



DMAIC: Define

Module 7

Basic Structure for Managing Process Improvements

Online or single module version

Approximate time to complete: 20 minutes

Updated: May 2016

COURSE INFORMATION

Title: DMAIC: Define – Module 7: Basic Structure for Managing Process Improvements

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:

- Define the DMAIC structure for conducting improvement projects
- Define a project using the structure of a project charter
- Discuss the elements and purpose of process mapping
- Describe the importance of keeping our customers (patients) the focus of what we do

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: 0571-0000-016-024-H04-P or 0571-0000-016-024-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

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

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

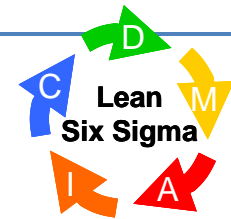
#10 LEAN Thinking and Intermediate A3 Skills

How we eliminate waste and create flow

Yellow Belt Workshop

Hands on use of the tools and concepts





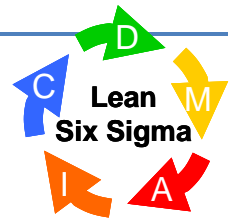
Systematic Approach for Continuous Improvement



Reflection:
Insanity: Doing the same thing over
and over again and expecting
different results.

[Albert Einstein](#)

Course Objectives



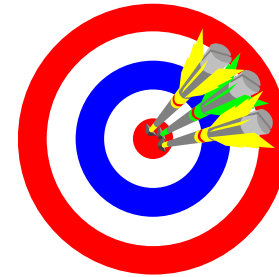
At the conclusion of this module, participants should be able to:

- Define the DMAIC structure for conducting improvement projects
- Define a project using the structure of a project charter
- Discuss the elements and purpose of process mapping
- Describe the importance of keeping our customers (patients) the focus of what we do

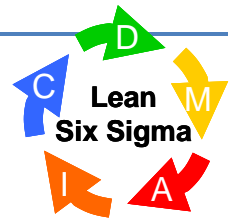
Six Sigma Compared to Traditional Problem Solving



- Strong focus on the customer
- Eliminating defects
- Reducing variation
- Data-driven results
- A term that represents near-perfection
- A philosophy of driving results to levels never before expected

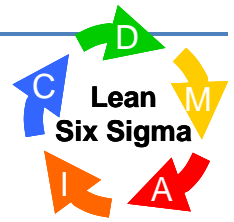


What we need from you:



- Think of everything we do as a process.
- All processes have variation and waste.
- No process is perfect; always look for improvement.
- All variation and waste has a cause; a root cause.
- Known causes can be eliminated, reduced or controlled.
- All customers have suppliers and all suppliers have a customer; within and between departments!

Objective of Six Sigma



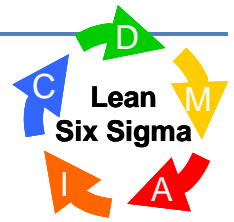
- Reduce the variation in a process or output
- By reducing the variation, less chance of creating a defect.

Six Sigma Process

- Understand the root cause of the variation
- Implement solutions that address the problem
- Re-measure and validate the effectiveness of the solution.
- Put controls in place to sustain the gains.

