Implementing a Quality Improvement Project in your Practice

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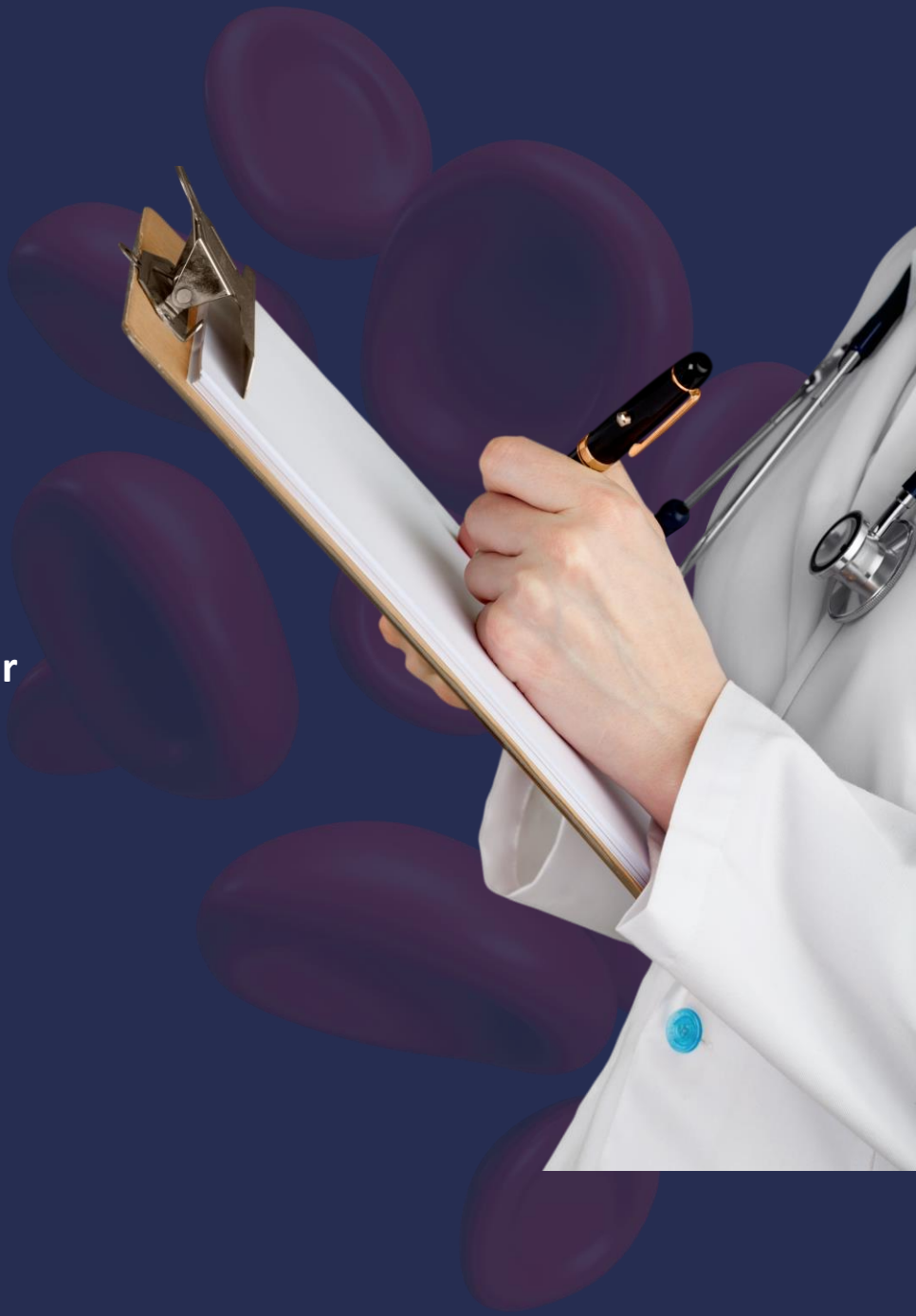
PRESENTER DISCLOSURE

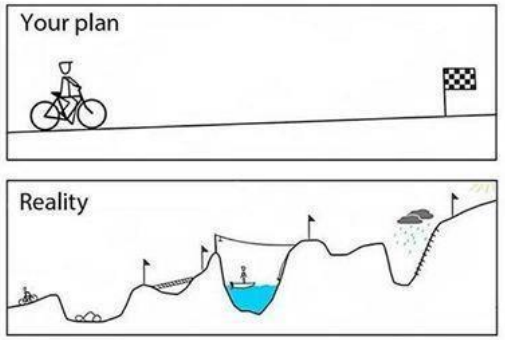
Nick Kates

I do not have an financial relationships or other relationships to declare

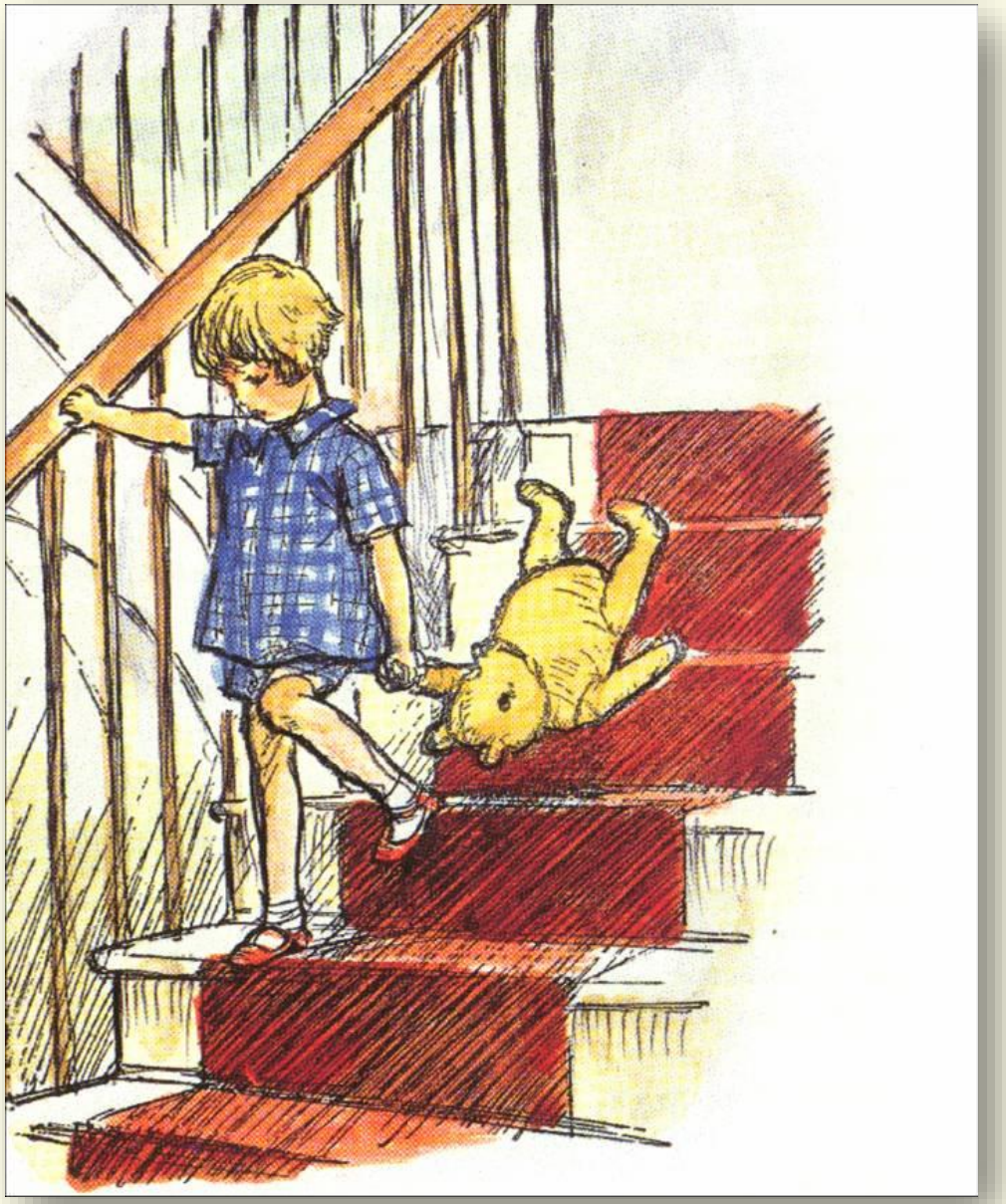


PLAN

- Expectations of Family Physicians
- What is quality care and Quality Improvement (CQI)



- Core Concepts for a QI Project
- Practical tools to assist you
- Examples of Projects (as we go)



“Here is Edward Bear, coming downstairs now, bump, bump, bump, on the back of his head, behind Christopher Robin. It is, as far as he knows, the only way of coming downstairs, but sometimes he feels that there really is another way, if only he could stop bumping for a moment and think of it”

A.A. Milne 1926

Illustration E.H.Shepard 192614

Changing expectations of Family Physicians

QI Expectation - CFPC

- Demonstrate Continuous Improvement in Clinical care, patient safety, practice efficiency
- Engage in structured activities
- Use a recognized QI Framework
- Maintenance of Competence
  - Participation in Mainpro+ Certified Activities
  - Demonstration of Reflective Practice on impact & Sustainability
  - Collaborative QI Work
    - Chose a focused topic
    - Define an aim
    - Document the Process and reflect on the result
    - Structured process
    - Measured outcomes

QI Expectation - Provinces

Each Province Differs

- Example : Ontario
- Quality Improvement Program – part of 5 year cycle
  - Practice Improvement Plan (PIP) options
    - Measurable goals
    - Use PDSA/data driven methods
    - Fulfil quality requirements for the 5 year cycle
- Example : BC
- Practice Support Program
  - Particiaption in Practice / Team QI activities
  - Certified by MainPro+ credits
  - Compensated for eligible activities
  - Focus on
    - Panel Management
    - EMR optimization
    - Team QI

- Residents also need to complete a QI Project during their training

What is quality care?

WHAT IS QUALITY CARE

High-quality mental health and addictions systems are:

- Effective
- Safe
- Equitable

- Timely (accessible)
- Efficient
- Consumer & Family-centred

- Integrated and collaborative
- Focused on population health
- Adequately resourced

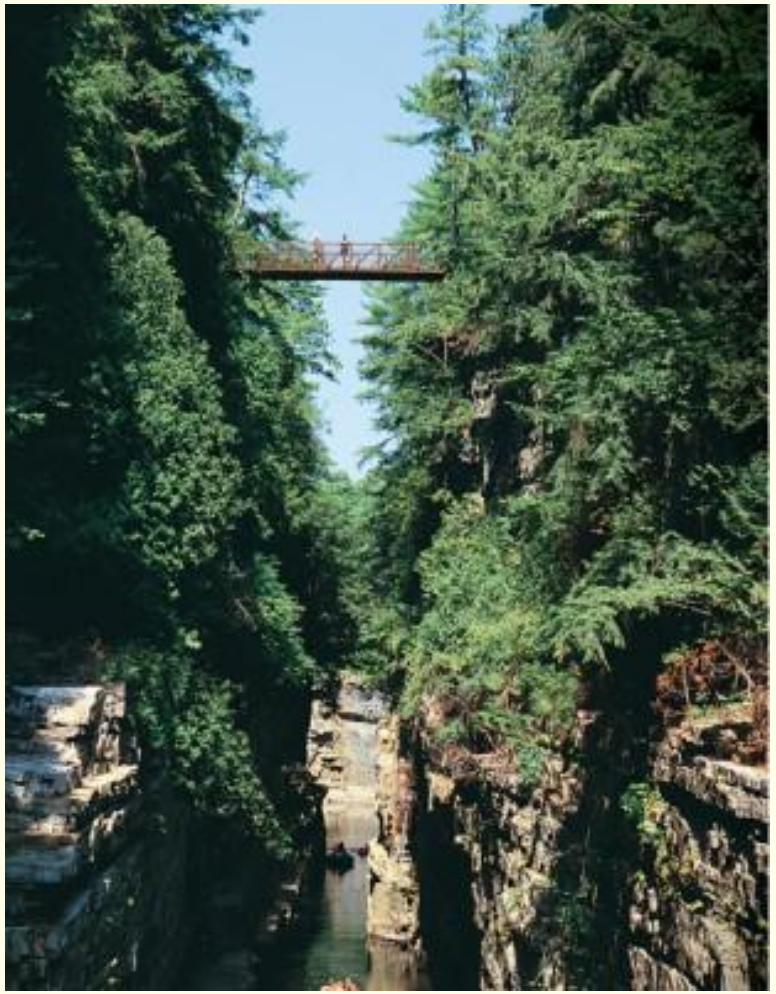
Why aren’t we doing better?

