Connecting Quality Management to Passion, Change and Advocacy

National Health Care for the Homeless Conference 2016

Portland, Oregon

Coldspring Center For Social and Health Innovation

About us….

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Stay positive
Informal
Interactive

What We'll Cover Today

- Introductions
- Organizational Infrastructure
- Tools
- Model for Improvement
- Change Leadership

Table Introductions

Share at your Table

- Name, Organization, Role
- How many years of experience with Quality Improvement?

Together as a Table

- How many total years of experience at your table?
- Average years of experience?
- Bonus: Min and Max?

Satisfaction Continuum Exercise

- Think about a recent health care experience (yours, or if you accompanied another person)

- How would you rate your experience?

1 = Horrid ⟷ **10 = Excellent**

Satisfaction Continuum Exercise

- Think about your clinic or program

- How would you rate your services?

1 = Horrid ⟷ **10 = Excellent**

Your Organization's Infrastructure

FOUNDATIONS FOR QUALITY

Paradigm Shift

A paradigm shift is a new way of thinking that challenges existing belief structures

QI is not QA

QA

Individual focused	→ Systems focused
Perfection myth	→ Fallibility recognized
Solo practitioners	→ Teamwork & Consumers
Errors punished	→ Errors are opportunities to learn
Few responsible for quality	→ All responsible for quality
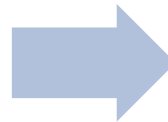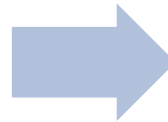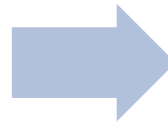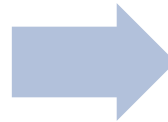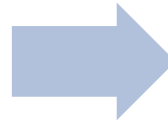
QI

Agency For Healthcare Research and Quality, Health Care/System Redisign

Example – Star Performer HIV Clinic

Excellence For All!

Change = Test Case Management integration!

Focus = Who makes up the 11-13%?

Status Quo = 87-89% Viral Suppression!

Quality Improvement

Quality improvement is an organizational approach to improve quality of care and services using a specified set of principles and methodologies.

Strategic Focus Areas for Quality Improvement

- Eliminate health disparities

- Increase patient and staff satisfaction

- Measure and assess specific care processes

- Improve clinical and non-clinical outcomes

- Enhance access to and availability of care

- Eliminate inefficiencies, errors, unnecessary steps and barriers

- Enhance communication and accountability

- Reduce burnout and increase staff effectiveness and morale

Principles on the Quality Improvement Journey…

- Success is achieved through meeting the needs of those we serve

- Most problems are found in processes, not in people

- Do not reinvent the wheel – Learn from best practices

- Achieve continual improvement through small, incremental changes

- Actions are based upon accurate and measured data

- Set Priorities and Communicate clearly

9 Critical Steps In Quality Management
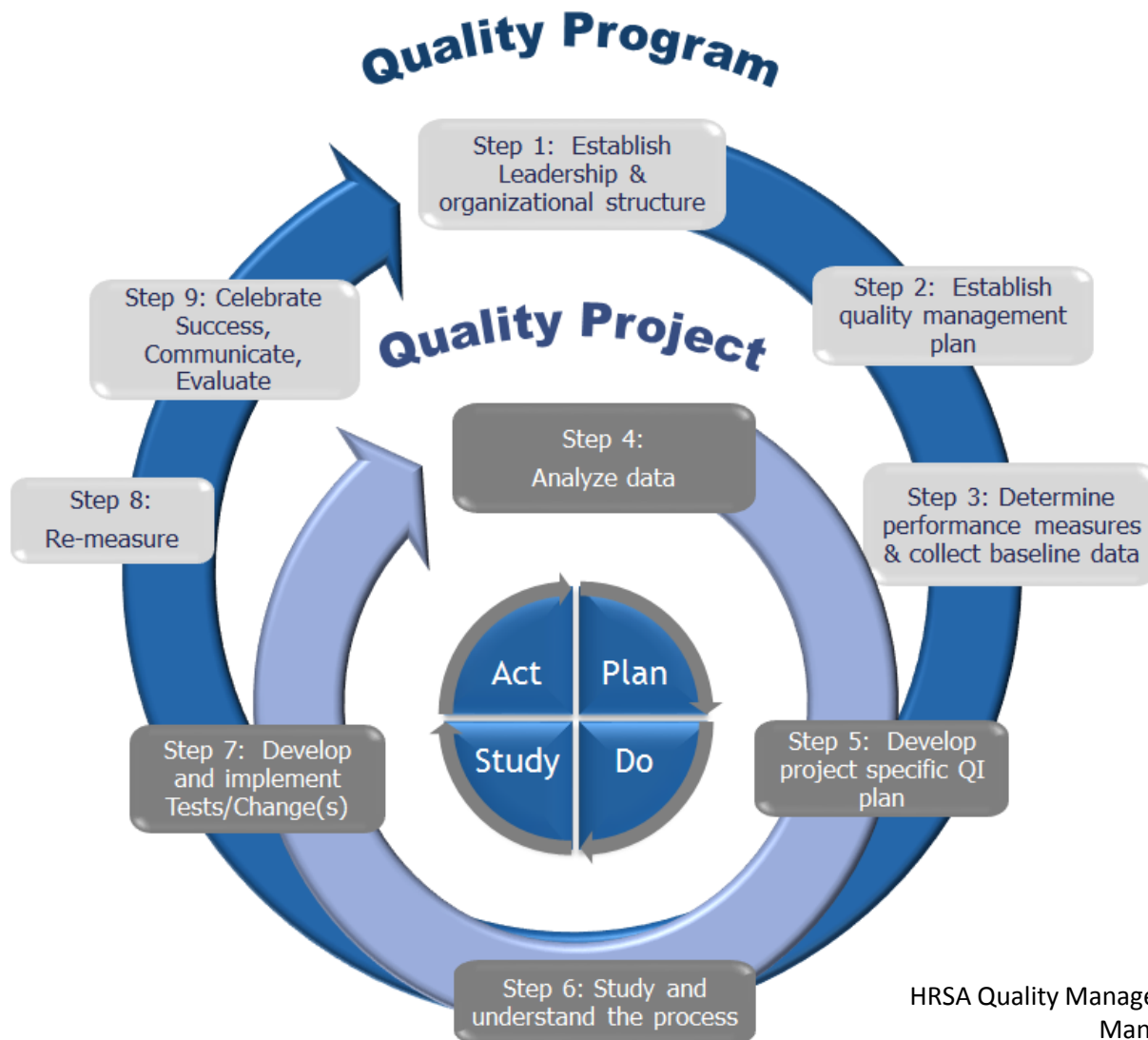
HRSA Quality Management – Technical Assistance Manual; Adapted HIVQual Model

Run, Flow, Drive, OH MY!

PRACTICAL TOOLS FOR QUALITY

Tools

Bar Chart	• Show comparison across categories
Run Charts	• Used to see performance over time
Flow Chart	• Graphic picture of the way a process works
Driver Diagram	• Simple visual to display cause/effects
Fishbone Diagram	• Understand many causes contribute to an effect

Bar Graph – Simple Pareto Diagram

Special Issues – Housing
Rent Increases in the Past Year
N = 469

- $1-$200: 26.9% (126)
- No Increase: 21.7% (102)
- $200-$400: 8.7% (41)
- $600-$800: 4.5% (21)
- $400-$600: 4.3% (20)
- More than $1,000: 1.7% (8)
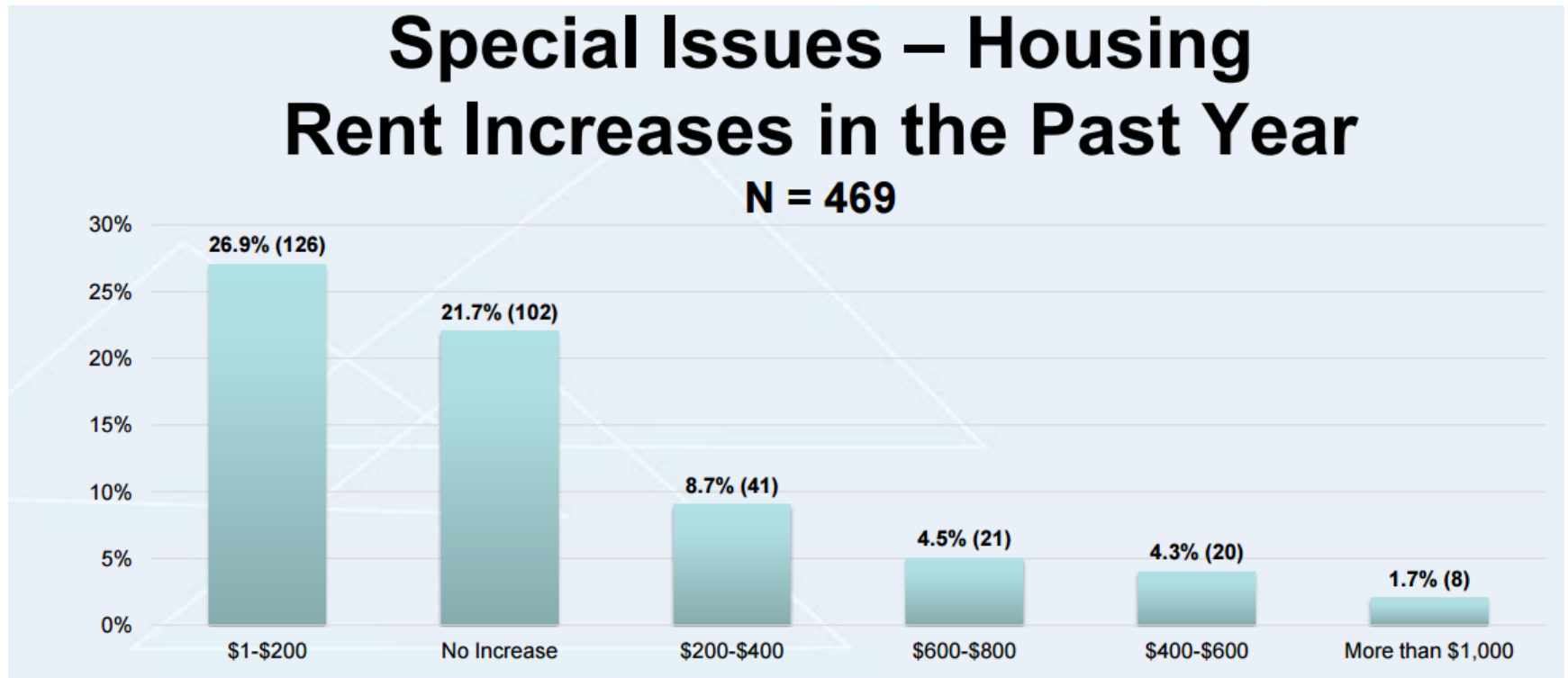
Run chart

