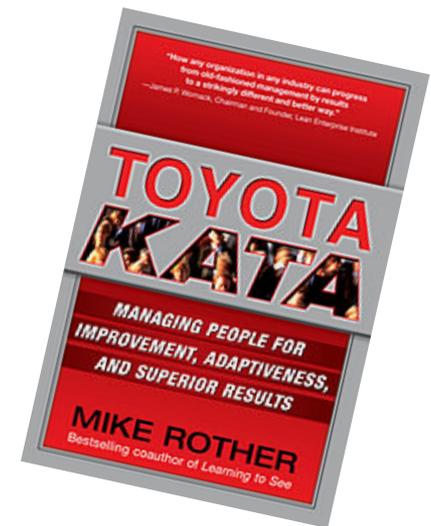
Lean is also about a management approach called Active Daily Management (ADM) and is a system to help a unit improve processes daily.

A unit is a group of people who perform tasks on similar or connected processes, and work in close proximity.

Each unit customizes ADM to meet its own unique needs.

Key elements of ADM include:

- **Routine Huddles**
- **Huddle Board**
- **Rounding / Observation**



Source: Lean HealthCare Associates, 2013

# Routine Huddles

Every work area should have a 5 to 15-minute team huddle to discuss important topics, such as yesterday's performance, today's goals and issues:

Patient Safety issues?

Staff Safety issues?

Wastes to be addressed?

Delays

Other Patient issues

Do we have what we need for a successful day?

**Decide what needs a quick fix and what needs an A3**



# Primary Visual Display

**Huddle Board** - an information center that includes all information discussed in huddles and metrics.



Creates daily situational awareness

Keeps track of measures that are meaningful to the staff

Proactive communication

Creates Department Transparency

Aids leadership rounding

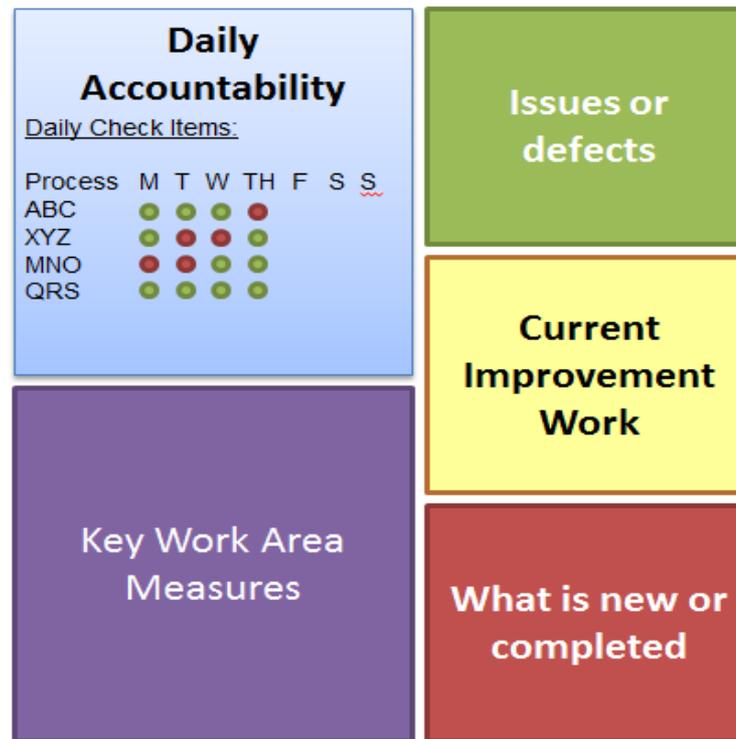
# Huddle Board



- Content to consider adopting for your Unit.
- Also known as High Reliability Board, Learning Board and Daily Management Board.
- Locate where it can be seen by everyone.

Daily Management:  
Specific daily check points for the team.

Key Process Indicator:  
Measure that reflects team's ability to provide for their customers



Defects:  
Safety Issues  
Quick Hits

Current work:  
Using A3 Problem Solving

Accomplishments:  
Recognition  
Communication  
Spread

# Huddle Board Conversations



New Issues/Defects we need to fix today

What we are problem solving and current changes.

Improvements for everyone to know about. Great Job!