“CROSSING THE QUALITY CHASM”

A NEW HEALTH SYSTEM FOR THE 21TH CENTURY

DON BERWICK

“Between the health care we have and the health care we could (should) have lies not a gap, but a chasm”



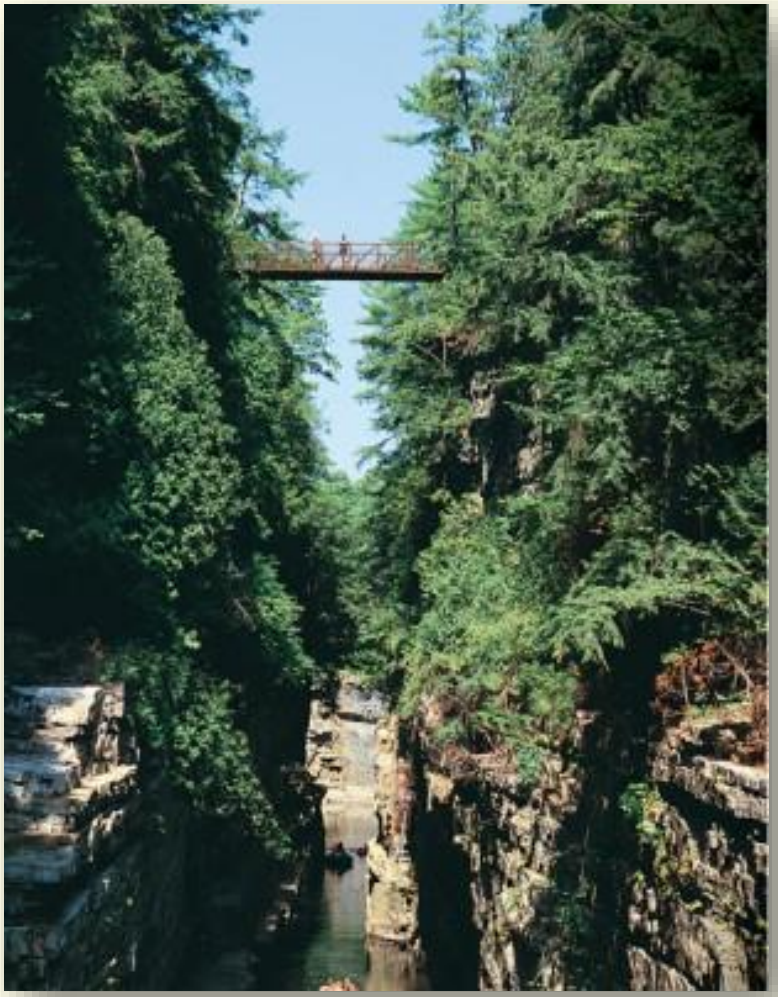
Why don’t we do better?

“CROSSING THE QUALITY CHASM”

A NEW HEALTH SYSTEM FOR THE 21TH CENTURY

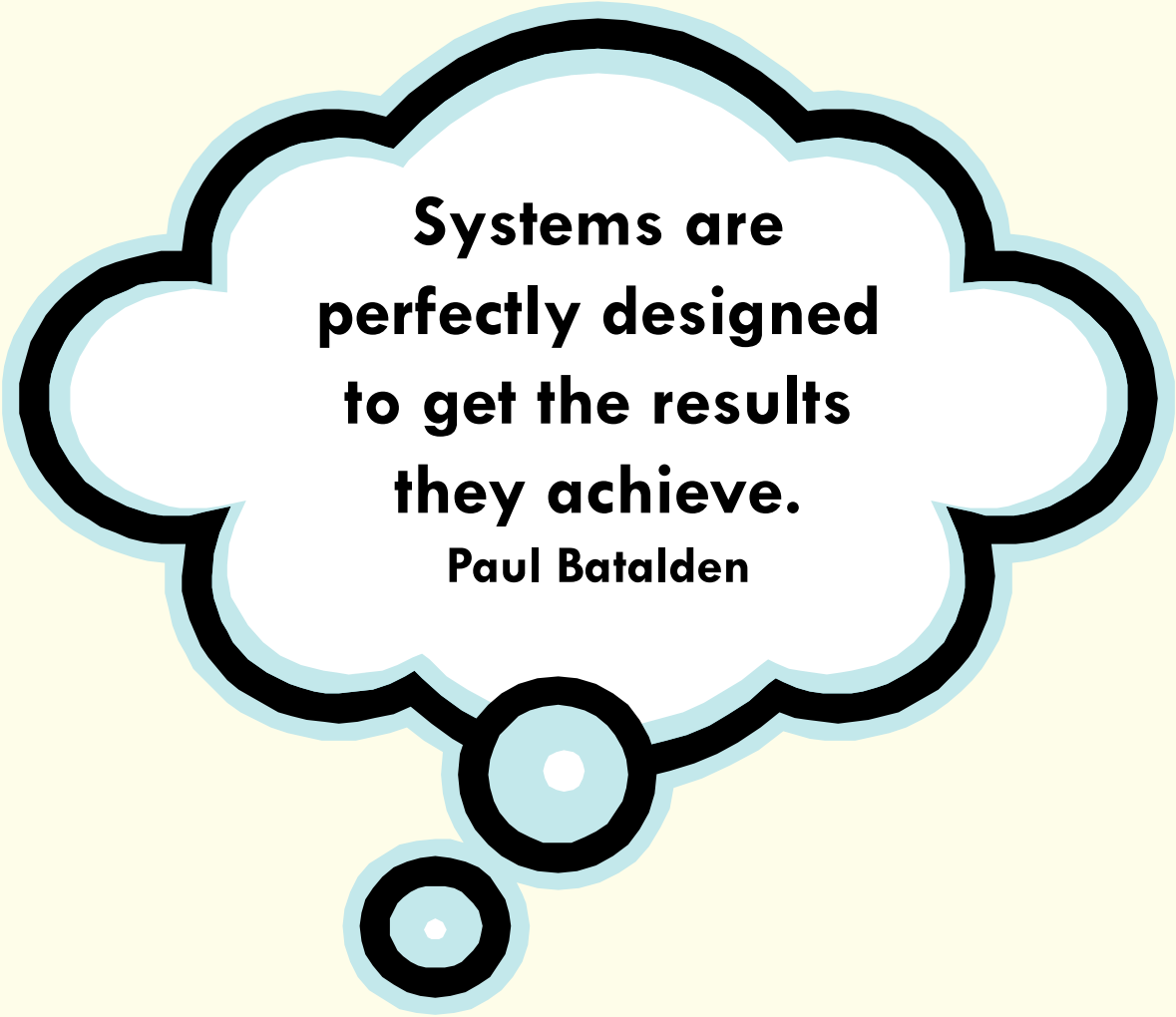
DON BERWICK

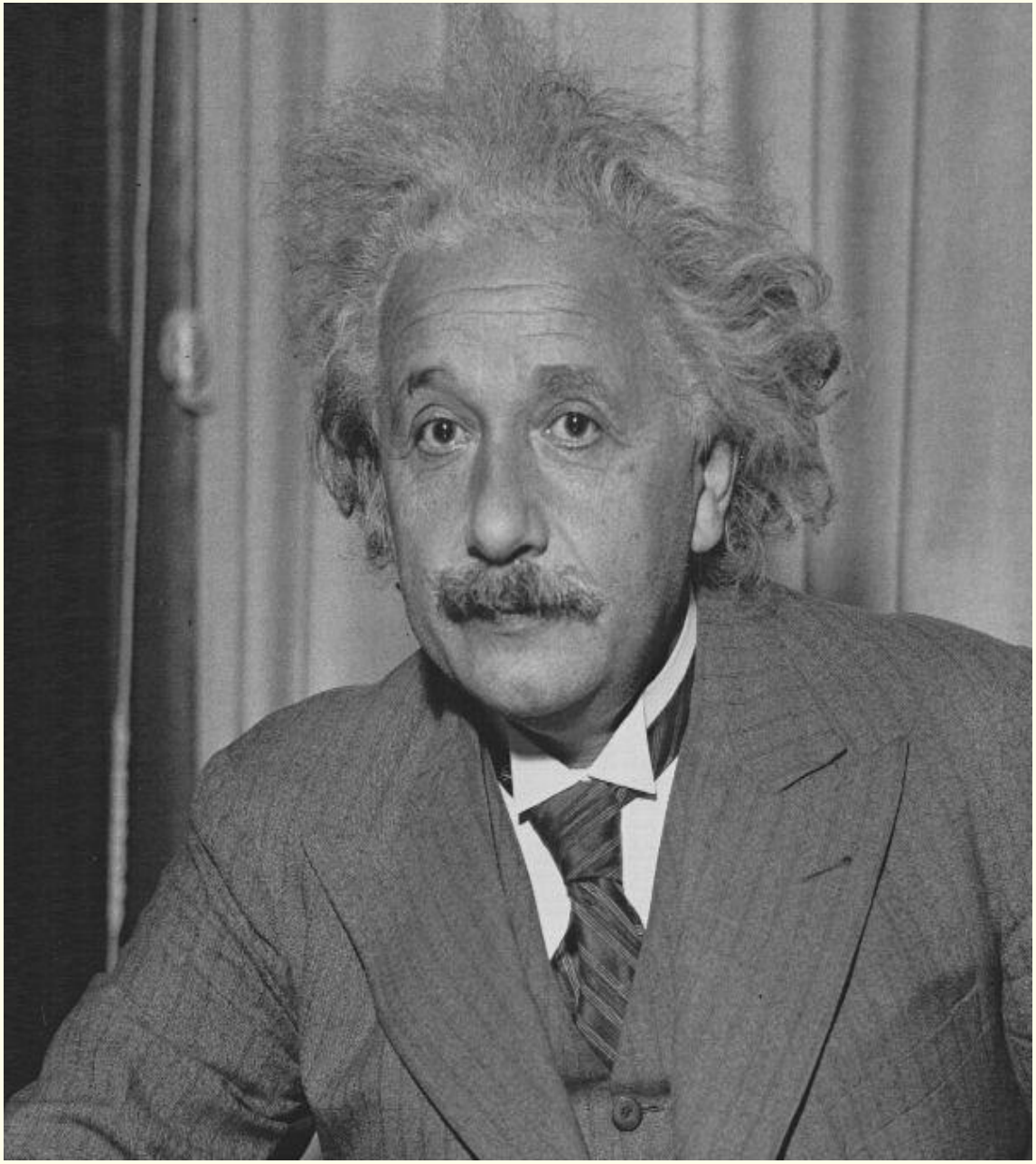
“These quality problems occur typically not because of failure of good will, knowledge, effort or resources directed to health care, but because of fundamental shortcomings in the way care is organized”



It’s not having the resources, tools or information but how we use them

THOUGHT FOR THE DAY



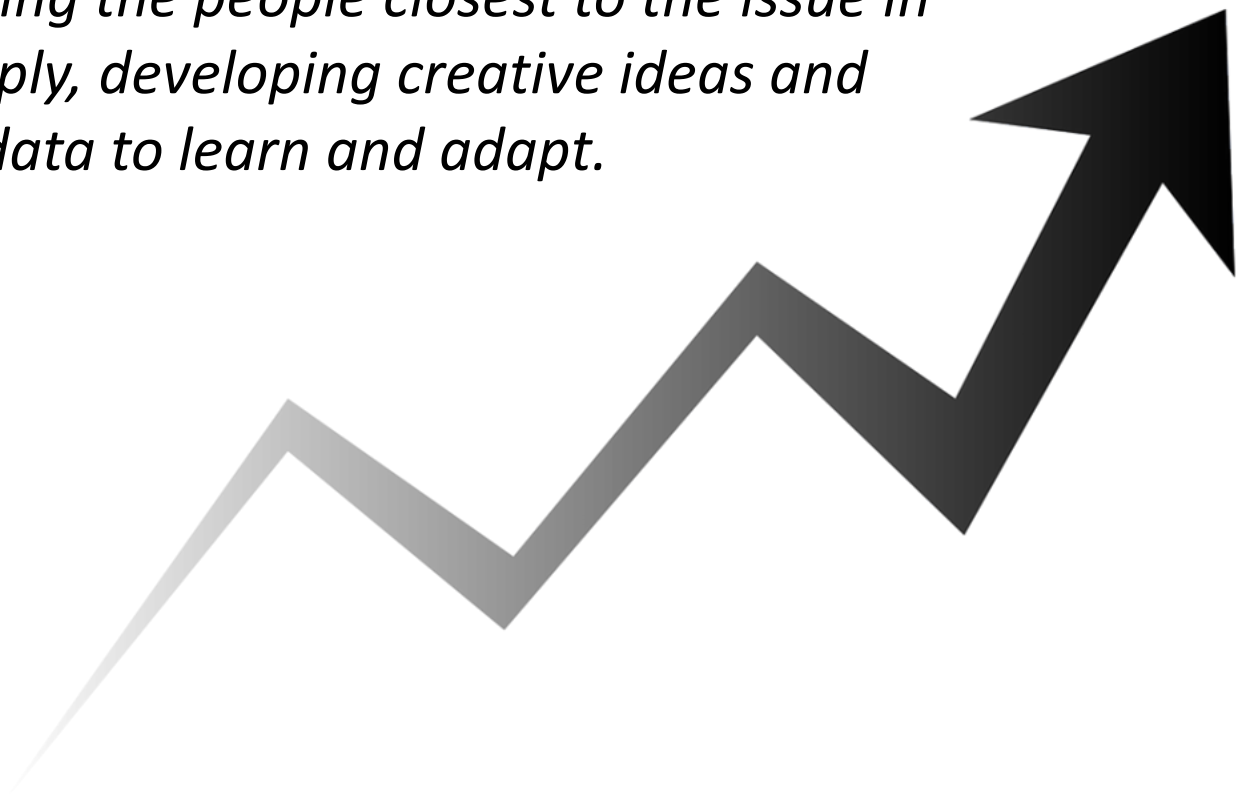


“Insanity is doing things the way we’ve always done them, and expecting different results.”

