MGMA Yellow Belt Certificate Program

TO: Medical Practice Leaders

Efficiency starts with you but does not come from you!

Objectives

To define Lean and Six Sigma

To review key tools used in implementing LSS and help identify what might work first

To drill into key tools to make LSS work

To challenge you to transition your practice in areas of efficiency, quality, and cost effectiveness

Table of Contents

- Background

- Project Management

- Deployment Platform

- Tools

- Four case studies

- 20 question multiple choice exam

Culture defined . . .

- Culture in its broadest sense is cultivated behavior; that is the <u>totality of a person's learned, accumulated experience</u> which is socially transmitted, or more briefly, behavior through social learning.

- A culture is a <u>way of life of a group of people</u>--the behaviors, beliefs, values, and symbols that they accept, generally without thinking about them, and that are passed along by communication and imitation from one generation to the next.

Source: https://www.tamu.edu/faculty/choudhury/culture.html

Culture – 6 components

- Built on the **vision** – mission of the practice

- Built on the **values**

- Built on the **"practices"**

- Built on the **people**

- Built on the **language used**

- Built on the **place**

Source: http://blogs.hbr.org/2013/05/six-components-of-culture/

Creative Culture of Transition

- Create an attitude that *everyone needs to participate* in changing the culture
  - Everyone has ideas that when brought out in the open will create the ultimate outcome of improved care for each patient served in your office

- Know that when *everyone works together* there will be better results
  - The team is more effective in implementing change than one individual

- *Openly talk* about how things are done.
  - Who has the knowledge in areas that need to be fixed, let them take the lead in changing how we've always done it!

- Change the "messages" or "notes" that have been hanging around desks and in the break area for months or years.

- *Spruce up* the work environment.

Culture of Transition

- Use *symbols* which can help remind you of a change in the way things are done or in an attitude. Toyota uses a rope (called Andon Cord) to "stop" the assembly line when something is wrong.

- Do a daily or weekly *huddle*, again open communication, but use this time to review what happened yesterday and what may be the bottle necks for the day ahead.

- Instead of donuts, try *fruit* for your morning snack!

- *Share positive stories*, successful events with patients

- *Recognize each other* with a friendly greeting in the morning, thank each other for a job well done, find ways to reinforce the behavior that you want and expect.

- *Talk and think positive*, it is easier to draw on strengths rather than remove barriers

Changing culture occurs first

AT THE TOP

Change vs. transition

- Change - situational
  - Move to new location
  - Reorganization of the roles
  - Revision of benefit

- Transition – psychological
  - Phases one goes through in coming to terms with the details of a new situation that the change brings about
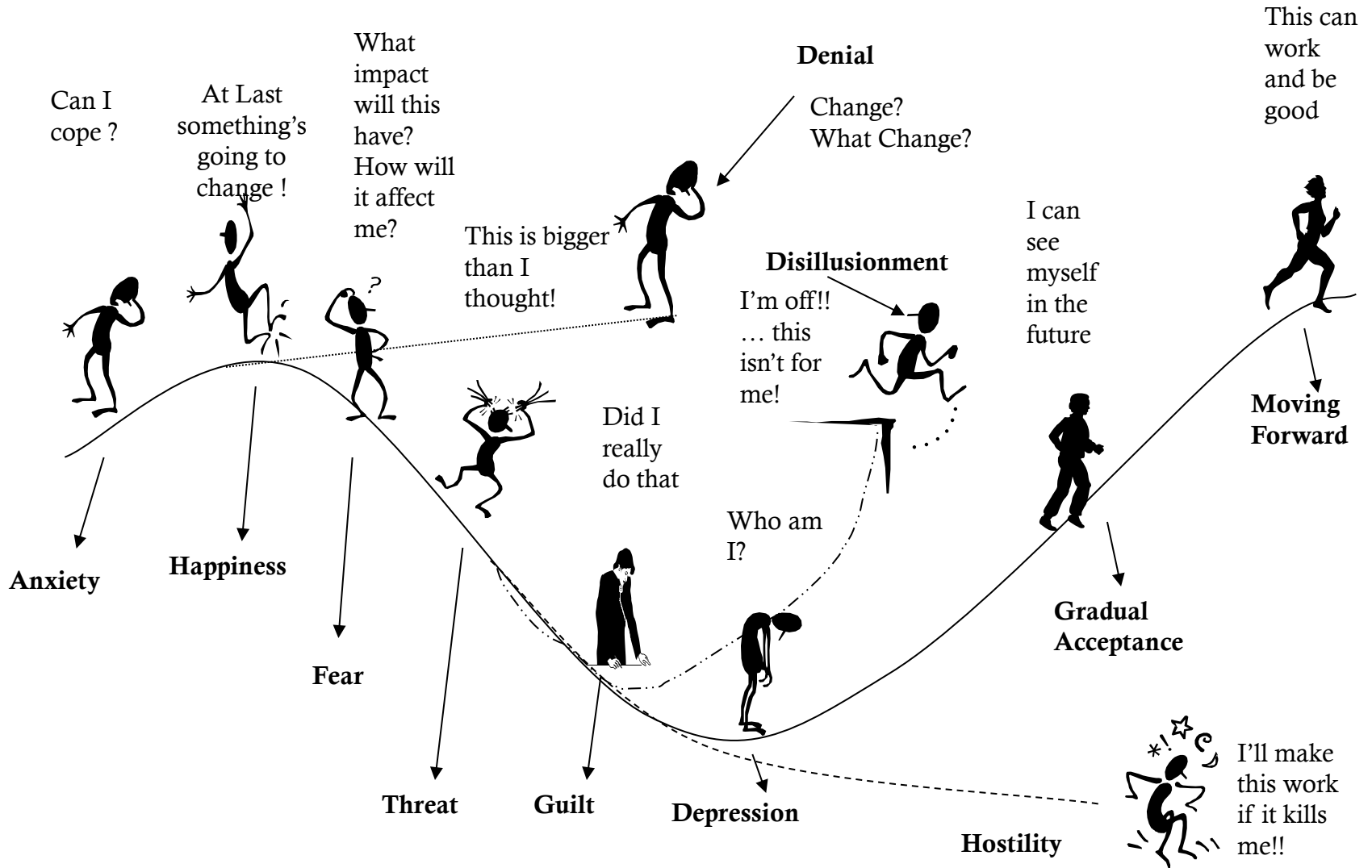
Change vs. transition

Change

- Unfreeze

- Freeze

- Re-freeze

Transition

- End

- Neutral zone

- Beginning

The Process of Transition

Can I cope ?

At Last something's going to change !

What impact will this have? How will it affect me?

This is bigger than I thought!

Denial

Change? What Change?

Disillusionment

I'm off!! … this isn't for me!

I can see myself in the future

This can work and be good

Did I really do that

Who am I?

Anxiety

Happiness

Fear

Threat

Guilt

Depression

Hostility

Gradual Acceptance

Moving Forward

I'll make this work if it kills me!!

Basics of Lean

- Definition

"…Practice that considers the expenditure of resources for any goal other than the creation of value for the end customer to be wasteful and thus a target for elimination. In a more basic term, **more value with less work**."

Waste, variation, and lag = loss in value

Source: Wikipedia, 2010

Principles of Lean

- Value –
  - as defined by the customer & delivered by the producer

- Value Stream –
  - identify set of actions required to bring the product or service to the customer

- Flow –
  - smooth movement

- Pull –
  - the downstream customer triggers the need

- Perfection –
  - no defects

What is Lean?

Lean is all about reducing waste

- Reduce the time it takes to deliver a service and increase efficiency without sacrificing quality
- Shorten the time between when you see the patient and you get the cash

Lean looks at the value stream of any process with the goal to eliminate steps that do not provide

- Value to the organization, or
- Value to the customer

Lean is more applicable to medical practices

- Shorter improvement cycle
- Less expensive delivery system
- Fewer resources

What is Six Sigma

- An improvement model designed to reduce the variability that exists within any given process
  - Eliminate errors and mistakes

- Six Sigma is a metric measured in unacceptable events per million
  - $6\,\sigma$ = 3.4 per million
  - $5\,\sigma$ = 233 per million
  - $4\,\sigma$ = 6,210 per million
  - $3\,\sigma$ = 66,810 per million

- Sigma measures variation rather than averages

- Six Sigma is counter-intuitive in that the process is within control up to a variation of six standard deviations

What is Lean Six Sigma?

Lean Six Sigma combines the strengths of each system into one

- **Lean**
  - Guiding principles based operating system
  - Relentless elimination of all waste
  - Creation of process flow and demand pull
  - Resource optimization
  - Simple and visual

- Efficiency

- **Six Sigma**
  - Focus on voice of the customer
  - Data and fact based decision making
  - Variation reduction to near perfection levels
  - Analytical and statistical rigor

- Effectiveness

Continuous Process Improvement

- Continuous Process Improvement, CPI, is a program of activities designed to improve the performance and maturity of an organization's process with regard to a set of goals

- The key to successful CPI –

  - Finding the best approach to meet the business goals of the organization

CPI Begins with Benchmarking

Current state or condition of operational components

PMS and other IT systems

Find and review MCO contracts

Accounting system and financial performance benchmarks

Patient Capacity (Maximum, minimum, excess, over, etc.)

Cycle Time

HR policies and practices

Value stream efficiencies

Waste (Downtime) (muda)

- **D**efects

- **O**verproduction

- **W**aiting

- **N**ot using Talent

- **T**ransport

- **I**nventory

- **M**otion

- **E**xtra processing

DOWNTIME Examples

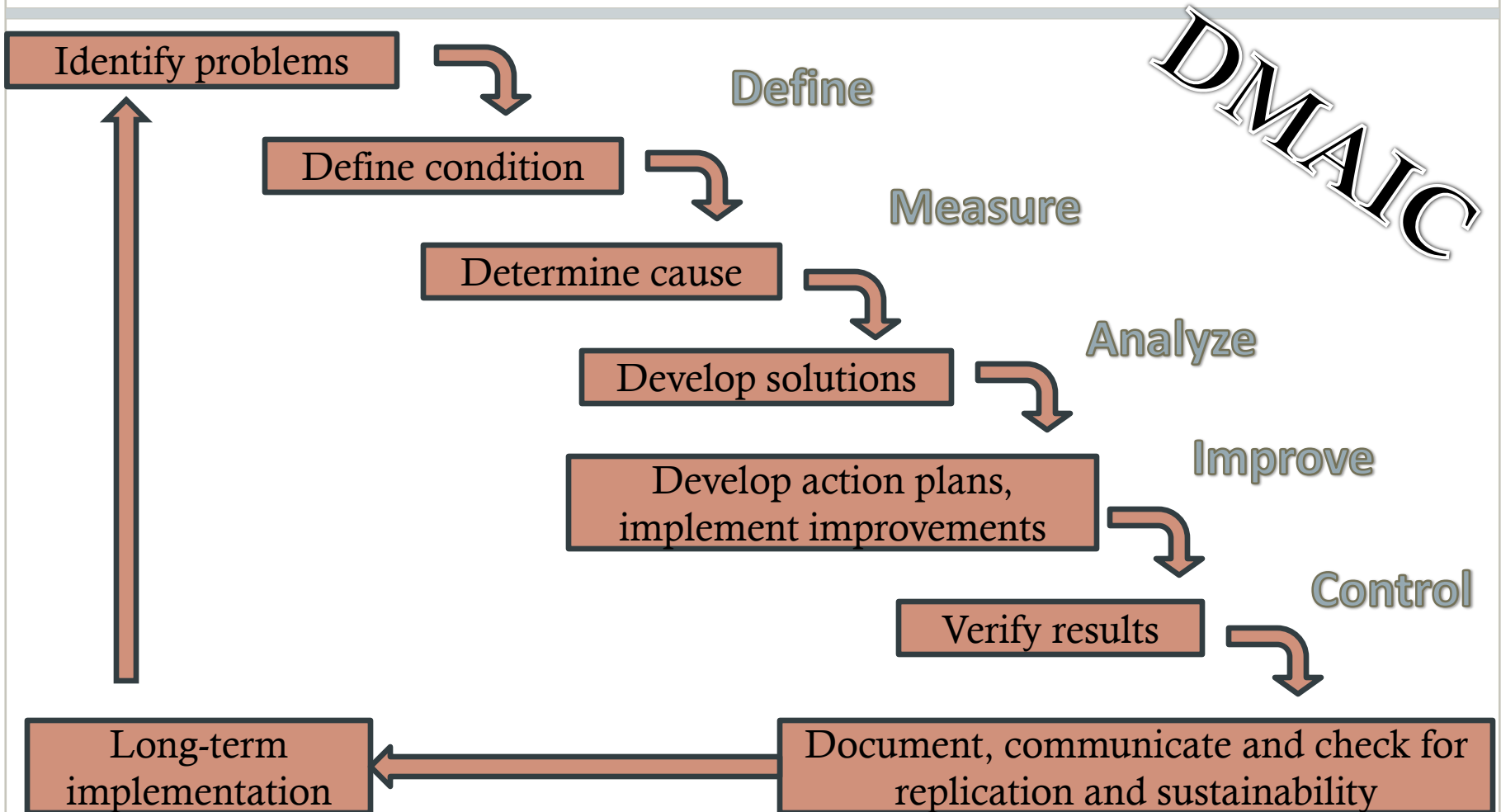| Waste	Observation
Defects	Medication error. Wrong patient. Wrong procedure. Missing information. Redraws. Poor clinical outcomes
Overproduction	Drawing too many samples. Extra tests.
Waiting	Waiting for doctor, procedure, room, test results, lab results
Not using employees abilities	No empowerment. "Check your brains at the door" mentality. Unenlightened management. Poor hiring practices. Low or no investment in training. High turnover
Transportation	Moving samples, specimens, patients for testing, patients for treatment or equipment
Inventory	Pharmacy stock. Lab supplies. Samples. Specimens waiting analysis. Paperwork in process.
Motion	Searching for patients, medications, or charts. Gathering tools. Gathering supplies. Handling paperwork.
Excess processing	Multiple testing. Multiple bed moves. Excessive paperwork. Unnecessary procedures.

Source: "A pathway for patients", Mark L. Dean
QP, February 2014

Deployment Platforms

Define – Measure – Analyze – Improve – Control

Plan – Do – Study – Act

DMAIC

Identify problems

Define

Define condition

Measure

Determine cause

Analyze

Develop solutions

Improve

Develop action plans, implement improvements

Control

Verify results

Long-term implementation

Document, communicate and check for replication and sustainability

DMAIC

Define the Process

Determine to whom the process is focused

Who are the customers?

- Patients
- Payers
- Staff

List the customers' requirements

- Quality
- Speed
- Value

Define the process boundaries

- Map the first and last steps first

Measure - Collect the Data

Know ahead of time what data you need vs. what data you can collect

For primary research, create a design for the experiment

- This is particularly prevalent with cycle time studies

Look for existing studies

Identify specialists within (and outside of) your organization that may be necessary to assist you

- IT support
- PMS support

Have a written data collection plan

- Includes the 'what' and 'where' and 'who'

Analyze the Data

Separate useful from fun-to-know data

Use analytical tools and statistical methods to conduct the analysis

Look for variability and conduct root-cause analyses to understand the underlying conditions

The key is accountability

- Someone within the organization should be able to explain, in understandable language, the reason for every significant variation.

Improve the Process

Use the information from the VSM and analysis phase to recommend process improvements

Develop future state maps with the improvements embedded and compare to current state maps

Include contingencies associated to risk analysis

Control the Process

Determine when to review

Identify what should be reviewed

Consider doing it again

PDS(C)A – a "lean" deployment platform

- Plan

- Do

- Study (Check)

- Act

Plan

- Purpose of the test?

- What change idea are you trying?

- Indicators of success?

- How will data be collected?

- How many subjects tested?

- What is the time frame?

- What do we hypothesize will happen?

Do

- Conduct the test

- Document any problems with unintended consequences

Study (Check)

- Analyze the data

- Study the results

- Compare the data to your predictions

- Summarize and reflect on what was learned

Act

- Refine the change, based on lessons learned from the test

- Prepare a Plan for the next PDSA cycle

Think

- So if you are …
  - Thinking months – think weeks; thinking weeks – think days;   thinking days – think hours

  - Thinking facility – think unit; thinking unit – think teams; thinking teams - think ONE team

  - Thinking all patients – think a type of patient; thinking a type of patient - think a sample; thinking sample - then 3-5 may be enough

Four Key Rules from TPS (Toyota Production System)

- How people work

- How people connect

- How the production line is constructed

- How to improve

Toyota – rule #1

- **How people work**
  - Scientific processes, each individual does the task the same way
  - Follow a specific sequence of steps for a particular job
  - Four questions
    - How do you do this work?
    - How do you know you are doing this work correctly?
    - How do you know the work is free from defects?
    - What do you do if there is a problem?
  - Hypotheses through action
    - The person doing the task is capable
    - The task actually produces the desired outcome (requires an understanding of why the task is being done!)

