#### Global Healthcare Leadership Academy Quality Satellite Meeting Agenda

0800-0805	Welcome - SID – Patrick Gausi & Alexis LLaguno et al
0805-0815	Worship
0815-1015	Quality and Patient Safety (Q/PS) Why? How?
1015-1025	Break
1025-1100	How to start a Quality Management Program
1100-1125	Clinical Indicators / Balanced Score Cards
1125 -12:00	SafeCare and COHSAS Accreditation Systems
1200-1300	Lunch
1300-1330	"A3" Project Management System
1330-1515	Hospital-based Team experience -creating an A3 for your hospital/clinic
1515-1530	Science of Improvement Review
1530-1600	Feedback and next steps



#### QI Fundamentals

"Tell me, I'll Forget; Show me I'll remember; Walk with me And I will understand"

#### Objectives

- To understand why Patient Safety and Quality Improvement is foundational to optimal healthcare delivery
- To know the meaning of basic vocabulary of patient safety/quality improvement
- To understand basic Patient Safety/Quality Improvement methods

## "Science of Improvement's" Mission:

- To relieve suffering due to:
  - Poor health and Poorly <u>Designed</u> and <u>Delivered</u> healthcare
- To continually improve the delivery of Healthcare to the population you care for, helping them achieve the fullest potential health and wellbeing in a sustainable fashion
  - = Evidence-Based HC Management

#### Consider "Marie"

- Marie works at a food stall
- Marie presented with burning pain in her chest and headaches
- Dx: GERD, HTN and Diabetes Mellitus Type 2
- Root problem: BMI of 36
- Diet: unhealthy
- Environment: surrounded by temptations for fatty foods ("Junk Food")
- Key: Where does "Marie" live?
  - Gabon (West-Central Africa)

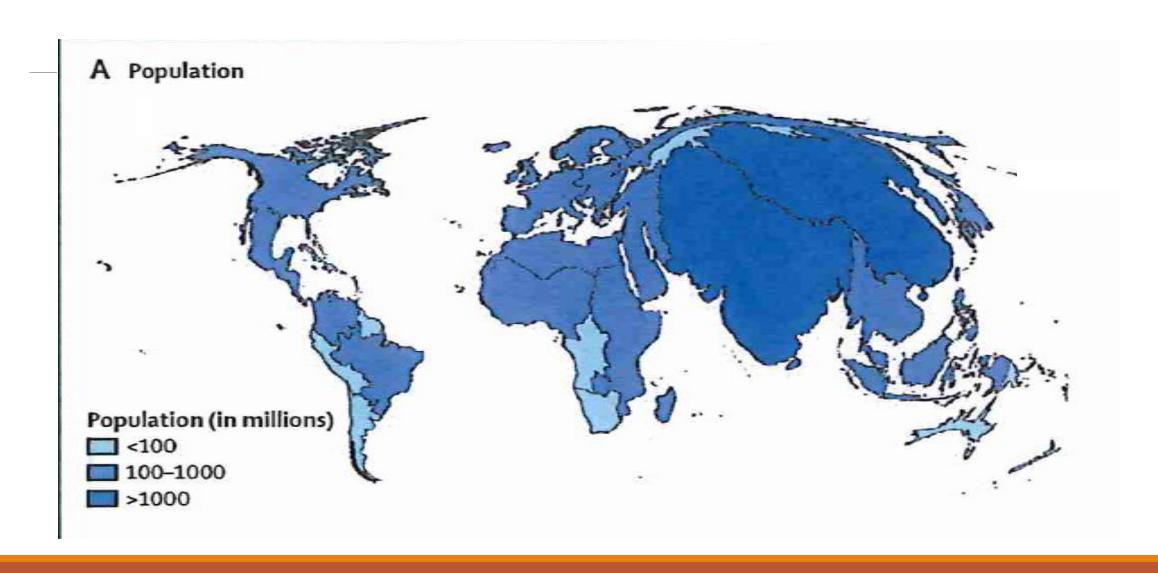
## Today's Healthcare Challenge

## Approximately 8.6 million people die from "avertable" deaths every year in LMIC countries

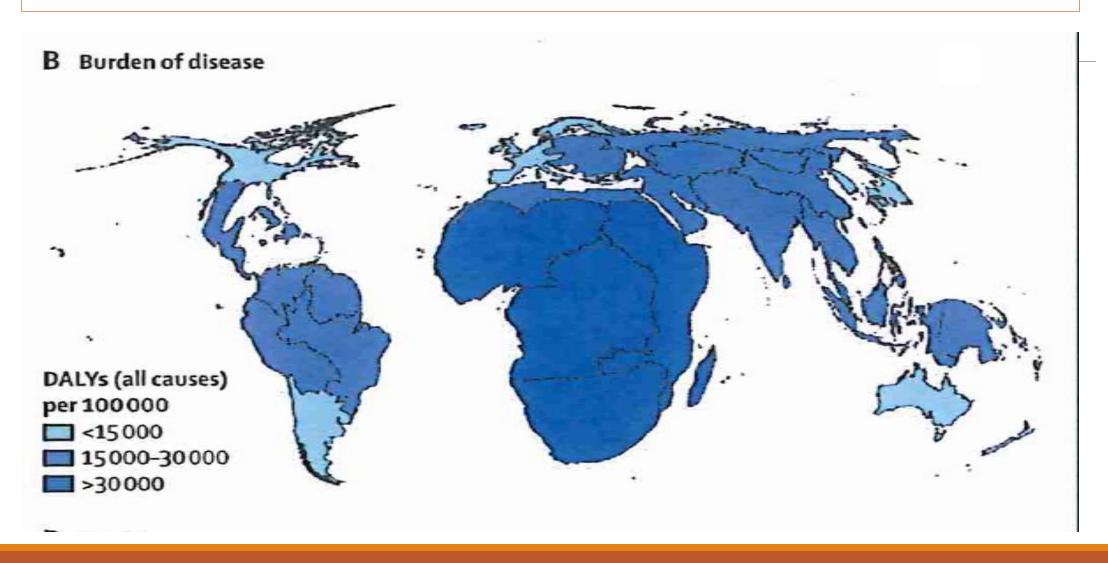
- 5 million from Poor Quality of "Care" delivered ["Amenable"]
- 3.6 million from "lack of Access" to care
- ~ 2.6% of GDP in LMIC lost per year from Amenable mortality "Crossing the Global Quality Chasm-Improving Health Care Worldwide"
- ° ~10-15% of all deaths are due to quality defects
- Cost: ~ \$ 5-6 Trillion in lost economic welfare each year