What is Quality Improvement?

applying a systematic approach to working through a complex issue, involving the people closest to the issue in understanding it deeply, developing creative ideas and testing these, using data to learn and adapt.

(https://qi.elft.nhs.uk/)



Differences Between Research & QI

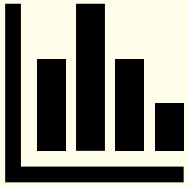
	Measurement for Research	Measurement for Quality Improvement
Purpose	To discover new knowledge	To bring new knowledge into daily practice
Tests	One large "blind" test	Many sequential, observable tests
Biases	Control as many biases as possible	Accept consistent bias; stabilize test to test
Data	Gather as much data as possible, "just in case"	Gather "just enough" data to learn and complete another cycle
Duration	Can take long periods of time to obtain results	"Small tests of significant changes" accelerates the rate of improvement

http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementEstablishingMeasures.aspx
Etchells E, Ho M, Shojania KG. BMJ Qual Saf 2016;25:202–206.

QI vs. Quality Assurance (QA)

Selecting a Quality Problem

Opportunity to address a clinical or other problem to improve the quality of what we do or to eliminate errors or mistakes



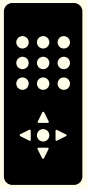
Frequency and Severity of the Problem

How often does it occur?

What are the impacts on care and outcomes?

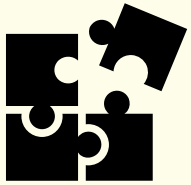
Possibility of unintended consequences

Could the change introduce new risks or disruptions?



Control Over the Problem

Is the issue within your team's ability to address directly?



Synergy with other activities

Does the project align with other initiatives?

Feasibility

How practical is change in terms of cost, time and resources?

ALWAYS EVENTS AND NEVER EVENTS

ALWAYS EVENTS refer to aspects of the patient experience that are so important to patients and families that health care providers should always get them right

NEVER EVENTS are things that are dangerous to a patient's care or well-being and should never be allowed to occur

EXAMPLES

IMPROVING CLINICAL CARE

- Increasing FIT rates
- Recall protocols
  - Diabetes
  - Blood pressure
- Improving recognition of patients with depression using the PHQ-9
- Follow-up after 18 month well baby screen
- 3 screening questions for insomnia
- Wellness checks for over 80s

PATIENT SAFETY

- Medication reconciliation – post hospital discharge
- Reducing antibiotic prescriptions

PATIENT EXPERIENCE

- Improving patient access to test results
- Increasing patient education re lifestyle changes

TEAM EFFICIENCY

- Reducing No-shows
- Reducing wait times (Same Day Access)

Core QI Concepts


We all have two tasks
To do our work
To improve our work

We are usually making changing in systems

We need to reduce variation (special cause and common cause) and standardize our approaches

We need to be positively realistic

"Start where you are.
Use what you've got.
Do what you can
Share what you learn"

We need to change our cultures of care

Cultures of improvement and safety require

TRUST

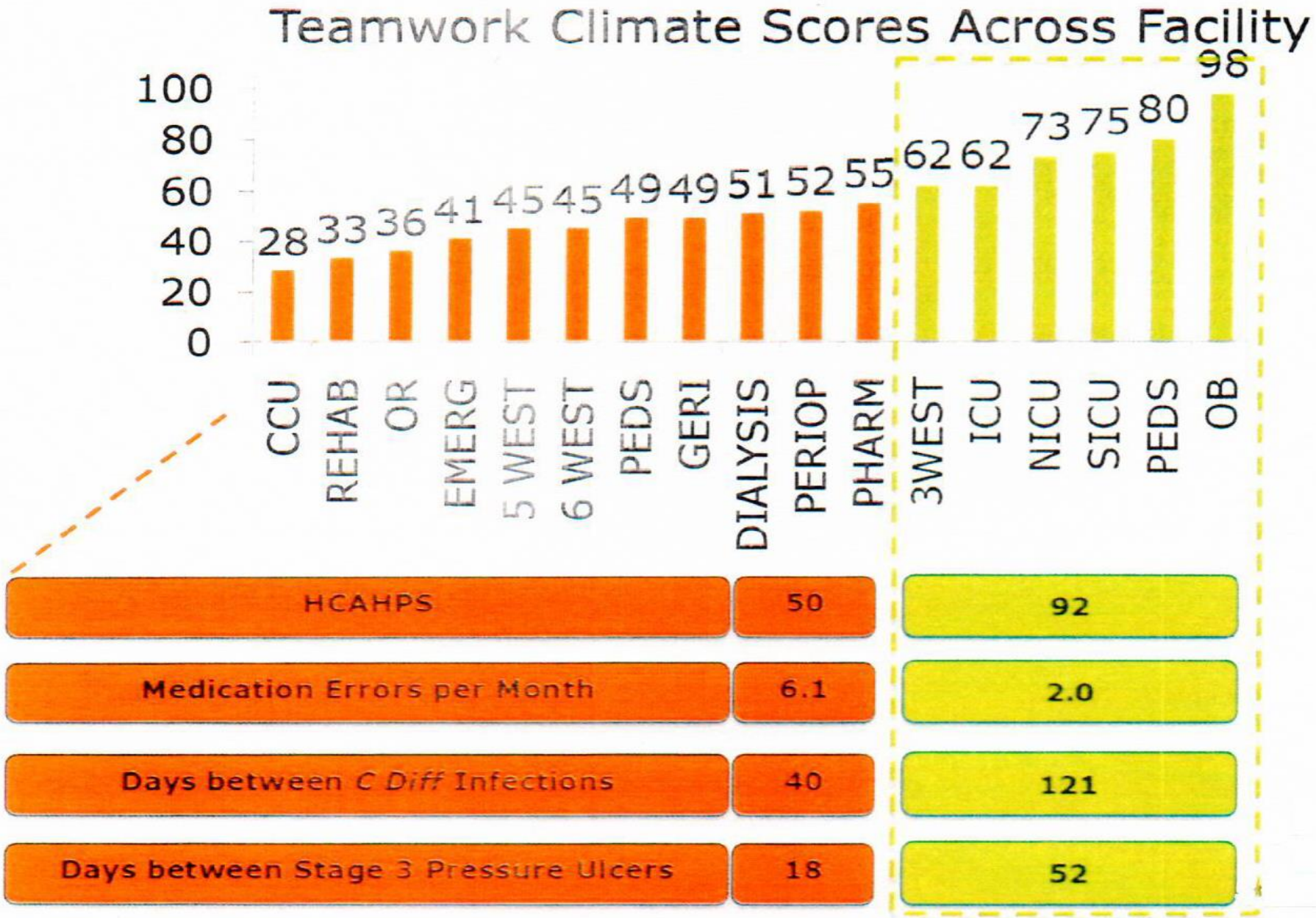
RESPECT

OPENNESS

PSYCHOLOGICAL SAFETY

Teamwork Climate Scores Across Facility

CULTURE IS RELATED TO...



To build cultures of improvement and innovation

- Everybody feels empowered to suggest improvements
- Willingness to think differently
- Leadership is visible, accessible and listens
- All staff are engaged in the need for and processes of change and buy in to the new vision
- New ideas are being introduced and tested regularly
- People share time, resources and ideas
- All ideas are respected but challenged
- Team members support and learn from each other
- Takes time to achieve

We need to think differently

“We have no money, therefore we must think” (differently)

Cindy Borgmeyer, Laura Hamblen/AAFP


MAGNETOM Trio
A Tim System

Implementing a QI Project

Engage all key partners / stakeholders

The tipping point

Figure 1: The Change Model

Making small rapid tests of change –

“What can we do by Tuesday”

“Big Changes in Small Steps”

Tools for Quality Improvement

THE IMPROVEMENT MODEL

Model for Improvement

Common model used in healthcare to rapidly test your change idea.

The goal is improvement, not theoretical perfection.

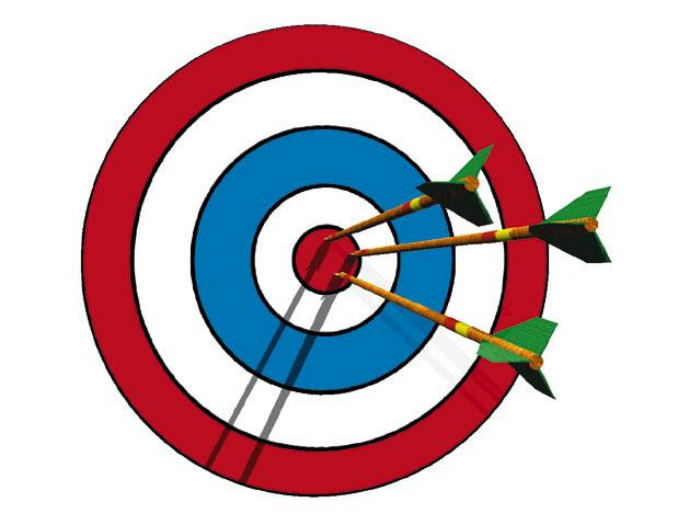
Aim Statement ⇨ What are we trying to accomplish?

Select Measures ⇨ How will we know that a change is an improvement?

Intervention Selection ⇨ What change can we make that will result in improvement?

https://www.ihi.org/resources/how-improve-model-improvement

Aim Statements



SMART: Specific, Measurable, Attainable, Realistic, Timely

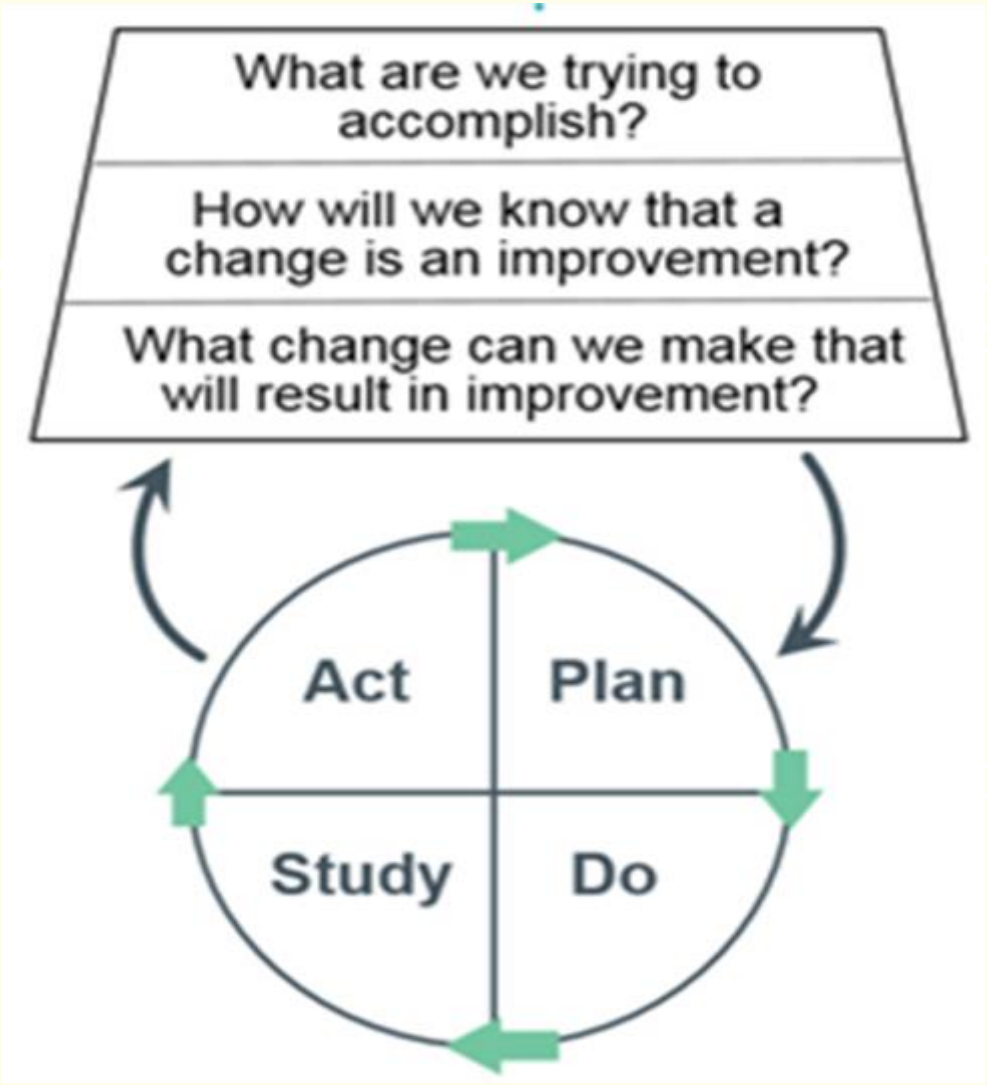
QI Measures

Outcome Measures	Process Measures	Balancing Measures
What is the QI initiative ultimately trying to achieve?	*Are we doing the right things to get to our goal?*	*Are the changes we are making causing problems in other parts of the system?*

Measurement

“Some is not a number, when is not a time, hope is not a plan”

PDSAs follow the scientific method



PDSA Cycles: Plan

What exactly are we going to do?
What are our predictions?