From: Decoding the DNA of the Toyota Production System, Steven Speer and H. Kent Bowen, HBR September 1999

Rule #2

- **How people connect**
  - *Supplier customer relationship* between each person
  - Connection as smooth as the Olympic relay team
  - *Specific tasks done by specific people*, expected and understood by all that are in the process
  - When problems arise, <u>*there is knowledge of who to ask for help*</u>
  - *The help is timely and responsive*

Rule #3

- **How the production line is constructed**
  - *Simple and specific*
  - <u>Services flow </u>to a specific person, e.g., Jane, MA to Smith, MD

Rule #4

- **How to improve**
  - To make changes, staff _must know how to change_ and who is responsible for making the change
  - Staff is _taught problem solving skills_ by redesigning their own work
  - Staff is trained to _frame problems better_ and to formulate and test hypotheses
  - _Teams are created_ to include those directly affected and with the person responsible for supervising the pathway involved
  - _State clearly the expected change (outcome)_ when the plan is implemented

The ideal output

- Is it defect free

- Can be delivered one request at a time

- Can be supplied on demand in the version requested

- Can be delivered immediately

- Can be produced without wasting any materials, labor, energy, or resources

- Can be produced in a work environment that is safe physically, emotionally and professionally for every employee

Is this your daily outcome?

From: Decoding the DNA of the Toyota Production System, Steven Speer and H. Kent Bowen, HBR September 1999

Define
Plan

What is a project? (Beginning & End)

Any temporary, organized effort that creates a unique product, service, process or plan

Projects bring together people from a wide range of jobs and provides them with the opportunity to collaborate in a unique way

Project Management

- Application of specific knowledge, skills, tools, and techniques to project activities

- A discipline that balances
  - Time, cost, and quality
  - Expectations
  - Identified needs
  - Unidentified needs

Project Manager

- **Process**
  - **Initiation**
    - Organization long term goals; risks; assumptions; constraints; charter
  - **Plan**
    - Development of plan to deliver
  - **Execute**
    - Integrate the resources and implement project effort
  - **Monitor and control**
    - Measure, identify variances, recommend/take corrective action
  - **Close**
    - Formalize completion of the project

Project Manager 2

- **Who** in your organization is capable of doing this job?

- **What skills and training** do they have or do they need?

- What **authority** will be given to this role?

Project Life Cycle

- Sequential project phases identified to assist in accomplishment of the desired objectives
  - Phase – logically related activities

- Sequential or overlapping

- Tracked through Project log or Gantt chart

Voice of the Customer

- Think price

- What is our price (does price have to be in $$$$?)
  - High deductible
  - Wait time
  - Time to get appointment
  - Reputation
  - Friendly staff

Customer Segmentation

- All patients are not the same

- Identify groups and sub groups to care for

- Economic
  - Revenue, loyalty, frequency, services

- Descriptive
  - Geography, age, gender

- Attitudinal
  - Price, value, service

Meet customer expectations

- Service MUST meet customer expectation requirements

- Must understand the customer expectation

$$V = R - E$$

V = Value (quality)
R = Results
E - Expectations

Voice of the Customer

- Process used to obtain feedback/requirements from the customer to provide them with the best service quality possible

- Proactive

- Captured through
  - Interviews
  - Surveys
  - Focus groups
  - Observations
  - Complaint logs

Contact Methods

Type of contact	Choose if you want . . .
Face to face	Unique perspective Ability to pursue unexpected lines of questions In-depth understanding of the customer experience Insights
Focus group	Information from customers with similar needs Information from many for single segment
Telephone interviews	Information from widely dispersed demographic Information on basic or simple issues Quick turnaround Lot of data for low cost
Surveys	Quantifiable and statistically meaningful response Information from many customers Confirmation of theories developed based upon data gathered from other forms of contact

Interviews

- Clear about purpose

- Have list of questions

- Decide method, e.g., face to face or telephone

- Determine how many

- Decide how data will be collected

- Conduct the interviews

- Transcribe the notes

Point of use observation

- Watch the customer – what's it like for the customer to do business with you?

- Steps
  - Clear purpose
  - When and how
  - Develop and test form
  - Train observers for consistency (have someone actually assigned!!!)
  - Do it
  - Continue data analysis
  - May follow up with customers, thank you note

Sickness Model of impediments to a "Healthy" Value Stream

Stress and anxiety	A common state of patients created by the malady that brought them to the office, uncertainty and fear about what may be wrong with them
Inactivity and waiting	Idle and unproductive time created when staff cannot tend to patients at a rate appropriate to their treatment
Coldness or apathy	Aloofness or distancing from the patient by one of his or her caregivers
Knowledge gap	Lack of information patients have about what is wrong with them, what is happening to them and what is going to happen to them
Neglect	The absence of steady interaction and information sharing with the patient
Embarrassment	A negative patient experience caused by a lack of dignity in the treatment process
Submission & Helplessness	A state of learned helplessness exacerbated by information, power and social status differences
Statistic	Depersonalization of patients.

Source: "A pathway for patients", Mark L. Dean
QP, February 2014

Patient Issues - documentation

Employee Name: _____

Date Submitted: _____/_____/_____

Instructions:

Please fill out this form throughout the day as you run across any patient care issues.

We will discuss during our huddle

Patient care issues include: 1) Delay in clinic flow

                                          2) Redundancies in work flow

                                          3) Any event that causes a disruption in normal clinic flow

                                          4) Identify the type of waste

Patient Name	Physician	Date of Issue	Brief Description of problem and recommended solution	What type of waste occurred?
Last, First (MRN)		--/--/--		

Critical to Quality (CTQ)

- From data gathered identify comments
- Use affinity diagram to arrange and find themes
- Start with these themes and find out why the customer feels that way
- Further customer contact

Voice of Customer	The Why	Critical Customer Requirement
I hate coming to your office	The wait time is too long	Seen on time +/- 10 minutes

TP & TP

- Touch Point
  - Where the customer is "touched" by the service/experience they have with the practice
    - All touch points when considered together create that impression or BRAND of your practice
      - A poor experience will erode the brand very quickly!

- Tipping Point
  - When things reach their "boiling point", critical mass or threshold

Lenox Medical Center Case

- Voice of the Customer

Four categories of quality costs

1. Prevention – incurred to prevent defects
   - Training

2. Appraisal – incurred for monitoring and inspection
   - Quality control and audits

3. Internal failure – incurred when a defect is found before service provided
   - Re-work

4. External failure – incurred for providing service to customer
   - Warranty, loss of goodwill, other talking, choosing a competitor, law suits

Quality through inspection

- Inefficient and costly

- Asks "who is the final inspector"

- Has a confused responsibility

- Is symptom oriented
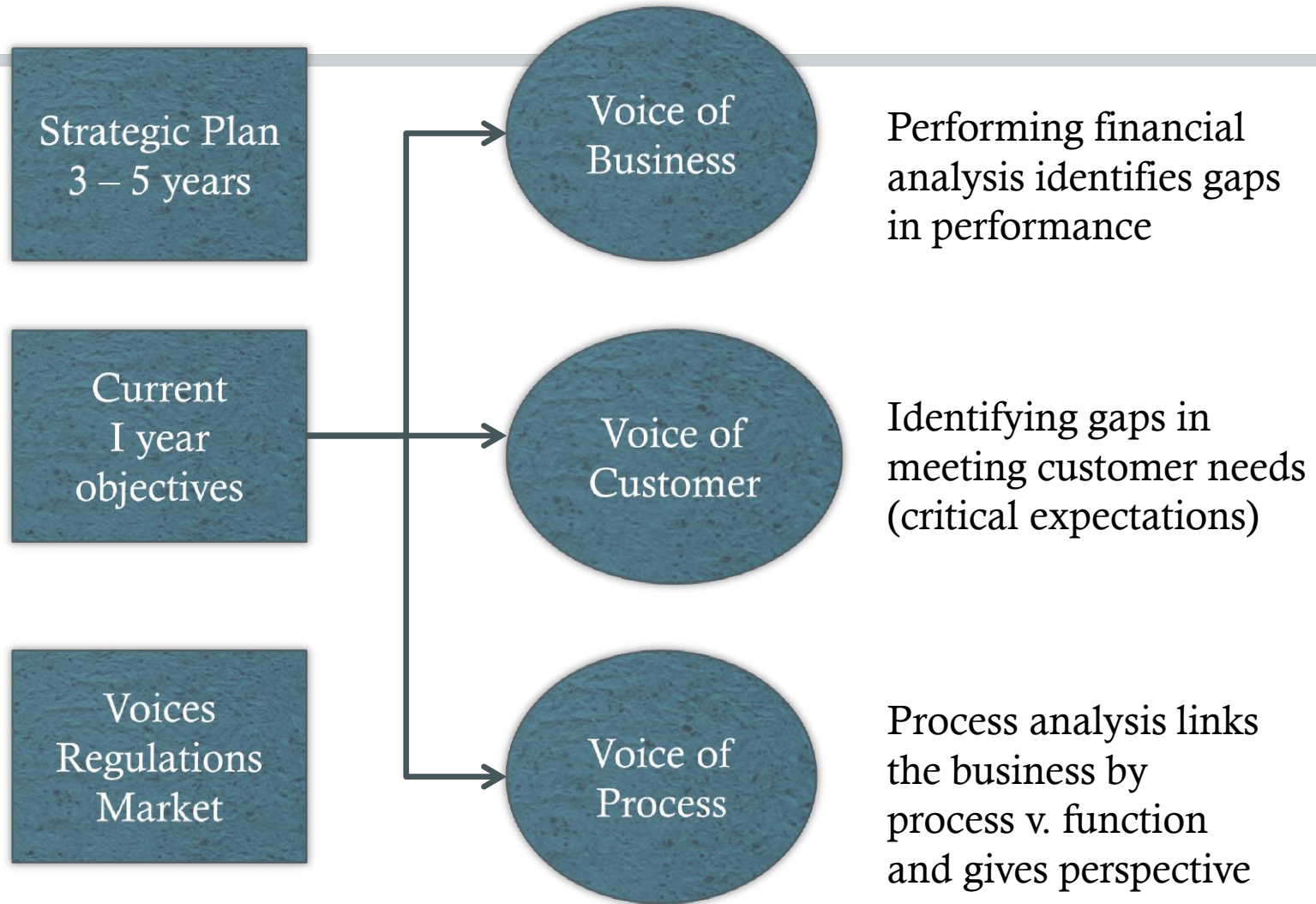
- Includes neglected improvements

Quality through prevention

- A change in philosophy where detection is no longer the goal

- Change in focus that takes place upstream on the process

- A change in responsibility, quality is NOW everyone's responsibility

- A change in attitude, good enough is not good enough anymore

- Continuous improvements designed to keep the practice competitive

Cost of Quality Report

- Costs by category for the current and prior period

- Percent change from prior period

- Current period budget
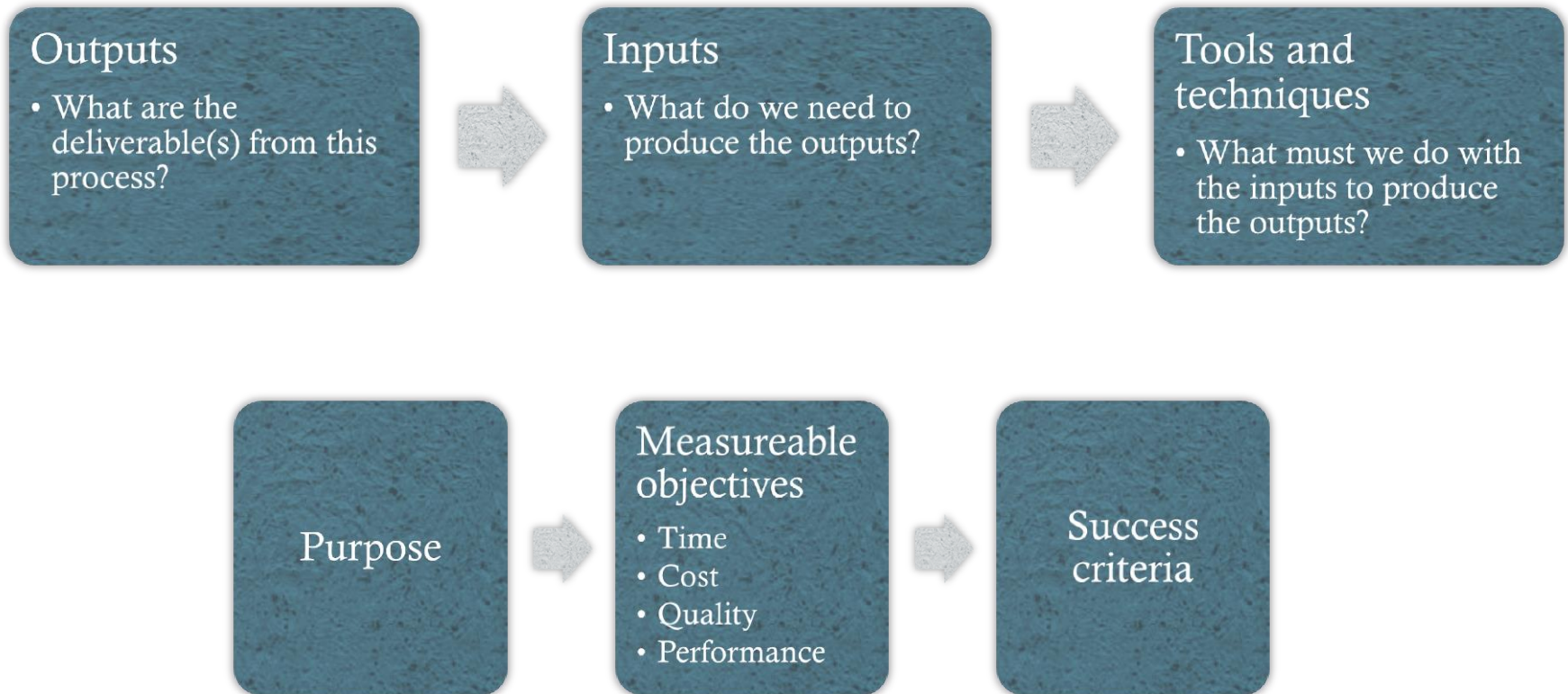
- Percent change from budget

Project selection

Strategic Plan 3 – 5 years	→	Voice of Business	Performing financial analysis identifies gaps in performance
Current I year objectives	→	Voice of Customer	Identifying gaps in meeting customer needs (critical expectations)
Voices Regulations Market	→	Voice of Process	Process analysis links the business by process v. function and gives perspective

L I S T   O F   P R O J E C T S

What is a Project Charter

- A Project Charter is a written document that is used as a foundational guide for conducting a process improvement project

- Establishes rules of game

- What project includes, what it doesn't (boundaries)

- Goals, constraints, success criteria

- It consists of:
  - Project scope
  - Project assurance
  - Project resources
  - Project limits and other expectations
  - Approvals

Contents of the charter ..

Outputs
- What are the deliverable(s) from this process?

Inputs
- What do we need to produce the outputs?

Tools and techniques
- What must we do with the inputs to produce the outputs?

Purpose

Measureable objectives
- Time
- Cost
- Quality
- Performance

Success criteria

Project Charter

Project Name		Start Date	
Team:	Leader		
	Members		
	Facilitator if needed:		
	Stakeholders		
Problem statement or business case			
Purpose/Goal (business need)			
Objectives (measurable)			
Assumptions			
Risks			
Deliverables			
Boundaries			
Task	**Assignment/duties**	**Due Date**	**To Whom**
Milestones			
Communication strategy			
Budget			
Final presentation	Who:	Date	
Recommendation			
Accepted/revision:		Date:	

Benefits of a Project Charter

- Establishes rules of game

- What project includes, what it doesn't (boundaries)

- Goals, constraints, success criteria

- Negotiations

- Buy-in

- Formal agreements

Business Case

- Market demand

- Organizational need

- Customer request

- Technology advance

- Legal requirements

- Ecological need

- Social need

A Good Project Charter

- Describe issues or situation motivating the project

- Describe the objective (outcome) of the project

- Identify the customers (patients, staff, payers, etc.)

- Stipulate boundaries (specific targets and/or goals)

- Estimate financial impact

- Define what the final deliverable will look like

Changes may occur …. later

- Assess the value of the change

- Assess the impact of the change

- Maintain integrity of baseline and original thoughts

- Ensure that only APPROVED changes are implemented

- Coordinate changes across all aspects of the project

- Communicating the changes

VA vs. BVA vs. NVA

- Value Add
  - Any step or activity that transforms the form, fit, or function of the product or service for which the "customer" is willing to pay

- Business value add
  - Necessary to support but not directly related to the customer

- Non-value Add
  - Waste in the process

Question

- Is a low bank balance a problem?

- Symptom?

- Poor financial planning?

- Inadequate systems to manage revenue cycle?

Define

- The problem or what are we improving
  - Scope
  - Business case
  - The customer
  - The sponsor
  - Current state

- Customer value
  - What matters
  - What priorities

- The vision
  - Future state
  - Strategy

Define – key steps

- Review project charter

- Validate the problem statement and goals

- Validate the financial benefits

- Create/validate the process map current state and scope of project

- Create communication plan

- Develop the project plan based upon the above

Key time for project charter

- Problem statement
  - When, what, magnitude, and impact or consequence

- Key stakeholders – who

- Business case

- Goal statement

- Verification of project scope

- Project plan

- Team members - key

Team Member Selection

Who selects the team?

What is the purpose of the project?

- Single issues may only require small, focused team
- Multi-issue may require process owners and management
- Complex project may require cross-disciplinary members

Always include process owners

Each member needs to contribute in some fashion

- Skills, technology, experience, facilitation, etc.

Each team member needs to share the goal

Team Objectives

The primary purpose of a team is to provide the organization with an efficient and effective model of process improvement and problem resolution

A properly functioning team will:

- Improve employee morale
- Develop creative skills of members
- Improve relationships and communication
- Build problem solving skills and techniques
- Demonstrate to management that employees have good ideas

Characteristics of an effective team

Clear sense of vision

Cohesive

Understand team interdependencies

Enthusiasm

Support each other

Developed level of trust

Project Management team . .