Kruk et al. "Mortality due to low-quality health systems in the universal health coverage era: a systematic analysis of amenable deaths in 137 countries" Lancet, published on-line 5 Sept. 2018. Crossing the Global Quality Chasm: Improving Health Care, Institute of Medicine Worldwide. Sept. 2018 http://nap.edu/25152

## Global Population (in millions)



# Global Burden of Disease – DALYs "Disability-Adjusted Life Years" Lost



#### Today's Healthcare Challenge

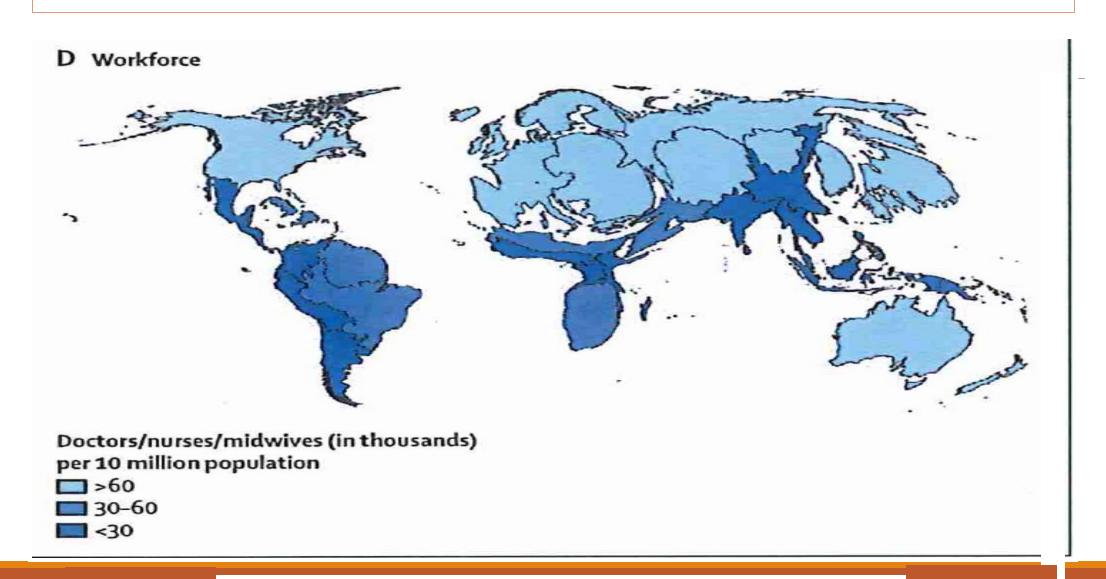
Every year in Sub Saharan Africa (SSA) there are ~ 200,000 maternal deaths 1 million newborn deaths, I million still births

The lifetime risk of a 15-year-old girl of dying a maternal death in SSA is about 100 times the risk in High-income countries

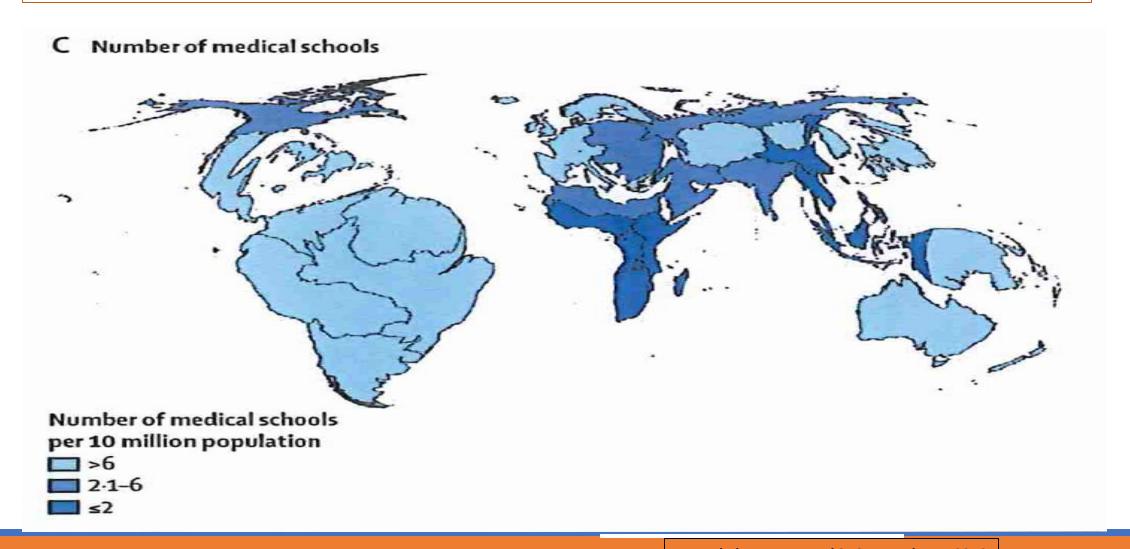
•~67% of the 23 million DALY lost are due to in-hospital adverse events.