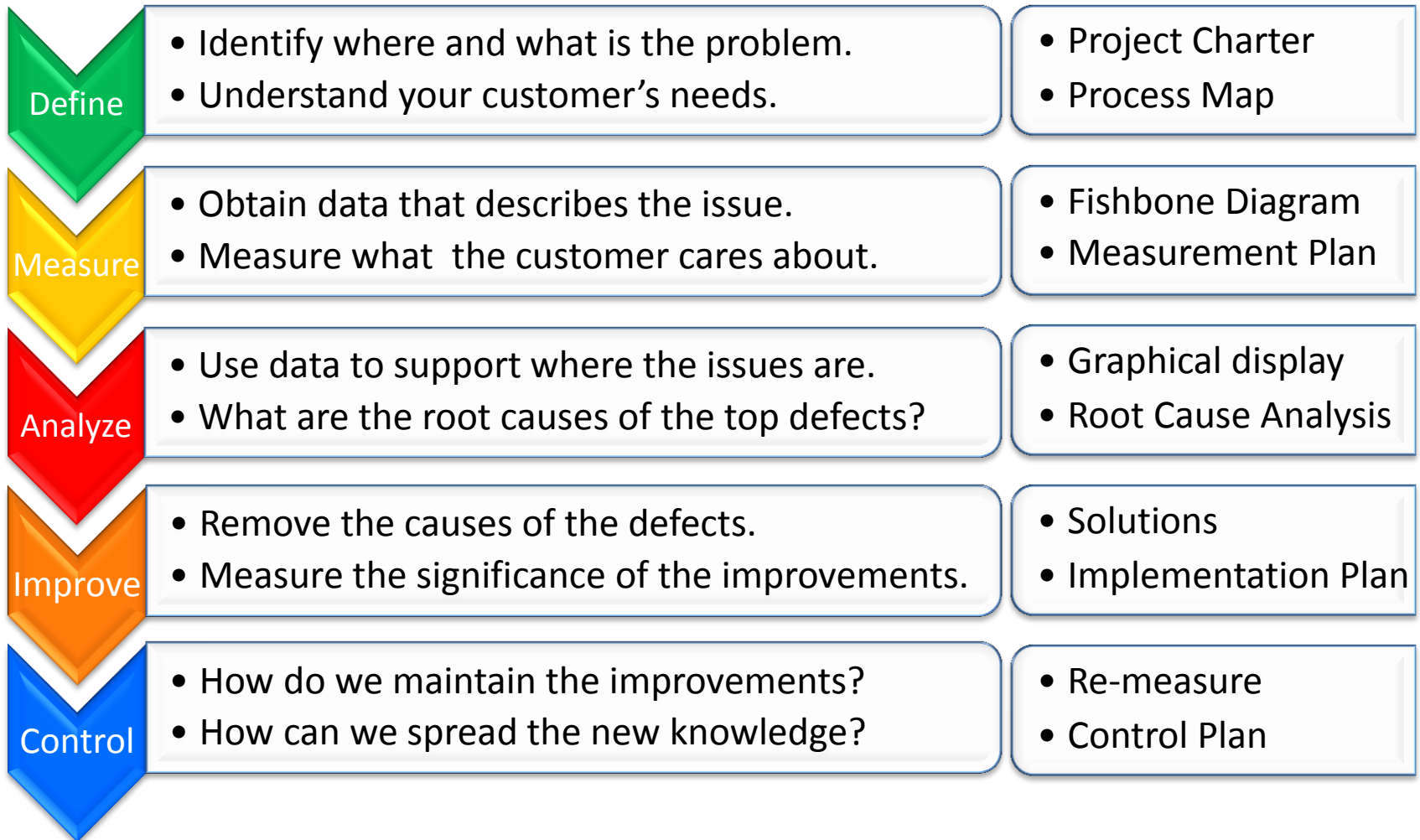
The structure followed is DMAIC. First Define the specific problem. Measure the magnitude of the issues. Analyze the data to determine which issues are significant enough to develop a solution for Improvement. Use data to validate the Improvement and as a way to Control the process in the future.

DMAIC for Yellow Belts



- The following content for each of the five phases of DMAIC are expectations for Yellow Belt level of projects.
- Yellow Belt projects typically do not require complex analysis and statistical analysis in order to determine significant root causes and justification to proceed with solutions.
- Complex issues may require the assistance of Green or Black Belt-level experience.

DMAIC is a framework for systematically working through an improvement project.



How to use DMAIC



The first step is to ‘scope’ the project. Scoping will provide much of the information needed to fulfill the ‘Define’ phase, however you are collecting enough information to decide whether to proceed and seek approval for an official project.

Why is this important? A poorly defined project can be difficult to manage and to satisfy expectations.

Proceed in order with Measure, Analyze, Improve and Control.

If you jump to Improve, you risk not addressing the root cause and not letting data point you in the right direction.

First phase is to create a well-defined opportunity



Define

- Identify where and what is the problem.
- Understand your customer's needs.

Deliverables

Understand who is your customer

Understand their requirements to guide your project

Anticipate your customer's needs

Create a Project Charter

Describe your objective and goal Statement

Identify your team, Complete a SIPOC

Identify what is in and out of scope, and Critical Success Factors

Create a Process Map

Show the steps and situation surrounding the problem area.