- The process of tracking team member performance, providing feedback, resolving issues, and managing changes to optimize project performance.

Source: Guide to Project Management Body of Knowledge

Team Roles

Champions

Facilitator

Team leader

Process owners

Inside subject experts

Outside subject experts

The recorder

Stakeholder

- Sponsor who is actively involved in the project OR whose interests may be positively or negatively affected by the project

- Exert influence on the project

Team Champions

- Upper level managers that control and allocate resources

- Team champions should be trained in process improvement techniques and strategies

- Team champions are (should be) there to lend support and encouragement from the organizations upper management
  - Sometimes, they are just spies and may jeopardize the benefit of group dynamics

- They are normally involved in all reviews pertaining to project milestones

Team Facilitator

- Perhaps the most important member of the team because . . . they are not really members

- The facilitator is normally someone from outside the team structure
  - From a different department
  - Outside the company (consultant)

- Should be trained in team structure and group dynamics
  - Forming, storming, norming and performing

The Team Leader

- Can be the facilitator, also, but not near as effective

- The team leader should:
  - Provide direction and suggest assignments
  - Act as a liaison to management
  - Handle administrative duties, i.e., meeting site and scheduling
  - Enforce meeting rules and regulations (sergeant at arms)
  - Work with and not over (or against) members

- The leader should be more of an encourager than a boss

- The role of the team leader will diminish as the team becomes more self-directed

The Process Owner

- A process owner is someone who is an expert regarding the process being reviewed and/or studied

- The process owner should:
  - Know the process inside and out
  - Be able to assist with process and value stream mapping
  - Have a good understanding of process improvement techniques
  - Support team's missions and goals

- Process owners may or may not be in management positions
 - billing manager vs. biller
  - office manager vs. front office staff

Subject Matter Experts -- SME

- Different from the process owners, these are people who offer an expertise in a particular technical area
  - IT, data analysis, statistics, clinical, CPC, technology, etc.

- Subject experts can be internal, external or both
  - External experts can provide new and unique perspectives

- Be careful regarding their ability to communicate effectively and work within a group environment
  - The 'geek' factor

Brainstorming

- Team creativity technique that encourages thoughts and ideas to develop new programs or create alternative solutions to problems.
  - More eyes, ears and experience than with an individual
  - Use sticky notes to start to eliminate domination and encourage all to be involved
  - Use affinity, consolidate ideas to achieve the best one or two

Communication

Sender → Message → Receiver
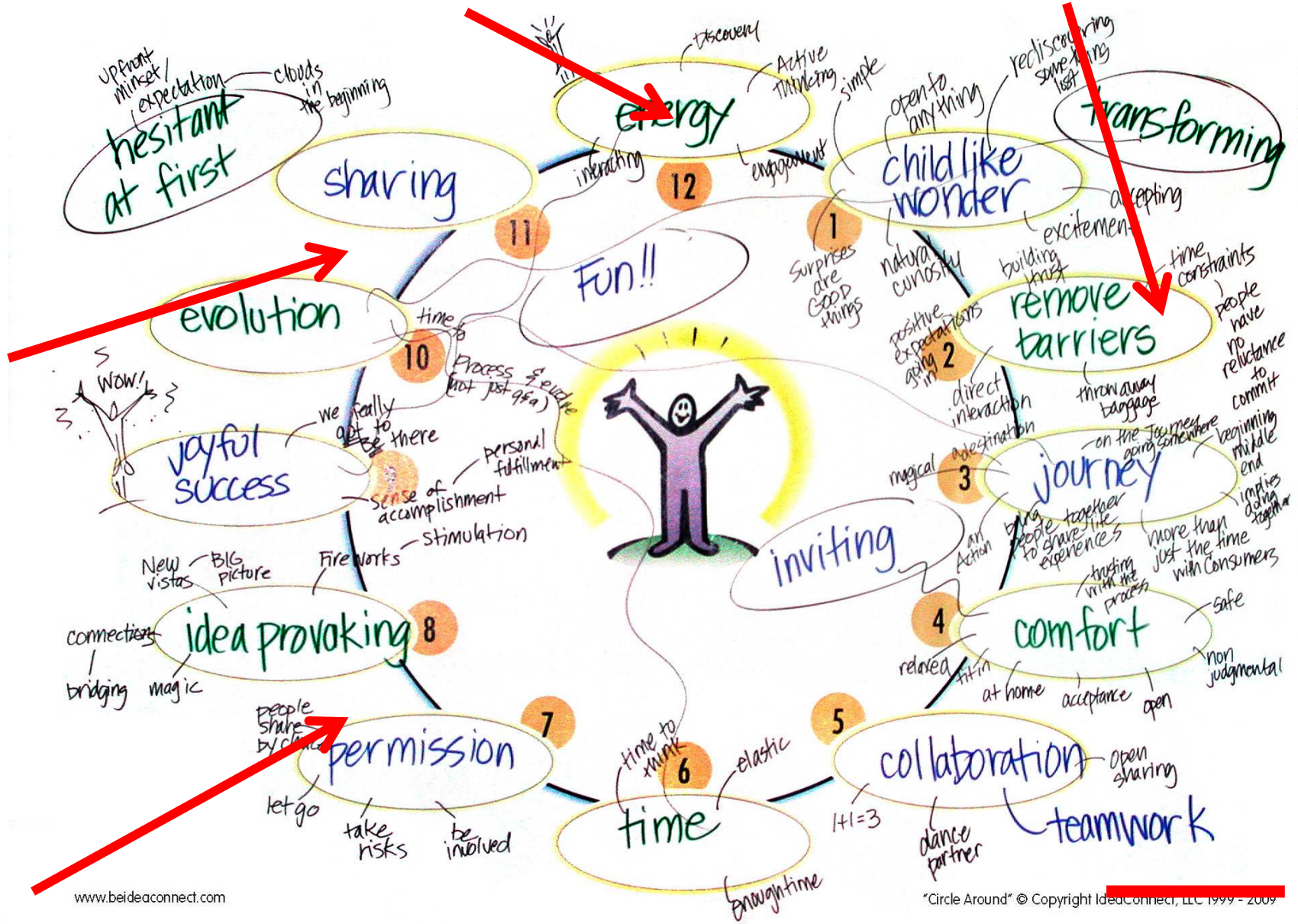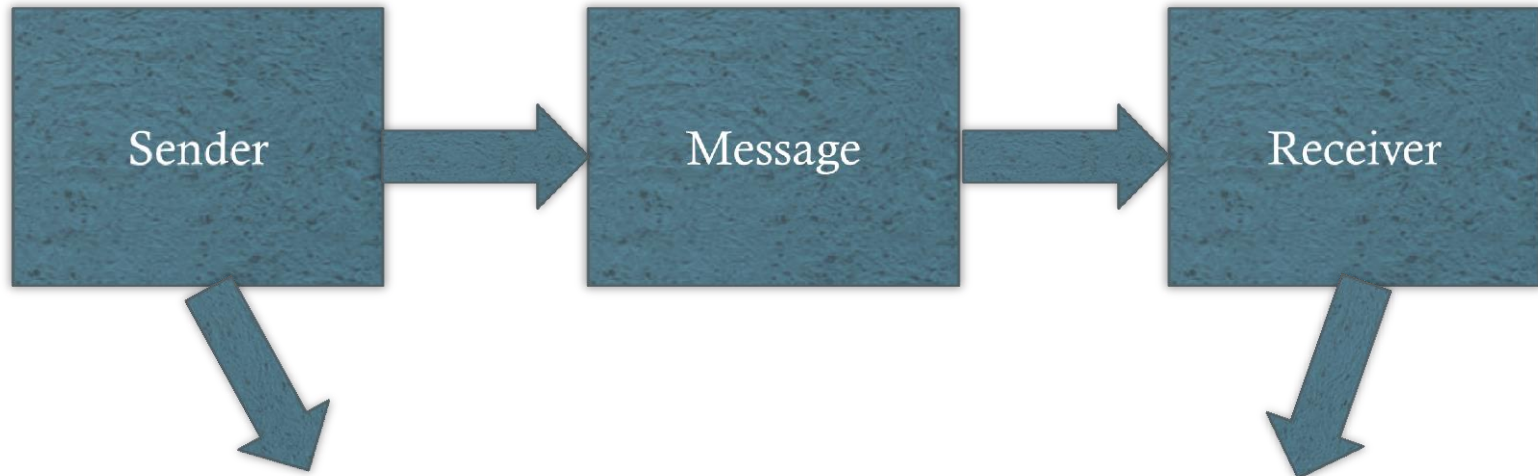
Sender:
- Selects media and content
- Prepares the message
- Controls the environment
- Sends the information
- Solicits feedback

Receiver:
- Keeps focused on the process
- Listens, reads, & observes
- Provides feedback, content, effect

Receiver's memory retention

- 50% now

- 25% in two days

- 10% after a week

- 10% of what we hear

- 15% of what we see and hear

- 40% of what we discuss

- 80% of what we experience

- 90% of what we teach others

Media

- Writing

- Speaking

- Non-verbal

- Pictures

- Experience

- Combination

- Factors leading to your choice:
  - Speed
  - Technology
  - Utilization
  - Cost

Work Breakdown Structure

- A deliverable-oriented hierarchical decomposition of the work to be executed by the project team to accomplish the project objectives and create the required deliverable

Work Breakdown Structure Model
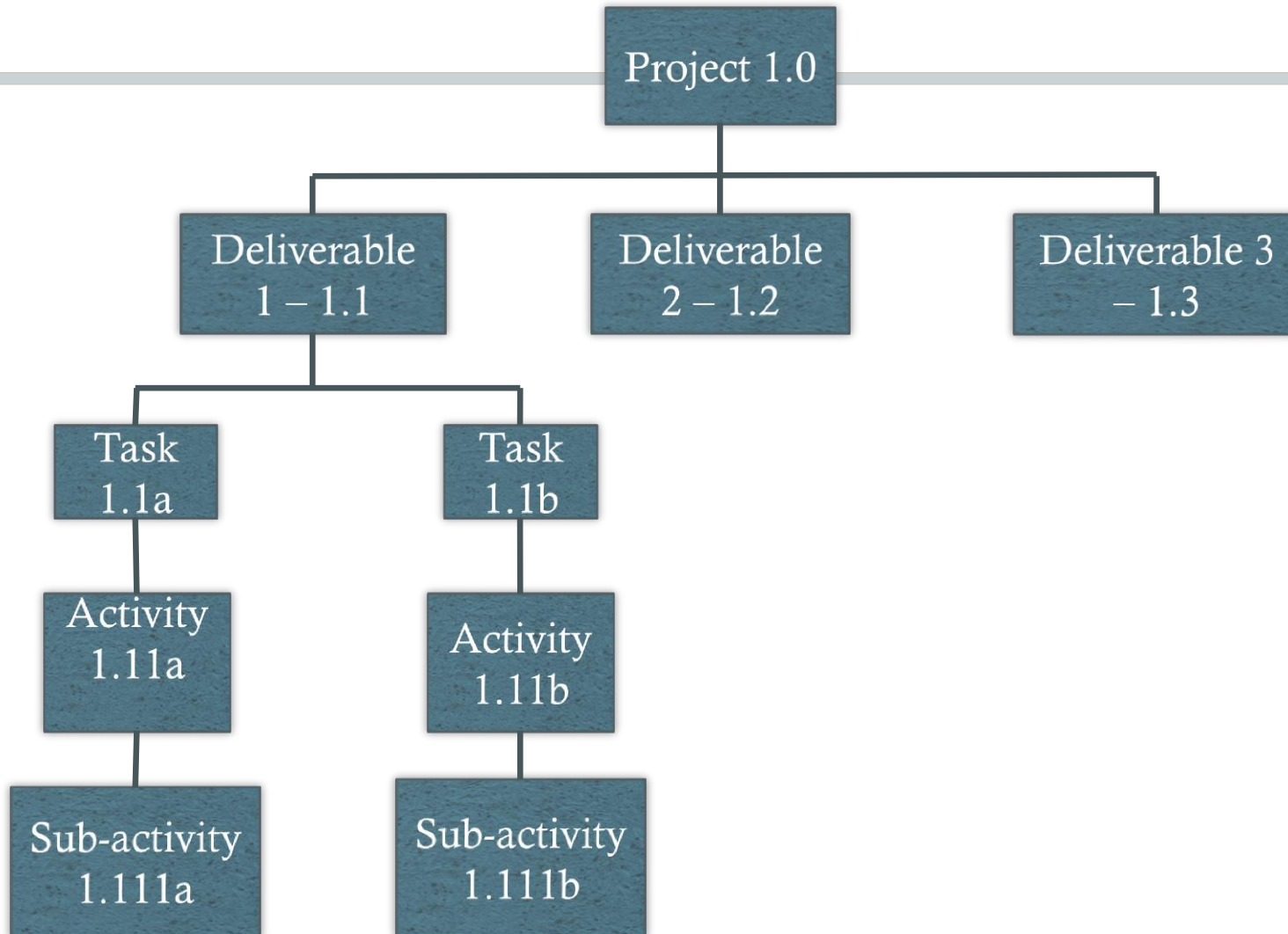
WBS key concepts

- Every task is a verifiable deliverable

- Each task must be unique and unambiguous

- Each item should be as continuous as possible

- Each item should have an identifiable end point

Define - deliverables

- Completed project charter

- Document – customers affected by the project either current or future

- High level process map

- Completed project plan

- Consensus of team related to the outcomes expected from the project (hypotheses)
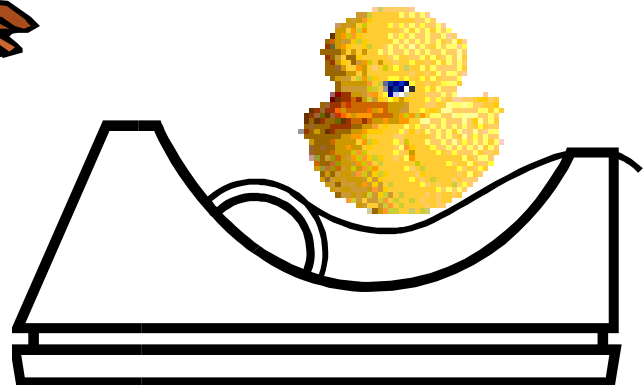
Spring Hills Clinic Case

- Define the key problem

JUMPING TO CONCLUSIONS
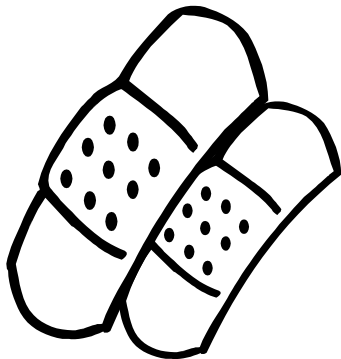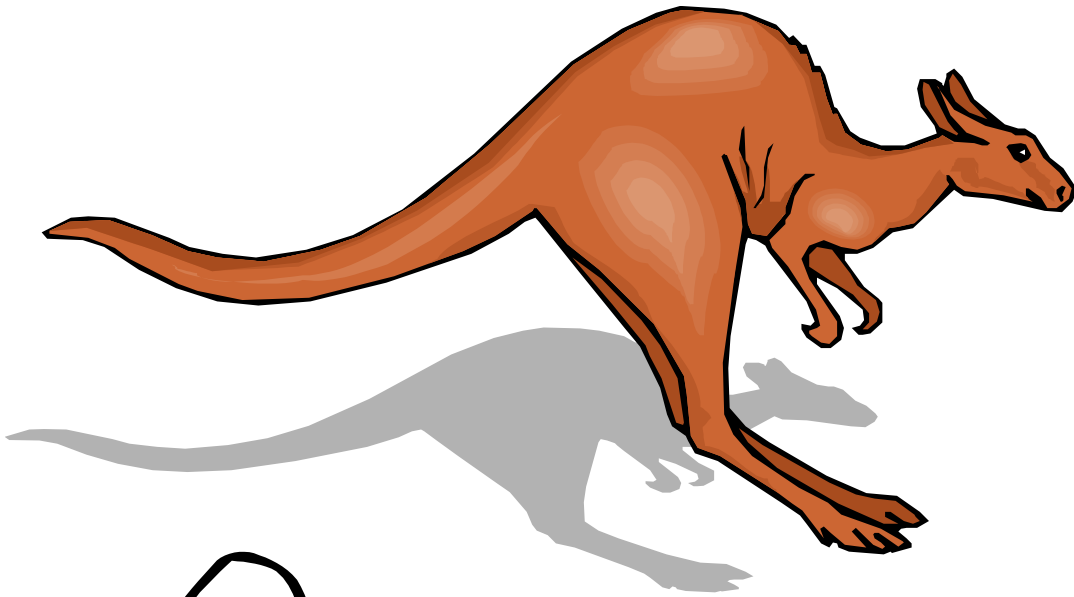
BAND-AID FIXES

DUCK TAPE

Measure

- Develop a thorough understanding of the current state and collect reliable data on the process itself – time, quality and cost that identify the problem current state

- Need benchmark – baseline (current state)

- Need hypothesis (targeted future state)

Factors to consider

- Time to order, transport, receive, etc.