Access to care has improved considerable over the past 20 years, but poor-quality care had not improved

## Healthcare Workers/10<sup>7</sup> Population



## Number of Medical Schools/10<sup>6</sup> Population



#### Proportion of Pop. Without Access to Surgery by Country

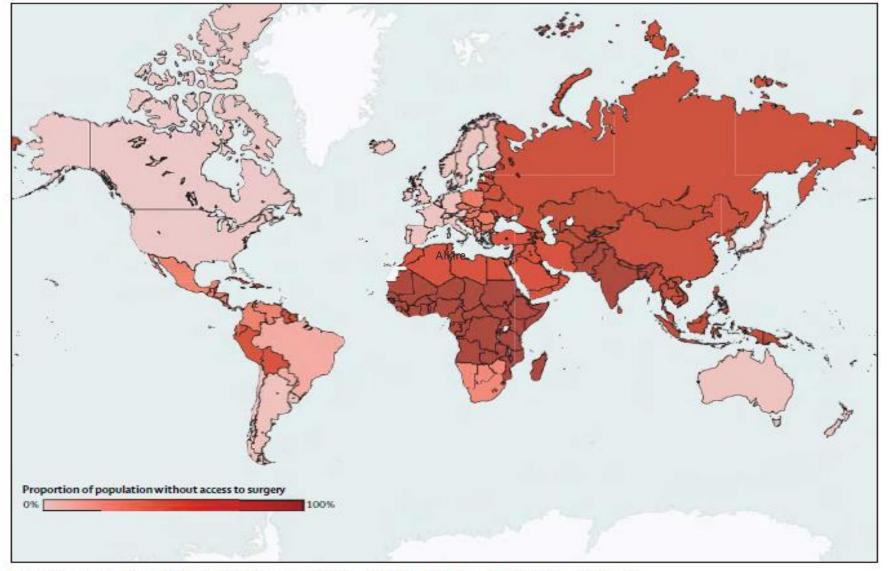


Figure 4: Proportion of population without access to surgery by country (selective tree with baseline assumptions)

#### ~ Two -Thirds of Africa has No Access to Safe Surgery

About 20% of all surgical operations occur in low-income countries (with >60% of the world's population)

- 1/3 of world has only 5% of all surgical procedures
- High Burden of Disease consistent across all countries
- Result: In the absence of surgical care, easily treatable diseases become fatal
- Of those who do have access to Surgery, ~ 25% will incur financial catastrophe – driving them into poverty

Long-Term Action: Better access to surgical/anesthesia care wherever needed

## Patient Safety

•HC has two implicit moral/ethical promises to patients that entrust their care to us, we promise to:

- Do everything possible to help them
  - Meeting external minimum standards
- Not hurt them

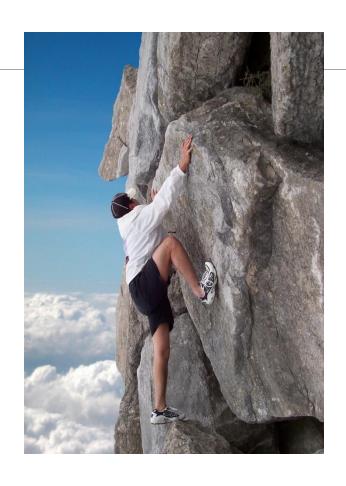
## Questions to ask in Evaluating Healthcare Outcomes – Evidence Based Medicine

•What portion of your patients are receiving care in line with current best practice (evidence-based medicine)?

•How does the healthcare you provide need to change to reflect best practice (evidence-based medicine)?

•Do your healthcare professionals / managers have the skills and support to make these necessary changes?

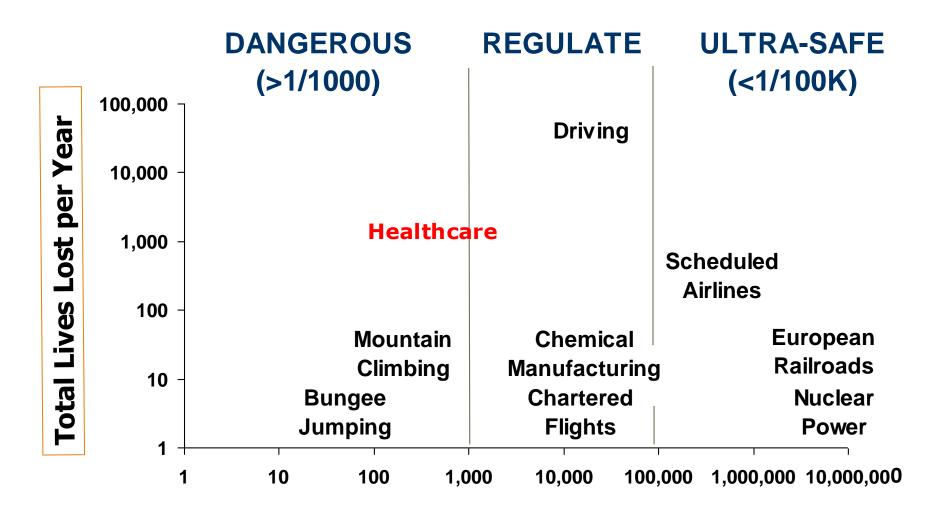
## Which is the Most Dangerous?







#### How Hazardous is Health Care?



Number of encounters for each fatality

#### Why Bother with Pt Safety/Quality?

•Do You Have an Ethical Responsibility to Consistently Provide Good Patient Care?

•Is your community better off because your healthcare facility is present in it?

## Patient Safety - Reliability

- •What if your hospital has an 80-90% institutional success rate?
  - "great"?
  - But from an individual patients' standpoint, it is unacceptable

- •For the individual patient, reliability is an "all-or-none" matter
- Optimal Patient Safety requires a framework for improving reliability
  - Standardized protocols for care that are evidence-based and widely agreed upon is essential