PDSA Cycles: Do

Implement the proposed change

- Collect data
- Did the implementation go as planned?
- What was surprising?

PDSA Cycles: Study

What were the results?

- Are the results what were expected?
- Why or why not?
- What have you learnt?

PDSA Cycles: Act

- Did you achieve the goal?
- What changes are we going to make based on the findings?

Act: Learn from your findings to inform the next PDSA

ADOPT?

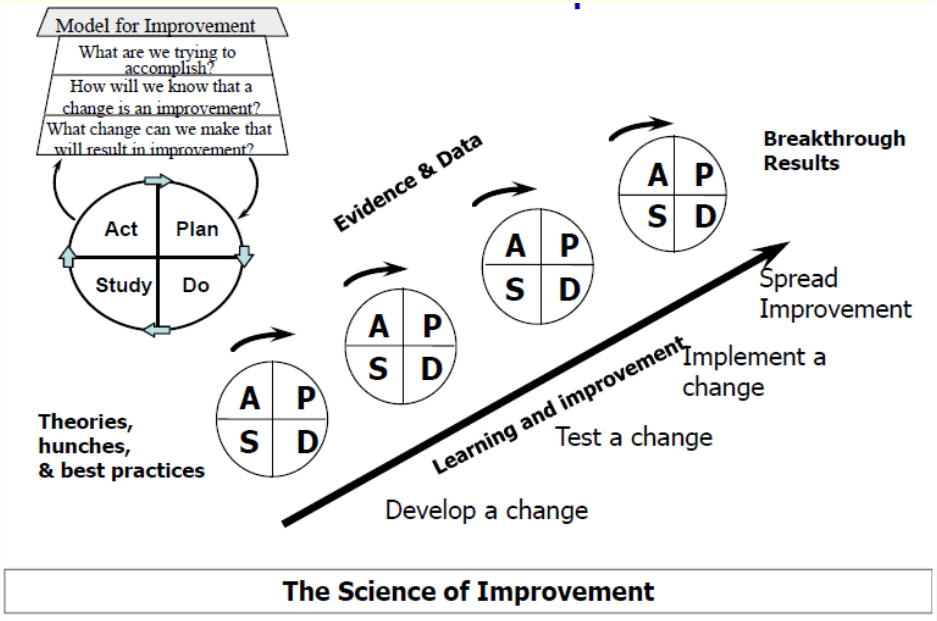
ADAPT?

ABANDON?

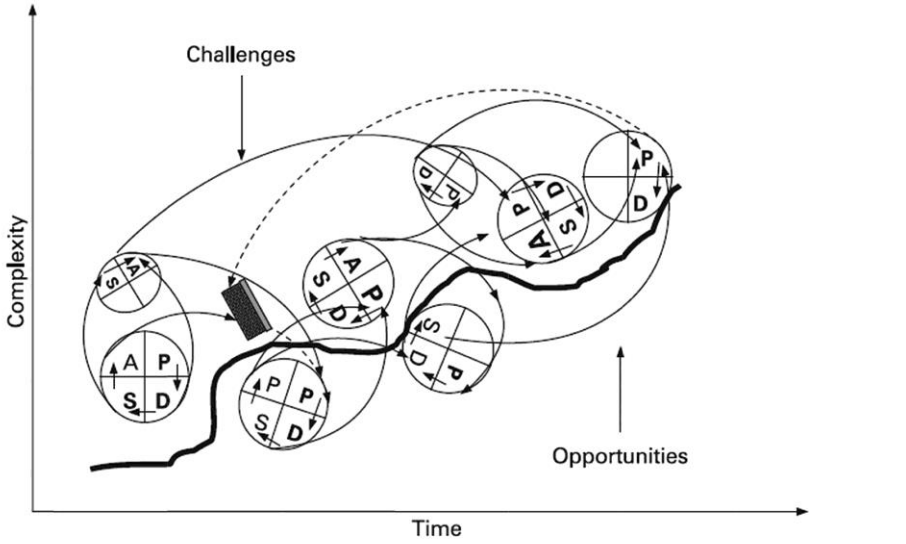
PDSA Cycles: Act

- Did you achieve the goal?
- What changes are we going to make based on the findings?
- Abandon? Adopt? Adapt?
- Time to scale and spread?

Next PDSA



The Science of Improvement



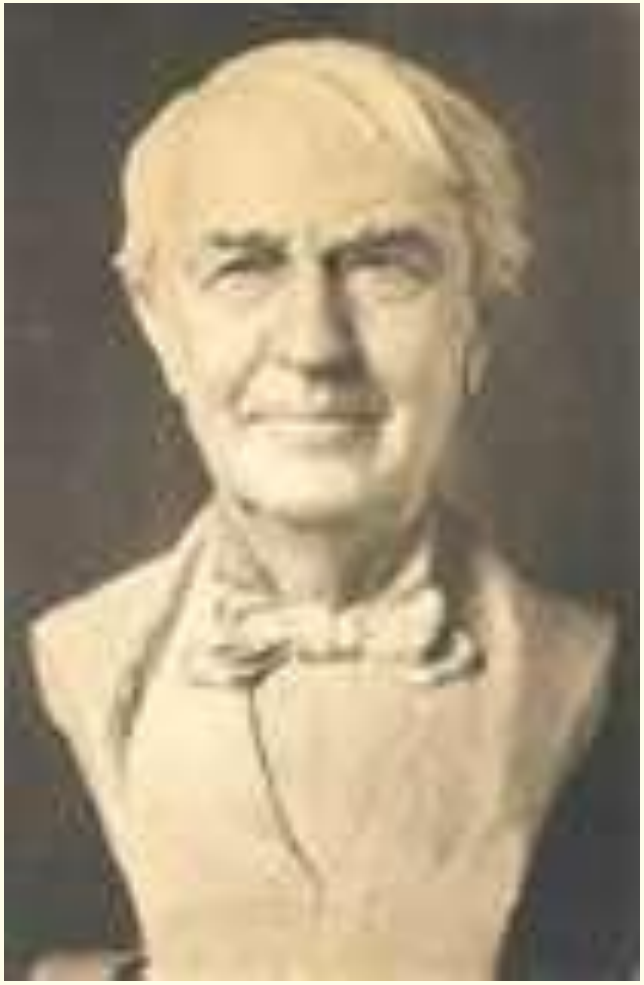
P = Plan D = Do = Barrier —— = Direct flow of impact
S = Study A = Act ----- = Lingering background impact Arrowhead = Feedback or feedforward
Different sizes of letters and cycles and bold letters = denotes differences in importance/impact

TESTING SMALL IMPROVEMENTS

- Different from the traditional model
- Not designing a multi-faceted intervention we can't change for a year because of fidelity to the design
- Small rapid changes
- Learning as we go - Study
- Relevant to that setting
- Everyone on the team is involved
- Makes sense in any situation

“I have not failed. I’ve just found 10,000 ways that won’t work.”

Thomas Alva Edison



“There’s a crack in everything. That’s how the light gets in.”

Always look at the system from the perspective of the user

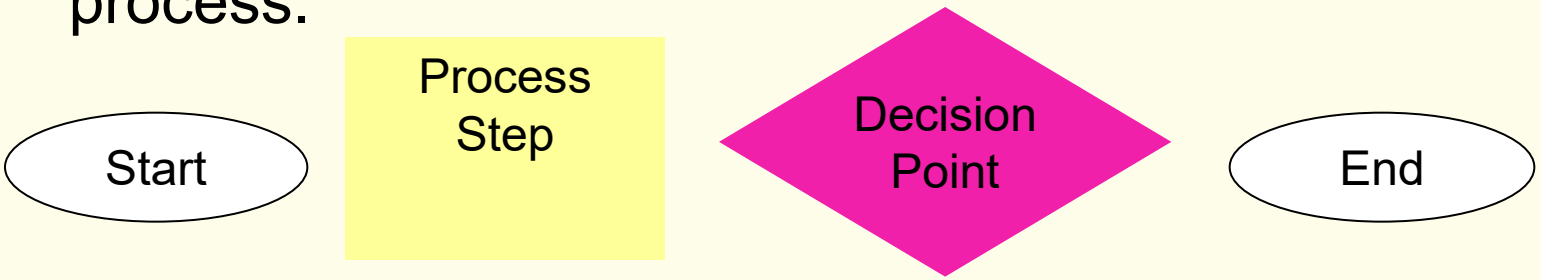
Make our processes (and data) visible

Map out your processes to understand them

- Visually depict the steps in a process
- Everyone in the team will participate
- Choose one specific process with a clear beginning and endpoint
- Define the specific interim tasks
- Post every step along the way
- It shows how things currently are
- Identifies duplication / inefficiencies / parallel processes
- Identifies opportunities for improvement

Process Mapping Activity Instructions

1. Think about your local efforts to improve transitions and create a detailed map for a segment of the journey
2. Agree on the beginning and end steps of your process.



3. Use the sticky notes as indicated above. One step per sticky note. Steps should include a noun and a verb.
4. Ensure every decision point question has 2 options: “Yes” (continues to the right) and “No” (goes down).

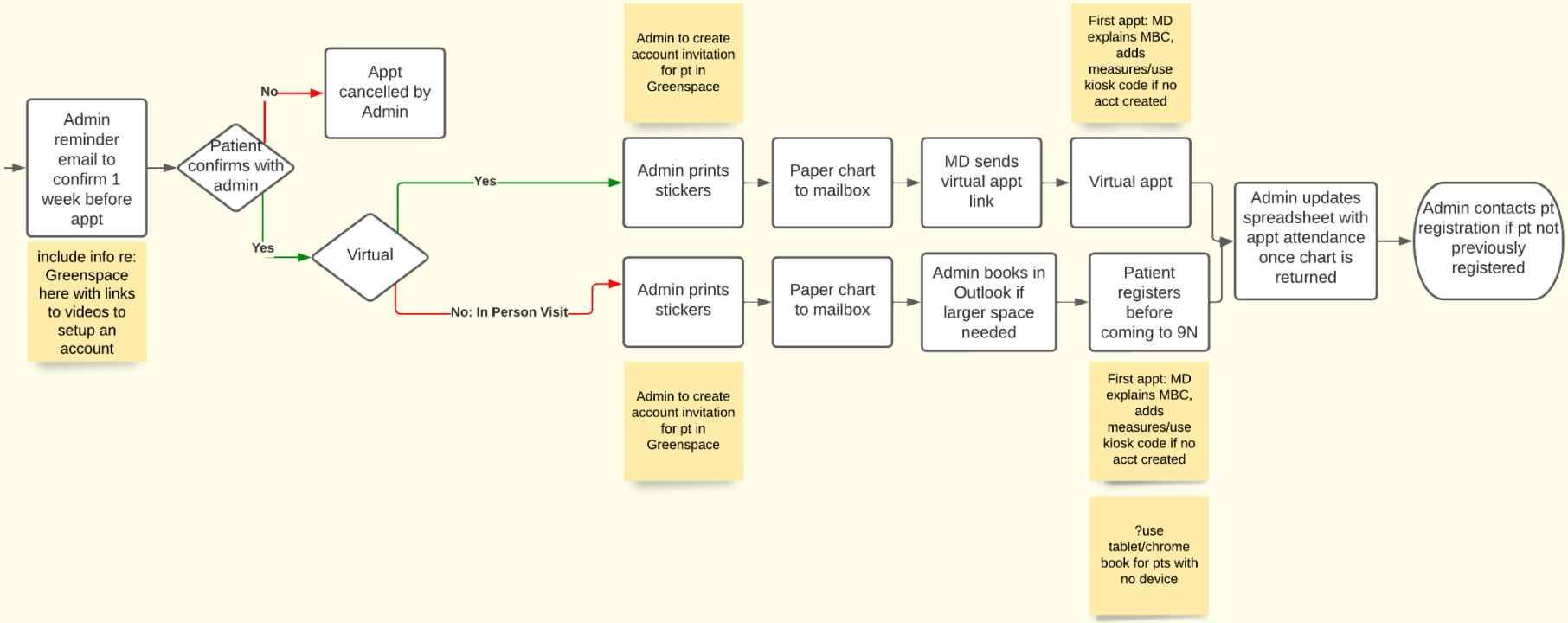
Analysing your process map

Can any of the steps be:

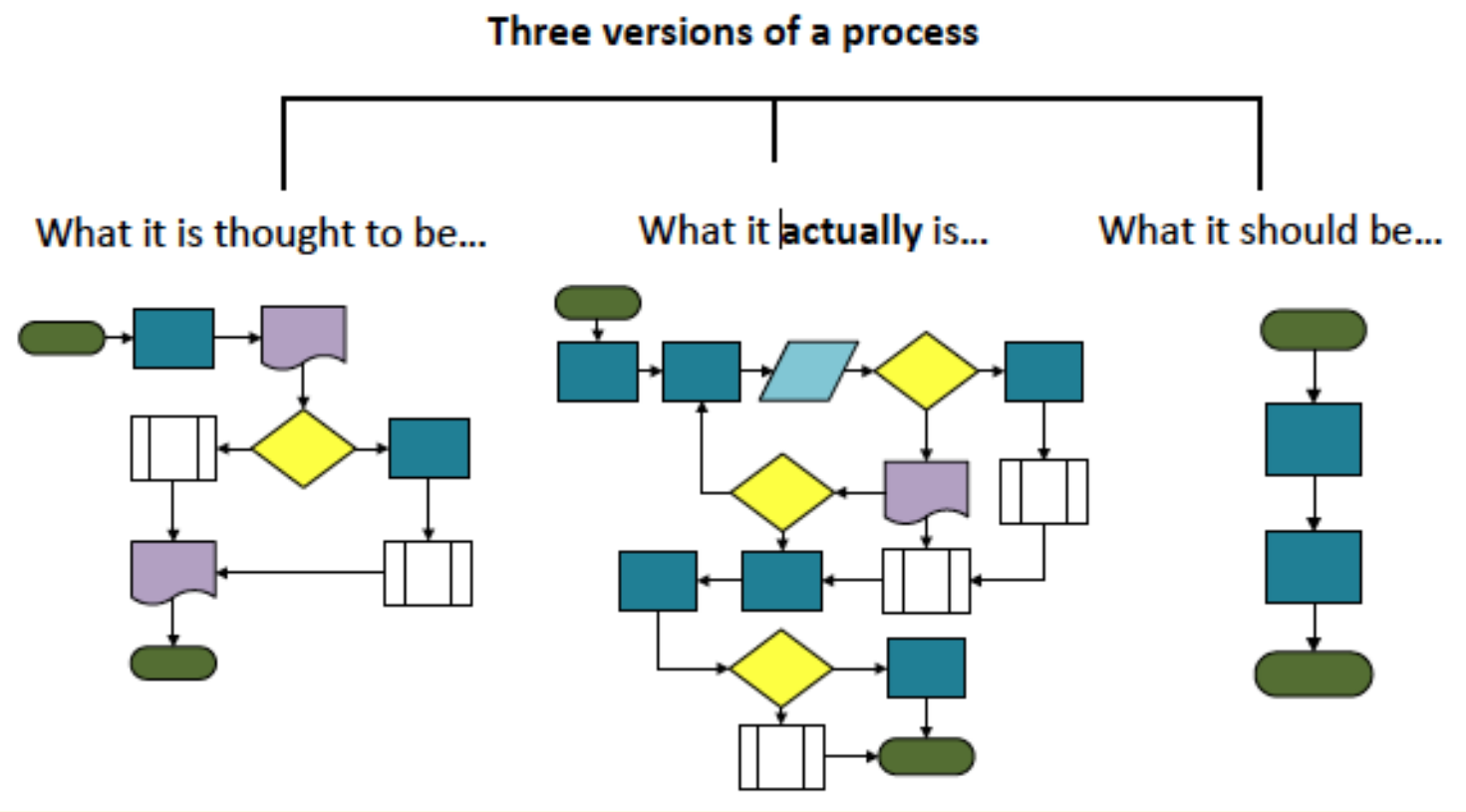
- Removed?
- Combined?
- Done in a different order?
- Done by someone else or more effectively and efficiently?
- Done in parallel instead of sequentially?

Shows opportunities for changes (PDSAs)

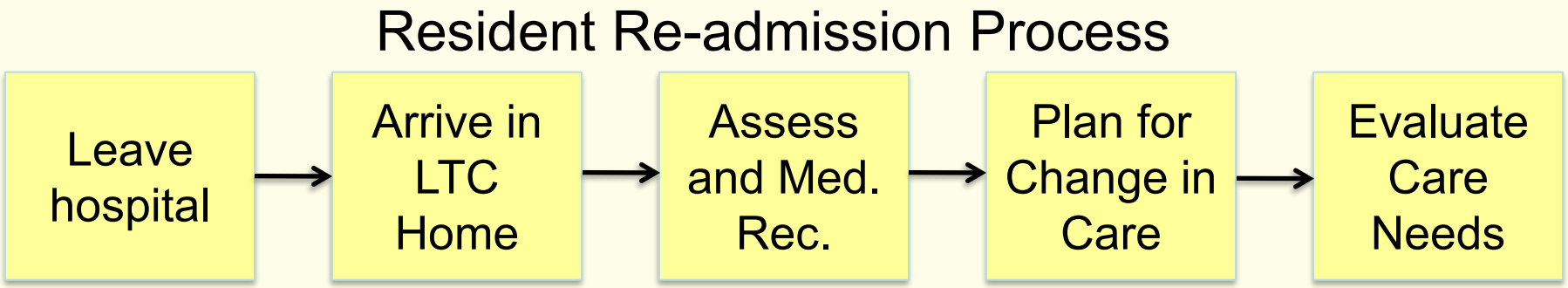
Example of process map



Clarify Current Practices

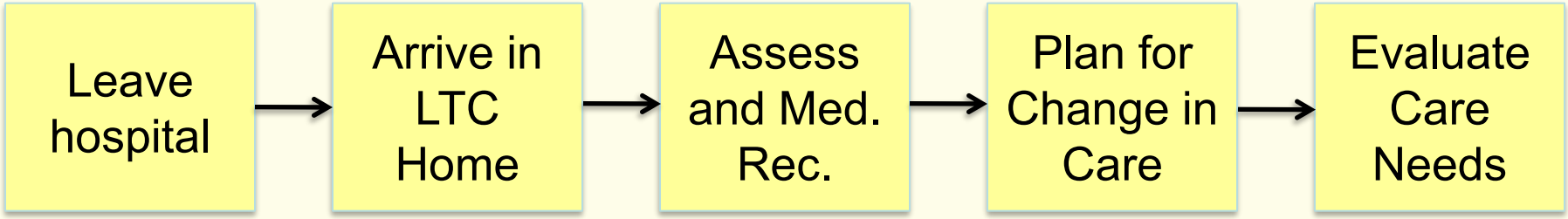


High-Level Process Map



High-Low Process Map

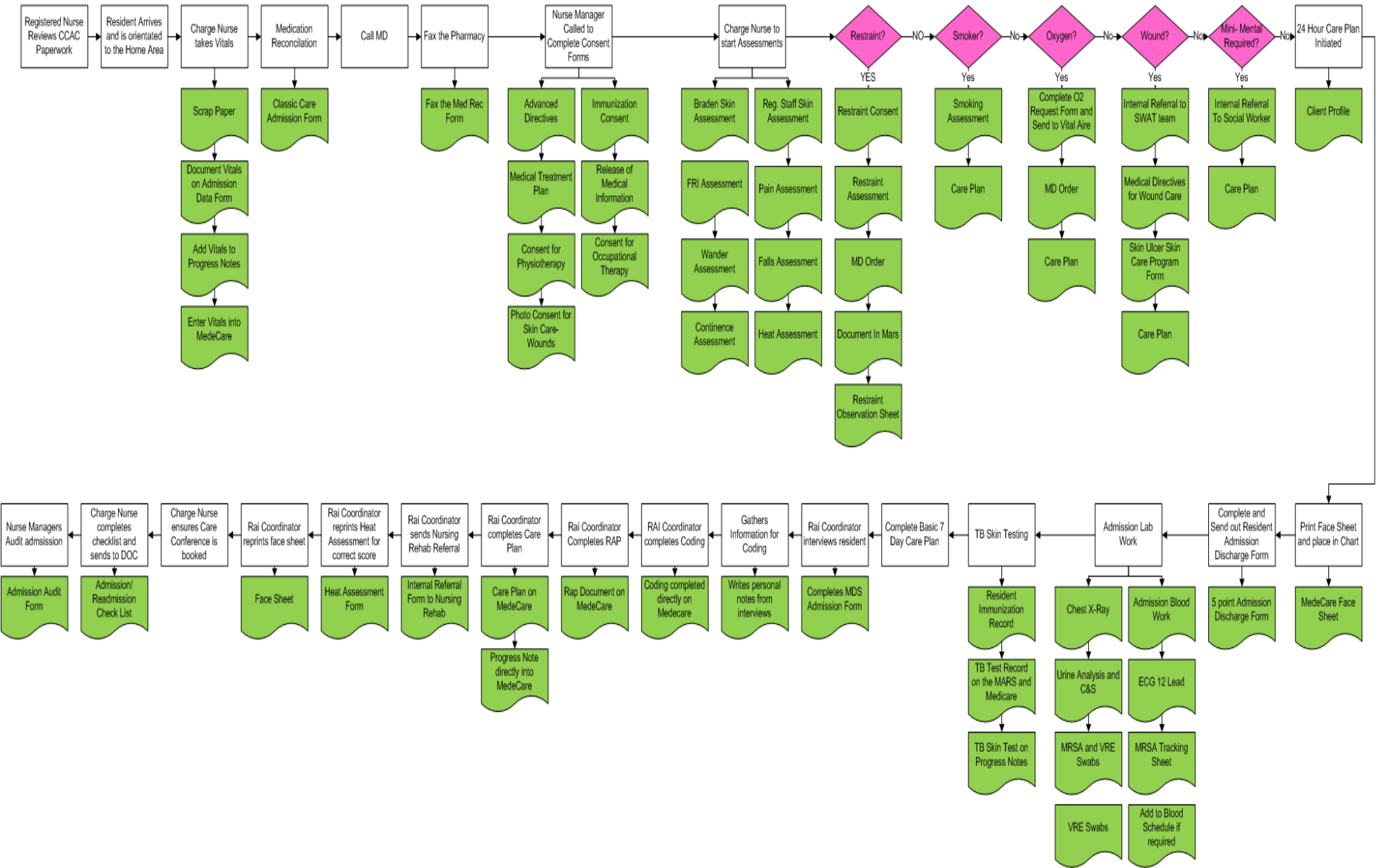
Resident Re-admission Process



•Physician gives discharge order •Collect personal belongings •Transport back to LTCH	•Greet resident •Bring to room •Review discharge summary •Re-orient back to room •Advise team of return •Call family	•Complete readmission assessments •Review changes in meds •Consult physician re changes in meds •Forward info to pharmacist •Document in progress notes	•Referrals to allied health team •Educate PSWs on changes and inform of care needs	•RN, RPN discusses changes to care with family and resident •Arrange case conference to discuss as inter-disciplinary team