- Room (area) change over

- Lead times

- Maintenance downtime

- Schedule demands

- Quality levels

- Process cycle times

- Constraints or bottlenecks

Data Collection

- Continuous
  - Variable measured on a continuum

- Discrete
  - Count
  - Binary – has only two values, e.g., yes/no
  - Attribute – Nominal – simple names or labels, no reason to arrange in any order
  - Attribute – Ordinal – names or labels have some inherent value, e.g., excellent, very good, good, fair, poor

X and Y

- X = process or input measures
  - Quality, speed, cost of information coming into the process

- Y =output measures
  - How well customer needs were met

- GOAL – find the Xs that are leading indicators of the critical output the Ys

Outputs from Measure

- Baseline of current state

- Key input process variables - X

- Key output process variables - Y

- Validated goals – financial or other

- Quantified objectives

Definition of Terms

- FTE = full time equivalent, 40 hours per work week

- Measures of central tendency
  - Mean = average (total value/count)
  - Median = data point, true center of count

- Standard deviation = measure of variation, cluster around the mean

- Percentile (%tile) = relative position of other data point: (number of values above/below a specific value) +/- 0.5 / total number of values * 100%

- Count – N/n

Data

- Valid
  - Meaningful
  - No bias

- Reliable (Gage R & R)
  - Repeat & re-produce (R & R)
  - Stable

- Some one else can use or reproduce

Metrics

- Informational
  - Average number of patients seen per month

- Actionable
  - Average number of patients seen per month per provider

Sampling

- Data from one or more subsets to make decisions about the entire group

- **Population** – fixed group with definable boundaries, e.g., customers

- **Process** – sampling from a changing flow of items moving through the business, time factor

Sample Selection

- Situation – population (set of items that will not change) or process (continually changing)

- Data type – continuous or attribute

- Objectives - what will you do with the results

- Familiarity – How much prior knowledge is available

- Certainty – how much confidence do you need in the conclusions

Choosing samples

- Worst
  - Judgment – sample based upon someone's knowledge = bias
  - Convenience – easiest or best time to measure

- Best
  - Random – random number table or draw numbers to identify which subject to include in sample
 - Systematic – select every "nth" unit

Sample size

- 30!

- http://www.surveysystem.com/sscalc.htm

Data Plan - steps

1. Decide what data to collect
   - How will data be used?
   - How will data be displayed?

2. Determine needed sample size

3. Identify source/location of data

4. Develop data collection forms

5. Decide who will collect data

6. Train data collectors

7. Do ground work for analysis

8. Execute the collection plan

SIPOC

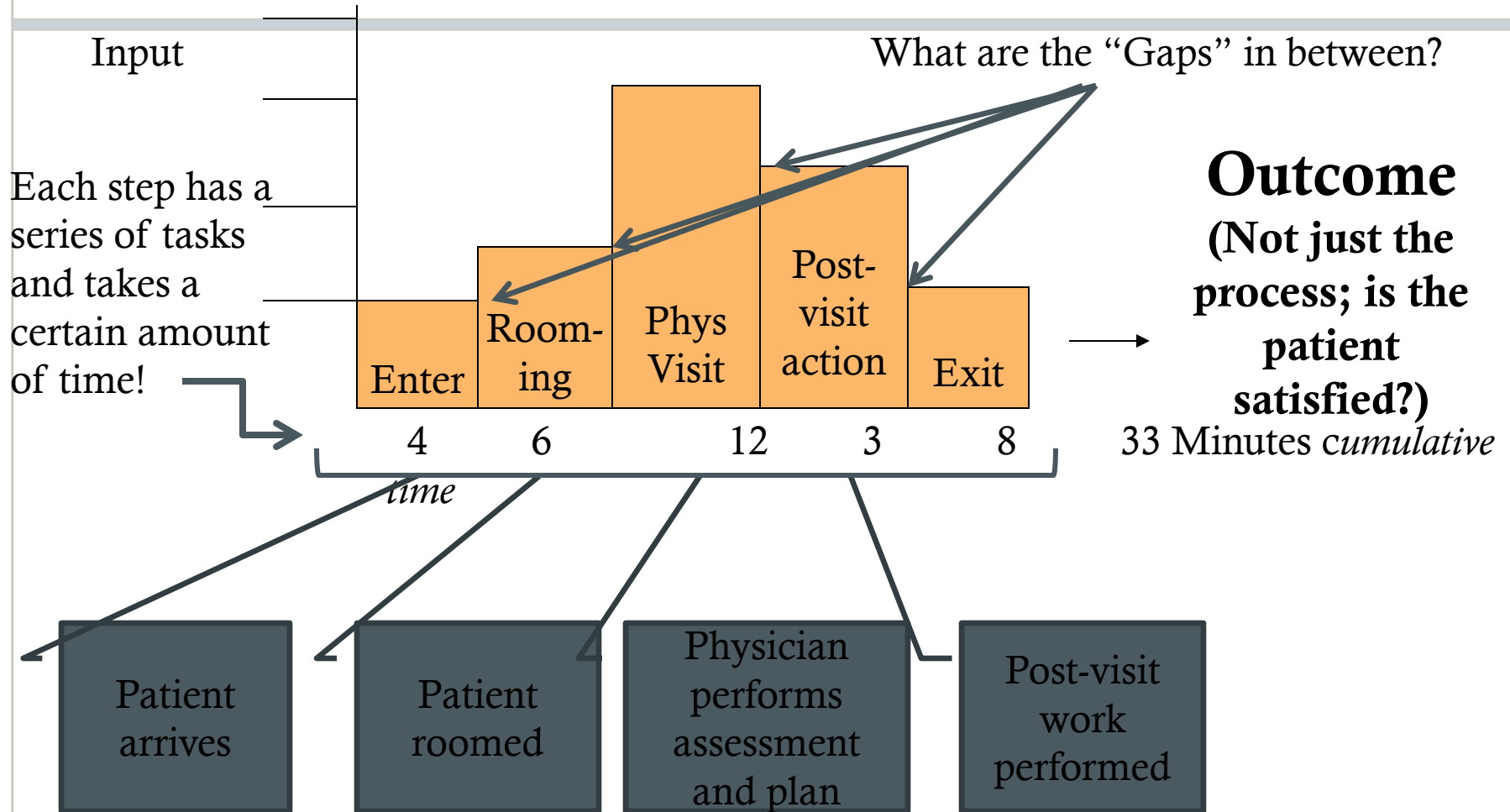SUPPLIER   INPUT   PROCESS   OUTPUT   CUSTOMER
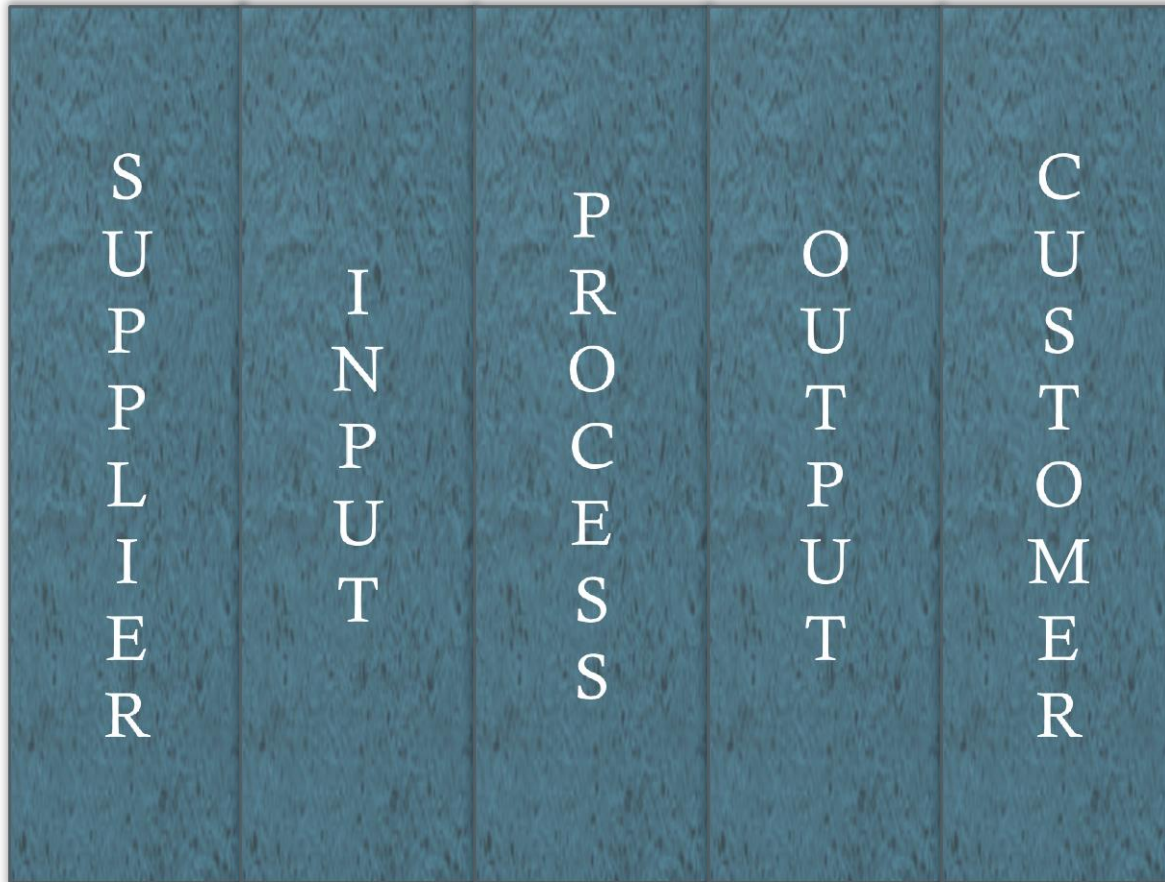
SIPOC

- Overview of project to help identify information critical to the process

- Assist in process boundaries and focus

- Verification of inputs (X) leading to outputs (Y)

- Start anywhere but may be best to start with outputs or customer and work backwards

- Identify the key CTQ – critical to quality requirements of X to achieve Y
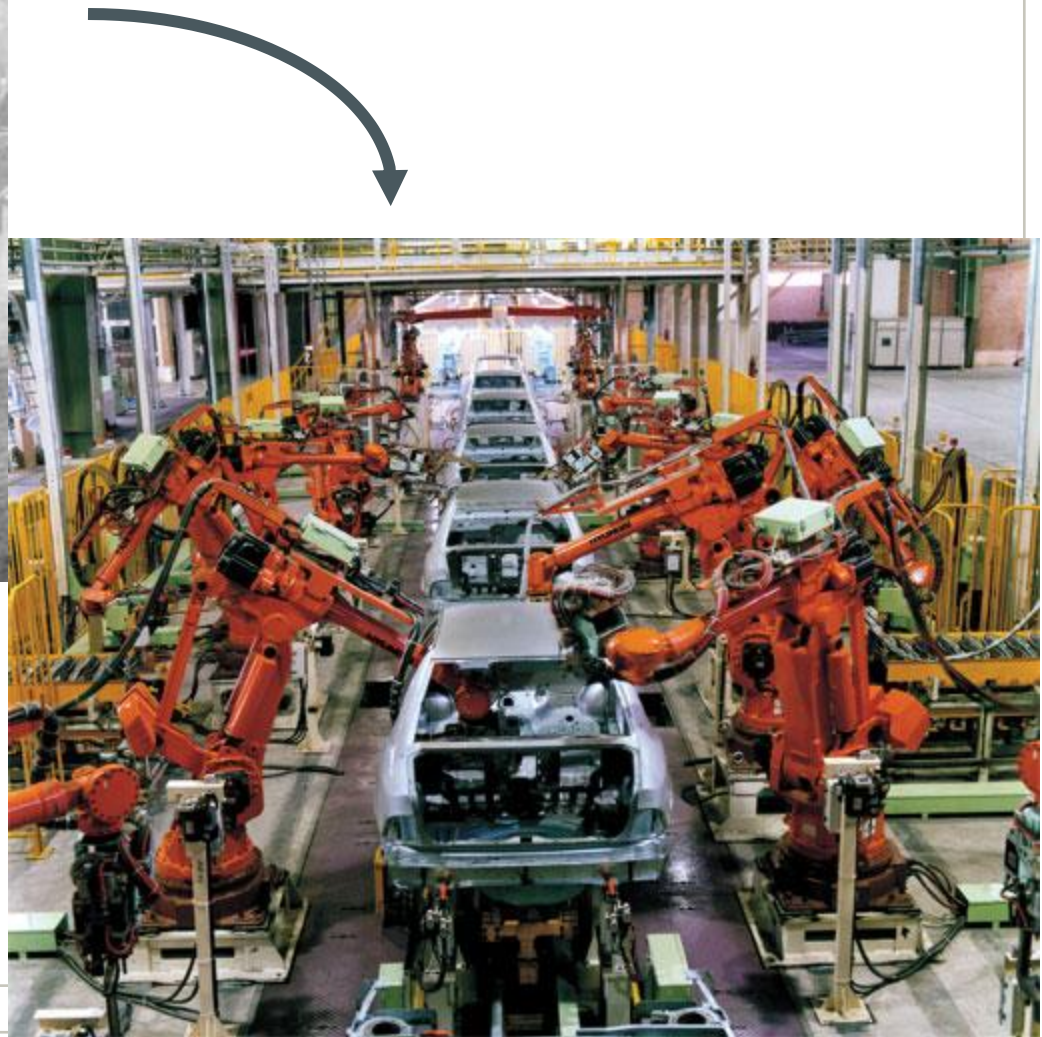
SIPOC example

- Output- x-ray, lab, surgery schedule, script, next appointment, check out

- Customer – patient, another department, hospital, pharmacy, check out staff

- Process – patient visit, exam, care plan, orders conceptualized

- Input – visit, triage, provider in exam room

- Supplier – appointment desk, receptionist, patient

Basics of Lean

Input

What are the "Gaps" in between?

Each step has a series of tasks and takes a certain amount of time!

Enter	Room-ing	Phys Visit	Post-visit action	Exit
4	6	12	3	8

time

**Outcome
(Not just the process; is the patient satisfied?)**

33 Minutes *cumulative*

Patient arrives

Patient roomed

Physician performs assessment and plan

Post-visit work performed

Assembly Line . . .

We've
come a
long
way!!!

# Non-integrated business processes - Problems!

- Different information systems

- No standard procedures

- Terminology

- Paper vs. computer

- Too many details

- Time lags

- Silos

- Communication

Integrated business processes

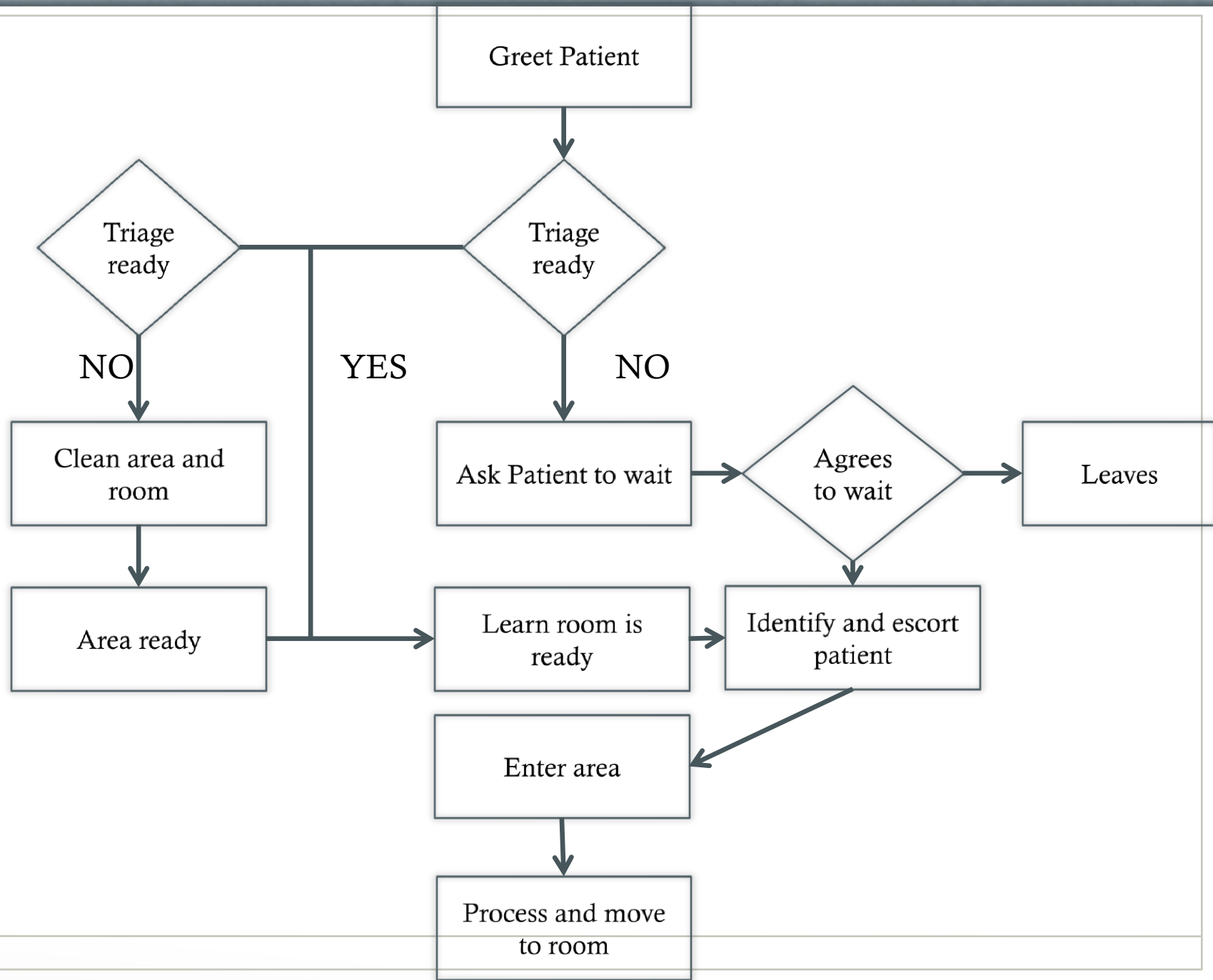- Systematic, all phases and activities support the project and organizational goals