First phase is create a well-defined opportunity



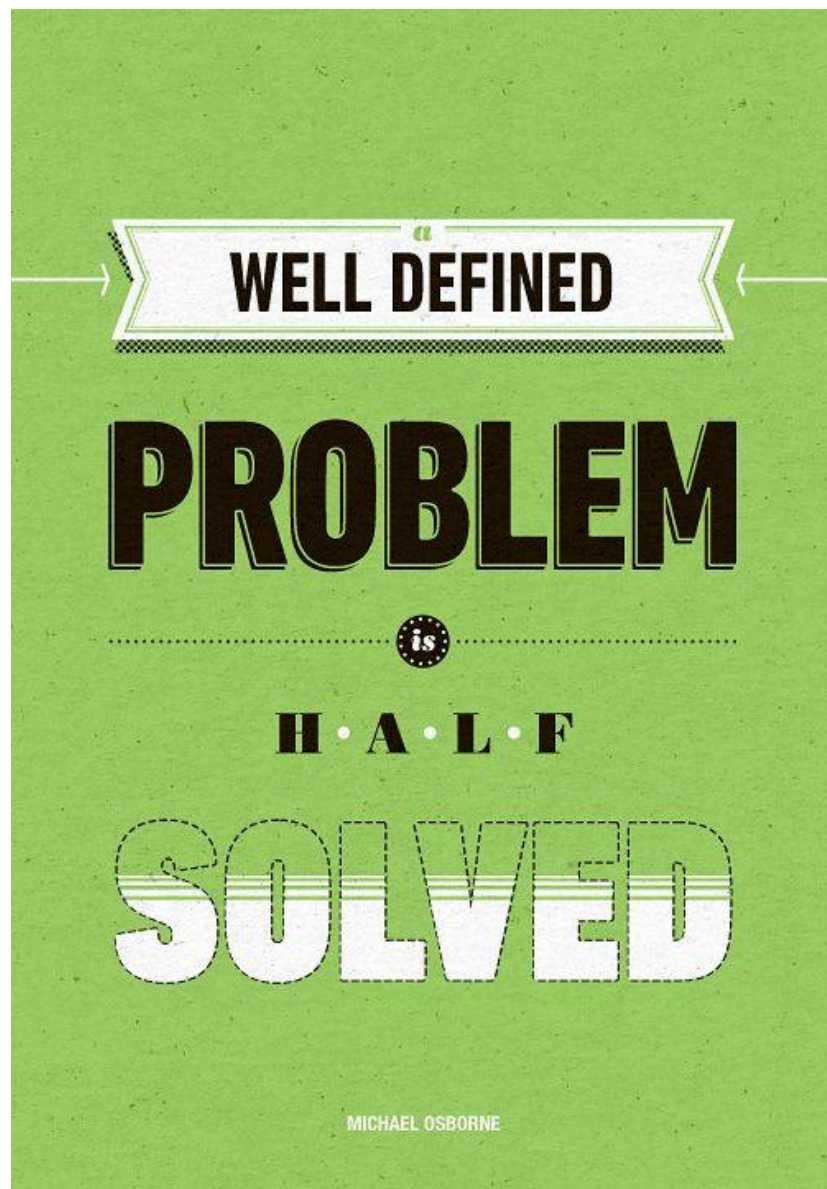
- Identify where and what is the problem.
- Understand your customer's needs.

What problem would you like to fix?

The Define Phase is the first phase of the Six Sigma improvement process.

In this phase, the leaders of the project create a Project Charter, create a high-level view of the process, and begin to understand the needs of the customers of the process.

This is a critical phase of Lean Six Sigma in which your teams define the outline of their efforts for themselves and the leadership (executives).



Project Charter



Use the SHARP Template to help identify key elements for a well defined improvement project.

- PowerPoint / ready to share
- Instructions embedded in the template.
- Process Owner and Sponsor sign off
- Corresponding Worksheet
- Includes a SIPOC (Define Tool for identifying your Process, Inputs, Suppliers, Outputs and Customer)

For Template Click [HERE](#)