That is a concerning issue! I will bring it up to the Leaders at our huddle.

Thank you

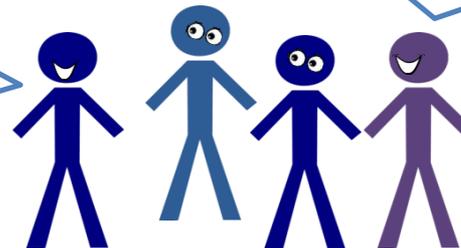
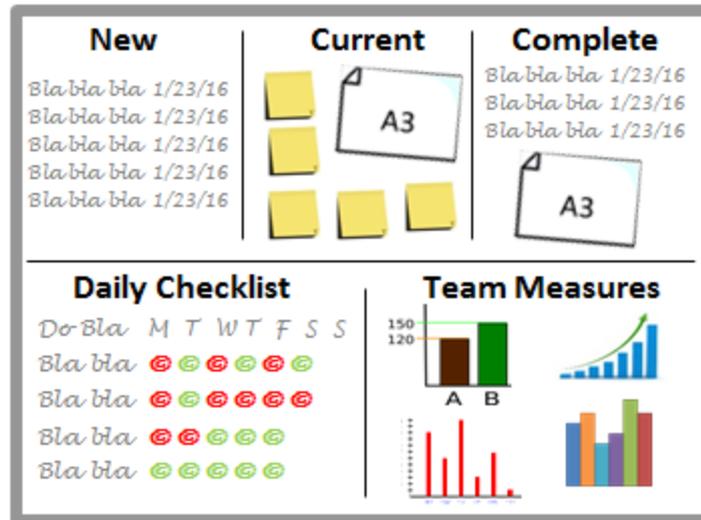
Good job with your complete improvements and your improving measures.

What will be your next focus on your daily Checklist?

We have no patient safety issues, delays and falls or capacity issues for today. It looks like a green dot day.

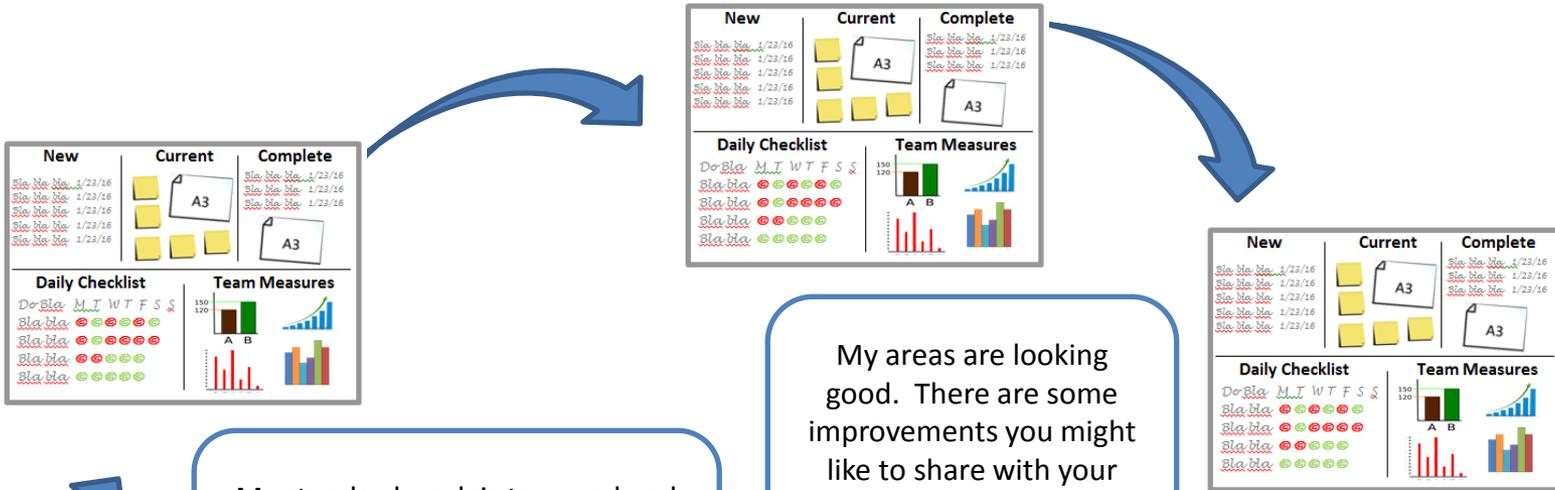
Becomes a hub for:  
Huddles  
A3 Problem Solving  
Communication  
Situational Awareness  
Leader Rounding

We have a new issue with a missing supply to be added to our Huddle Board. I started an A3 and posted under 'Current' for everyone to review. I look forward to your feedback.