## "Systems" Thinking

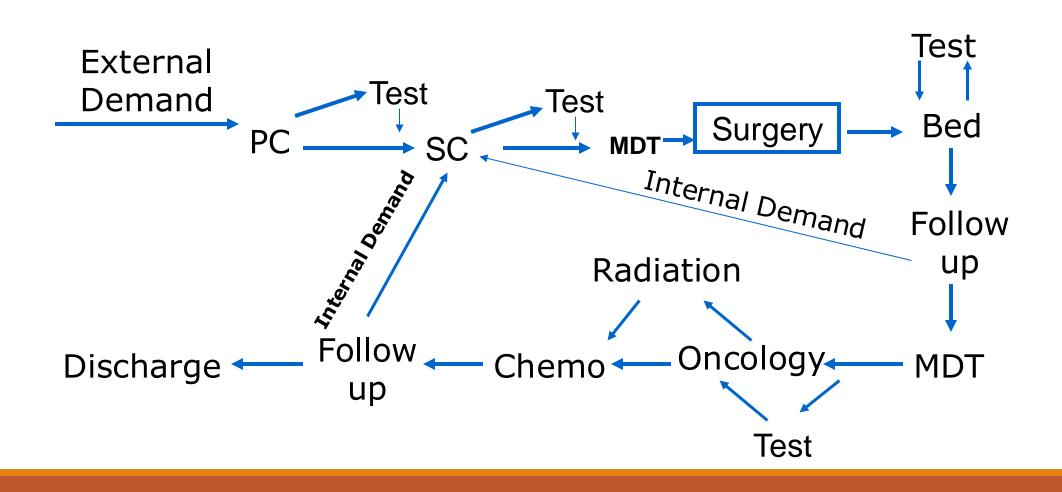
- A system is a network of interdependent components that work together to try to accomplish a specific aim (Deming)
- A system has flow, constraints, sequence and context
- A system has an aim; in HC systems our aim is to meet the needs of patients, families and communities
- •A system takes inputs and transforms them into outputs through a process or series of processes. For us in Healthcare, our inputs are patients, staff, resources and our outputs are better clinical outcomes (higher quality, great patient safety, patient satisfaction, etc.)

## Healthcare (HC) "Systems"

Using a "Systems Thinking" approach:

A hospital is a system; and that system can and must be designed to compensate for the errors that are likely to be made by any of its components

## "System" Flow for Just One Patient



### Systems Thinking:

- Systems thinking is not easy
- •Not a natural act: we see the parts not the whole
- But to master the art of Patient Safety /Quality Improvement we must have a deep and fundamental understanding of how the parts are connected in our entire complex Healthcare system
- •" We must accept human error is inevitable and design around that fact." Don Berwick, M.D.
- •"The Search for zero error rates is doomed from the start"

## Systems Thinking

"Healthcare Organizations are the most complex organizations to manage"

Peter Drucker

#### System "Transformation" Definition

System Transformation is a profound change in form, structure, and/or character of that system

It is the emergence from what you were to something radically different

## "Systems" Principles

"A bad system will DEFEAT a good person every time."

W. Edwards Deming

"Every system is perfectly designed to get the results it gets."

Dr. Paul Batalden

## Complexity vs. Safety

"When an accident is waiting to happen,

it eventually does"

Reinhart and Rogoff

#### Medical Errors

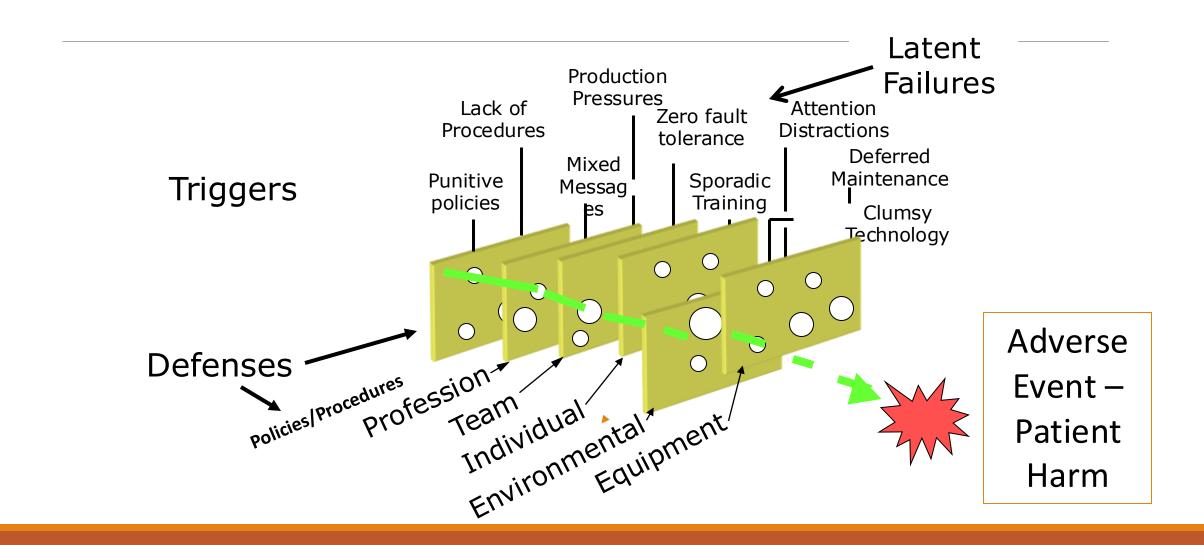
#### •IOM Definition:

"The failure of a planned action to be completed as intended or the use of a wrong plan to achieve an aim (including problems in practice, products, procedures or system)"

- "A Process that does not proceed the way it was intended by its designers/managers"
- A more practical definition:

"Freedom from (accidental) injury due to medical care"

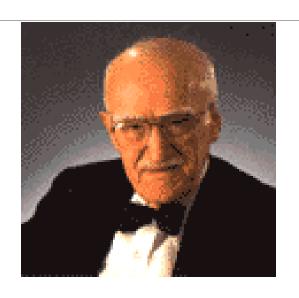
## The Swiss Cheese Model (Reason, 1991)



#### Normal Response to a Medical Error

- •Go directly to the staff members involved (the sharp end of the chisel)
  - The Physician/medical residents
  - The Nurse
- •However, this is counter to a Safety Culture ("Just Culture") concept:
  - Do not automatically blame the caregiver
  - Instead, thoroughly investigate the incident
  - •Root Cause Analysis:
    - RCA is the process that seeks to explore all of the possible factors associated with the incident by asking what happened, why it happened and what can be done to prevent it from happening again

#### Systems Behavior



80+%

Joseph Juran

Poor
Performance
Due to the
Design of the
System

<20%

Poor Performance due to the efforts of the **People** in the **System** 

#### The Balance Between Punitive and Blame-free Cultures

The single greatest impediment to error prevention in the medical industry is "that we punish people for making mistakes"

Dr. Lucian Leape
Professor, Harvard School of Public Health

### Patient Safety is a "Systems" Issue

- In successful organizations, the focus is on the performance as a "system" not on their individual results
  - •Leaders are responsible for *hospital-wide patterns of poor performance*
- •A significant portion of errors are caused by poor communication, inadequate training, and lack of procedural compliance—these are all "failure of leadership" to institute systemic solutions to ensure safety"