- Used to see performance over time
- May help you decide where to put focus for improvement
- Can help to show if changes result in improvement

% of clients with Service Plan developed and/or updated two or more times in the measurement year

Run Chart Example

% of clients with Service Plan developed and/or updated two or more times in the measurement year
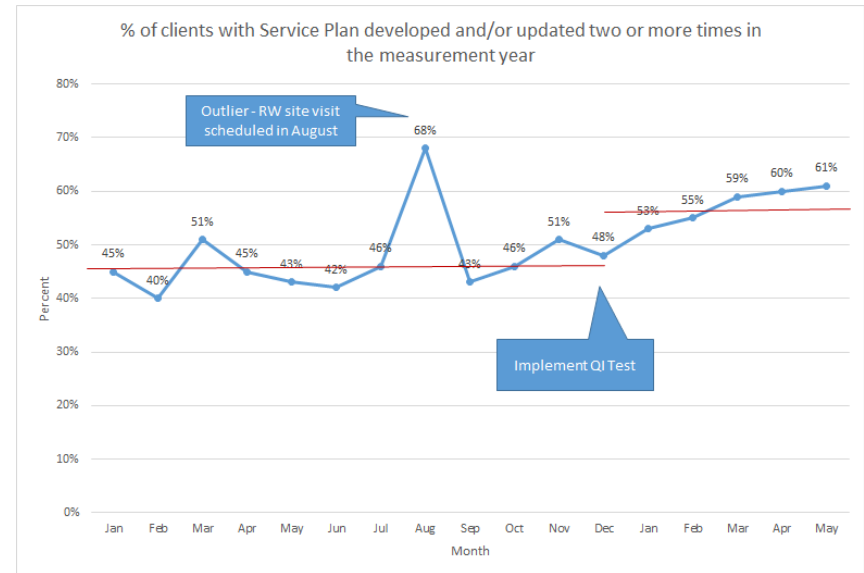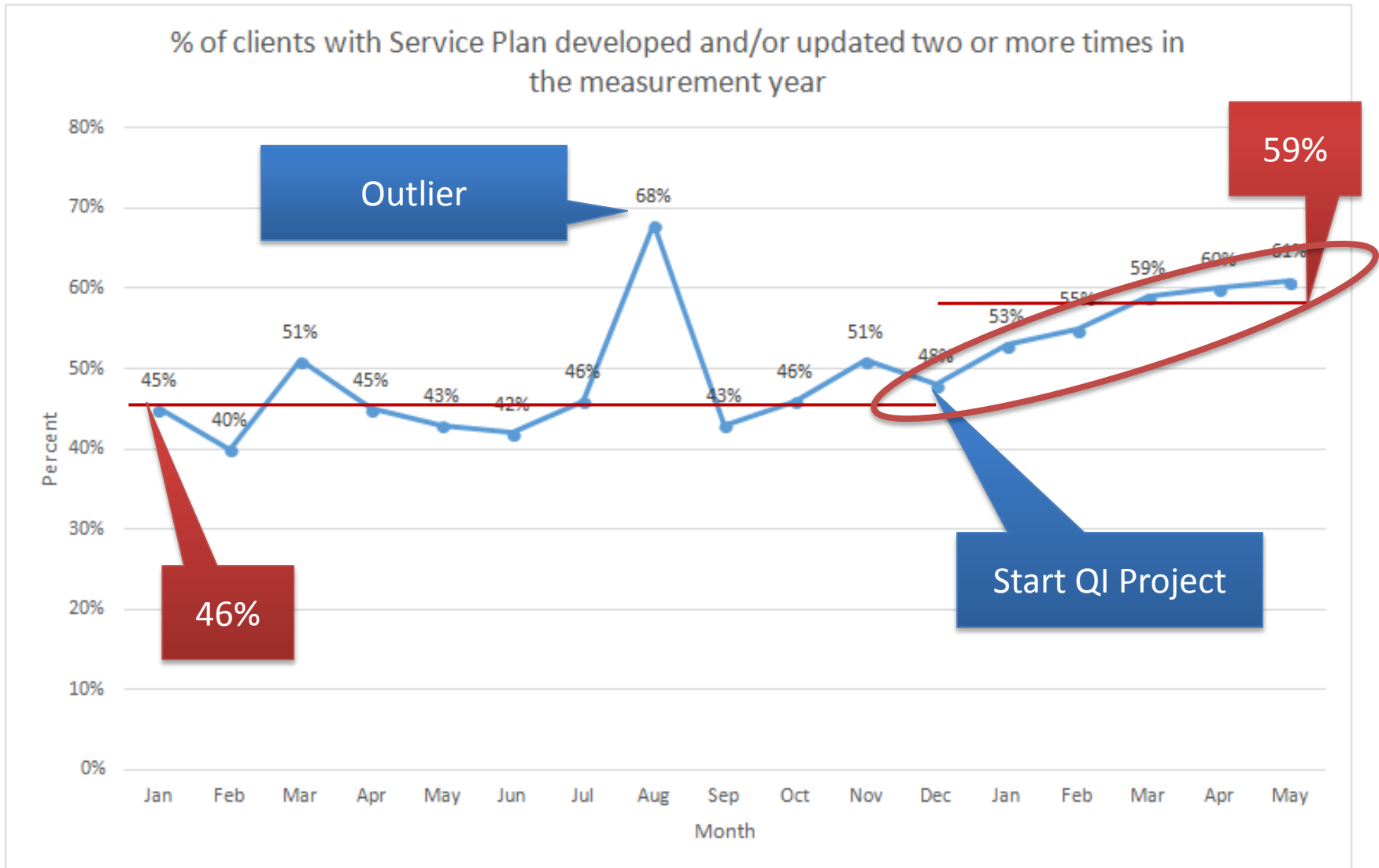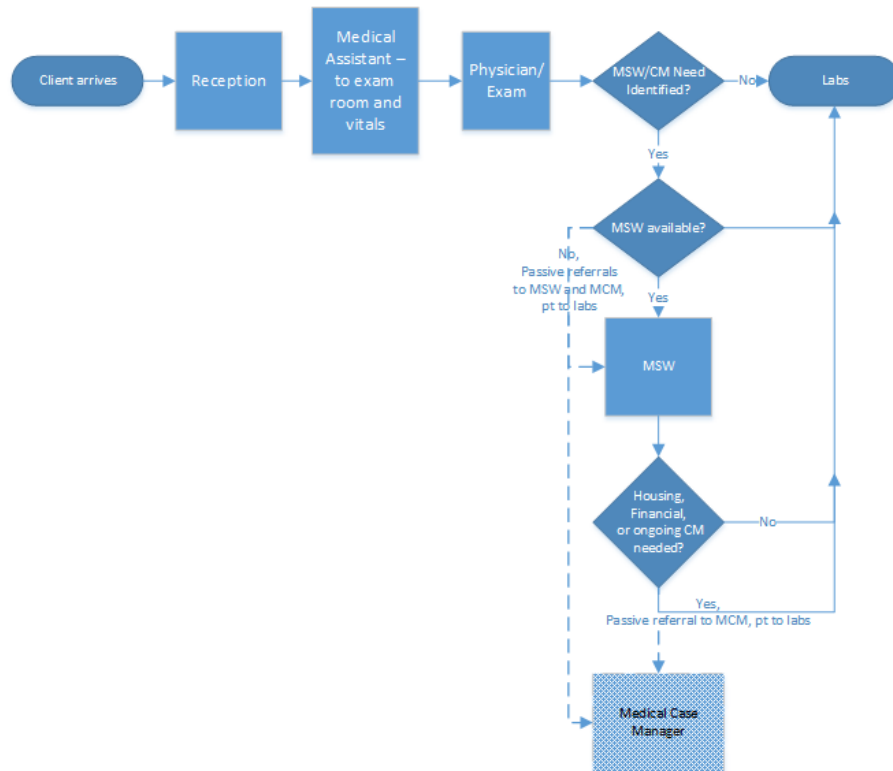
Flowchart

- Graphic picture of the way a process works
- Can help you understand an existing process and create a proposed process

Flowchart Exercise

At your table –

- Build the best pizza ever!

- Use the basic flowchart shapes and sticky notes to document your process.

Flowchart Example - Current

Flowchart Example – Test 1

Integrated visit (Test 1)

Prep Processes

software: Schedule Flags (Show clients in need of

Huddle

MCM Issues identified?