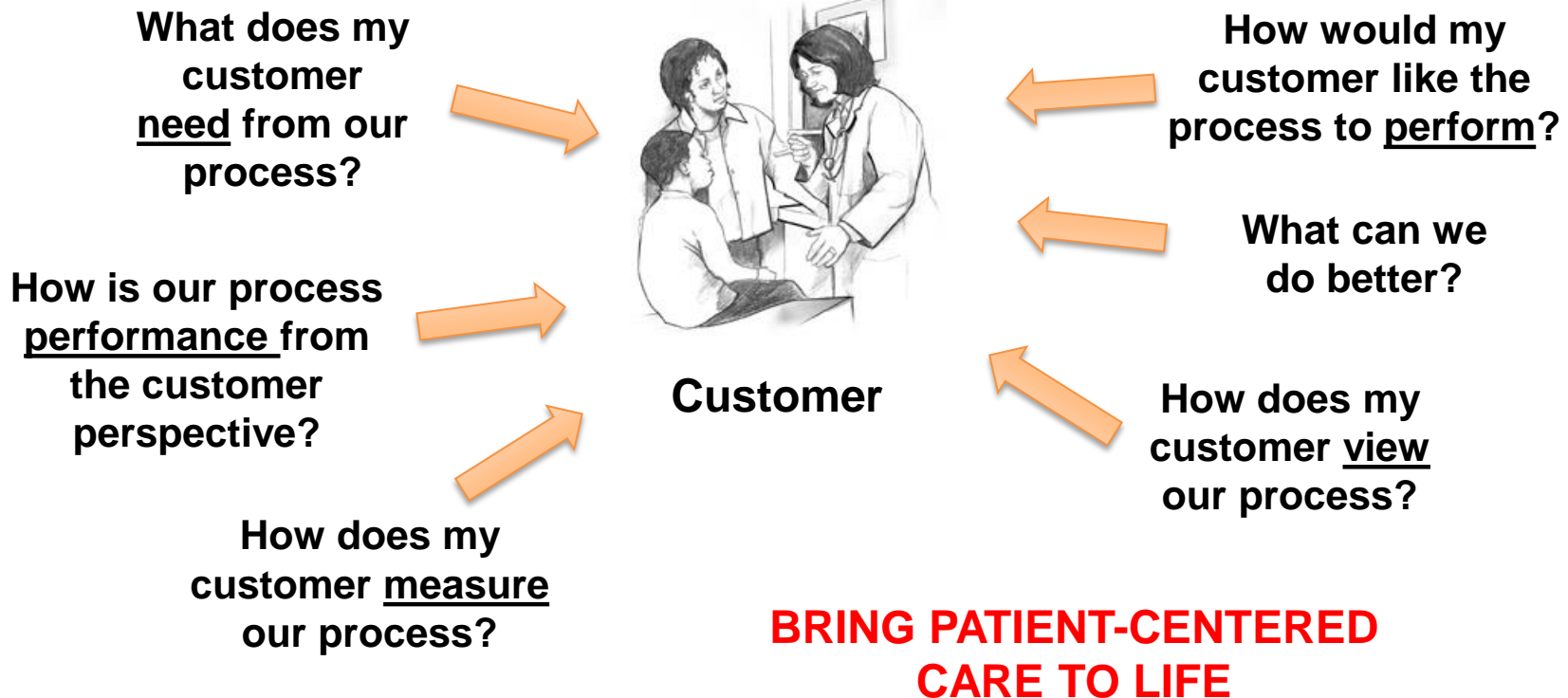
For the SIPOC tool kit Click [HERE](#)

For a SIPOC how to video Click [HERE](#)

Reference Project Management Module Click [HERE](#)

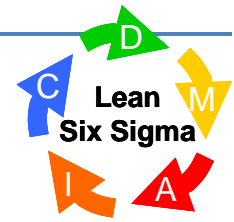
The image shows two overlapping copies of the SHARP Project Charter template. The top copy is titled 'Lean Six Sigma Department' and features a 'Define' section with fields for Project Title, Project description, Goal Statement, Sponsor, Process Owner, and Team. It also includes a 'Measure' section with a bar chart showing 'Y=LOS (median)' over time (Jan 13 to June 13) and a 'Control' section with checkboxes for documentation, spread, control analysis, project closure, and control plan. The bottom copy is partially visible and shows the 'Improve' section with checkboxes for strategy, improve analysis, test solutions, communication plan, and implementation plan.

Get to know your customer. Round with them.
What are their requirements from the process?



Move away from how we always have done it, to what is important to the Customer. The Customer gives us the reason to be here.

Get to know your customer. What did they say was important?



I would like to be seen by a doctor quickly



Customer

It would be so nice if it was there waiting for me or easy to get to.



Looks like there are so many other things going on by the staff and I am left waiting.



I waited 2 hours to get what I needed.

If you could just tell me, I could have helped make this go quicker.



This is messed up, they gave me the wrong information.



**BRING PATIENT-CENTERED
CARE TO LIFE**

**What part of the process delivers what is important to the customer?
Can you measure it? Is this reflected in your goal?**



How the customer explained it



How the project leader understood it



The work-around by the staff



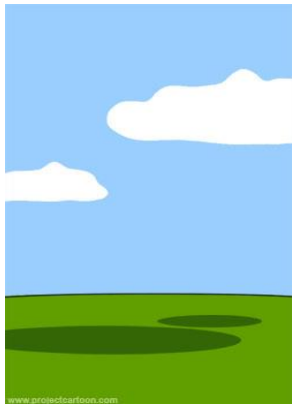
How it was designed in the board room



When the customer received it



How the consultant described it



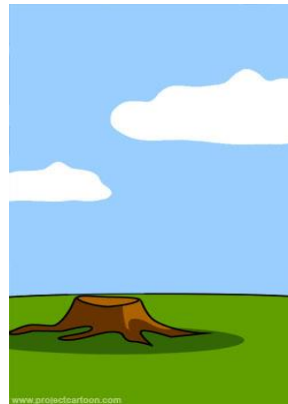
How it was documented



What operations installed



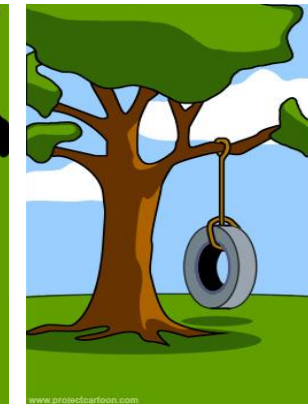
How the customer was billed



How it was supported



What marketing advertised

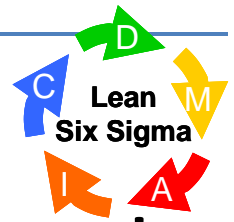


What the customer really needed

Sometimes you need to filter through all the demands and look for the true needs and wants of your customer.