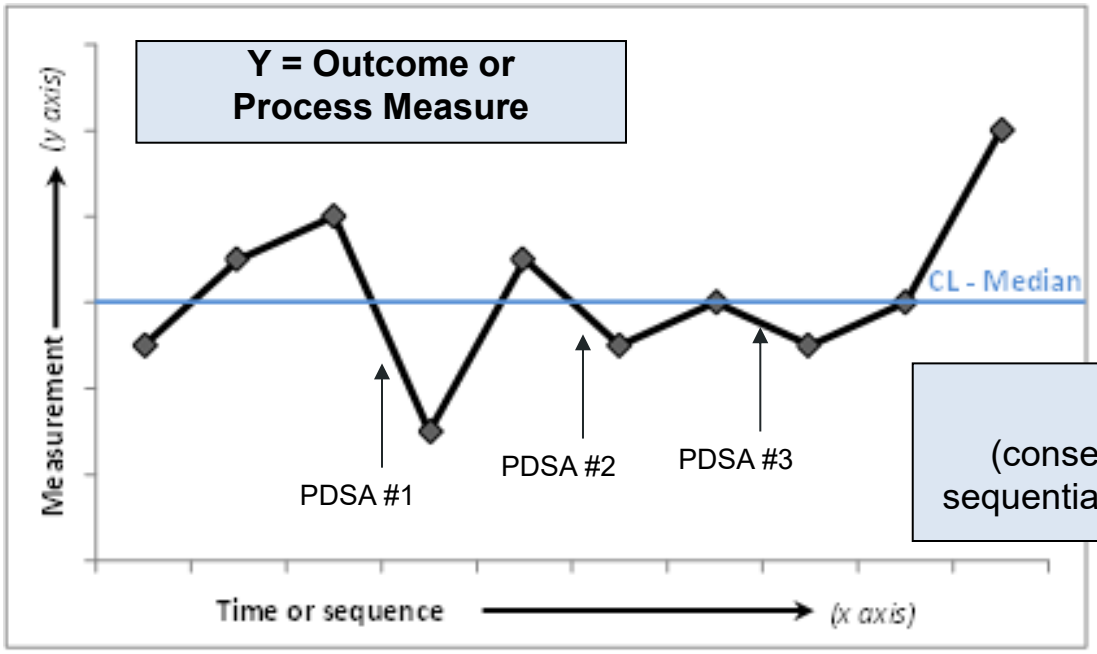
Detailed Process Map

Resident Admission Process to a Care Home



Anatomy of a Run Chart

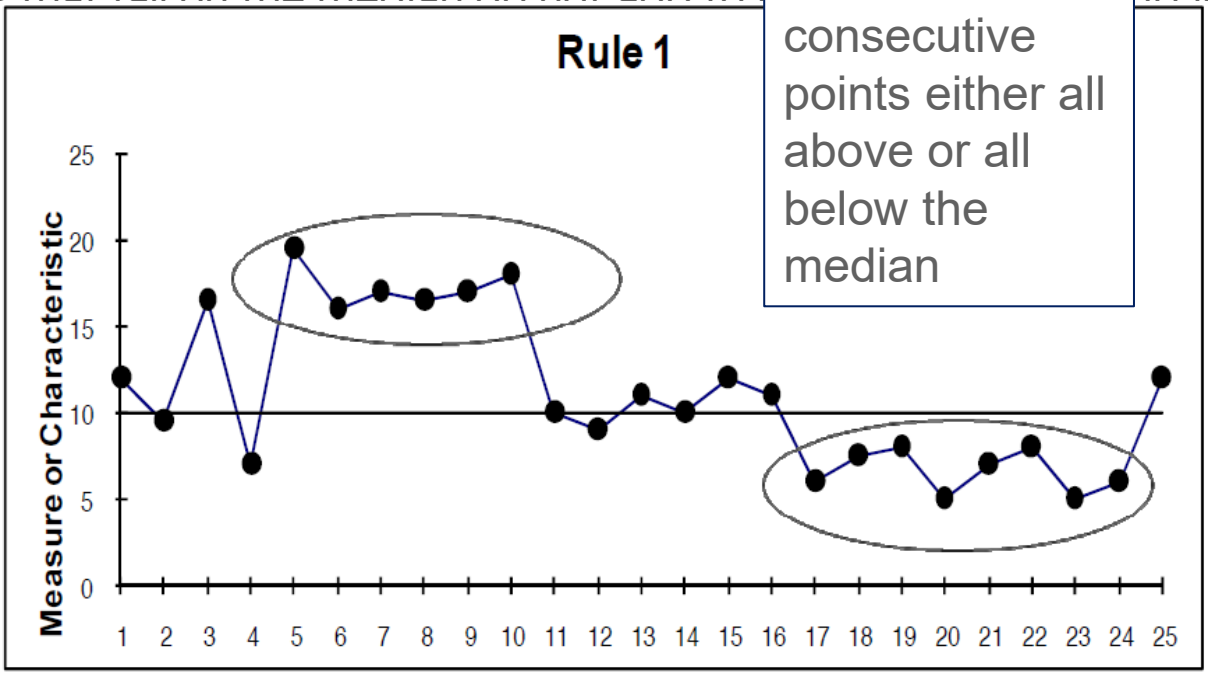
- Data plotted in time order
- Once data collected, the *median* is calculated and marked on the chart as a centre line (CL)
- Can add annotations of change interventions with PDSA cycles



X = Time scale
(consecutive days, weeks, months, sequential patients, visits, or procedures)

Rule 1 – A Shift

Note: Values that fall on the median do not add to [illegible] values that fall on the medi

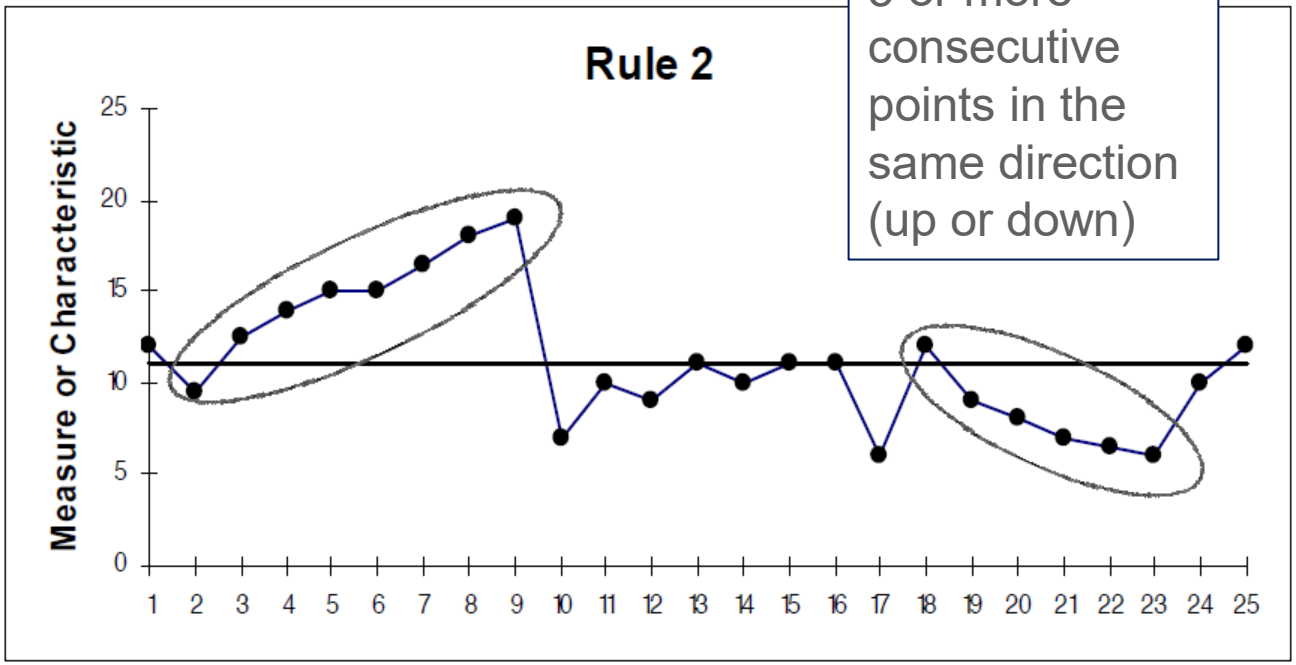


6 or more consecutive points either all above or all below the median

Lloyd & Provost (2011): The Health Care Data Guide – Learning from Data for Improvement, Chapter 3

Rule 2 – A Trend

Note: Like values do not make or break a trend – if the valu ssive points are the same, igr



Lloyd & Provost (2011): The Health Care Data Guide – Learning from Data for Improvement, Chapter 3

Identify the Root Causes

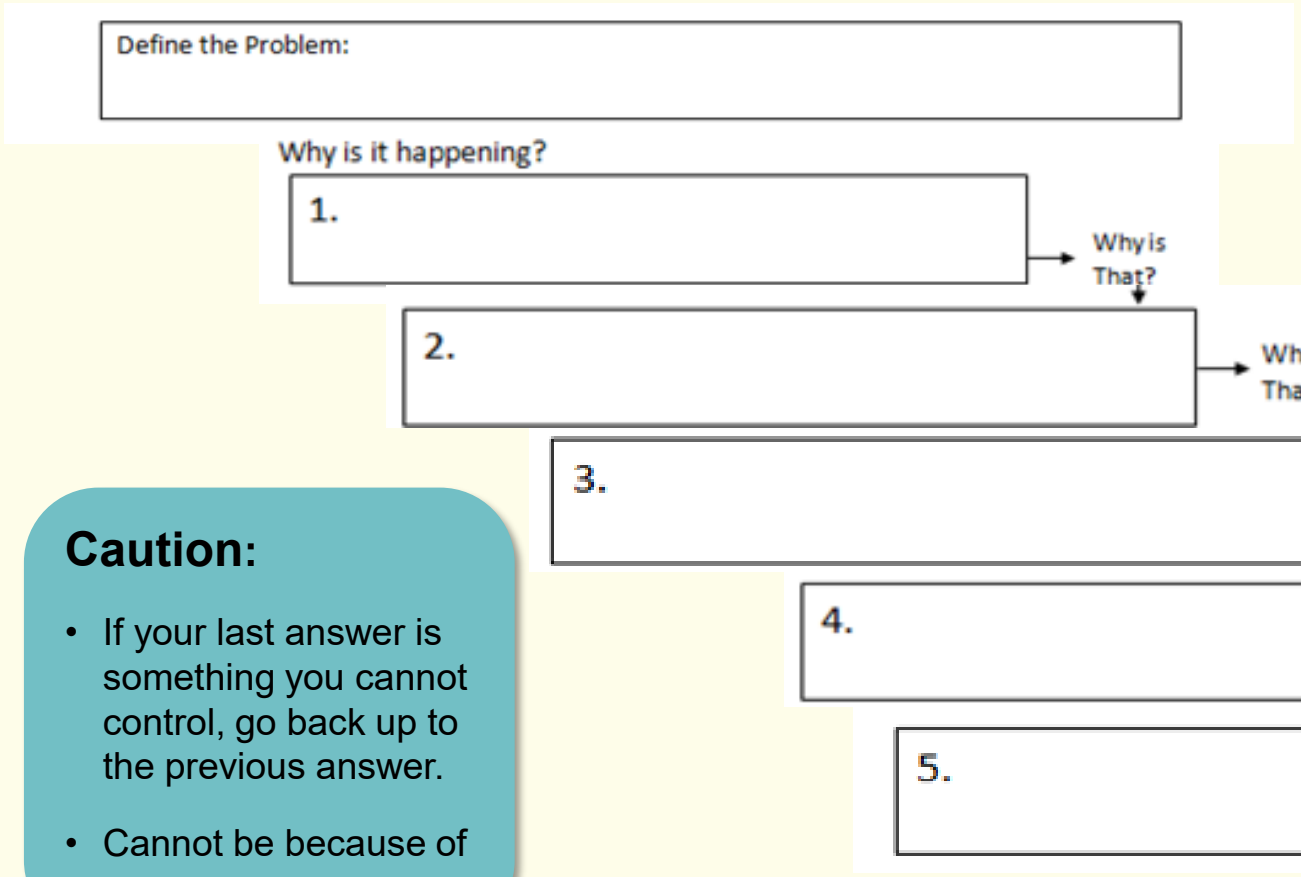
What is the real problem we need to improve

Tools for Quality Improvement

THE 5 WHYS

Asking Powerful Questions

5 Whys Worksheet



Tip

You don't want to list 5 different reasons, you want to go deep on **1** reason.

Caution:

- If your last answer is something you cannot control, go back up to the previous answer.
- Cannot be because of a person.

Action: _____

5Whys

Why is the monument crumbling?

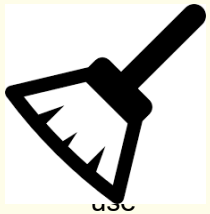
Because of the harsh cleaning chemicals

Why didn't changing the chemicals work?

Because of all the bird droppings

Why didn't the nets work?

Because the birds stayed to eat the spider



Why didn't the sweeping work?

use the spiders re-spin webs to catch

Why didn't the insecticide work?