Yes, MCM engaged

Patient Visit

Client arrives → Reception/MCM question asked → Medical Assistant – to exam room and vitals → Physician/Exam → Medical Case Manager → Labs
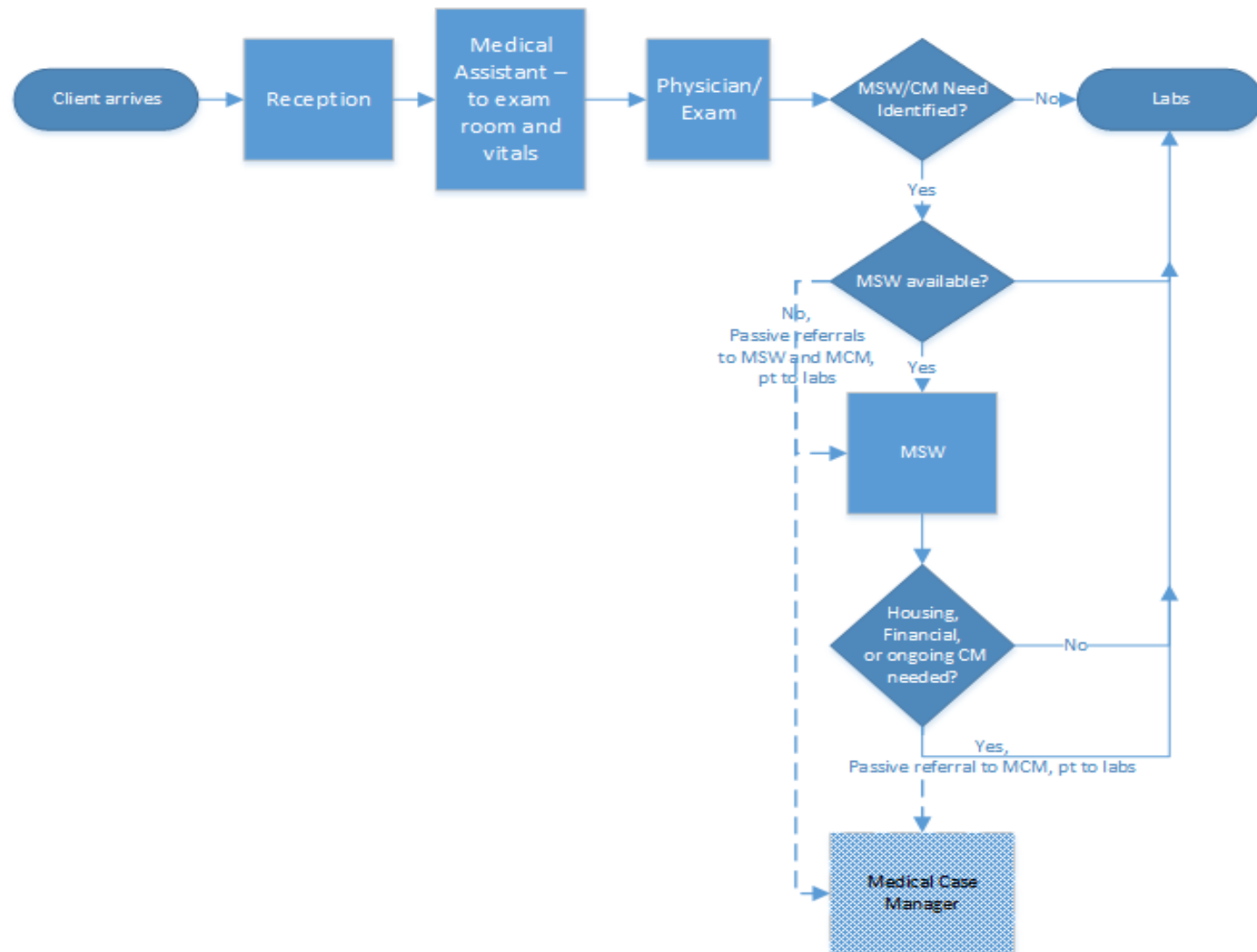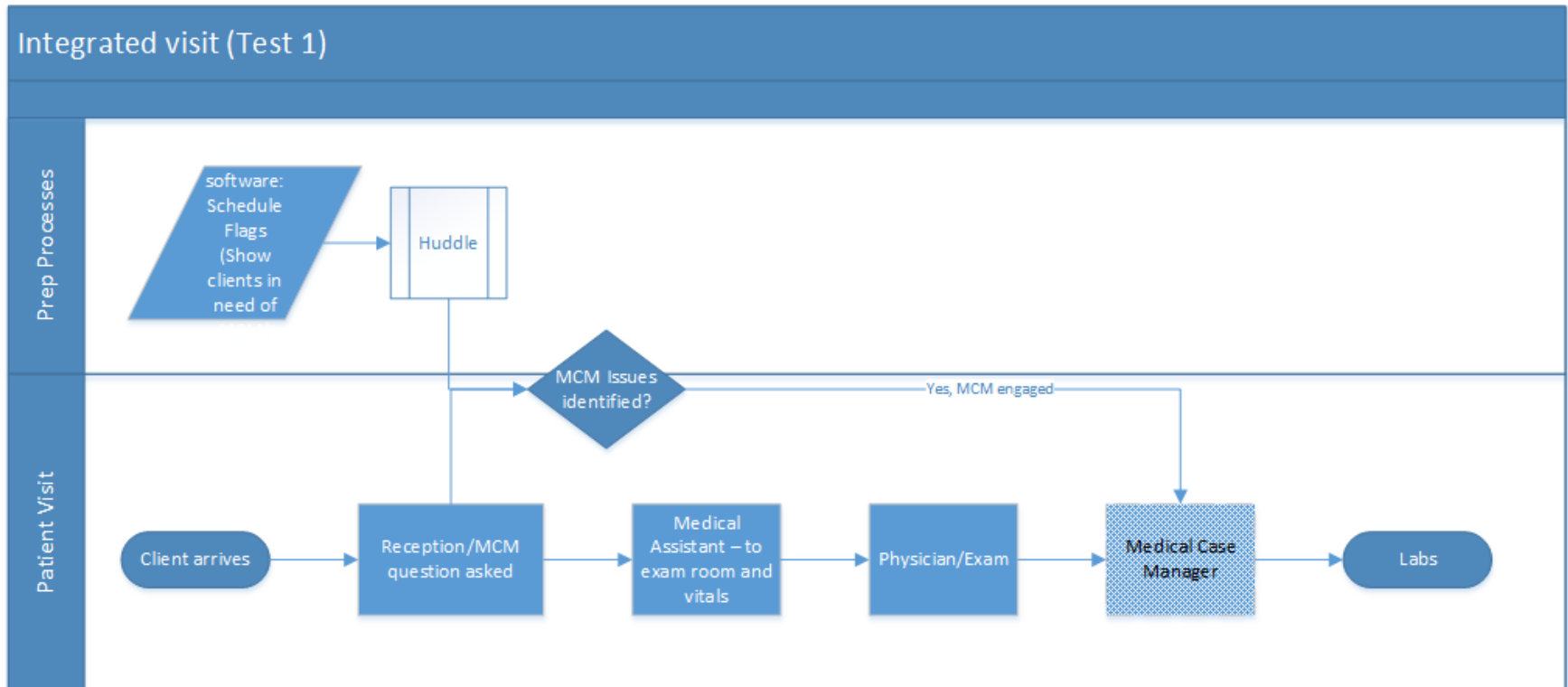
Drivers