Process Map

Check In

Triage

Provider

Document

Update Chart

Care Plan
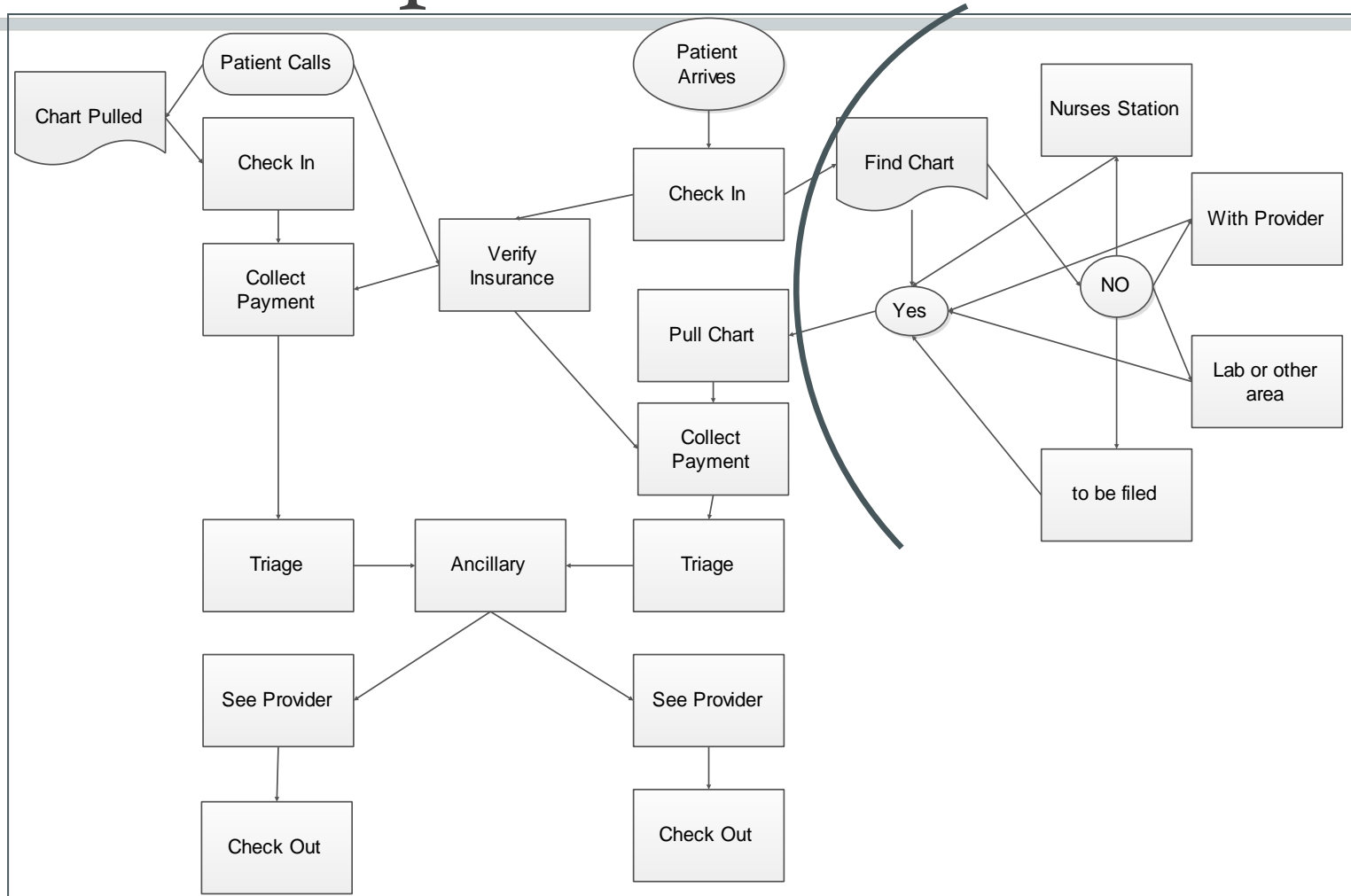
Post Activity

Check Out
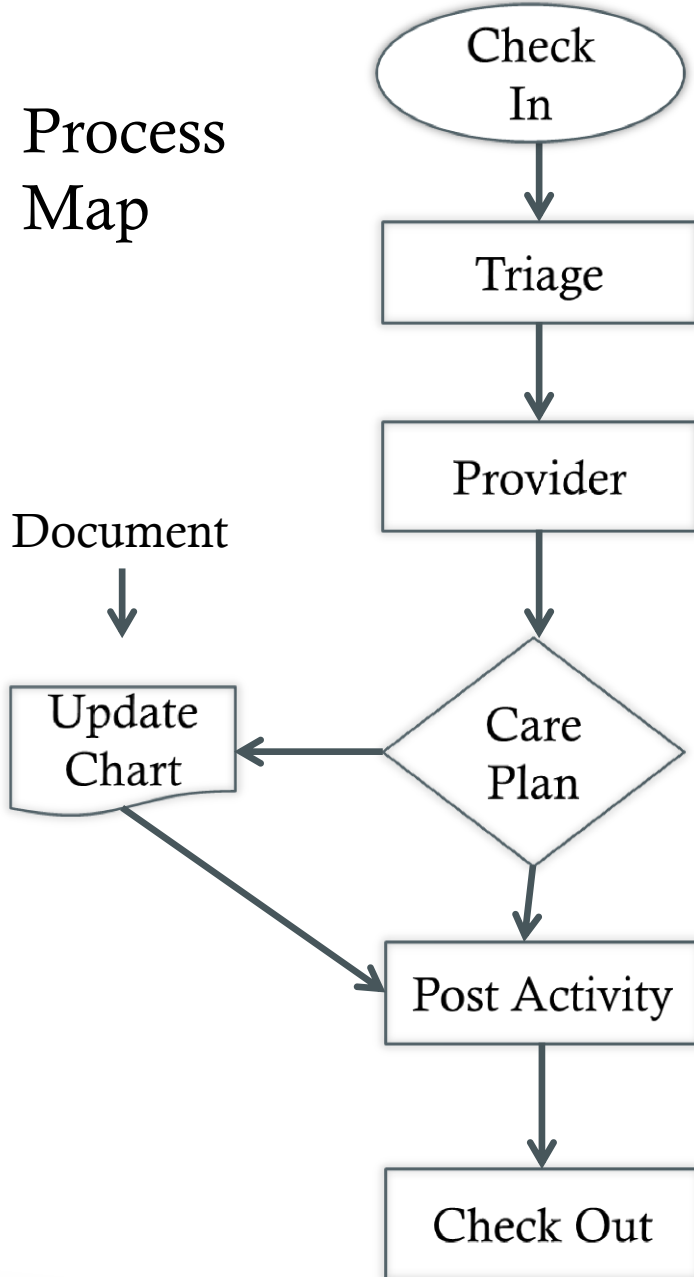
Oval = start

Rectangle = process

Diamond = Decision

Process map with sub process identified

Basic Procedure

- Define the process to be diagrammed.

- Discuss and decide on the boundaries of your process: Where or when does the process start? Where or when does it end? Discuss and decide on the level of detail to be included in the diagram.

- Visit the "Gemba" – the place where the process occurs

- Brainstorm the activities that take place. Write each on a card or sticky note. Sequence is not important at this point, although thinking in sequence may help people remember all the steps.

- Arrange the activities in proper sequence.

- When all activities are included and everyone agrees that the sequence is correct, draw arrows to show the flow of the process.

- Review the flowchart with others involved in the process (workers, supervisors, suppliers, customers) to see if they agree that the process is drawn accurately.

Materials needed: sticky notes or cards, flipchart, marking pens

Flow or process charts

- When to Use a Flowchart
  - To develop understanding of how a process is done.
  - To study a process for improvement.
  - To communicate to others how a process is done.
  - When better communication is needed between people involved with the same process.
  - To document a process.
  - When planning a project

Process map tips

- Walk through forward and then backward

- Visit the Gemba – the place where the process occurs

- Use sticky notes, remember step one is draft

- Date the notes

- Clarify who has option to update the map

- Concentrate on the process, not the tools, metrics

What is Value Stream Mapping?

- Value stream mapping starts as a paper and pencil tool that helps you to see and understand the flow of objects, patients, materials, supplies and information as a product or service makes its way through the value stream.
- **It differs from the process mapping in four ways:**
  - It gathers and displays a far broader range of information than a typical process map
  - It tends to be more specific than process maps
  - It tends to be used at a broader level, i.e. from inventory to accounting to clinical
  - It tends to be used to identify where to focus future projects, subprojects, and/or kaizen events

VSM – Activity ++++

- *A value stream map takes into account not only the activity of the procedure/service, but the management and information systems that support the basic process.*
  - This is especially helpful when working to reduce cycle time, because you gain insight into the decision making flow in addition to the process flow
- The basic idea is to first map your process, then map the information flow that enables the process to occur

Value Stream

- Set of specific actions required to bring a specific product through three critical management
  - Problem solving – concept to launch
  - Information management – order to delivery
  - Physical transformation – get the product in the hands of the customer

VSM - examples
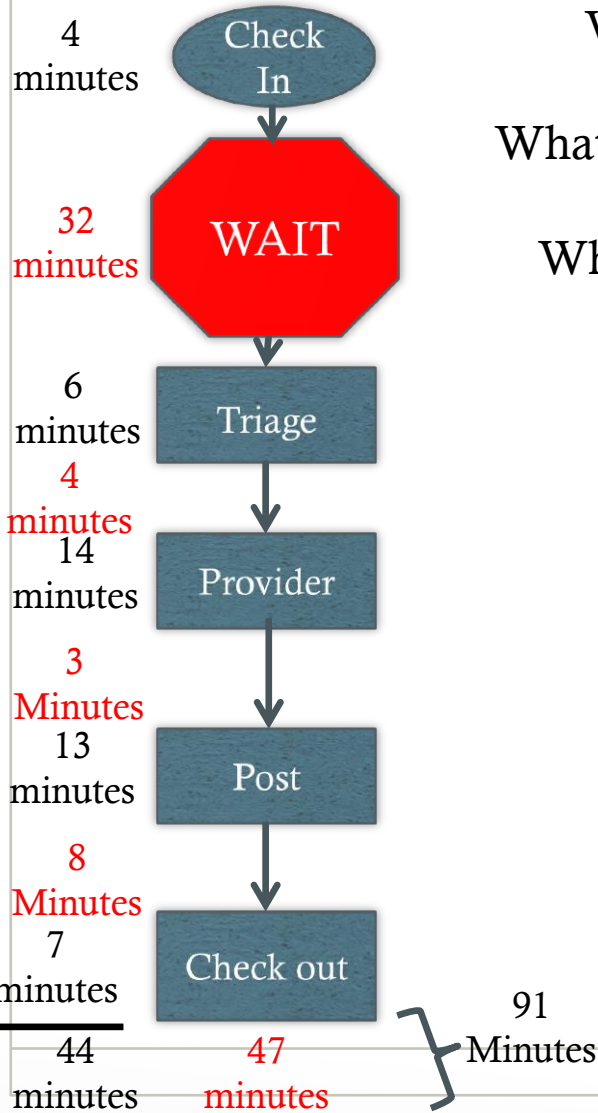
What is value added?

What is business value added?

What is non-value added?

Identify wastes by type:

-
-
-
-
-

Left flow:

4 minutes — Check In

32 minutes — WAIT

6 minutes — Triage
4 minutes

14 minutes — Provider
3 Minutes

13 minutes — Post
8 Minutes

7 minutes — Check out

44 minutes / 47 minutes — 91 Minutes

Right flow:

Encounter Form

4 hours — Provider Generates — Instantly

16 hours

5 minutes — Coder Reviews — Not

4 hours — Scrubber

Clearing house

30 days — Payment – Denial — 14 days
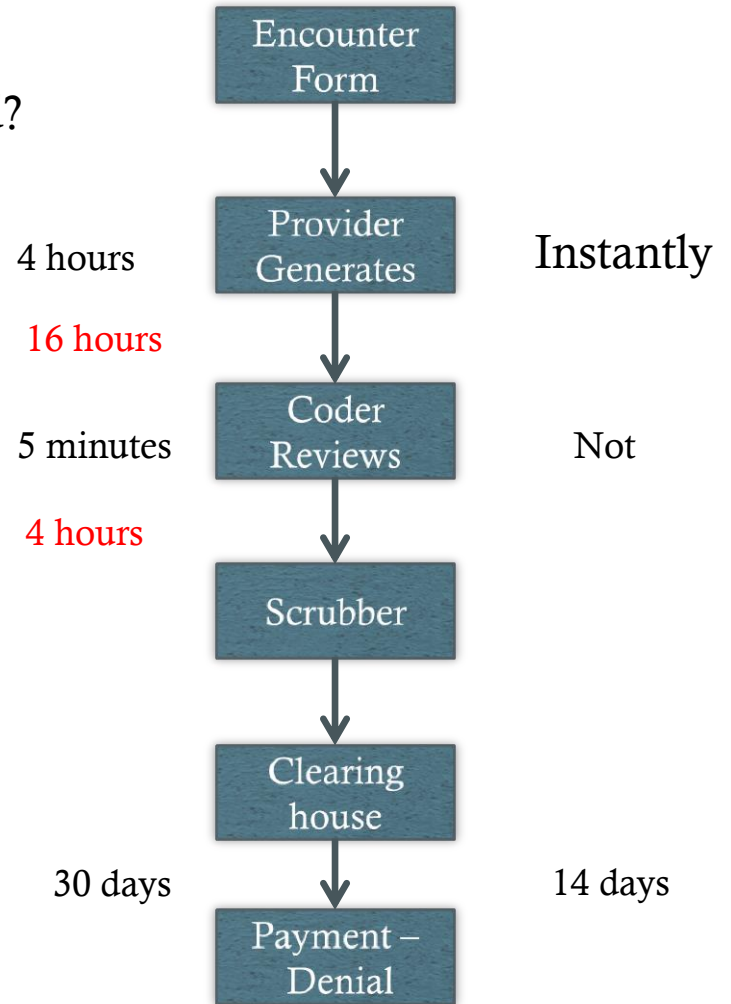
Process Cycle Efficiency

- Value Add to total time

Patient in office 60 minutes, sees MA 5 minutes, sees provider 5 minutes

PCE = 10/60 = 16.7%

Value Stream Analysis

Define boundaries
Build a SIPOC diagram
Create a process map

Analyze the flow

Perform waste walk
Create current state map
Visualize flow
Perform flow analysis

Identify waste

Perform impediments Walk

Identify impediments to
Patient care and satisfaction

Create ideal State Map

Envision the
Perfect process

Develop future state map
Prioritize opportunities
Develop improvement plan

Plan
Improvements

VSM Challenges in a Medical Practice

- Speed of change is usually slower

- Policies are well established and politics get in the way

- It is often difficult to establish the metrics needed to measure and analyze processes and results

- Even though it is easy to see what needs fixing, it normally takes longer to achieve results

- Establishing the true cost of quality and the cost of the process is much more difficult than other industries

Measure – key steps

- Create or validate the current state of the VALUE stream from the initial process map

- Identify outputs, inputs, and process variables relevant to the project

- Create a data collection plan

- Create a data analysis plan

- Use measurement system analysis

- Collect data – establish baseline

- Update value stream map with the data

- Perform process capability evaluation

- Make readily identifiable improvements

Measure - deliverables

- Fully developed current state value stream map

- Reliable data on inputs (X) and outputs (Y) for analysis of defects, variation, process flow, and speed

- Baseline measures of process capability

- Refined definition of improvement goals

- Capable measurement system

- Revised project charter, if change warranted

Analyze
"Seek to understand"

- Pinpoint and verify causes affecting the key input (X) and output (Y) variables – finding the key (X)

- Understand – common picture
  - Cause & effect relationships
  - Optional solutions

- Prioritize –
  - Issues and opportunities
  - Plan improvements

Variation

- Common cause
  - Random changes in process yet stable and predictable
  - "in control" (statistically)

- Special cause
  - Variations that are not always present in the process
  - Special causes that are not random, not predictable as to when they appear or the overall impact of the variation
  - "out of control"
  - Requires a look to determine what's different

Visit Times

82	60	68	37
61	73	61	54
50	57	157	67
52	67	82	55
56	60	54	70
35	32	125	78
57	54	92	77
28	37	80	68
75	54	98	68
85	127	82	52
			20

Which Measure to Choose?