are so many insects when the monument is lit at dusk

Use a consistent framework for approaching improvement work

FOCUS-PDSA QI approach

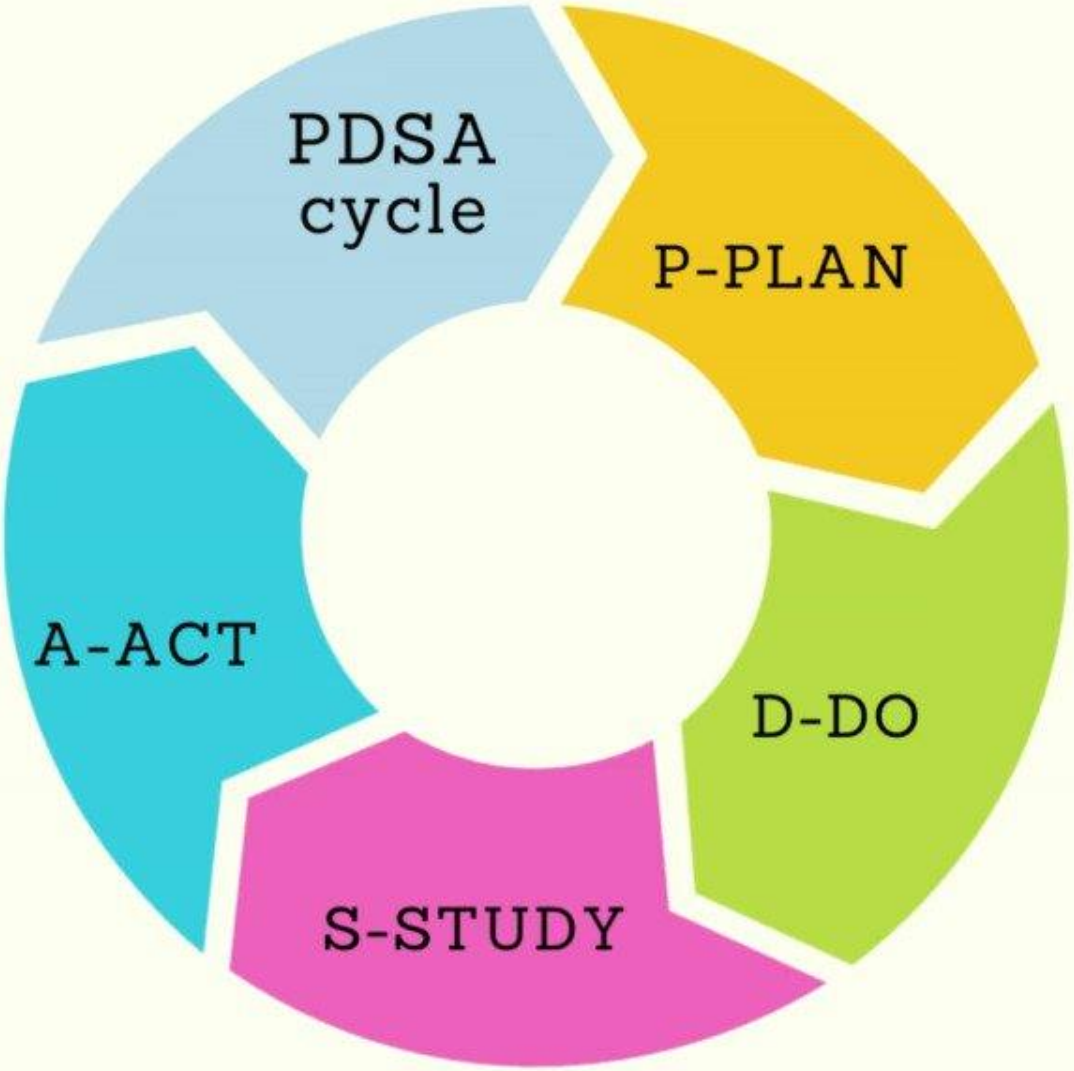
F- FIND A PROBLEM

O-ORGANIZE TEAM

C-CLARIFY THE PROBLEM

U-UNDERSTAND THE PROBLEM

S-SELECT AN INTERVENTION



FOCUS for Quality Improvement

1

Find

- Find a process to improve

2

Organize

- Organize a team that understands the process

3

Clarify

- Clarify current knowledge of the process

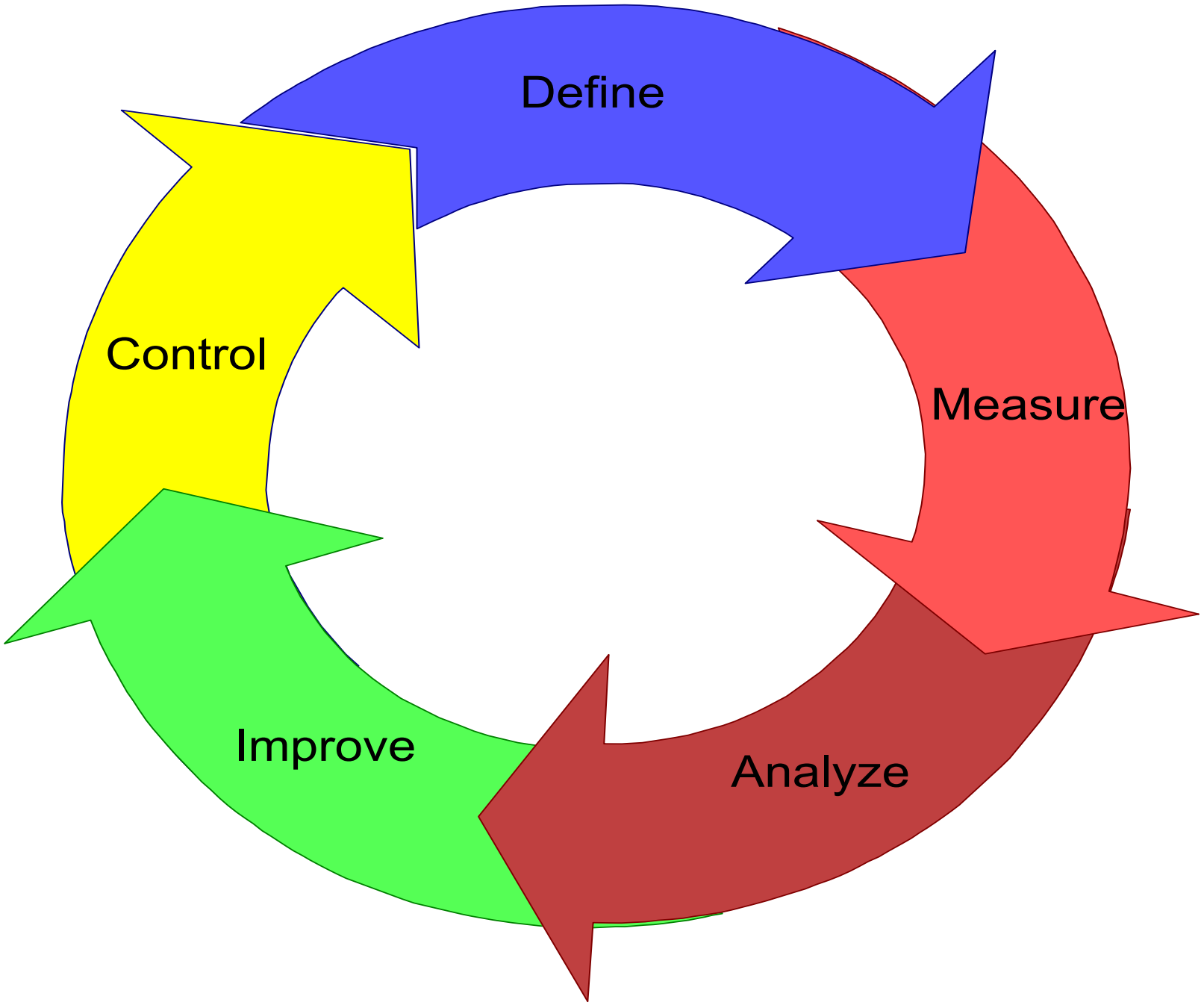
Uncover

- Uncover root causes of variation or poor quality

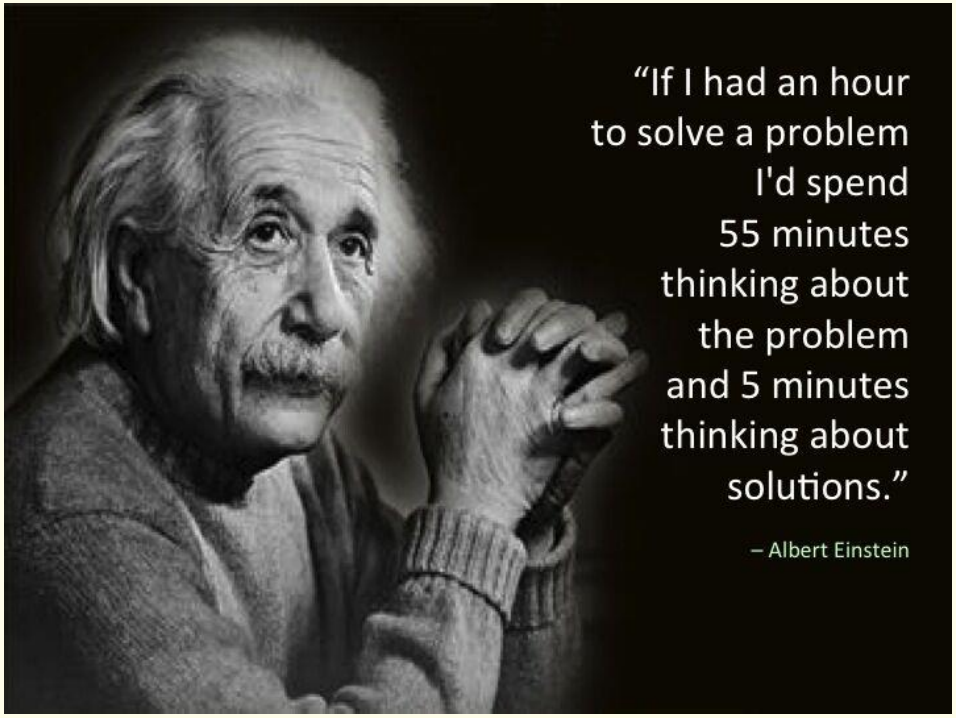
5

Select

- Select a part of the process to improve


Define
Measure
Analyze
Improve
Control

Define the problem



DEFINE THE PROBLEM

- What exactly is the problem
- Who are the partners in resolving it - your team
- Have we identified the right problem
- Can we break it down into smaller, more manageable pieces
- If there are multiple problems is there one that is
  - More important
  - More urgent
  - Easier to start with

Measure your system and your current performance

MEASURING CURRENT PERFORMANCE

- Consumer and family experience
- Focus groups
- Survey
- Mapping our processes
- Review of existing data / data sets

Tools for Quality Improvement

SUPPLY AND DEMAND ANALYSIS

Supply and Demand: The Capacity Equation

Demand

Demand:

New referrals + caseload - discharges

x

visits/ patient/year

Supply:

Provider scheduled visits per day

x

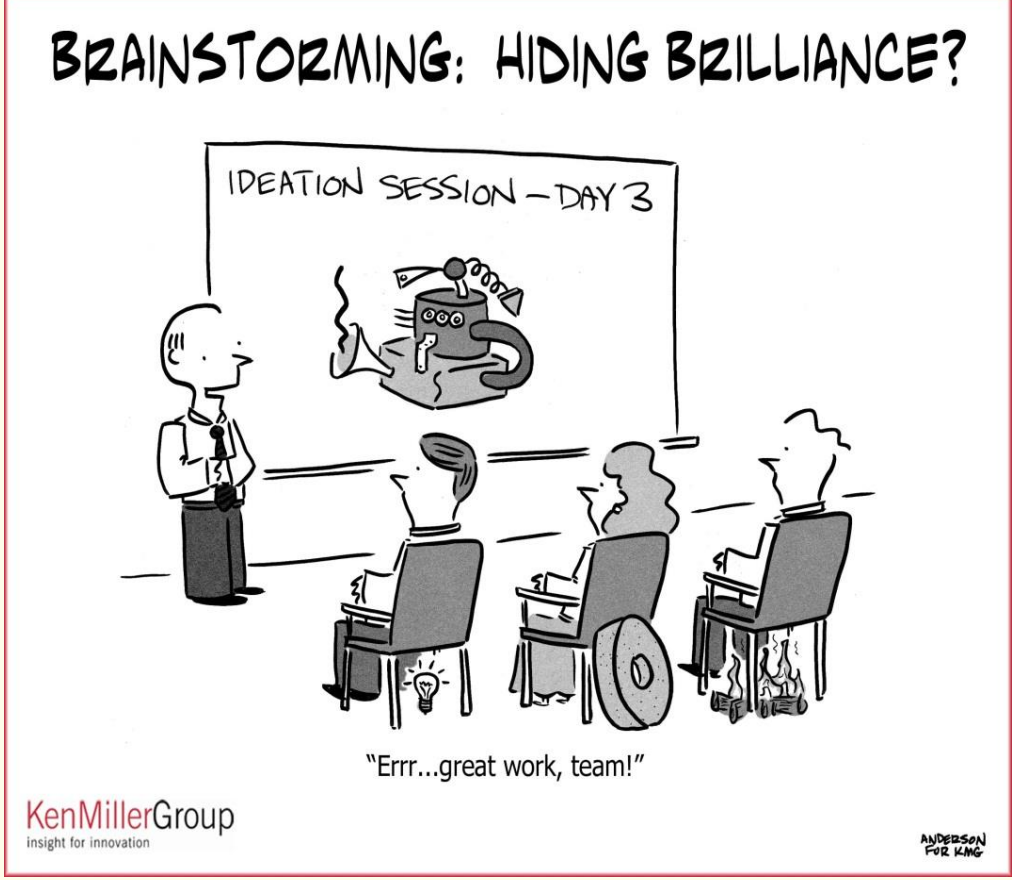
Provider days per year

Balancing Supply and Demand

- Calculate likely demand
- Measure supply
- Look at how they balance
- Increase Supply
  - New models of care
  - Efficiencies
- Change Demand
  - Self-Management support
  - Telephone consultation
  - Post – discharge follow up
- Work down the backlog

Analyse data and Identify Potential Improvements

YOU ARE LOOKING FOR



- Root causes
- Opportunities for improvement
- Common cause or special cause (80 / 15 / 5) of variation