#### "Near Misses"

- "Near misses are the huge iceberg below the surface where all the future errors are occurring"
- Close calls should be given the same level of scrutiny as adverse events that result in actual harm:
  - •They are 3 to 300 times more common than actual adverse events
- As important, if not more important to evaluate a near miss than evaluating an actual misadventure that resulted in patient harm
- •A willingness and a way (means) to report problems is essential to safe care because you can't fix what you don't know about

#### Sentinel Event

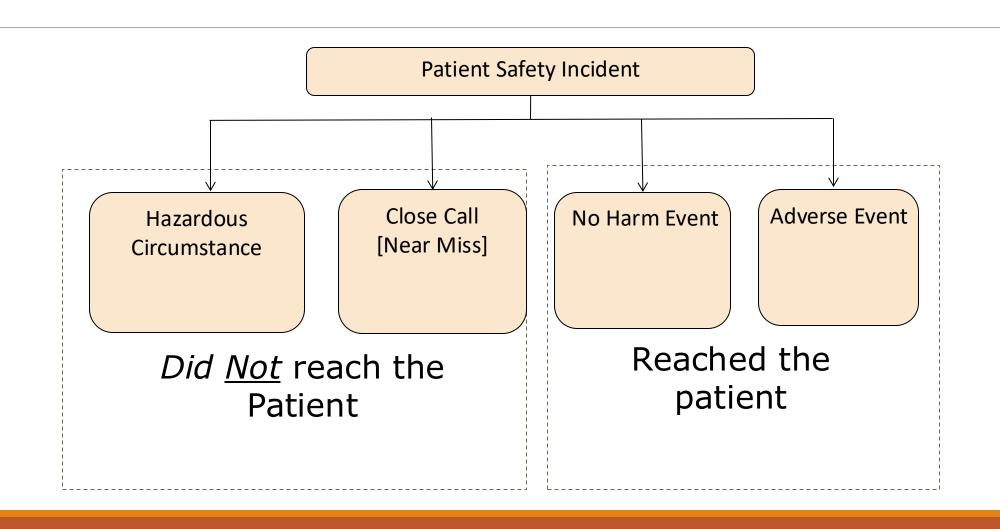
An unexpected occurrence involving death or serious physical or psychological injury, or the risk thereof

Serious injury includes loss of limb or function ("or the risk thereof") includes any process variation for which a recurrence would carry a significant chance of a serious adverse outcome

#### HC Leadership – Culture of Safety

- Be transparent: policy whereby all adverse events and patient safety issues are reviewed
- •Do "Root Cause Analysis" on all adverse events (as well as close calls) to search for patterns- make recommendations
- •Add a human element and a sense of urgency: have patients communicate their experiences and perceptions to the Board, senior management and medical staff leaders

## Defining a Patient Safety Incident



## Root Cause Analysis (RCA):

Start: "Incident" Reported, then Initiate a Prompt Investigation

- Extensive Discussion by multi-disciplinary RCA team:
  - Establish a timeline what happened? Who was involved?
  - Review the Medical Record; Interview those involved
  - Do not settle for an easy answer; Ask the 5 why's find the incident's root cause
- End with a short Concise Document: [to be presented to the CEO in < 45 days, for concurrence or not]</li>
  - Clear description of the Issue(s)
  - •Actions to be taken to ensure it doesn't happen again:
    - Who will do the action
    - Date change in system (P&P) to be completed

## Root Cause Analysis (RCA) Report

"X" Adventist Hospital"						
ROOT CAUSE ANALYSIS REPORT						
Date RCA Team Started:		Date RCA Team reported to CEO (Goal < 45 days):				
Description of Process to Change s u e	Suggested Changes	Time Fame to accomplish change	Res ponsible Person	CEO Response/Rationale	Follow up (document when completed)	
1						
3						
4						
5						
6 7						

#### Patient Safety Depends on Culture Change

Culture: "The set of values, norms, mores and behaviors which create formal and informal networks within an organization"

Culture is the beliefs, attitudes and priorities of the staff

Practical Definition: The "way we do things" around here

Diverse cultures may exist in even in a small hospital

If a culture of safety and quality pervades an organization, they will be successful

Remember, "Culture eats (QI) Change every day"

A Health Care **System** Includes your visible Policies, **Procedures and** Strategies; however, your organization's **Culture** (the hidden part of your "System") is the major determinant of how well you deliver high quality care



Strategy/Procedures /Programs/Policies

Organizational culture

#### Culture is an Integral part of Outcomes

- Establish a Culture of Safety ... not 'fear'
- All employees should be respected
  - Facilitate employee courage in speaking up and challenging traditions medical authority

 Result: Advanced collaborative, high-quality care based on "Trust" not fear

#### Just Culture

An atmosphere of **trust** in which people are encouraged (even rewarded) for providing essential safety-related information.

Individuals <u>trust</u> that they will <u>not be held accountable for system failures</u>; but are also clear about where the line must be drawn between acceptable and unacceptable behavior

#### System Change

- The problem is not bad people, the system need to become safer
- Humans are inherently fallible = can't blame clinicians for poorly designed systems full of error traps
- System approach = a better dx/tx of the real causes of a pt safety issue
- But don't forget that <20% of errors are human in origin

# System Characteristics That Promote a Culture of Patient Safety

•Culture Change: is it <u>Safe</u> to report adverse events?

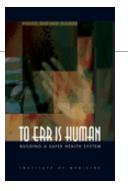
•Simple: one-page (or less) Incident report form

•Share Feedback: in an <u>Effective</u> system – adverse events are analyzed by experts and all share in feedback

#### A New Culture for Patient Safety

- •Lucian Leape, M.D. Harvard:
- "The main thrust of the safety movement is that <u>safety is a</u> systems problem...
- •We must develop better systems to prevent errors, and equally important, develop better systems to ensure that we actually provide the effective care we intend to provide."