- Average = 67
  - Average minus top and bottom 3 = 64.51

- Median = 61

- Mode = 54

- Range = 20 – 157

Chart options – examples to follow

- The following slides offer options for presentation of information

- Keys
  - Ease of creation
  - Display preferred by the audience
  - What is the intent of the information – will there be additions that will integrate

Column Chart
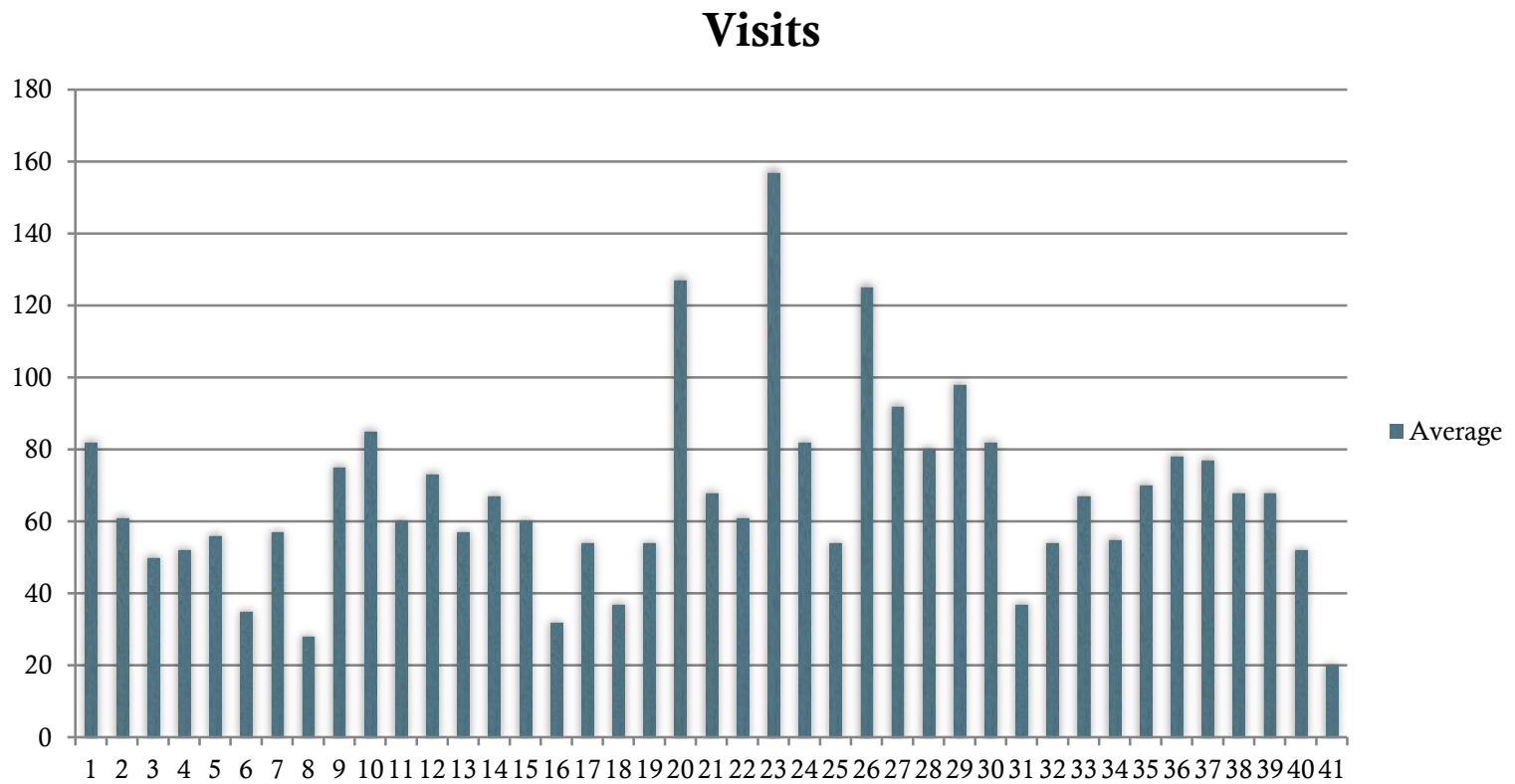
Scatter Diagram
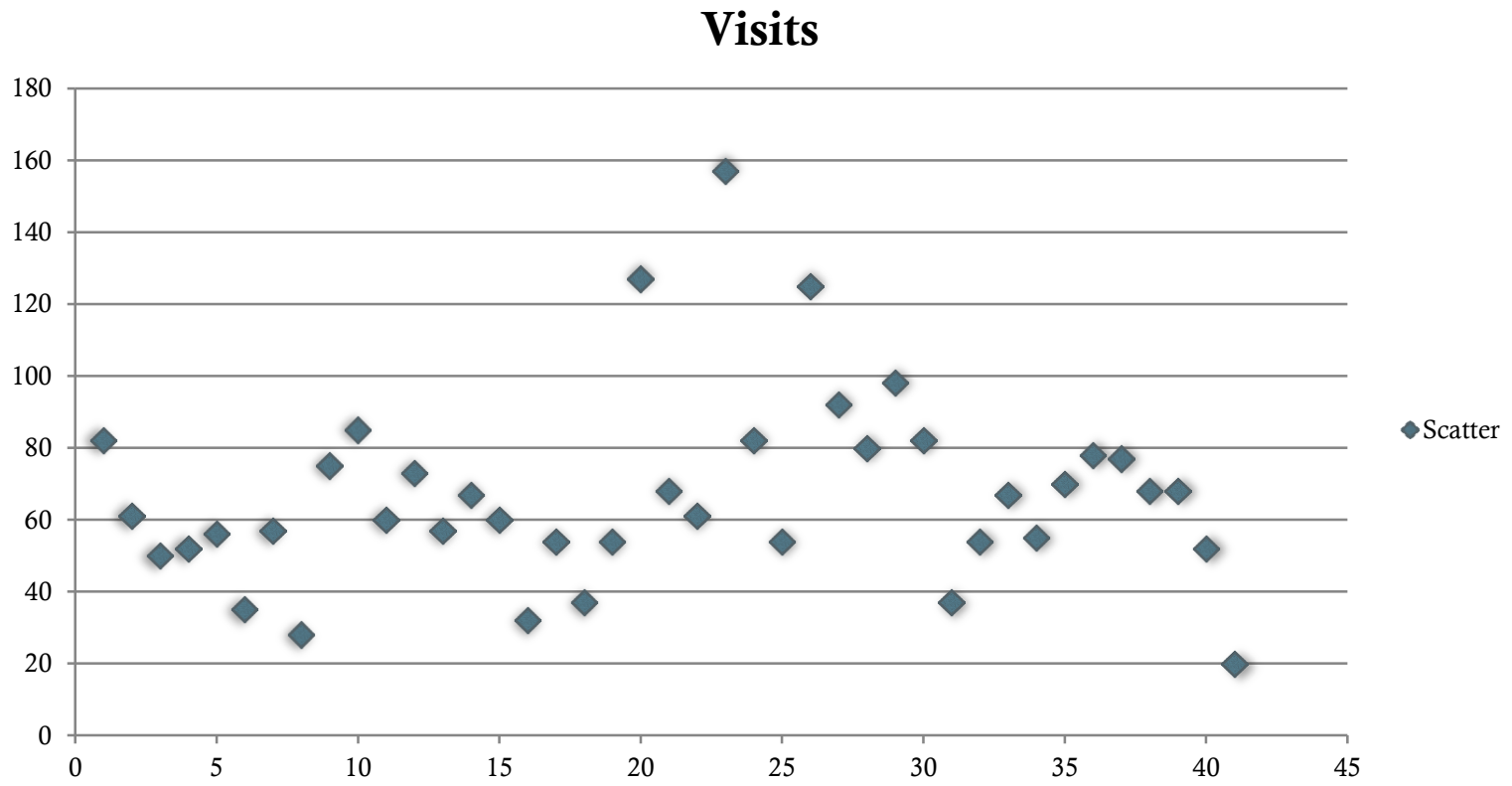
Normal

Normal DIstribution
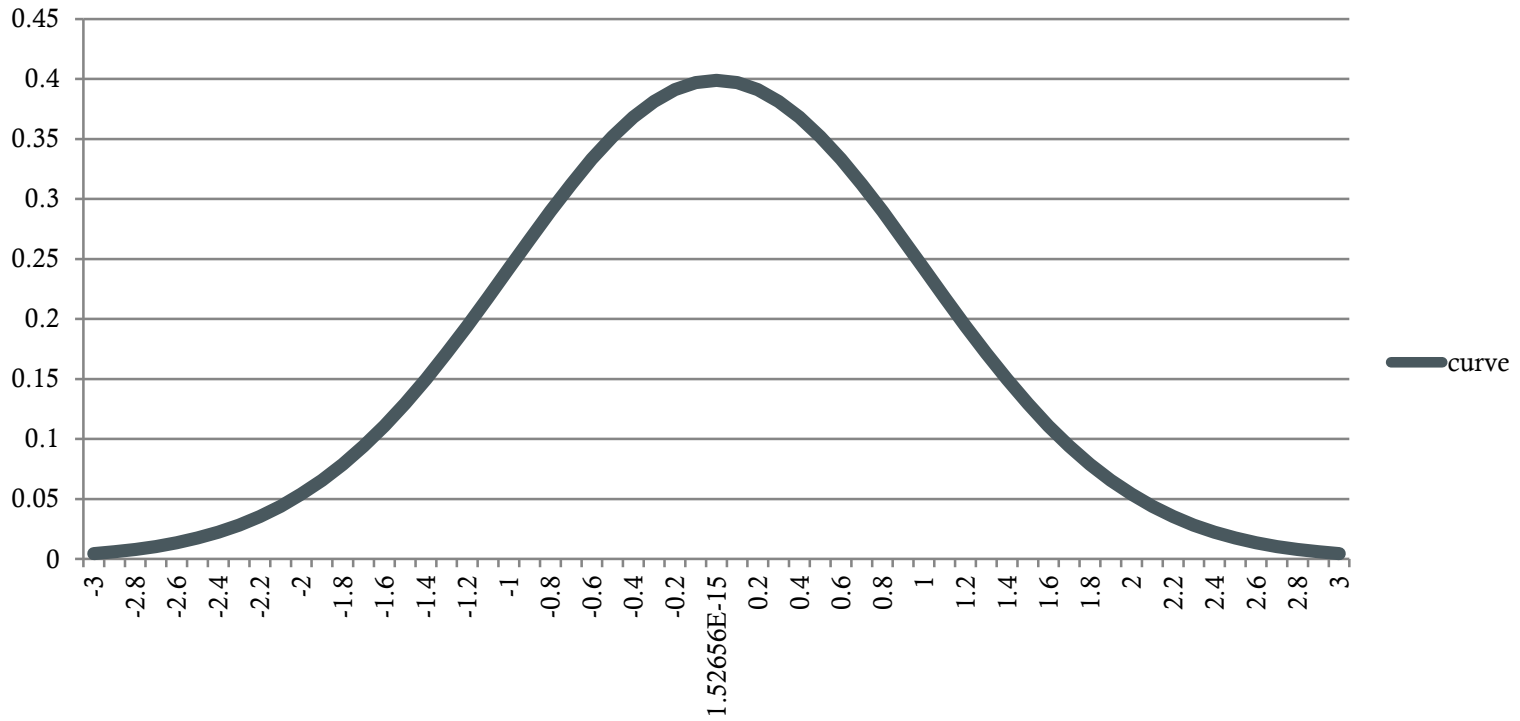
Run Chart

Control Chart
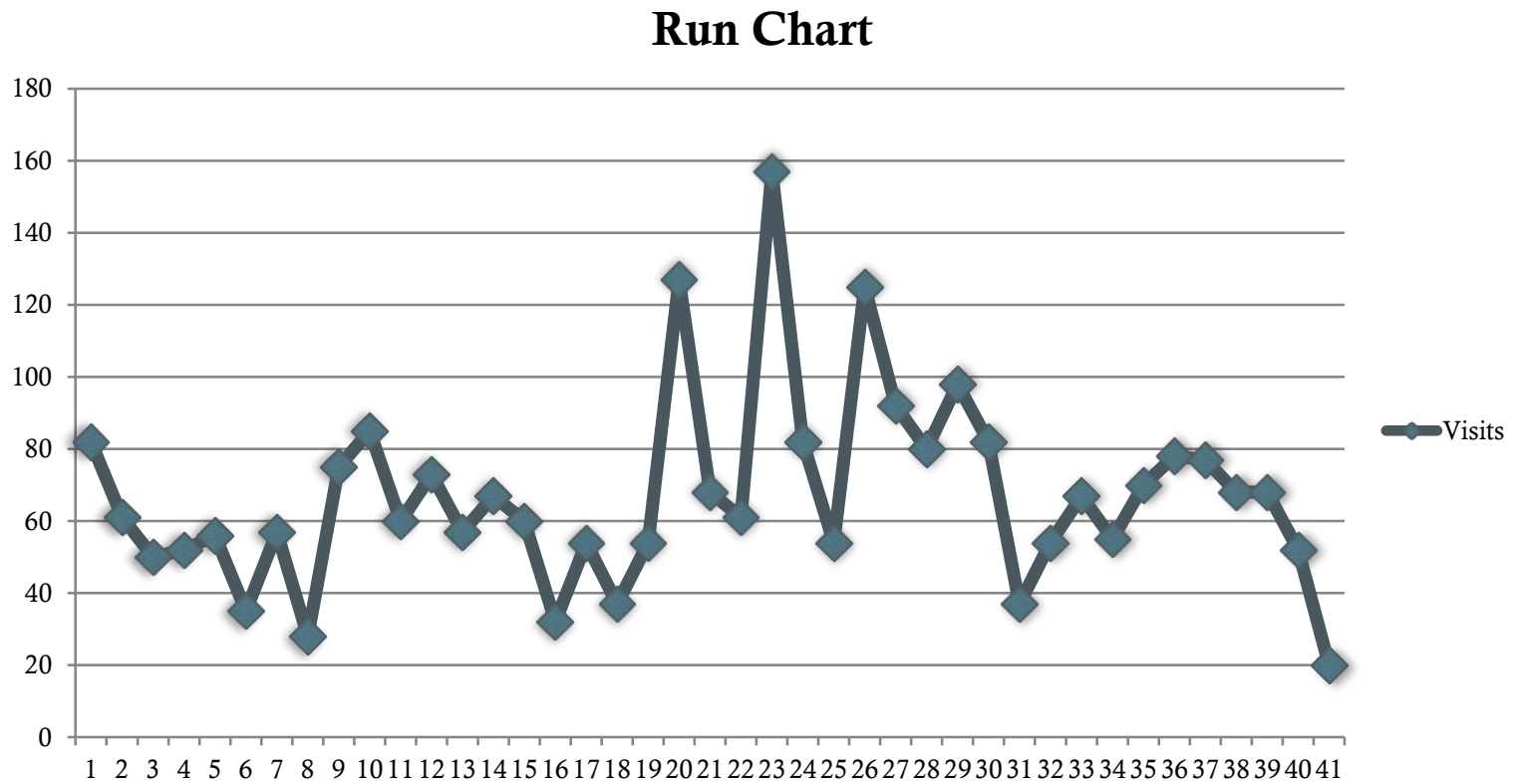
10 above
12 below
45% in range
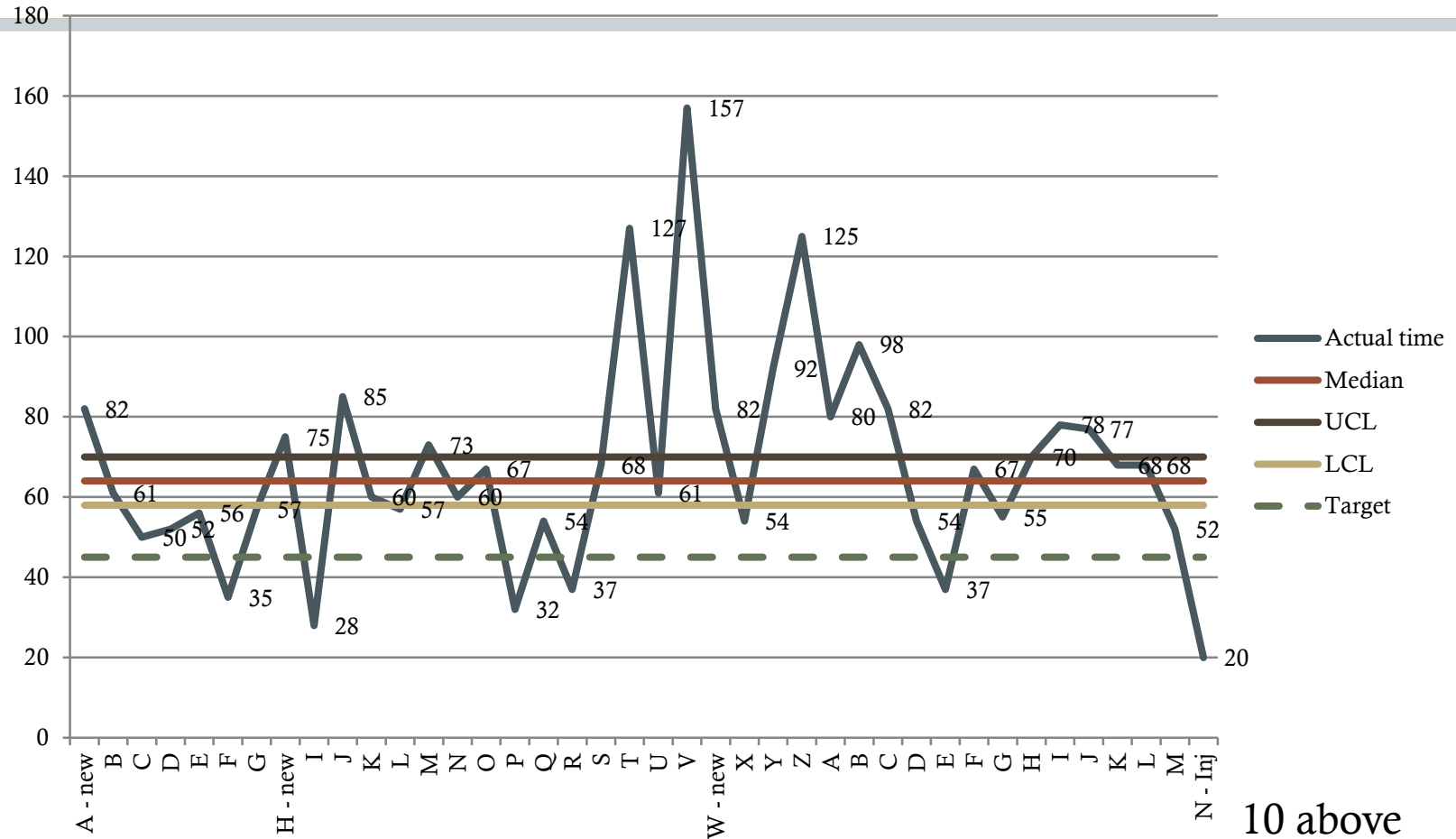
Monitor and Set Control Limits
3 Sigma above and below mean