# Leadership Active Daily Management

## Daily Rounding, Observation, Coaching and Connecting

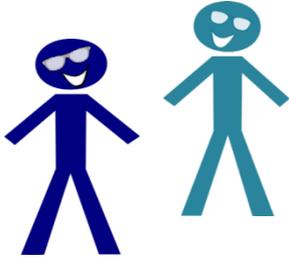


My standard work is to round and attend 5 huddles in my area. I go to the Lab Huddle on Tuesday's and Thursdays

My areas are looking good. There are some improvements you might like to share with your teams.

The teams are performing more on their own. I look for opportunities to coach them and think on thought provoking questions to keep them challenged to continuously improve.

There is a theme of issues between the departments. Sounds like we need to get a process improvement team together of our experts to work on it as a process improvement project.



I did an A3 on a similar issue. I will share it with you to see if there are some improvement ideas we can spread.

# Continuous Improvement



FAQ: Once started, how long will Lean take?

Lean Answer:

Until you have reached perfection.

SHARP Answer:

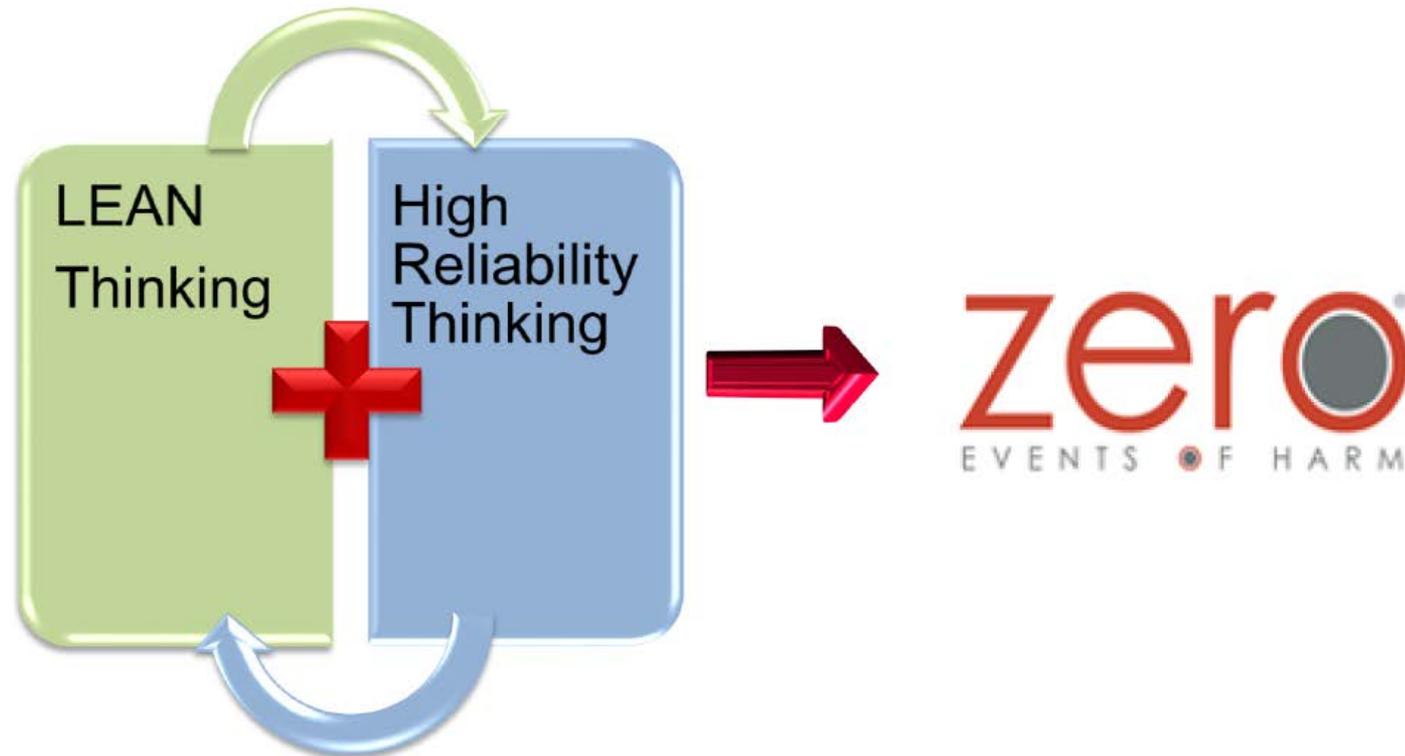
When we are the best in the universe.