- Simple visual to display cause/effects
- Helps you see where you are going

Driver Diagram

Aim   **Drivers**   **Improvement Test**

Lose Weight

Calories In

Calories Out

Sugary drinks/ soda

Wine and beer

Fat in foods

Daily steps

Gym

Change

Change

Change
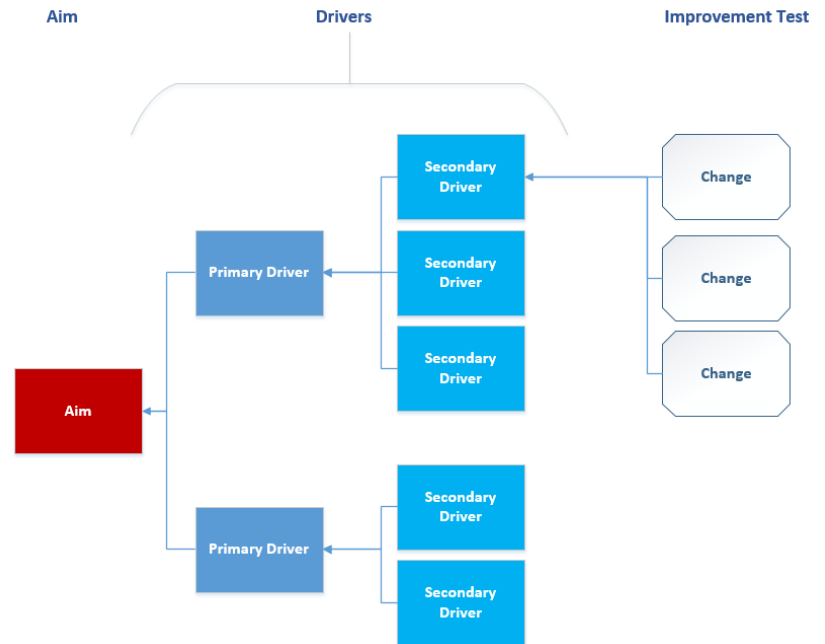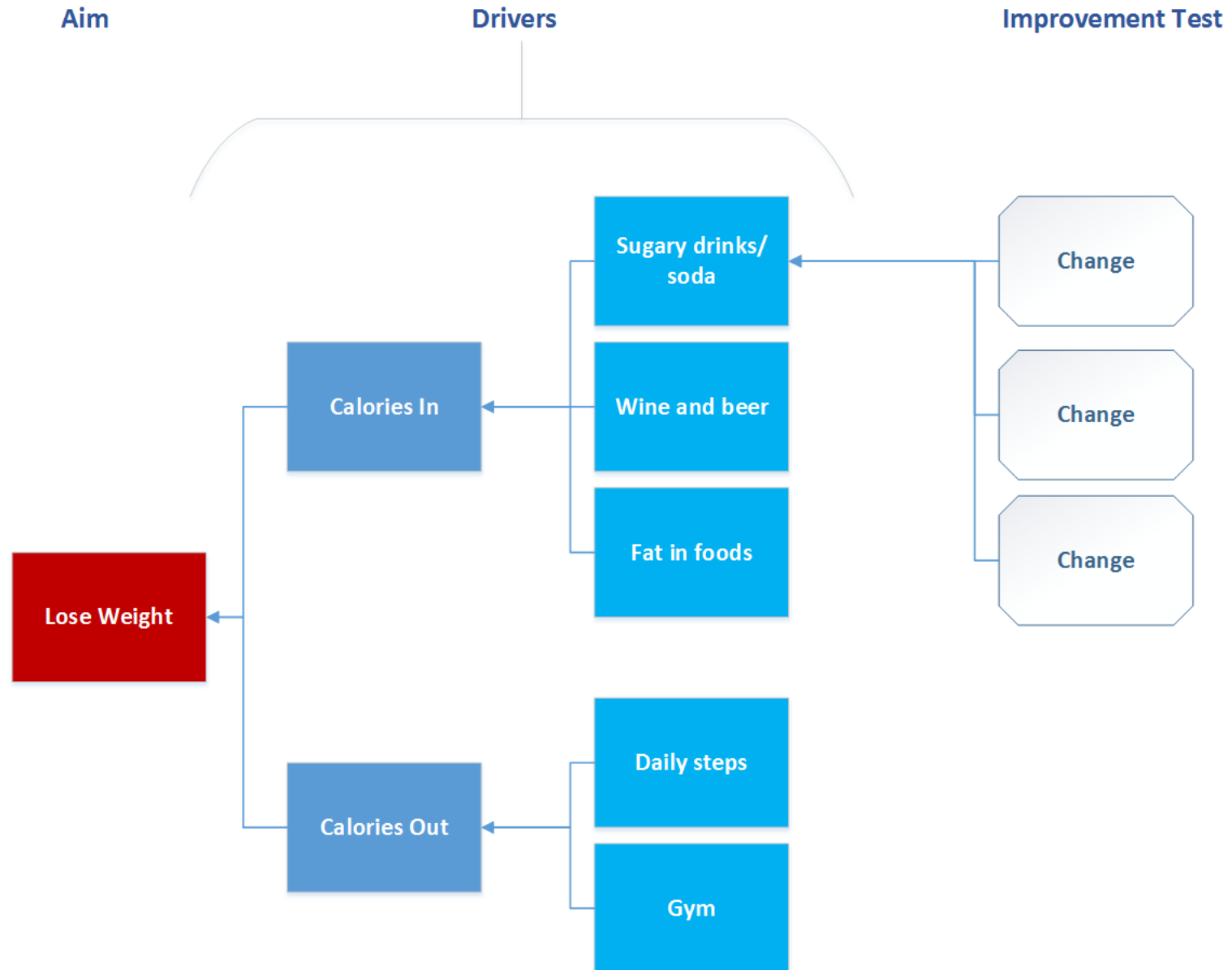
Fishbone Diagram Example
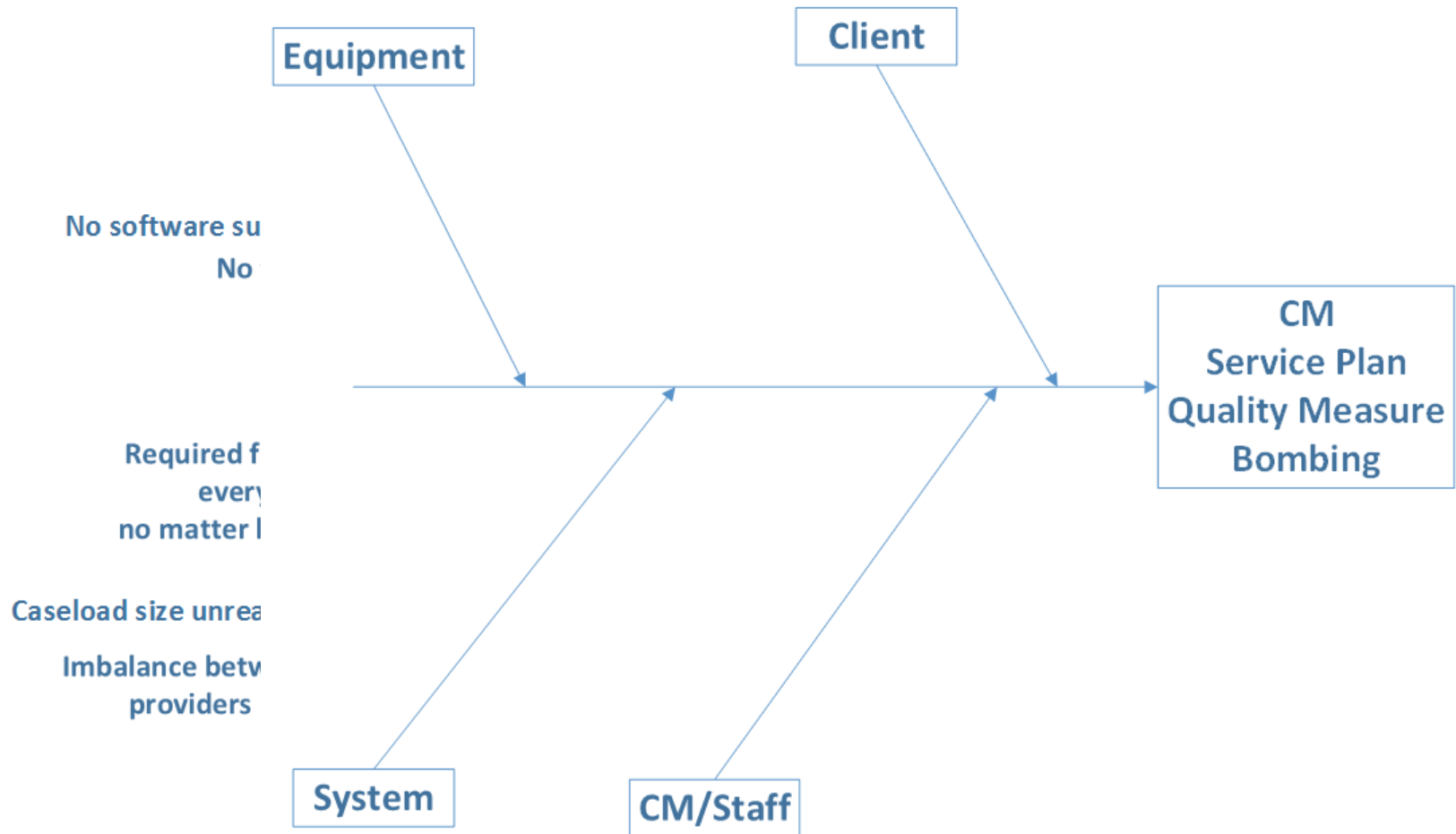
Equipment

Client

No software su

No

**CM
Service Plan
Quality Measure
Bombing**

Required f
every
no matter l

Caseload size unrea

Imbalance betw
providers

System

CM/Staff

BREAK

Paper Puppet Exercise

- Learning Objectives
  - Understand what a process is and how the design of the process affects quality
  - Build experience using tools for measuring a process
  - Build experience analyzing data about a process