Tools for Quality Improvement

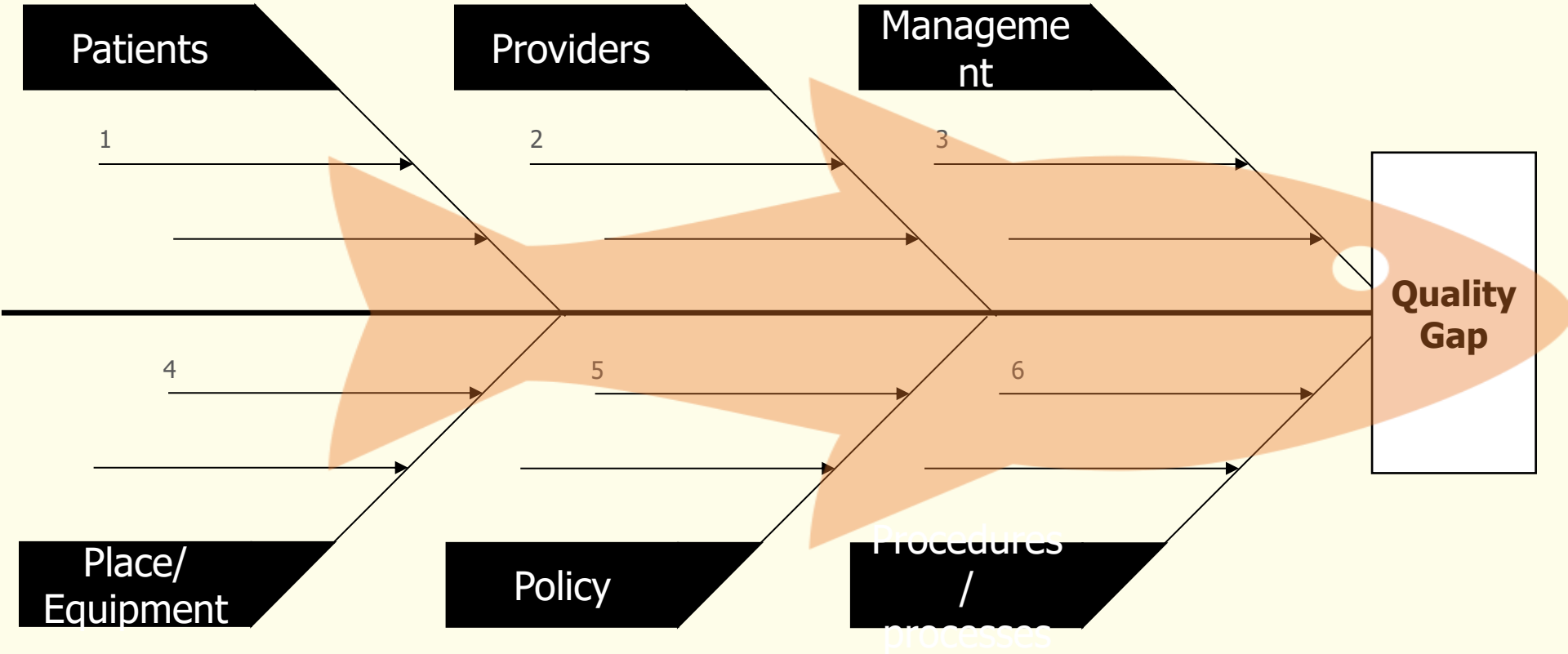
BRAINSTORMING

Tools for Quality Improvement

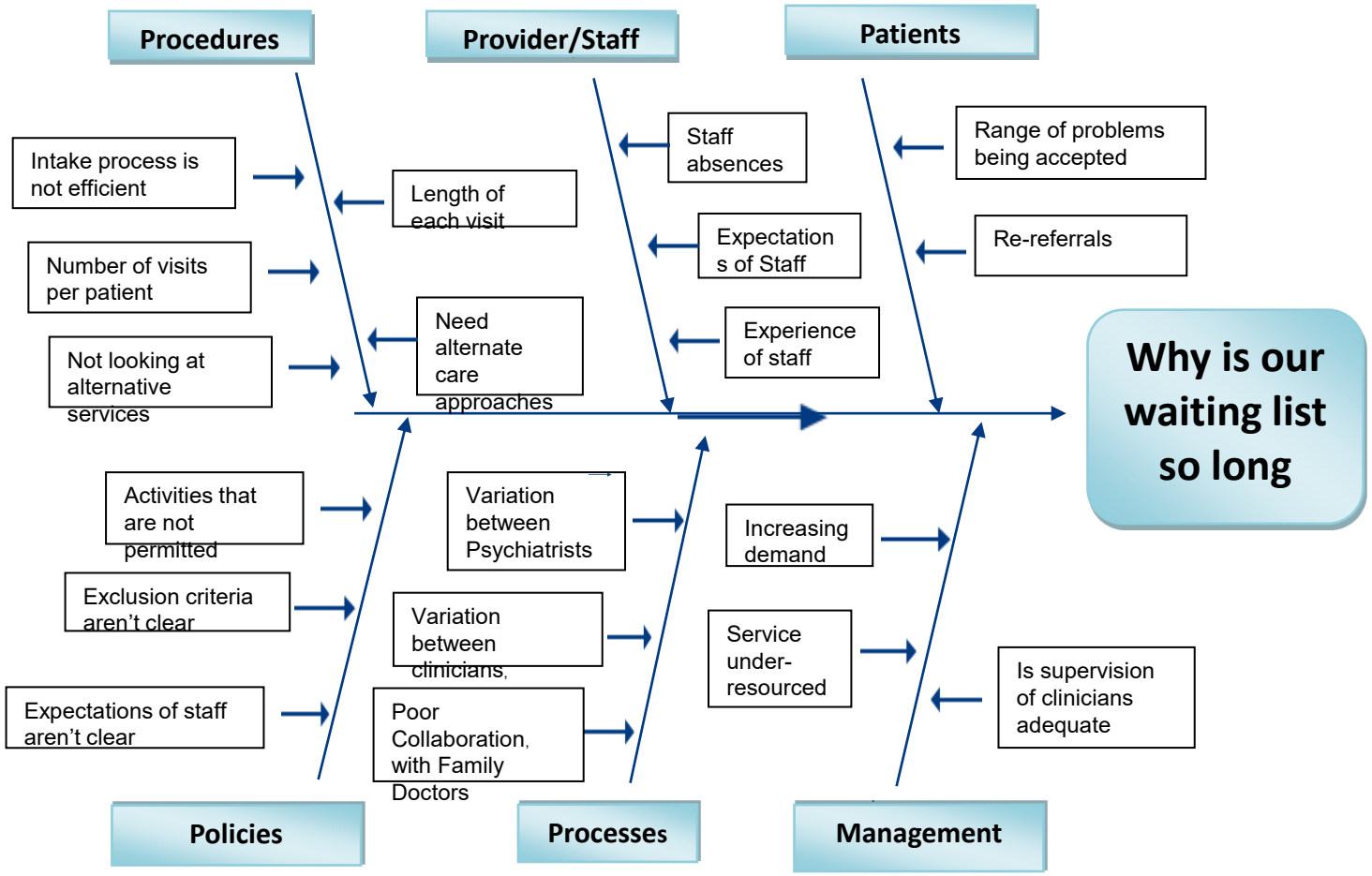
FISHBONE (ISHIKAWA) CHART

Identifying Root Causes:

Fishbone Diagram

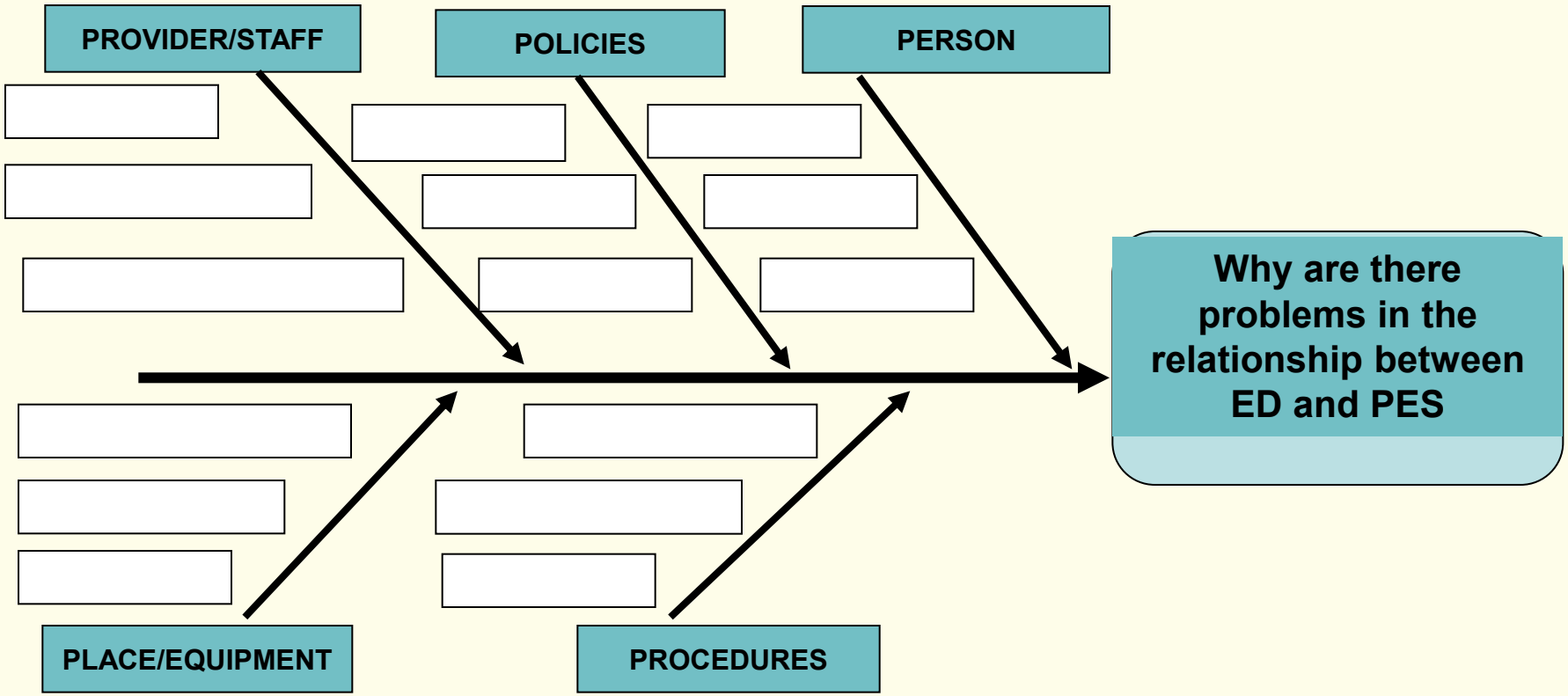


Waiting times Fishbone



How to Build a Fishbone

Brainstorms causes and add to ribs



Introduce changes using proven improvement approaches

SOURCE OF CHANGE IDEAS

- Best practices literature
- Other QI initiatives
- Ideas from your peers
- Your own system analysis
  - Think of processes that could be improved from process map
- Your own brainstorming
    - Beginning to identify root causes
- Thinking differently
- Ideas from other systems / organisations

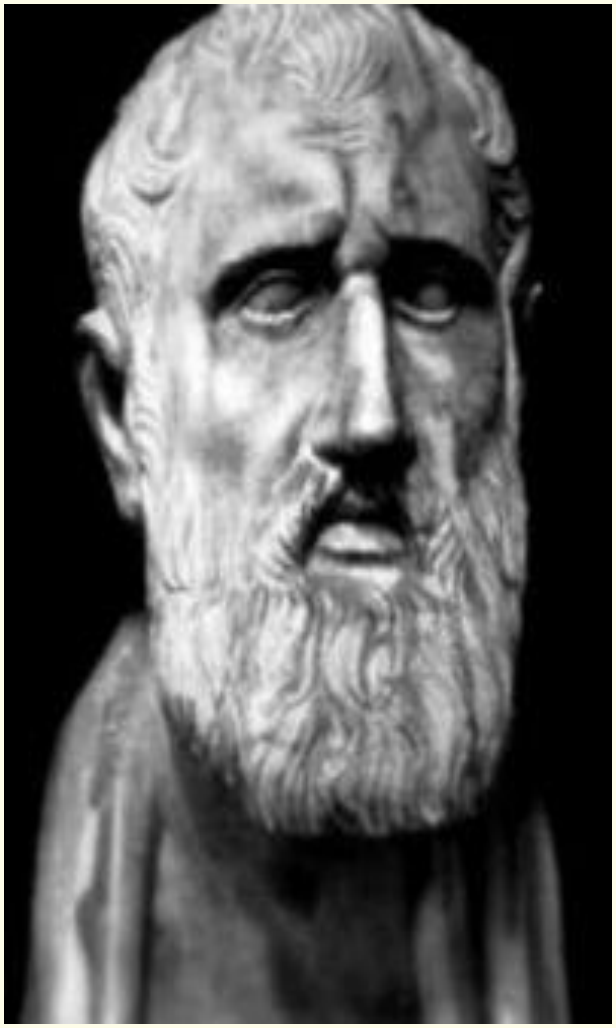
Control and standardise the changes

Is an innovation always an improve-ment?

"The defibrillator's not for pressing panini."

It is not that things are difficult so we do not dare – We do not dare and therefore things are difficult

Seneca



Further your own QI knowledge

- Royal College CPD
- Distinguishing Between Quality Assurance/Improvement, Program Evaluation & Research (example from UWO)
- Consider taking a course from a local university with an academic focus on QI (e.g. Calgary, Toronto, Western, University of Ottawa, Queen's University, UBC, University of Alberta)
- Complete a Royal College Section III Credit project

Share your QI practices

- CPA Conference
- Join the new CPA Section on QI (email *tara.burra@camh.ca*)
- Journals
  - *BMJ Quality and Safety* (http://quality.bmj.com)
  - *The American Journal of Medical Quality*
  - *The International Journal for Quality in Health Care*
  - *The Joint Commission Journal on Quality and Patient Safety*
  - *Health Care: The Journal of Delivery Science and Innovation*
  - *Journal for Healthcare Quality*
  - *The Journal of Clinical Outcomes Management*

Thank You

PLEASE FILL OUT YOUR SESSION EVALUATION

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