### The Catalyst to Change



*"To Err is Human"* 1999

~ 98,000 preventable deaths

This was the "what"

"To Err is Human" identifies things that should <u>never</u> happen



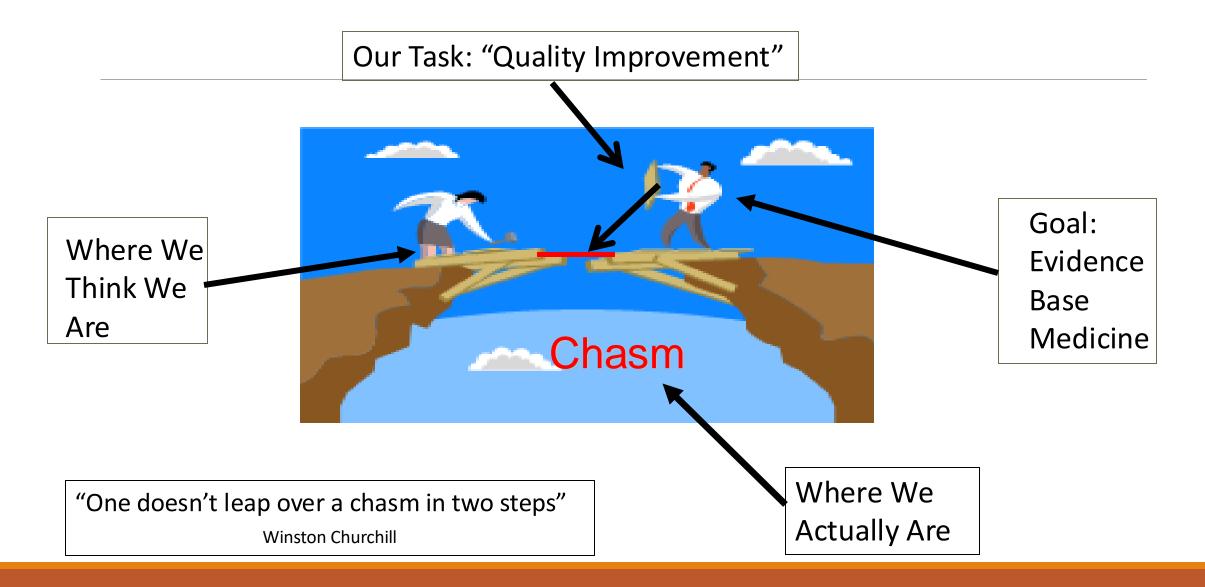
"Crossing the Quality Chasm" 2001

Quality as a **systems** issue This was the "how"

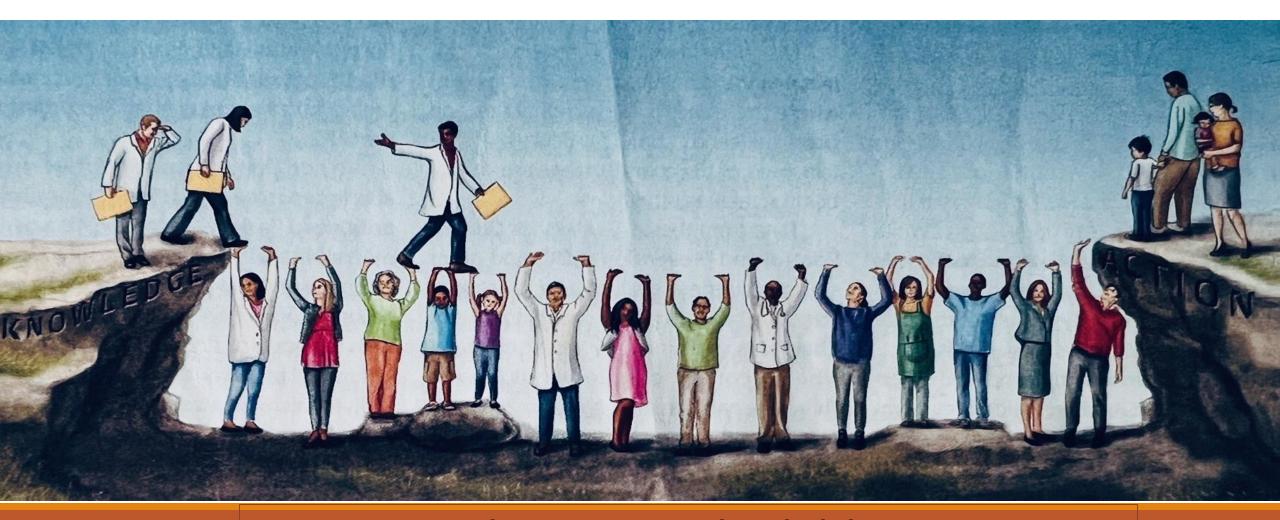
"Crossing the Quality Chasm" identifies things that should <u>always</u> happen

	The Six Aims For Improvement			
	Safe	Effective		
<b>&gt;</b>	Patient-centered	Timely		
	Efficient	Equitable		

## "Crossing the Quality Chasm"



## "Crossing the Quality Chasm"



A Key Step in becoming a High Reliability Organization

#### Hospital Systems Have "Flaws"

- "We must accept human error as inevitable and design around that fact." - Don Berwick, M.D.
- "The Search for zero error rates is doomed from the start"
- If You Want a New Level of Performance?

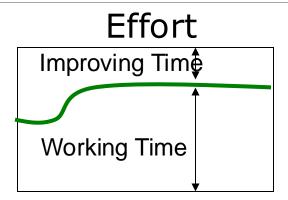
#### Design a New System!

Apply the

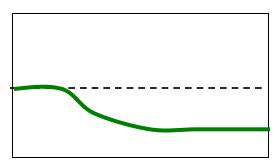
"Science of Improvement" to Change your system (Change how your Healthcare is Delivered!)

The "Science of Healthcare Delivery" or "Systems Redesign" [Evidence-Based HC Management]

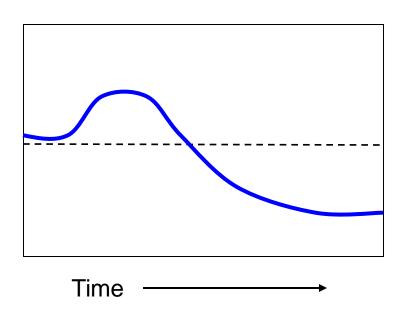
#### System Paradox: Work Harder?