Actual Practice Control Chart

Dr. TM — control chart (Upper, Actual, Average, Lower)

Dr. WW — control chart (Series1, Series2, Series3, Series4)

Dr. JT — control chart (Upper, Actual, Average, Lower)
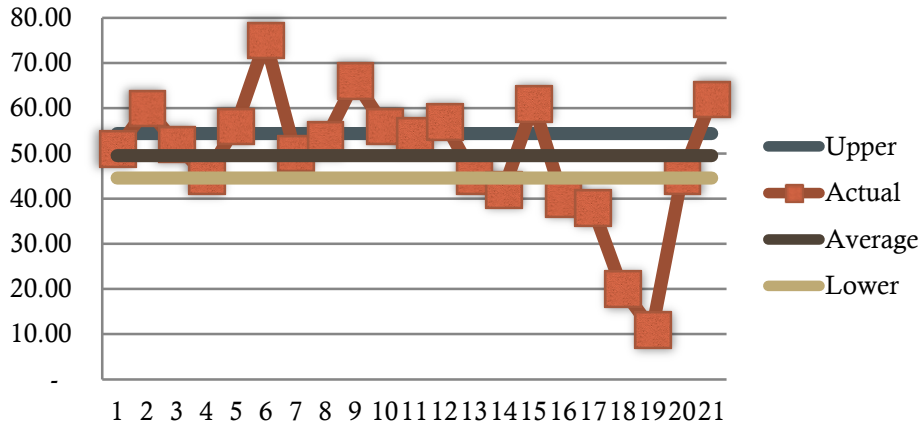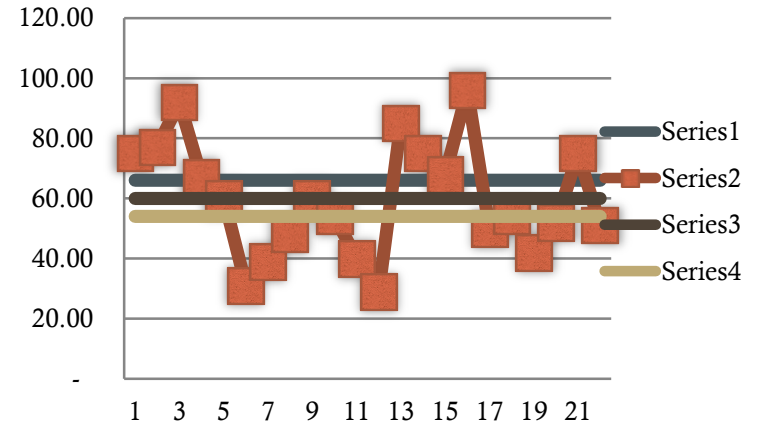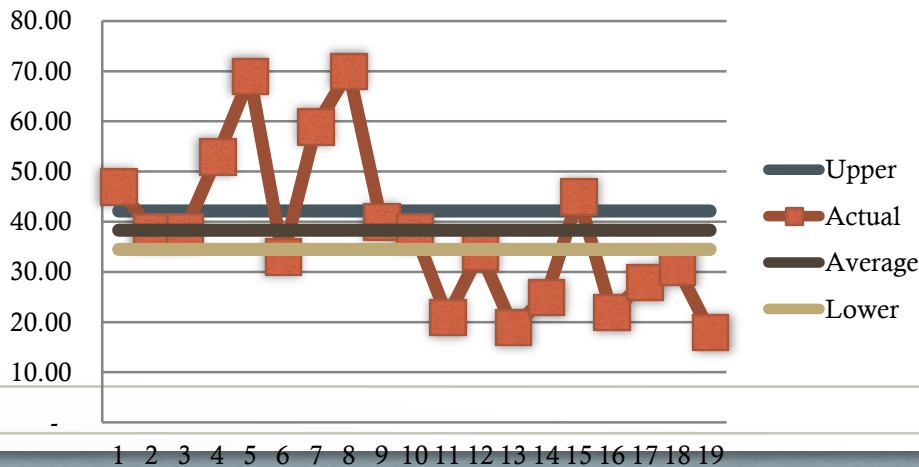
	In 10%	Total	% In
Dr BY	3	11	27.3%
Dr PB	3	16	18.8%
Dr NM	3	9	33.3%
Dr TM	8	21	38.1%
Dr JT	5	19	26.3%
Dr WW	5	22	22.7%
Group	27	98	27.6%

FMEA – Failure Mode and Effects Analysis

- A structured approach to: (Brainstorm)
  - Identify the ways in which a product, service, or process can fail
  - Estimate risk associated with specific failure causes
  - Prioritize the actions to reduce risk of failure
  - Evaluate design validation plan (product/service) or current control plan (process)

- When to use
  - When designing new systems, products, and processes
  - When changing existing designs or processes
  - When carry-over designs are used in new applications
  - After system, product, or process functions are defined, but before beginning detailed final design
  - In Define: To understand the risks of a project
  - In Measure: To understand how process steps
  - In Analyze: To understand the improvement implementation risks
  - In Improve: To assess the effectiveness of a Control

FMEA example

Form Format

Process Name				Prepared by				
Responsible				FMEA Date				
Function	**Potential Failure Mode**	**Potential Effects of Failure**	**S**	**Potential Causes of failure**	**O**	**Current Process Controls**	**D**	**PRN**
What is the step and input under investigation	In what ways does the key input go wrong?	What is the impact on the key output variables		What causes the key input to go wrong?		What are the existing controls & procedures that prevent either the cause of the Failure mode		
Fill carriage with water	Wrong amount of water	Coffee too strong or too weak	8	Faded level marks on carafe	4	Visual inspection	4	128
			8	Water spilled from carafe	5	None	9	360
	Water too warm	Coffee to strong	8	Faucet not allowed to run cool	8	Finger	4	256
			8	Employees not aware of new need to cool water	7	None	10	560
	Carafe not clean	Foreign objects in coffee	10	Carafe not washed	4	Visual inspection	4	160

S= severity; O = occurrence; D = detection:
RPN = risk priority number

FMEA solution

Actions Recommended	Responsible	Actions Taken	SEVERITY	OCCURRENCE	DETENTION	RPN
What are the actions for reducing the occurrence of the cause or improving detection?		What are the completed actions taken with the recalculated RPN?				
Replace carafe	Mel	Carafe replaced	8	1	3	24
Train employees	Flo	Employees trained	8	2	7	112
Train employees	Flo	Employees trained	8	2	6	96
Train employees	Flo	Employees trained	8	1	8	64
Appoint inspector before storage	Alice	Vera is the new inspector	10	2	3	60

Work (things/patients) in Process

- WIP – any item that has entered the process and not yet exited

- PIP = Patients in process at any one time

  - ??? What is your optimum number

Takt Time

- Time available

- Services performed

Includes:
Prep
In Room
Documentation

Eight hour day	480
25 patients to be seen	
Minutes per patient	19.2
30 minute break	-30
Time Available	450
No break	18.0
Six hour day	360
Minutes per patient	14.4

Total "Productive" Maintenance

- Reduce down time or PCE (time to use Takt time again!)

- Preventive – review at regular intervals how things are going
  - New issues
  - Types of patients seen
  - Internal or external factors

- Predictive
  - Seasonal

Definitions

- Benchmark
  - A systematic, logical and common-sense approach to measurement, comparison and improvement
  - A comparison to a standard

- Benchmarking
  - Copying the best, closing gaps and differences, and achieving superiority
  - Identifying, understanding, and adapting best practices and processes that will lead to superior performance (www.dti.gov.uk/benchmarking)

Where to get benchmarks

- Externally
  - Sources available
  - Ask
  - Research

- Internally
  - What is important today?
  - What was important yesterday?
  - What are your trends?

Comparison – leads to goal achievement

- Health care industry
  - The more information we have and share the better the outcomes

- Improved care
  - Patient care is the reason to exist, clinical comparisons, compliance to standards, use of evidence to make decisions

- Improved processes
  - Understand processes, improve processes over time when looking internally and externally

What are your goals in any benchmarking project?

- Increase
  - Patient satisfaction
  - Efficiency
  - Revenue
  - Productivity

- Decrease
  - Cost of doing business
  - Overhead
  - Overall cost of care for each patient

- Optimize
  - As opposed to maximize = seeking quality outcomes

Two key principles

1. If you don't measure it, you can't change it
   - Description
   - Comparison
   - Context

2. If you don't value it, you won't change it
   - Benefit

Nguyen Case

- Process map, value stream map and calculations

Analyze – key steps

- Conduct the value analysis – identify the value add and non-value add steps

- Calculate process cycle efficiency – compare to benchmarks, how much improvement needed

- Analyze process flow

- Analyze data collected

- Generate theories to identify and explain causes

- Refine the focus to root causes and cause and effect relationships

- Collect additional data

5 Why's

- May not take "5' to get to the root cause

- This is a guideline, not an absolute

- Drilling down in a vertical fashion, not a horizontal

- Skill developed in asking the right questions

5 Why's for a receptionist

- Baseline – develop job description and engaged staff

- Question: what do you get paid to do?

- Answer: Greet patients

- 5 Why's
  - Why is greeting patients important?
    - I was told that was the main part of my job
  - Why were you told to do that?
    - It helps the clinic staff know that the patient is here
  - Why does the clinic staff need to know the patient is here?
    - So they can get the patient into the room
  - Why is it important to get the patient into the room?
    - So they can see the provider
  - Why does the patient need to see the provider?
    - So they can get well, get good patient care

Cause and Effect

- Purpose
  - For teams – to push beyond symptoms to uncover potential root causes
  - To provide structure to cause identification efforts
  - To obtain a balanced list of ideas and to insure major possible causes are not missed

- Use
  - Cause identification
  - Cause prevention – surfaces during brainstorming and may help address future problems

Ishikawa Diagram

- "Fishbone" or Cause and Effect

- A causal diagram that show the causes of a specific event

- Each cause is the source of a process variation

- Causes are best tracked in major categories

- Major categories: method, materials, methods, and manpower. There are many independent variations and additions.

- You will need to determine the major categories when designing

- Best developed by brainstorming and the "5 whys"

What is an Ishikawa Diagram?

- Also called a Fishbone diagram

- This is a tool that is used to drill down during cause-and-effect steps in a project

Practice   **Process**

What's Your Problem?

Payers   **Patients**

Example – Long Wait Time for New Patients

Practice

Process

Scheduling

Phone Triage

Time of Visit

Unnecessary forms

ABN

Duplicate HIPAA

Long Wait Time for New Patients

Insurance verification

Pre-authorization

Patient late (early!)

Elderly Patients

Payers

Patients

Analysis: Why does the problem or need exist?

Partnership

Patients are being admitted to the hospital due to failure to cope at home, caregiver burnout or inability of current facility to deal with patient behaviors.

Lack of training.

Scarcity of community services.

Physician encouraging patients/families that the hospital is a place to wait for a LTC bed.

Misconceptions that patient was given priority for LTC when in hospital.

Changes to the LTC Act in 2010 impacting prioritization of hospital patients accessing LTC beds.

Lower-than-expected referrals to home care for discharged patients.

Service plan takes too long.

Home care services plan not aligned with patient needs.

Inconsistent communication between partners.

People

Staff/physicians risk-averse to discharge of patients.

Provider-centric vs. patient-centric goal setting.

Fear of liability/responsibility.

Family/patient refusing idea of timely discharge.

Inconsistent messaging from health care team.

No standard communication plan.

Fear of inability to cope due to lack of community services.

Unrealistic expectations.

Policy/process

Multidisciplinary team not fully embracing idea of timely discharge.

No hospitalwide appreciation of bed pressures.

Unaware of depth of problem.

Lack of accountability (not my problem to fix).

Lack of estimated date of disharge process.

No standardized approach to use of data (problem not visible and manageable).

Inconsistent admission/discharge practices across the organization.

No consistent communication plan (informal).

Inconsistent approach by Interprofessional staff and leadership team for use.

Goal of timely discharge not aligned between hospital and community partners.

Individual departments imposing own rules related to admission practices.

Lack of accountability.

No clear plan of care.

Departments attempting to control work.

No common vision communicated.

Patient flow

Patient not disharged due to lack of resources across the continuum of care.

Lack of services for specialty population (no hospice).

No bed admits in ED. Awaiting an inpatient bed.

Lack of personal support workers to provide community services.

100% occupancy inpatient beds.

Resource

ED = emergency department
LTC = long-term care

CE Categories

- Manpower (personnel)

- Machines

- Materials

- Methods

- Measurements

- Mother nature (environment)

CE steps

- Identify the effect (problem)

- Determine categories

- Brainstorm

- Review information gathered

- Discuss final diagram – what is (are) the most critical cause

- Verify the cause before moving to an action plan!!!!!!!

Applying 5 Why's to C & E

- Select any cause from the diagram

- Ask "why does this outcome occur"

- Continue

- Nothing sacred about "5"

- Stop when you have reached a potential cause

Handle seasonality!

- Determine Process Lead Time for the season

- Identify schedule to optimize to meet demand

- Identify what is maximum (safety) level of patients to schedule

- *Process Lead Time – PLT – time from initiation of process to actual activity

Analyze - deliverables

- Documentation of potential causes considered

- Data charts and other analyses showing link between X and Y

- Identification of value-add and non-value add work

- Calculation of process cycle efficiency

Analyze outputs

- Approach used in analysis

- Statistical analysis of data sources of waste, variation, constraint

- Value stream map

- Revised problem statement

- Improvement opportunities

Improve/Do

- Reduce waste, complexity, variation

- Identify and learn from pilots of solutions and move to full scale implementation
  - Test and confirm
  - Design controls
  - Plan implementation

Improve – key steps

- Develop potential solutions

- Evaluate, select, and optimize best solutions

- Develop future state value stream map

- Develop and implement pilot solution

- Confirm attainment of project goals

- Develop and execute full-scale implementation plan

Pilot Testing

- To identify practical problems and failures in a chosen solution so those can be addressed before full scale implementation

- Keys
  - Small scale
  - Evaluate the solution and the implementation
  - Step to make full scale implementation more effective

How to pilot

- Plan
  - What needs to be piloted
  - Where, who, when, how long

- Review design
  - Elements complete
  - All pieces and parts fit together
  - Identify possible failure points and vulnerability
  - Review plans

- Finalize design and implement
  - Do it

- Evaluate the test and verify
  - Statistical tools for evaluation
  - Celebrate success
  - Improve the design

Pull system

- Set cap or maximum number of WIP, means predictable

- Then apply tools to improve

- Current PLT (process lead time)

- Current PCE

- Target PCE

Pull = part 2

- Count WIP

- Can you "release" into process

- Identify trigger – how will you know when to release more into process?

- Triage system – determine order of patients to be released into system

- Once items identified, implement and maintain!

Workflow Optimization

- "Pull in" the work (kanban)
  - Do work in small batches; "just do it!!"
  - Continuous work flow
  - Why?
    - (Paper) Charts can be put back into circulation
    - You must spend time *remembering*
    - If you don't, callbacks overwhelm the practice
    - If you don't, staff spend the next morning playing catch up

Workflow Optimization

- (More!) "Pull in" the work
  - Avoid interruptions
  - Be organized
  - Establish protocols for message taking and callbacks
    - Urgent?
    - Referring physician?
  - Document in exam room
    - Customize template

Signal to "pull" (push)

- How does the staff know the next step is "ready"?
  - Observation (visual)
  - Electronic notification (material)
  - Room marker (material)
  - Other?

5S

- Sort – what is needed and not, eliminate the latter
  - Remove or "red tag"

- Set in order – keep needed items in right place
  - "Picture" current state, draw future state

- Shine – keep area clean
  - Safety, waste, cleanliness

- Standardize – clean up – the first 3 S
  - Every day
  - Create your OWN agreement to accomplish

- Sustain – make this a habit to clean, establish processes or procedures to insure success
  - Self discipline – do you have it???????