**“Relentless pursuit of perfection”**



# Join Forces!

## PROCESS TOOLS

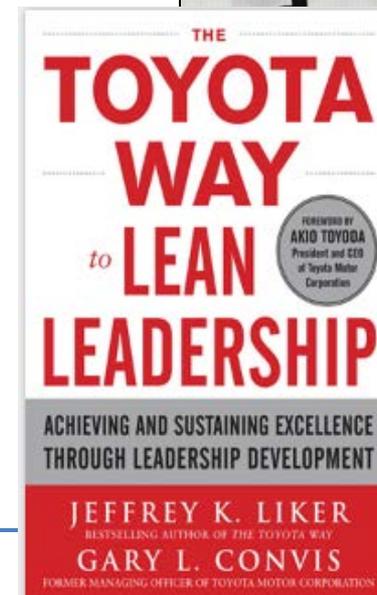
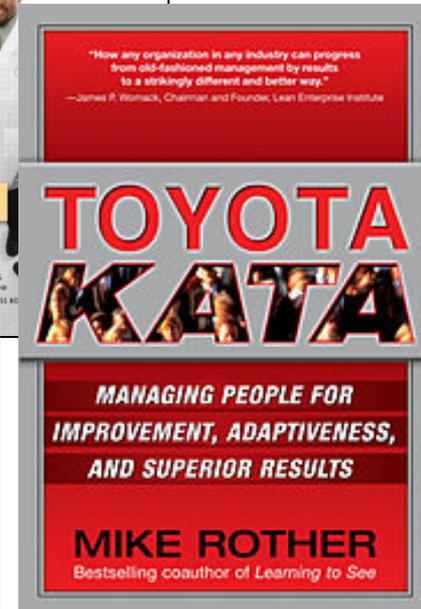
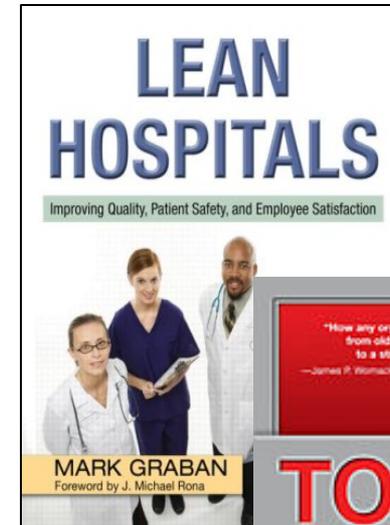


## Human Behavior Tools

# Recommended Reading



- Lean.org 
- The Toyota Way to Lean Leadership (for Leaders) Liker and Convis
- Lean Hospitals; Mark Graban
- Toyota KATA; Mike Rother
- Sharpnet Lean Six Sigma web site



# Next Steps:



Congratulations, you are almost a ‘Yellow Belt’.

- Complete the Module 10 quiz.
- Complete all 10 online modules and quizzes.
- Have your Leader sign off certification worksheet
- Sign up for the “Yellow Belt Workshop” (8:30am to 4:00pm)
  - Sign up at SHARP.COM and search for ‘Yellow Belt’.
  - All day workshops scheduled throughout Sharp.

**IMPORTANT: Bring your Waste Walk and A3 to the workshop!**  
**We will be using your completed work as part of the workshop.**

Certification Worksheet Link [HERE](#)