What is a Process?

Think of everything we do as a process!



Giving Medication

Patient Handoff

Registering a Patient

Cleaning a room

Scheduling a case

Clearing defective equipment

Patient Discharge

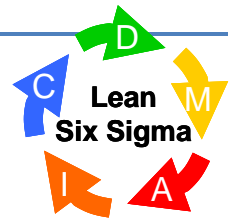
How I get to work

Rounding on my patients

Preparing a patient for a procedure



What is a Process?



Definition

- A series of steps that lead to a desired output

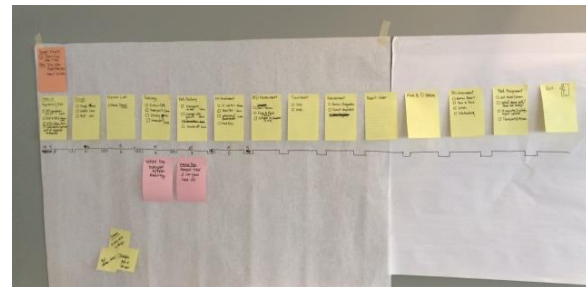
Why focus on process?

- Understand how and why work gets done
- See the flow from start to finish – across silos
- Characterize customer and supplier relationships
- Focus on the process with a no-blame perspective about the people.

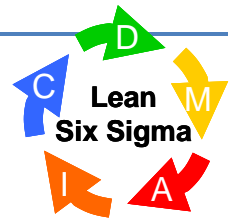
Most organizations struggle because:

- Processes are not clearly specified
- People are not engaged in optimizing the whole process but rather the point where they work
- Managers own departments not processes

The aim is to capture the contexts in which the defect occurs.



Graphical Representation of a Process



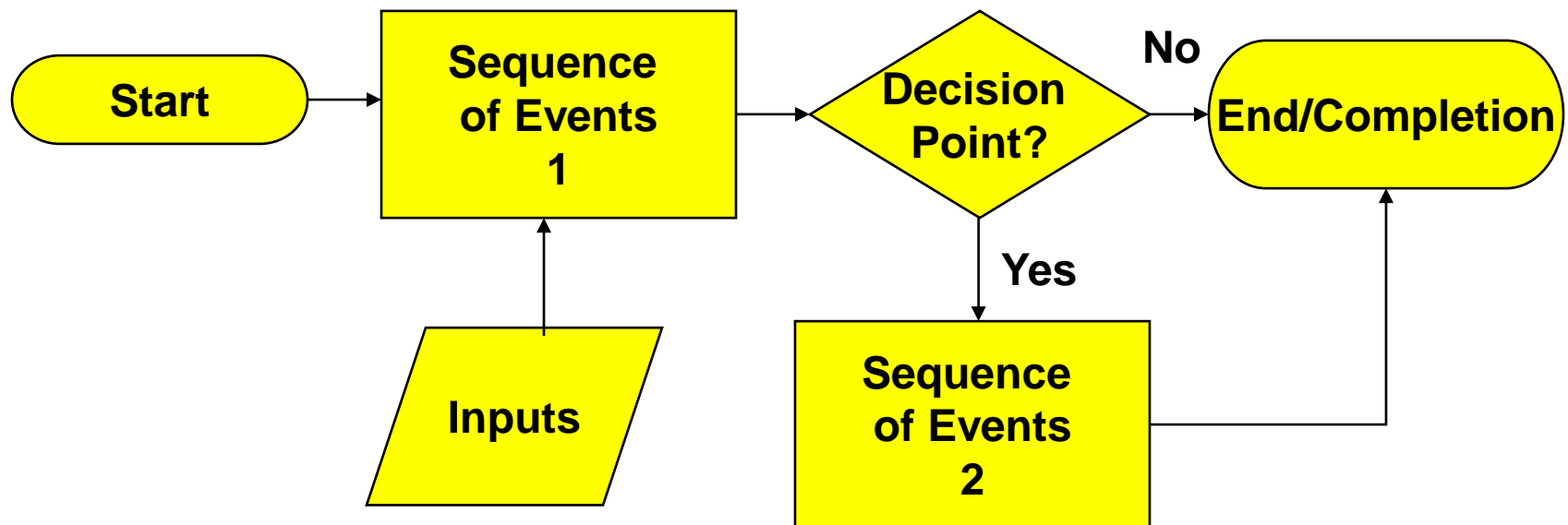
Why start with a Process Map?