INTRODUCTION TO THE MODEL FOR IMPROVEMENT

Inner Circle Work
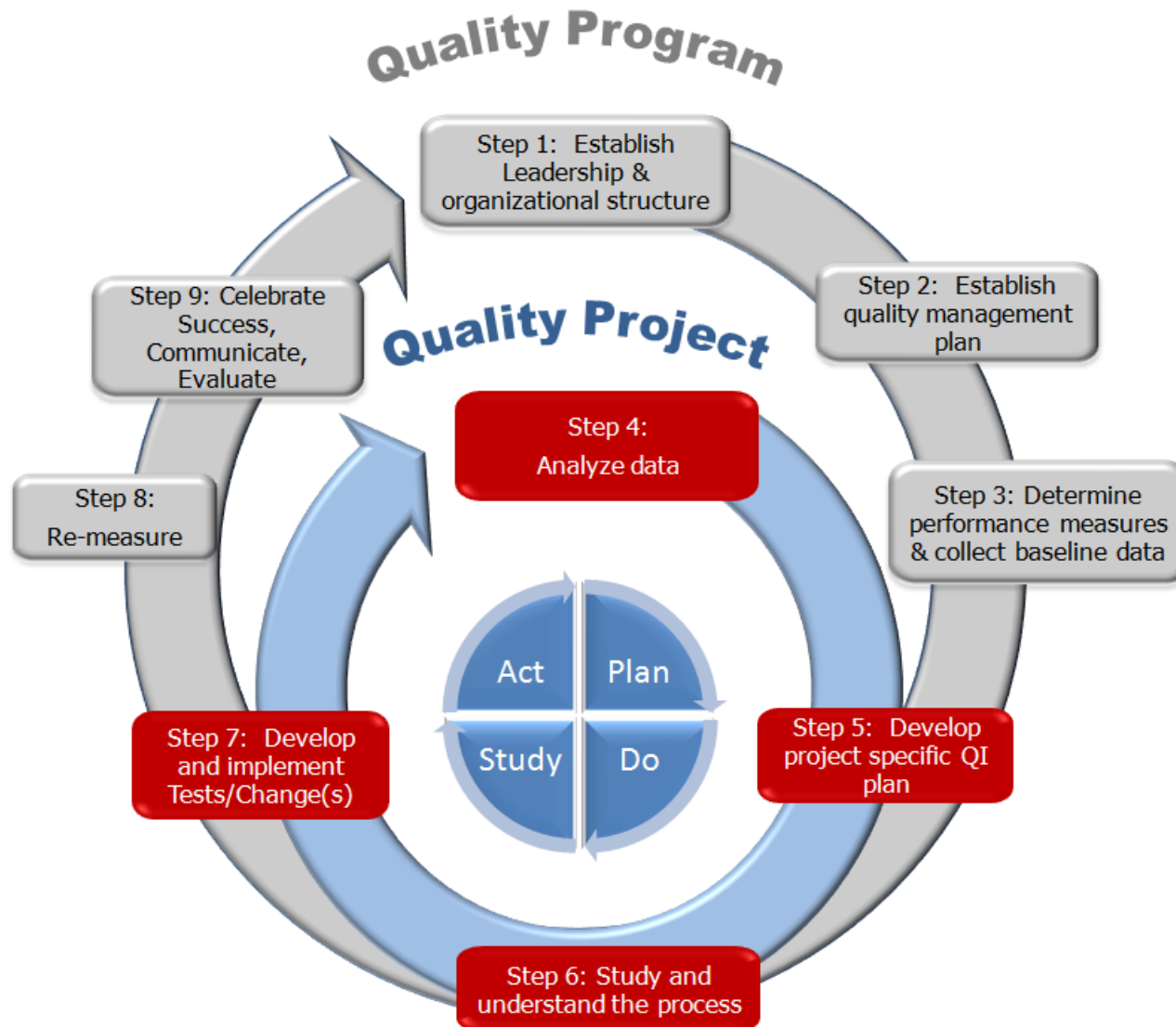
In 1601, James Lancaster successfully conducted an experiment to illustrate the effectiveness of lemon juice to prevent scurvy. When did the British Navy adopt this treatment?

1. 1602
2. 1689
3. 1757
4. 1796

In 1601, James Lancaster successfully conducted an experiment to illustrate the effectiveness of lemon juice to prevent scurvy. When did the British Navy adopt this treatment?

1. 1602
2. 1689
3. 1757
4. **1796 (195 years later)**

Treatment of Scurvy

A
TREATISE
ON THE
SCURVY.

IN THREE PARTS.

CONTAINING

An Inquiry into the Nature, Causes,
and Cure, of that Disease.

Together with

A Critical and Chronological View of what
has been published on the Subject.

By *JAMES LIND*, M.D.

Fellow of the Royal College of Physicians in *Edinburgh*.

The SECOND EDITION corrected, with Additions
and Improvements.

LONDON:
Printed for A. MILLAR in the *Strand*,
MDCCLVII.

- In 1601 lemon juice, as protective against scurvy, is recorded by James Lancaster
- In 1612, Woodall recommended citrus fruit for protection against scurvy on sea voyages
- In 1753 James Lind published A Treatise on the Scurvy which portrays his experiment on-board the ship Salisbury in 1747
- From 1772 to 1775 sailors on historic voyages with Captain James Cook remained free from scurvy
- In 1796 lemon juice was officially introduced in the British Navy as a prophylactic against scurvy
- In 1865 British Board of Trade adopted the policy for the merchant marine

S. Brown, 2004

How long did the NIH take to recommend the treatment of ulcer as suggested by Dr. Marshall in his 1984 Lancet Article?

1. 2 years
2. 5 years
3. 10 years
4. 20 years

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2. 5 years
3. **10 years**
4. 20 years

Treatment of Ulcer – Dr Marshall

The Lancet · Saturday 16 June 1984

UNIDENTIFIED CURVED BACILLI IN THE
STOMACH OF PATIENTS WITH GASTRITIS
AND PEPTIC ULCERATION*

BARRY J. MARSHALL   J. ROBIN WARREN

*Departments of Gastroenterology and Pathology,
Royal Perth Hospital, Perth, Western Australia*

Summary   Biopsy specimens were taken from intact
areas of antral mucosa in 100 consecutive
presenting patients presenting for gastroscopy. Spiral or
curved bacilli were demonstrated in specimens from 58
patients. Bacilli cultured from 11 of these biopsies were gram-
negative, flagellate, and microaerophilic and appeared to be a
new species related to the genus *Campylobacter*. The bacteria
were present in almost all patients with active chronic
gastritis, duodenal ulcer, or gastric ulcer and thus may be an
important factor in the aetiology of these diseases.

- 1979: Dr. Robin Warren, pathologist at Royal Perth Hospital, Australia found bacteria in stomach of patients

- 1981: Dr. Barry Marshall starts residency

- 1982: Marshall cultivates bacteria: Helicobacter pylori, 100% in Duodenal Ulcer and 77% in Gastric Ulcer

- 1984: first publication in Lancet; presents treatment of ulcer with common antibioticum

- 1994: National Institute of Health recommends treatment of ulcer as suggested by Dr. Marshall

In a recent article in the Journal of Quality Improvement, 92 QI projects were compared. What was the timeframe from problem identification to completion of first pilot?

1. 23 days
2. 60 days
3. 397 days
4. 504 days

In a recent article in the Journal of Quality Improvement, 92 QI projects were compared. What was the timeframe from problem identification to completion of first pilot?

1. 23 days
2. 60 days
3. 397 days
4. **504 days**

Survey of 92 Quality Improvement Projects in *Journal of Quality Improvement*

504 days from problem identification to completion of first pilot

- 397 days from first team meeting to the end of first cycle
- 75 days to describe current situation in flowchart
- 62 days for data collection if change was improvement

F. Alemi, F. Safaie, D. Neuhauser, 2001

How can we accelerate change and improvements in our programs?

Multiple Rapid Tests

- Increase confidence that the change will result in an improvement

- Learn how to adapt the change to conditions in the specific setting

- Minimize resistance when you move to implement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

Act   Plan

Study   Do
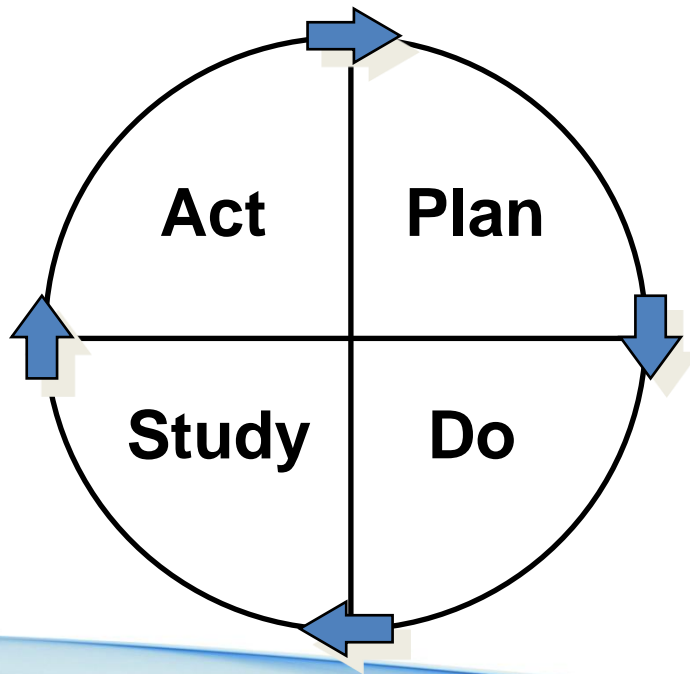
Model for Improvement

Model for Improvement

- **Improvement is about learning**
  - trial and error (scientific method)
  - improvements require change, however not all changes are an improvement
- **Measure your progress**
  - only data can tell you whether improvements are made
  - integrate measurement into the daily routine
- **Improvements thru continuous cycles of changes**
  - Plan-Do-Study-Act approach
  - changes are initiated on a small scale to test them before implementation

Model For Improvement Worksheet

MODEL FOR IMPROVEMENT WORKSHEET

What are we trying to accomplish?
How will we know that a change is an improvement?
What change can we make that will result in improvement?

Team Name: _____   Date: _____

AIM:
What are we trying to accomplish?

HYPOTHESES:
What change can we make that will result in improvement?

MEASUREMENT:
How will we know that our change is an improvement?

PDSA WORKSHEET

Plan | Do | Act | Study

Team Name:	Date of test:	Test Completion Date:
Overall team/project aim:		
What is the objective of the test?		

PLAN:
Briefly describe the test:

How will you know that the change is an improvement?

What driver does the change impact?

What do you predict will happen?

PLAN

List the tasks necessary to complete this test (what)	Person responsible (who)	When	Where
1.			
2.			
3.			
4.			
5.			
6.			

Plan for collection of data:

DO: Test the changes.

Was the cycle carried out as planned? ☐ Yes ☐ No

Record data and observations.

What did you observe that was not part of our plan?

STUDY:
Did the results match your predictions? ☐ Yes ☐ No

Compare the result of your test to your previous performance:

What did you learn?

ACT: Decide to Adopt, Adapt, or Abandon.

☐ Adapt: Improve the change and continue testing plan. Plans/changes for next test:

☐ Adopt: Select changes to implement on a larger scale and develop an implementation plan and plan for sustainability

☐ Abandon: Discard this change idea and try a different one

Model for Improvement

What are we trying to
accomplish?
_____

How will we know
that a change is an
improvement?
_____

What change can we make
that will result in
improvement?