5S

- Purpose – create and maintain an organized, clean, safe, and HIGH PERFORMANCE work place
  - Distinguish between normal and abnormal
  - Foundation for continuous improvement
  - Systematic way to improve the workplace

- When

Improve - deliverables

- For Quality Improvement (QI) project – tested, robust solutions that affect the causes of X that impact the critical Y

- For lean project – document the proven best practice or solution applied

- An improved process – stable, predictable AND meets customer expectations!

Improve outputs

- Process improvements

- Pilot results

- Control system design

- Implementation plan

Study

Bottlenecks

- Patient

- Supplies

- Staff

- Equipment – scopes, wheelchairs

- Space

Refine

- Review the analysis data

- Consider new data

Develop strategy

- What will work in roll out to rest of clinic?

- Documentation
  - New flow chart
  - Policies and procedures

- Training program
  - Who, what when

- s

Control/Act

- Complete project work and train, support to the operational team the procedures identified to maintain the gain

Control – key steps

- Develop supporting steps of documentation

- Launch company wide implementation

- Secure performance gains

- Monitor implementation

- Develop the process control plans and pass on to those operationally responsible

- Audit the results

- Finalize the project

- Review the process, memorialize for others and the next improvement project

Control - deliverables

- Documented plans to transition to the process owner for implementation

- All data metrics

- Operationalize, train, communicate, and provide documents from process to support improvements

- A system of monitoring and metrics necessary to insure successful implementation

- Completed project documentation – lessons learned and recommendations to others

"Outputs" from control

- Trained personnel

- Deployed improvements

- Implemented controls

- Documented adjustments

- Completed recognition events

- Documented lessons learned

Gantt Chart

Issue	Responsible	Goal	March	April	May	June
IT	Deni & Fran	Remove firewalls, insertion and download work				
EMR	Team	Install and use EMR			17	x
Forms/iPro tools	Michelle	Review and begin using the iPro forms	X	X	Complete	
Pre-Authorizations	Danielle/Fran	Each payer requirements, utilize electronic options	check	check	Follow procedure	
Reimbursement and Managed Care Contracting	Deni with help from Michelle and Peter	Need to understand current contracts, reimbursement levels, as well as possible change in terms	X	X	Implement	
Metrics	Deni	Assess history of iPro use, find reports that will generate current and future measurements	History	Test	Implement	x
Patient schedule	Doctors	Use 5 day cycle, find days of week to use the 7 current units to maximum level	Model and test	Begin		Check
Protocol	Doctors	Determine criteria for iPro use, train staff, staff remind of possible candidates	Review materials and standardize	x	x	x
Staffing	Deni	Front desk - numbers, train & cross train	Build case for 3 FTE's	Fill in		3rd FTE
iPro use	Team	Do at least five in March to test schedule, 200 by year end	5	5	10	20

General design rules

- Ensure quality prior to movement

- Consumer's pull from the supplier

- Suppliers should produce only to the Kanban (schedule)

- Processes should be standardized and stabilized before implementation

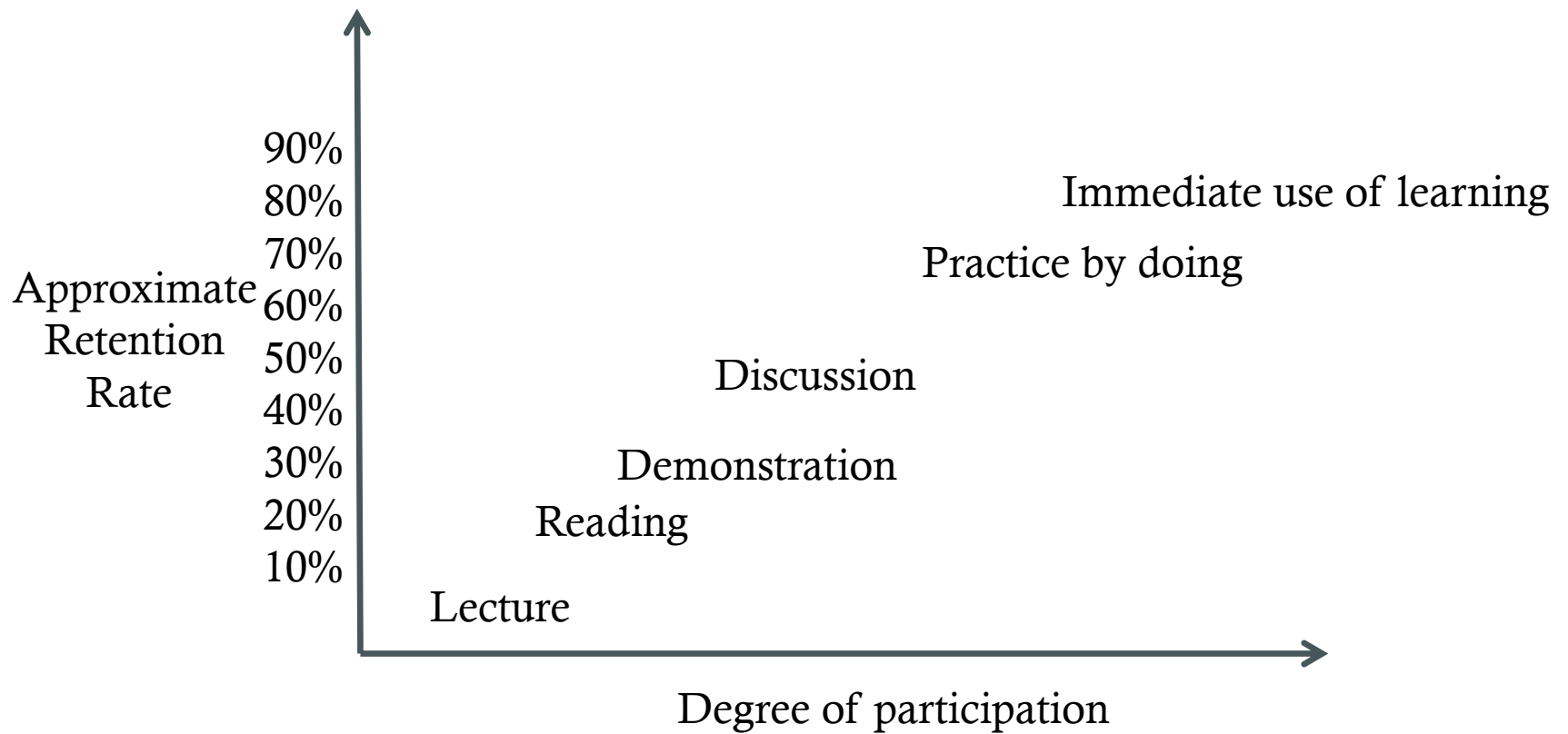- Schedules should be balanced and smoothed (Heijunka)

Adult learning

- Focus on real world issues that apply to their job

- Meets THEIR goals and expectations

- Allows for debate and challenge of ideas

- Encourages an exchange of ideas and opinions

- Allows them to be resources for others

- Meets a current need

Different ways of learning

- Visual
  - What you see

- Auditory
  - What you hear

- Kinesthetic
  - What you can "touch"

Retention

Approximate Retention Rate (y-axis, 10% to 90%) vs. Degree of participation (x-axis)

- 90%
- 80% — Immediate use of learning
- 70% — Practice by doing
- 60%
- 50% — Discussion
- 40%
- 30% — Demonstration
- 20% — Reading
- 10%
- Lecture

Leadership vs. Management

- Characteristics of a Good Leader
    - Good listening skills
    - Good communication skills
    - Approachable and helpful
    - Good mediator and buffer
    - People-oriented personality

- Characteristics of a Good Manager
    - Efficiency
    - Task Oriented
    - Gets the job done
    - Gets the work done

Behavioral Theory
Human Relations Approach

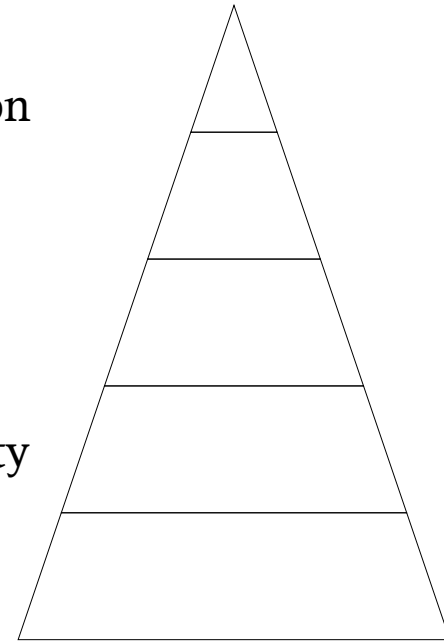- Mayo and Hawthorne experiments (1929)

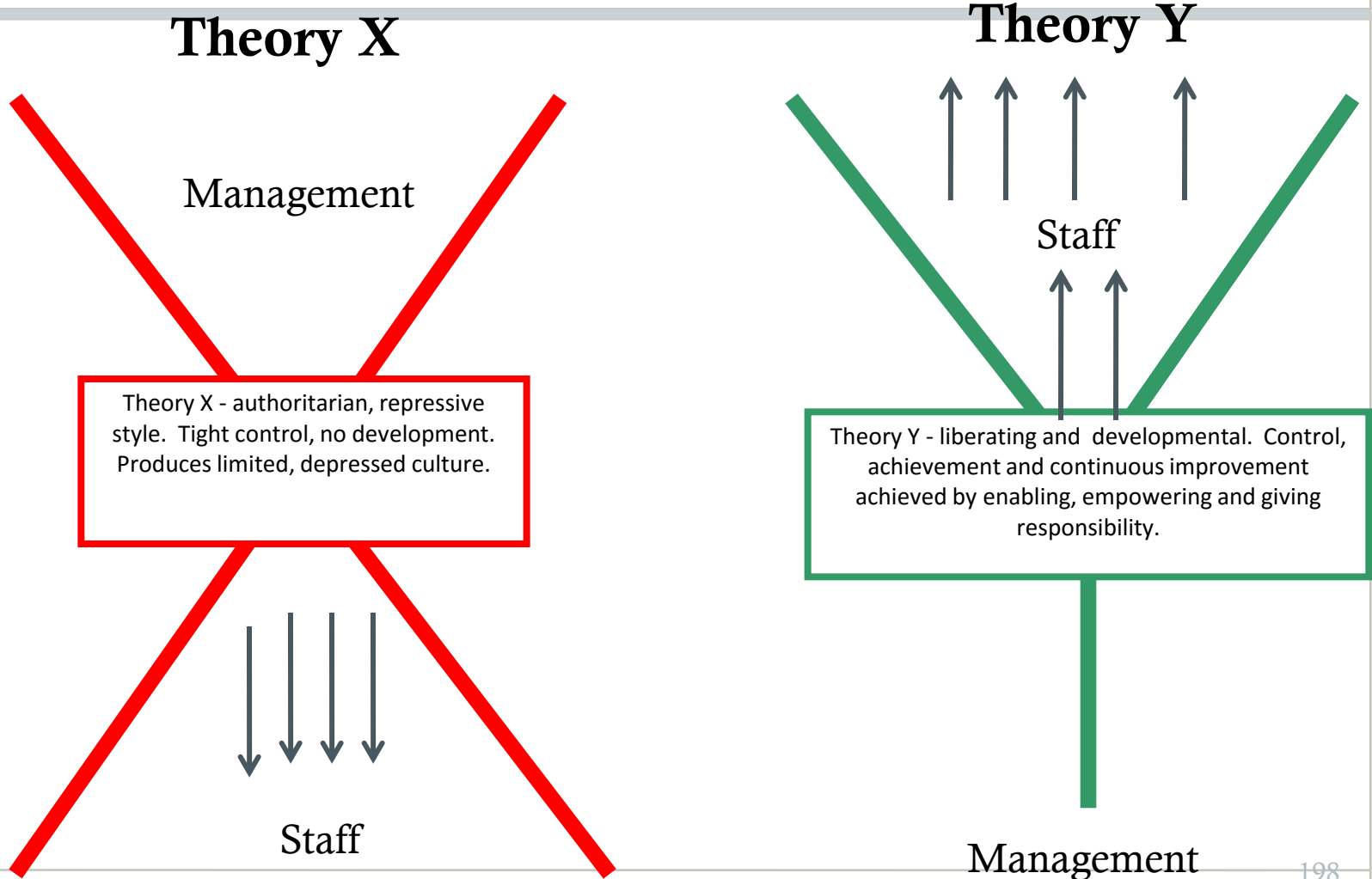- McGregor and Maslow

Self-actualization

Self-esteem

Belonging

Safety & Security

Physiological

McGregor's Theory of Management

Theory X

Theory Y

Management

Staff

Theory X - authoritarian, repressive style. Tight control, no development. Produces limited, depressed culture.

Theory Y - liberating and developmental. Control, achievement and continuous improvement achieved by enabling, empowering and giving responsibility.

Staff

Management

Transition

- Is there a widespread sense that "change" is necessary?
  - Talk, act, show that it is important – mission, vision, patient care to change

- Is the level of trust in the organization's leadership adequate?

- Will you be able to "train" staff on these principles?

- Is there blame first or acceptance of what happened and analysis, moving forward?
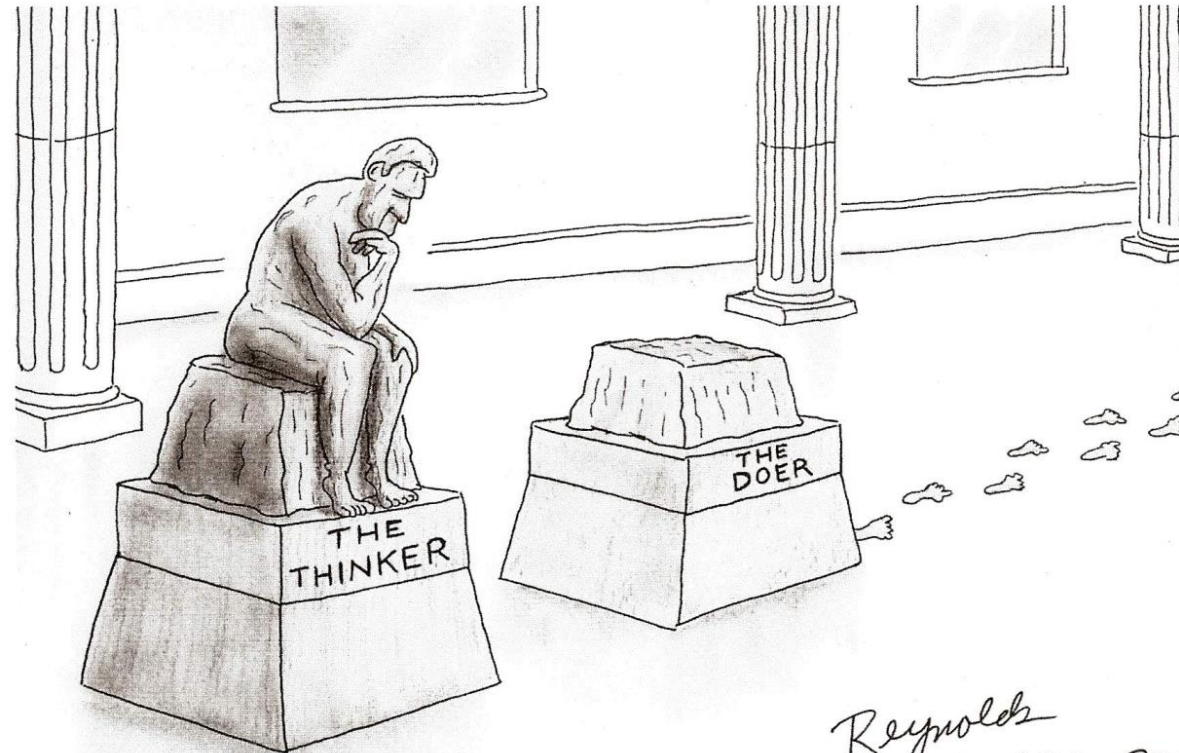
Transition

- Is process improvement a widely understood strategy?

- Does the culture work in favor of process improvement?

- Do YOU understand that *transitions* will necessarily take longer than *changes*?

Your Process Improvement Organization Chart

Typical Structure

The Process Improvement Way
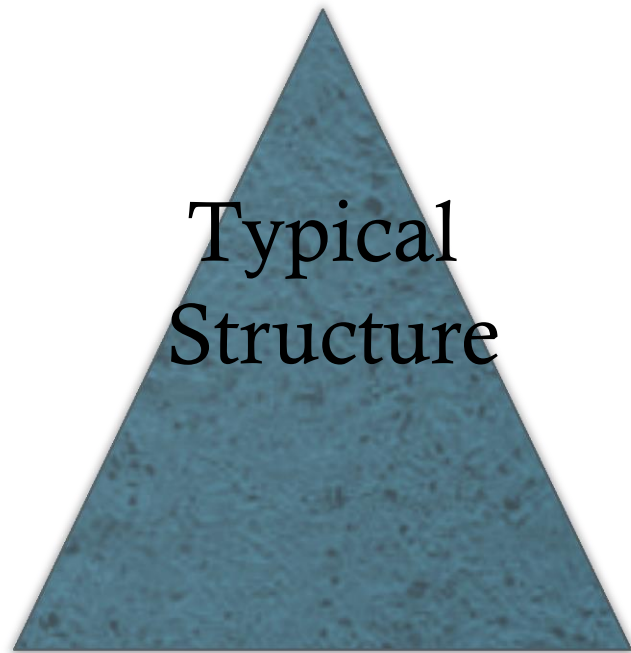
Are you ready to rumble?

Strategic Humor