- Reveals how much standardization (or chaos) exists
- Instruction manual "what we do around here"
- Stake in the ground for improvements
- Helps you see weaknesses:
 - Redundant work
 - Hand-offs
 - Ambiguity
 - Responsibilities

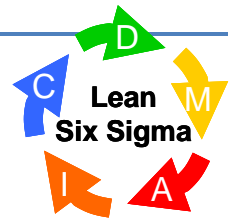
For detailed
instructions Tool
Kit Link [HERE](#)

Process Map

Basic shapes used



Process Mapping: Getting Started

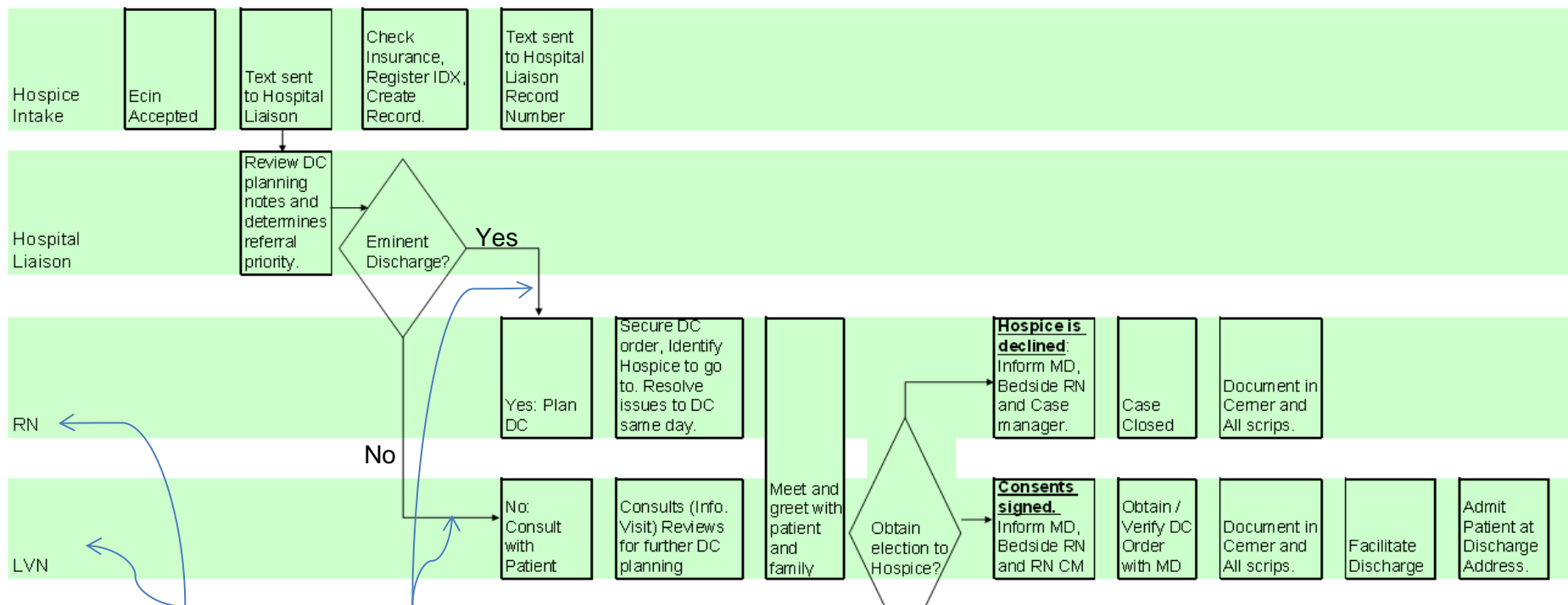


- Start with identifying the beginning and end of the process.
- Next go to those who do the work!
 - Process map with a team of staff that work in the process.
 - Go to the work place and observe and talk to staff.
- Draw the process – Get a pencil, wall charts, post-its!
- Validate
 - Check back with those that do the work!