Set an aim:
- Answer the question, "What are we trying to accomplish?"
- The aim needs to be measurable and have a timeframe

Model for Improvement

What are we trying to accomplish?
_____
How will we know that a change is an improvement?
_____
What change can we make that will result in improvement?

AIM:

What are we trying to accomplish?

In the next six months, increase access to case management (CM) for high-risk patients

Model for Improvement

What are we trying to accomplish?

_____

How will we know that a change is an improvement?

_____

What change can we make that will result in improvement?

Establish measures:

- Answer the question, "How will we know that a change is an improvement?"
- If we don't measure what we've done, we don't know if what we did is better

Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

MEASUREMENT:

How will we know that our change is an improvement?

Process Measure: **More high-risk patients receive CM services**
Outcome Measure: **Enhanced health outcomes for high-risk patients**
Balance Measure: **Patient satisfaction**

Model for Improvement

What are we trying to accomplish?

_____

How will we know that a change is an improvement?

_____

What change can we make that will result in improvement?

Take action:
- Select new ideas to test
- Answer the question: "What changes can we make that will result in improvement?"

Model for Improvement

HYPOTHESES:

What change can we make that will result in improvement?

Hire more CM

Incentivize high-risk patients for attending CM visits offsite

Provide transportation to CM visits offsite

Improve coordination between clinic and external CM organizations

Seamlessly integrate CM services into clinic visit

Model for Improvement Worksheet - Exercise

MODEL FOR IMPROVEMENT WORKSHEET

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

Team Name:	Date:

AIM:
What are we trying to accomplish?

MEASUREMENT:
How will we know that our change is an improvement?

HYPOTHESES:
What change can we make that will result in improvement?

Tennis Ball Exercise

- Learning objectives
  - Know how to design changes to a process
  - Know how to test these changes and build on them to design subsequent changes

The PDSA cycle
for Learning and Improvement

Act

What changes are to be made?
Next cycle?

Plan

Objective
Questions and predictions (why)
Plan to carry out the cycle (who, what, where, when)

Study

Complete the analysis of the data
Compare data to predictions
Summarize what was learned

Do

Carry out the plan
Document problems and unexpected observations
Begin analysis of the data

Many PDSA Cycles

Changes That Result in Improvement

DATA

Implementation of change

Wide-scale tests of change

Hunches Theories Ideas

Follow-up tests

Very small scale test

PDSA Cycle – Step 1: Plan

Act | **Plan**
Objective
Questions and predictions (why)
Plan to carry out the cycle (who, what, where, when)

Study | **Do**

- Choose change to test
- Plan should be comprehensive
- Small, simple & fast
  - Oneness
  - Can you do the test by next Tuesday?

PDSA Cycle
Step 1: Plan

PLAN:

Briefly describe the test:

High-risk patients will be referred by clinic staff (MA, nurse, provider) to a CM onsite for one day

How will you know that the change is an improvement?

High-risk patients see CM during their clinic visit

Satisfaction of patients, clinic staff, and CM

What driver does the change impact?
Driver: Access to CM
Barrier: High-risk patients are unlikely to access CM offsite

What do you predict will happen?
Patients will be identified as high-risk and referred to CM
Patients will accept CM services
Patients, clinic staff, and CM will be satisfied with new process

List the tasks necessary to complete this test (what)	Person responsible (who)	When	Where
1. Identify high-risk patients	MA, Nurse, Provider	During visit	Clinic
2. Offer CM services	MA, Nurse, Provider	During visit	Clinic
3. Provide CM services	CM	During visit	Clinic
4. Assess patient satisfaction	Front desk person	End of visit	Clinic
5. Assess CM satisfaction	CM	End of day	Clinic
6. Assess clinic satisfaction	MA, Nurse, Provider	End of day	Clinic

Plan for collection of data:
Collect number of patients seen by CM
Satisfaction of patients collected upon existing clinic
Clinic staff and CM record experience/satisfaction in notes

PDSA Cycle – Step 2: Do

Act | **Plan**

Study | **Do**
Carry out the plan
Document problems
and unexpected
observations
Begin analysis of
the data
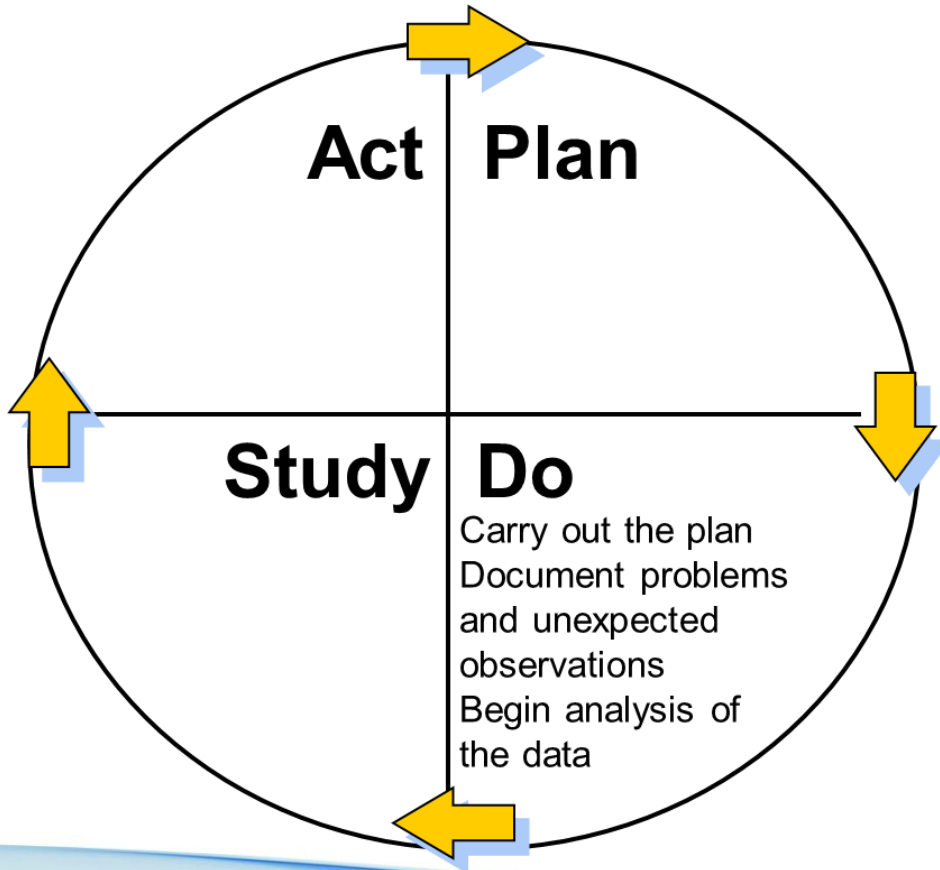
- Try the new way
- Consider how it's going

PDSA Cycle – Step 2: Do

DO: Test the changes.

Was the cycle carried out as planned?   **X** Yes   ☐No

Record data and observations
20 patients seen in clinic, 4 referred, 2 accepted

What did you observe that was not part of our plan?
**Clinic staff didn't use a standardized method to identify high-risk patients to refer to CM
Patients didn't provide detailed feedback regarding their satisfaction, general responses weren't informative**

PDSA Cycle – Step 3: Study

Act | **Plan**

Study | **Do**

Complete the analysis of the data
Compare data to predictions
Summarize what was learned
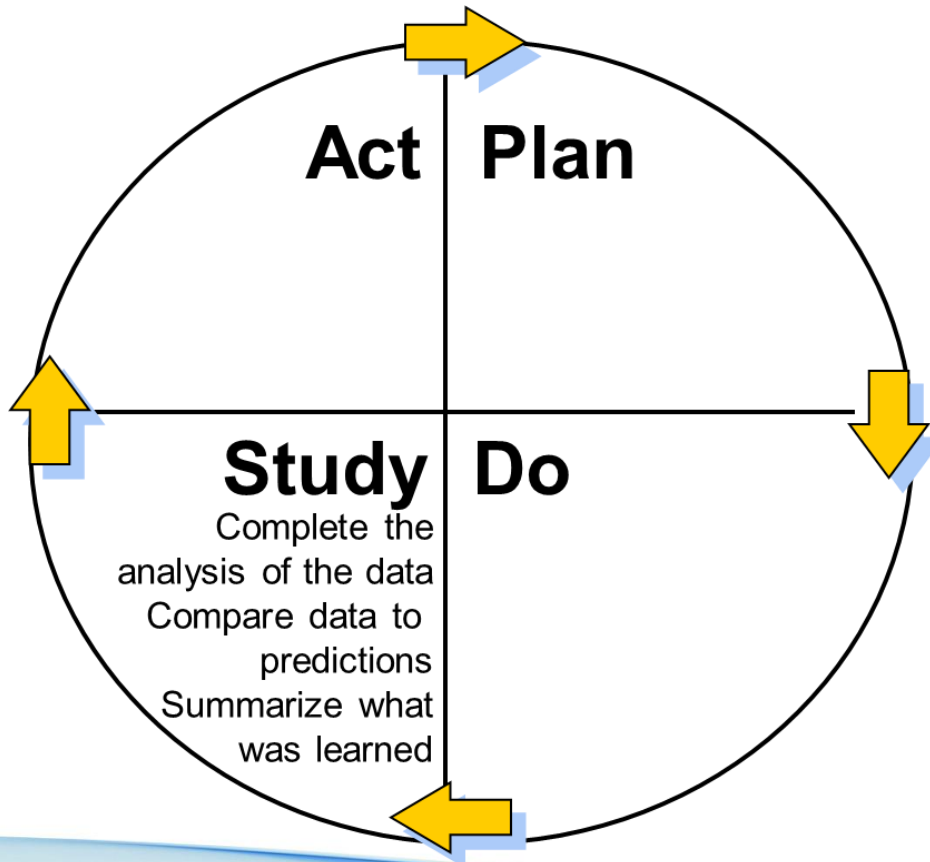
- What are the results of the test?
- Was our prediction correct?