Swim Lane Process Map: Distinguish Roles and Handoffs

Hospice Intake Process

Updated 03292011



Roles

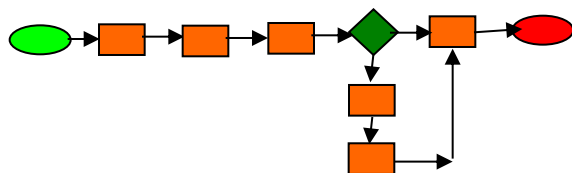
Handoffs

Flow

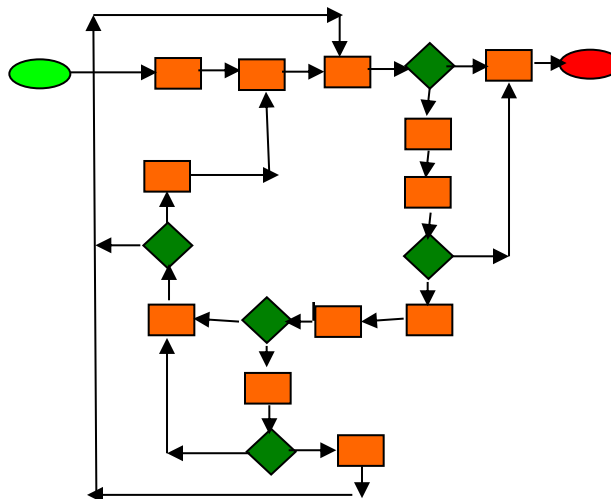
Makes a great training tool

Views of your process

What you **BELIEVE** it is...



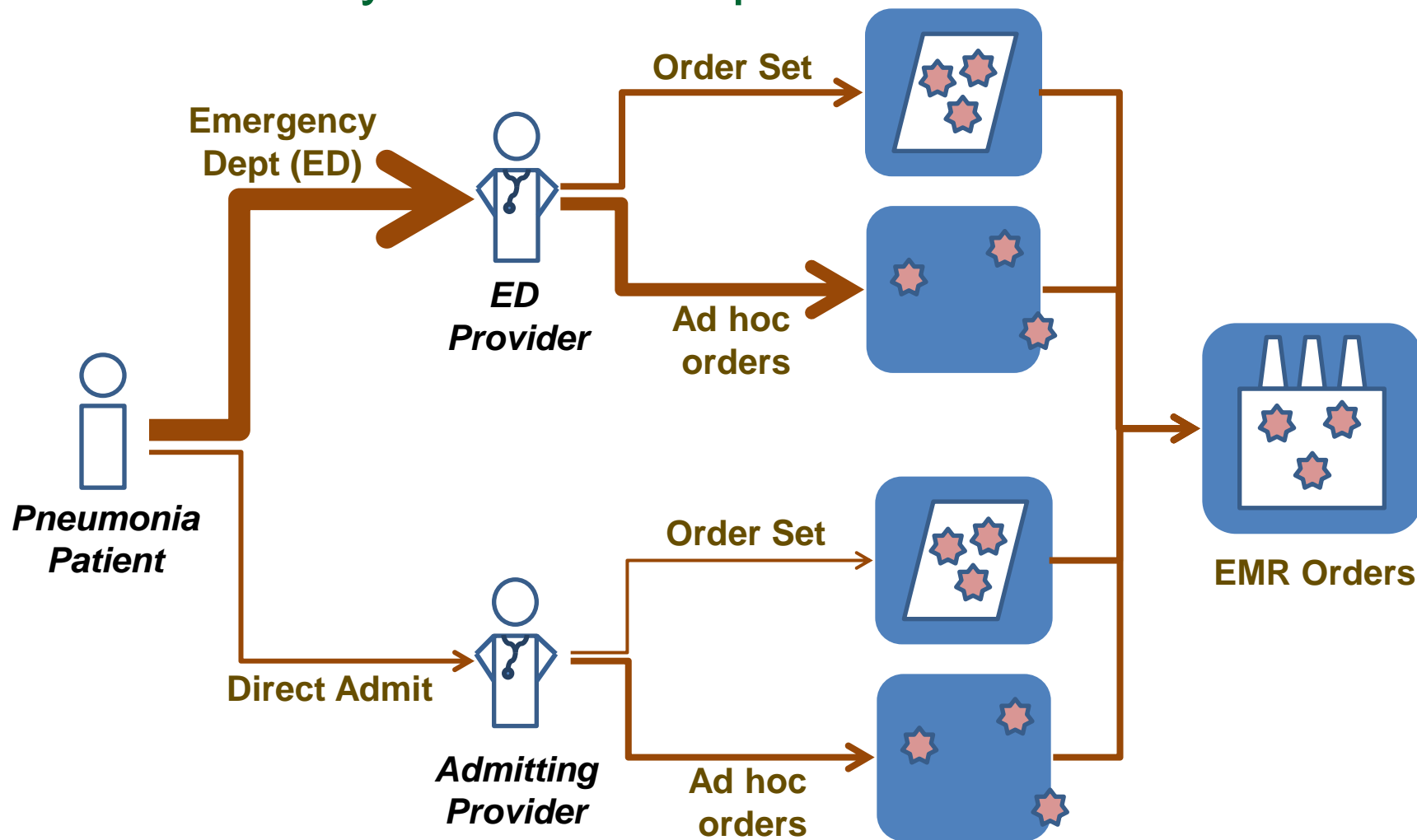
What it **ACTUALLY** is...



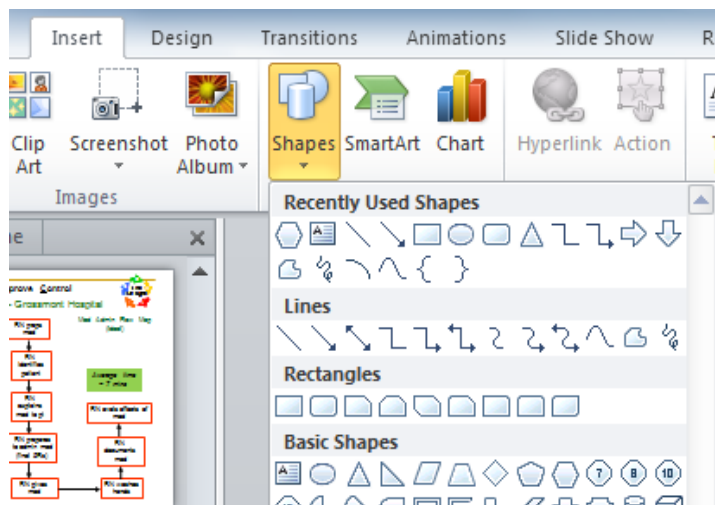
What you **WANT IT TO BE**...



Order Entry Process Map

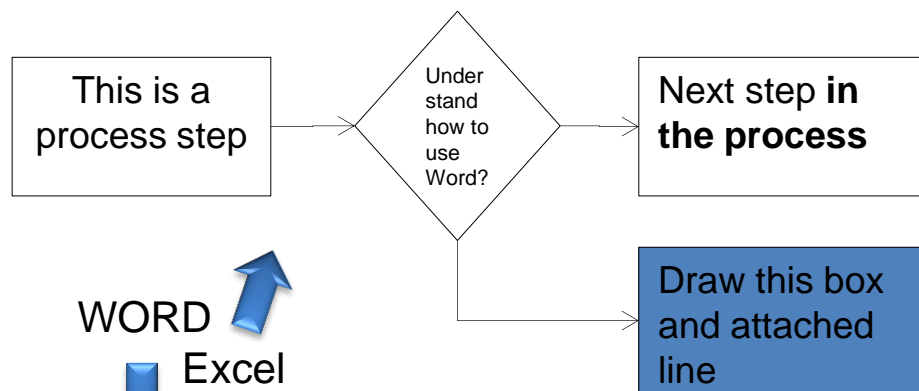


You can use Excel or Word to create a process Map

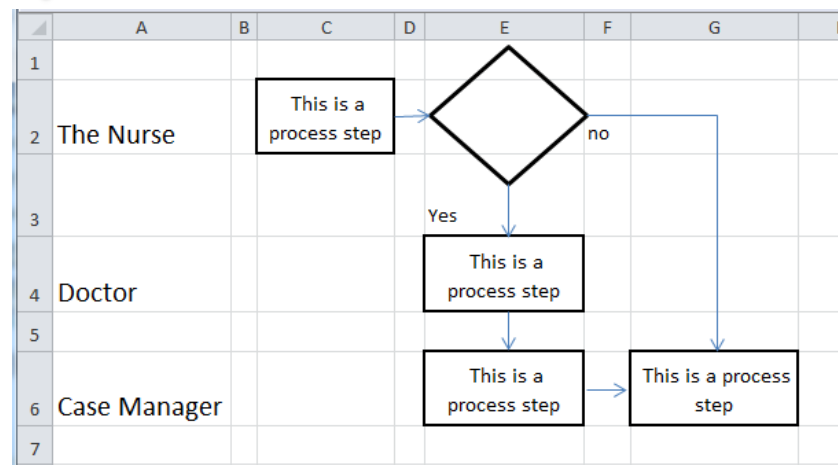


Use Insert > Shapes
Connect lines

Use of WORD or EXCEL is easier to maintain and share



WORD
Excel





Use it before you lose it!

However large or small (best to start small) pick a project or help with a project to start using DMAIC and supporting tools.

For Yellow Belt certification, complete a Project Charter and include a current state process map in your certification portfolio. Your work will be reviewed as part of the certification process and workshop.



Certification Worksheet Link [HERE](#)

Next Steps:



- Complete the Module 7 Quiz.
- However large or small (best to start small) pick a project or help with a project to start using DMAIC and supporting tools.

For Yellow Belt certification: Select a process in your work area and create a process map. You can do it by hand, use post-it notes (take a picture of it) or use the computer. Include a current state process map with your certification worksheet. Discuss with your leader the use of the tool.

Certification Worksheet Link [HERE](#)