PDSA Cycle – Step 3: Study

STUDY:

Did the results match your predictions? ☐ Yes **X** No

Compare the result of your test to your previous performance:
First test:
Fewer patients were identified for CM services than expected
Some high-risk patients were missed
Impacted provider and CM satisfaction
No standardized way to capture details on patient satisfaction

What did you learn?
A standardized process to identify high-risk patients is needed
A standardized tool to gather patient satisfaction data is needed

PDSA Cycle – Step 4: Act

Act | **Plan**

What changes
are to be
made?
Next cycle?

Study | **Do**
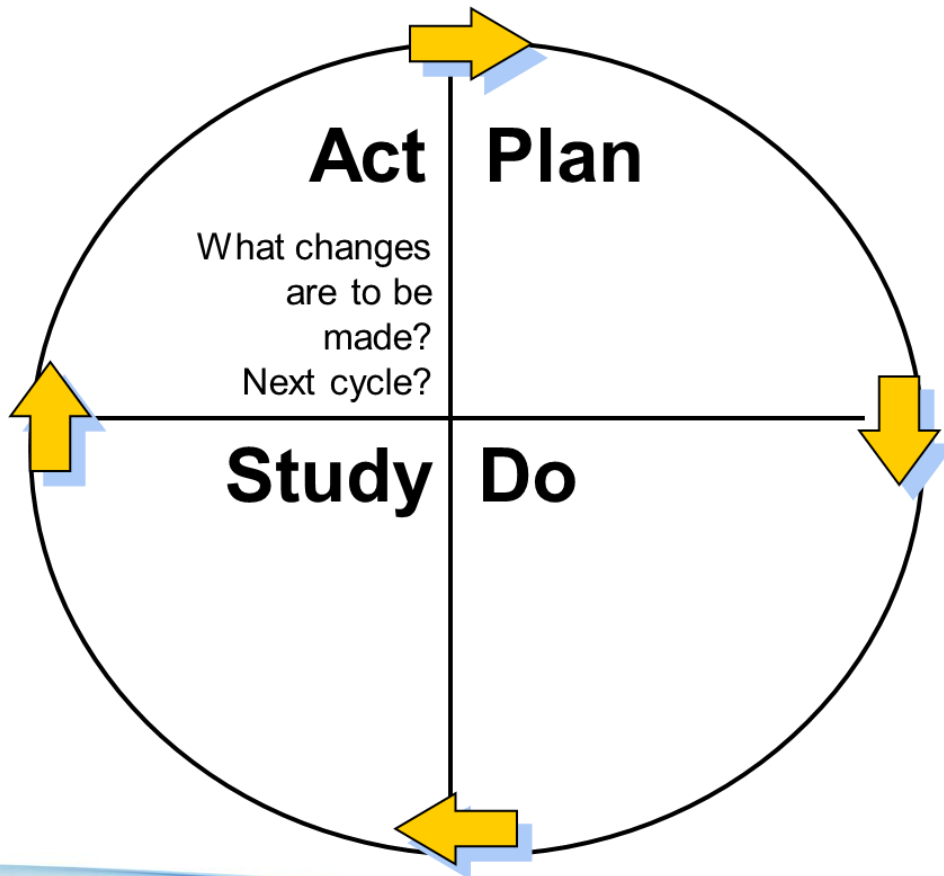
- Adopt, Adapt, Abandon

PDSA Cycle – Step 4: Act

ACT: Decide to Adopt, Adapt, or Abandon.

X <u>Adapt</u>: Improve the change and continue testing plan.
    Plans/changes for next test:
    Nurses implement standardized screening tool to identify high-risk patients, Front desk staff will implement standardized patient satisfaction survey

☐ Adopt: Select changes to implement on a larger scale and develop an implementation plan and plan for sustainability

☐ Abandon: Discard this change idea and try a different one

Many PDSA Cycles

Changes That Result in Improvement

DATA

Implementation of change

Wide-scale tests of change

Hunches Theories Ideas

Follow-up tests

Very small scale test

A | P
S | D

A | P
S | D

D | S
P | A

A | P
S | D
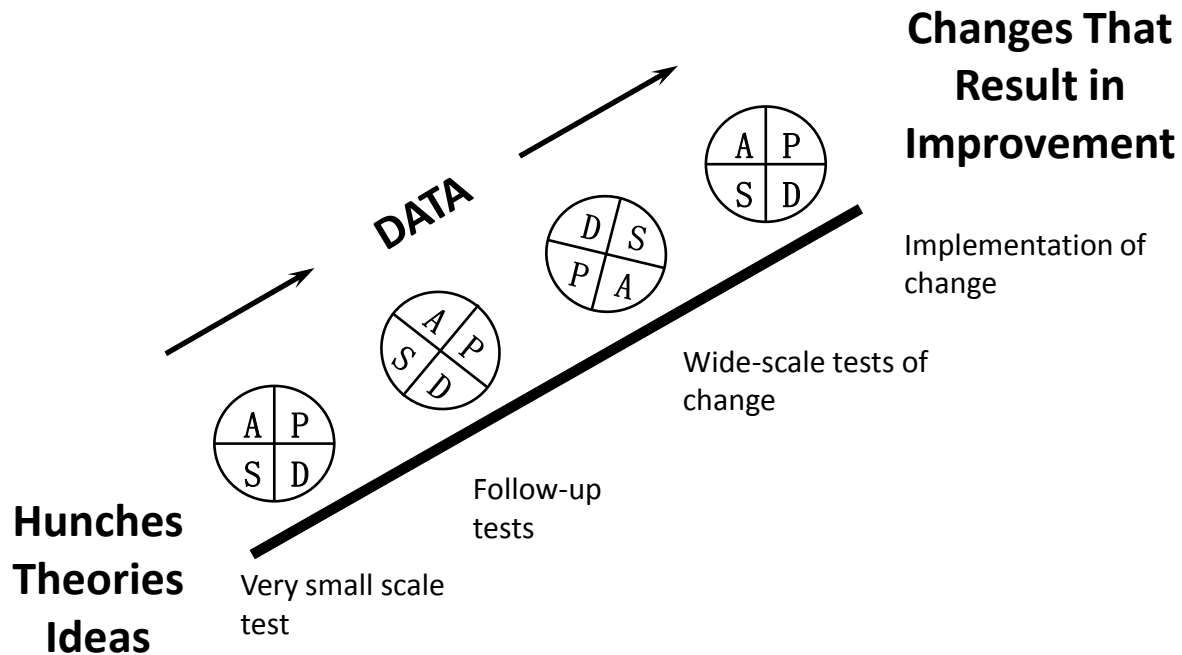
Many PDSA Cycles - Example

Changes That Result in Improvement

DATA

Test Larger Population

Test Huddles

TestScreening Tool & Patient Satisfaction Tool

Hunches Theories Ideas

Test CM presence in Clinic Visit

PDSA Worksheet - Exercise

PDSA WORKSHEET

Team Name:	Date of test:	Test Completion Date:
Overall team/project aim:		
What is the objective of the test?		

PLAN:

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Plan for collection of data:

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What did you observe that was not part of our plan?

STUDY:

Did the results match your predictions? ☐ Yes ☐ No

Compare the result of your test to your previous performance:

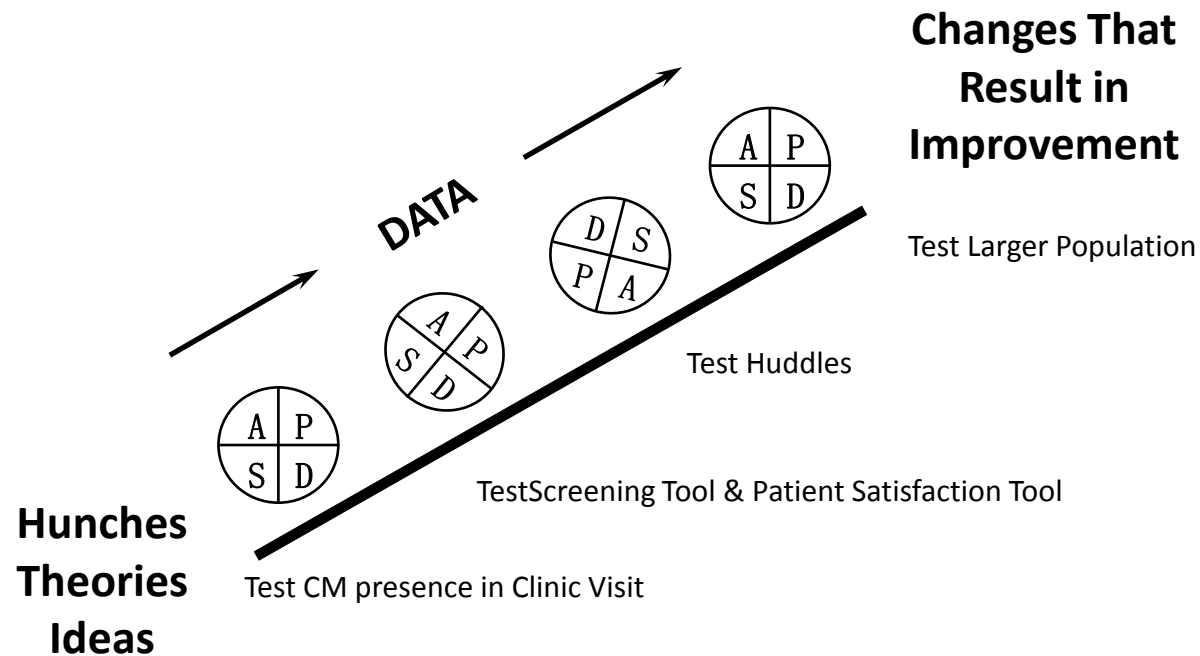What did you learn?

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Creating Energy and Momentum For Change

QUALITY AND CHANGE LEADERSHIP

Quality Program

Quality Project

Step 1: Establish Leadership & organizational structure

Step 2: Establish quality management plan

Step 3: Determine performance measures & collect baseline data

Step 4: Analyze data

Step 5: Develop project specific QI plan

Step 6: Study and understand the process

Step 7: Develop and implement Tests/Change(s)

Step 8: Re-measure

Step 9: Celebrate Success, Communicate, Evaluate

Act | Plan
Study | Do

Quality management shifts responsibility for excellence from the individual to a strategic system for improvement

Excellence

Change

Focus

Status Quo
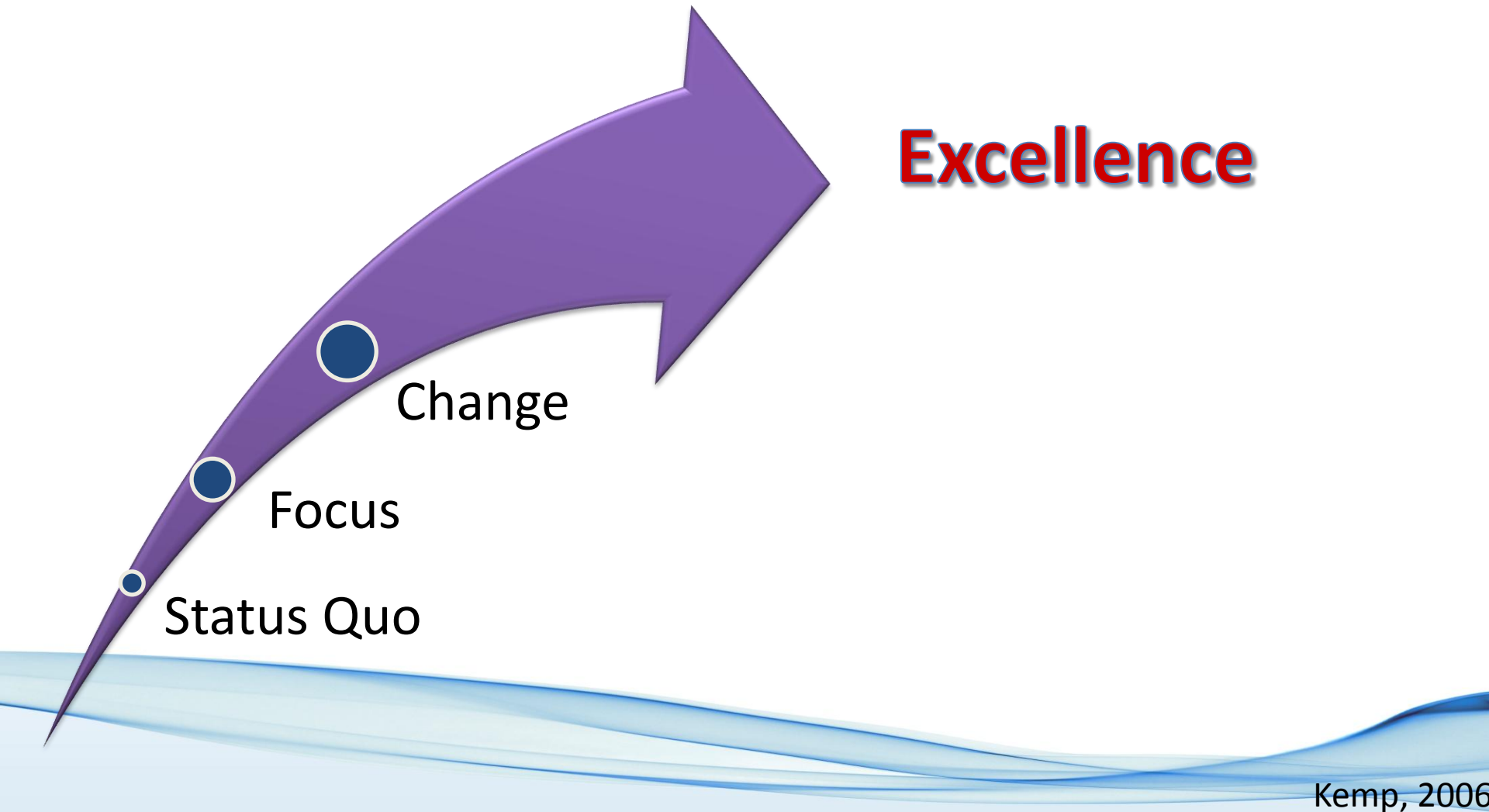
Leaders must...

- Identify assumptions and question them
- Find best practices and spread them throughout the organization and beyond
- Manage standards (defined, observable and measurable requirement, target or goal)
    - Understand the standard
    - Have a way of comparing a process to the standard
    - Know how much variation is acceptable
    - Take action when practices are not in line with the standard

External Standards

Internal Standards

Kemp, 2006
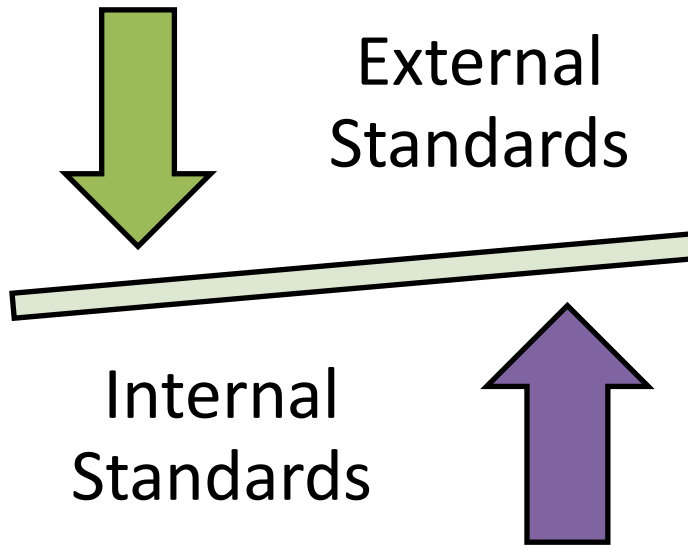
Elephant & Rider

The Elephant (Emotion)

- Gives energy to change
- Provides motivation
- Loves instant gratification
- Overpowers the rider

Status Quo **Change**

Heath & Heath, 2010

# Dangers that Shift Focus Away from Excellence

- Change is Stress!!!
  - Make sure there is room in the cup
  - Eustress and Cognitive Dissonance
- Self-care and Healthy Organizational Cultures Prevent
  - Toxic Stress & Burnout
  - Compassion Fatigue
  - Vicarious Trauma
  - Secondary Trauma

Anxiety

Behaviors

Cognitive Dissonance

Zone of Tolerance

Life in Line with Values

Bloom & Farragher, 2011
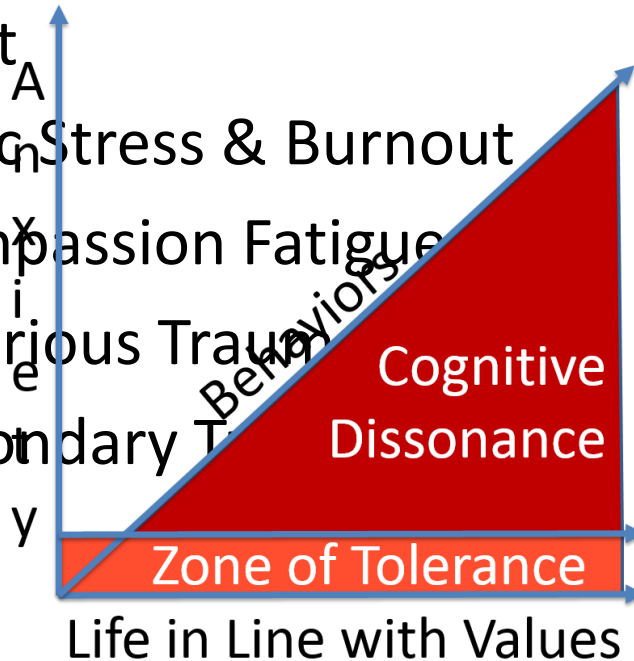
Elephant & Rider

- The Rider (Intellect)
  - Provides direction
  - Thinks long term
  - Gets stuck easy

Status Quo   Change

Heath & Heath, 2010

Elephant & Rider

Direct the Rider!

- Follow the Bright Spots
- Point to the Destination
- Script the Critical Moves

Motivate the Elephant

- Find the Passion
- Shrink the Change
- Celebrate Wildly

Shape the Path

- Tweak the Environment
- Build Healthy Habits
- Rally the Herd

Status Quo

Change

Heath & Heath, 2010

Quality Improvement in an Organizational Context

- Utilize PDSA Cycle:
  - Pursue a vision towards excellence
  - Support Mission and values
- Provide focus and motivation for <u>strategic</u> change
- Striving for Excellence
  - Motivating the elephant
  - Giving the rider a direction
  - Creating process that lead to a better future state

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