Capability



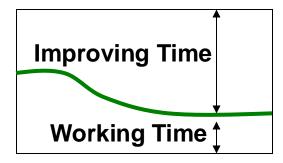
#### **Actual Performance**



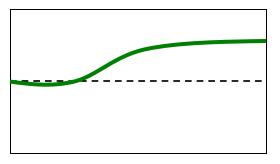
Repenning, NP and Sterman, JD: Nobody Ever Gets Credit for Fixing Problems that Never Happened www.webmit.edu

#### System Paradox: Work Smarter!

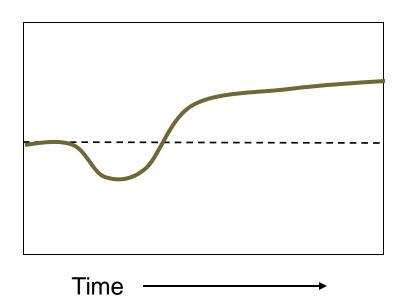
#### **Effort**



#### Capability



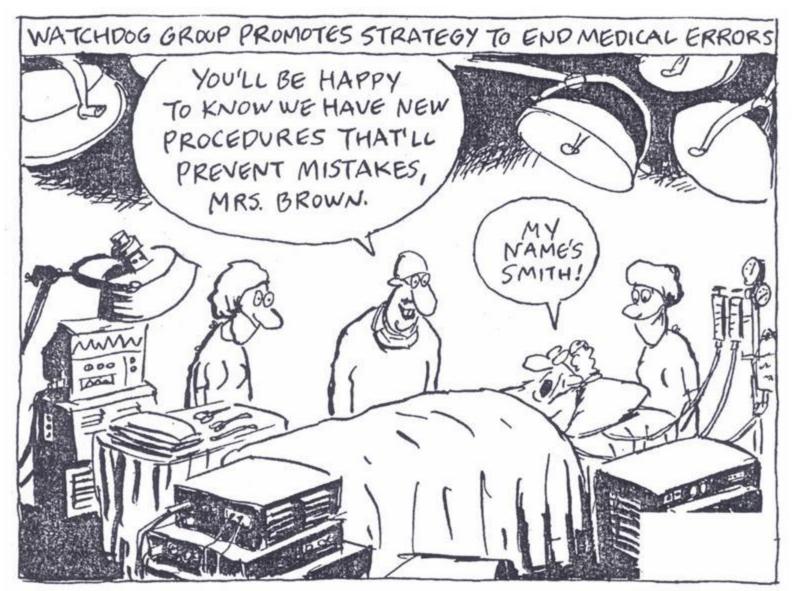
#### **Actual Performance**



Repenning, NP and Sterman, JD: Nobody Ever Gets Credit for Fixing Problems that Never Happened www.webmit.edu

#### International Patient Safety Goals

- 1. Improve the accuracy of patient identification:
  - Two patient identifiers
  - "Time Out Process:" Prior to the start of any invasive procedure conduct a final verification process to confirm that all team members understand:
    - You have the correct patient
    - You are doing the correct procedure
    - On the correct site,
    - With the availability of appropriate ancillary data
    - "Time-Out" is documented



BY STAYSKAL FOR THE TAMPA TRIBUNE

#### Surgical Checklist / Teamwork

A 2010 JAMA shows that use of WHO Checklist combined with improving teamwork resulted in an 18% decrease in surgical mortality

 The longer teamwork protocol was in place, the lower the mortality

A Culture of Teamwork, accountability (specific measures) and using a checklist is the new ideal

#### International Patient Safety Goals

- 2. Improve the effectiveness of Communication among caregivers:
  - Verbal and telephone orders or critical test results require "read-back" verification
  - Never document with unapproved abbreviations, acronyms or symbols ("Do Not Use" list)
  - Reporting and receipt of critical test results and values must be timely (<60 minutes)</li>
  - Standardize "hand off" communications including time to ask and answer questions (such as SBAR)

## Can You Read This?

MEDICAL CENTE	ER HOSPITAL
100-100 W. BIR STAIRT CONSSA, FE	DOS M. 383-7772
10A Varquer Ramon	AGē
ADDRESS WELLEN BURGE	DATE 6/ 23/95
REFILLS TO METELS TO METERS TO METER	# 120- 2660000 # 100 710 & mente.
PRODUCT ZELECTION AFRICATED	DEPENSE AS WRITTEN

#### International Patient Safety Goals

- 3. Improve medication safety:
  - Your Pharmacy should only stock the lowest Electrolyte solution concentrations
  - Actions are taken to prevent look-alike and sound-alike medication errors
  - Label all medications and solutions used in OR and Procedure areas
- 4. Reduce the risk of health care-acquired infections:
  - Comply with hand hygiene guidelines: wash hands for at least 15 seconds before and after delivering care or use alcohol-base hand gel
  - Manage all unanticipated death (s) or major permanent loss of function associated with a healthcare acquired infection as a sentinel events

#### International Patient Safety Goals

#### Accurately and completely reconcile medications across the continuum of care

 Obtain, document, compare and reconcile medications for inpatients and outpatients; involve the patient. Repeat the process if changes in provider or setting. Provide the patient with a copy of the reconciled medication list

#### 6. Reduce the risk of patient harm from falls

Implement a fall reduction program and evaluate the effectiveness of the program

#### The 6 Fundamental Domains of Quality IOM

- 1. Safety: as safe in healthcare as in our home
- 2. Effectiveness: matching care to science; only "Appropriate" care avoiding overuse of ineffective care and underuse of effective care
- 3. Patient (Person) Centeredness: honoring the individual, and respecting choices
- 4. Timeliness: less waiting for both patients and those who give care
- 5. Efficiency: reducing waste: "Improving my work is my work"
- 6. Equity: closing gaps in health status amongst groups

## "Quality" = Three Components

Deming:

1. Quality Planning

2. Quality Assurance

3. Quality Improvement

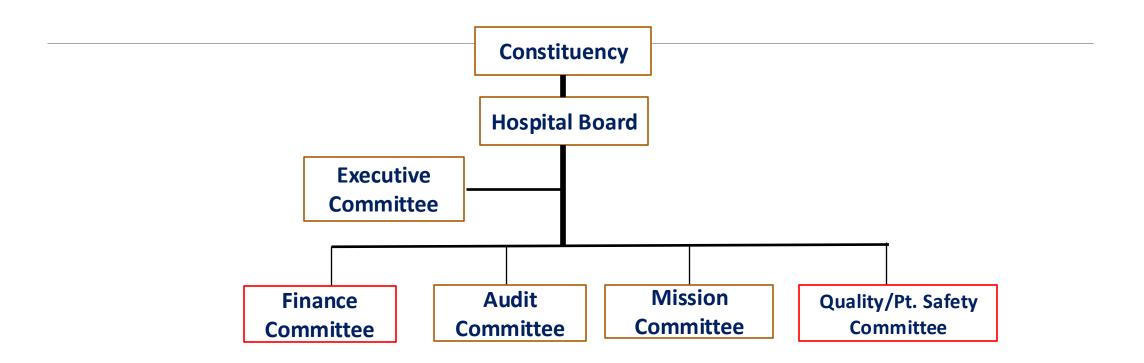
#### 3 Essential Quality Practices

- 1. Quality Planning: identifying patient's/community's needs to:
  - Define the hospital's quality goals
  - Set priorities
  - Design and deploy the hospital's strategy to reliably meet these needs
  - •Done by formal action by:
    - Board
    - Administration
    - Hospital-level Quality and Patient Safety Committee

#### Quality Planning – Board Level

- Start with Hospital Board: Document the Board's commitment to Quality and Patient Safety as a core value
- Commit to a Culture of Psychological Safety (Trust) at Board, Senior Management and all employee levels
- A major Board role is to establish Quality/Patient Safety Policies and Monitor its status through a Board Quality Committee
- Document which Quality Improvement Methodology chosen
- •Agree that >25% of the Board's Agenda should be on Quality and Patient Safety activities/issues
- Ensure the Hospital has a "Quality and Patient Safety" Committee

#### Ideal Board Structure



#### Board Quality/Patient Safety Committee

- •The Board "Q & PS" Sub Committee has two functions:
  - •Set Q & PS Policy
    - Select a "Quality Improvement" Methodology
    - Determine Hospital's Quality priorities (and how to establish them)
  - Monitor the hospital's "Q & PS" status (quarterly)
    - Hospital management provides a quarterly Q & PS Report

#### Quality vs. Finance Committees

"If hospitals had a Board Quality committee that functions like a finance committee,

We would transform healthcare."

Peter Pronovost, M.D.

#### 3 Essential Quality Practices

#### 2. Quality Assurance (Quality Control):

- Adopts external minimum performance standards settles with being within local benchmarks
- Key Performance Indicators are the foundation of QA
- •Depends on development of an internal information system to track performance: operational data; clinical data, etc.
- In part is based on Implementing an efficient Incident Reporting System
  - As simple as possible: a one-half page Incident report form
- Focuses hospitals on continuously monitoring their data

#### 3 Essential Quality Practices

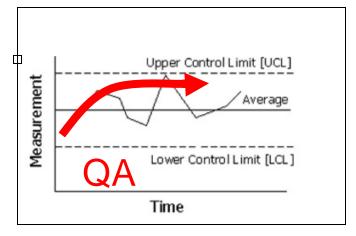
## 3. Quality Improvement ("Science of Improvement" / "Systems Redesign"):

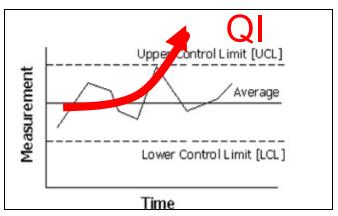
- •A structured approach (Internal focused) to redesign your hospital's systems to achieve new (higher) levels of performance through:
  - •Identification of "Opportunities for Improvement" with Prioritization of the order in which the 'gaps' are addressed
  - Application of what is known as the "Science of Improvement"
- If QI isn't connected to the Hospital's Mission, then a hospital only does QA – a passive response to external requirements

#### "Quality Assurance" vs. "Quality Improvement"

"Quality Assurance"
will support best
outcome within
system design

"Quality
Improvement" will
transcend system
design specifications





# How to Determine the <u>Value</u> You Provide to Your Patients:

VALUE = Outcome Cost

VALUE = "A" X Access + Technical + Functional + Satisfaction
COST

A= "Appropriate"
If "A" = 0, Do nothing
If "A" = 1, appropriate care

"Delight Index"

# "Science of (Q) Improvement"

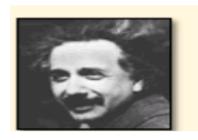
- •Basically, the Scientific Method:
  - Measure the current process (baseline status)
  - Analyze the steps in the process (process mapping)
  - Create a "Hypothesis" (change part of the process)
  - Experiments changing the process (PDSA Cycles)
  - Measuring the new results (Measurement)
  - Analysis: accept (incorporate into your processes) or reject the change studied
  - I Thes. 5:21 Check out everything, and keep only what is good; throw out everything tainted with evil"

# The "First Law of Q Improvement"

- •"Every System is perfectly designed to get the results it gets" Paul Betalden, M.D.
- This reframes Performance from a matter of effort to a matter of system design (change from existing form)....

If you want to improve results you must change your system!

#### Mindset



You cannot solve the problem with the mindset that created it

A. Enstein

# Second "Law of Q Improvement:" Transparency

- Be open and honest about "failed" tests:
  - These are often the most valuable PDSA cycles
  - •It is natural for humans (HC workers) to want to forget about experiments that don't work

•But all scientists know that learning from failure is just as important as learning from success

# Third "Law of Q Improvement:" Attitude

•To learn something new is **Humbling**. It requires that we put aside our "expert" status and become learners: disciples, open, teachable, obedient

•We don't like feeling stupid; we'd much rather be the "Teacher", the one with all the answers, but first we must embrace the humility discipleship requires

Willingness to Fail

# Fourth "Law of Q Improvement:" Agility

How do I implement this the new information in this Thursday's *Lancet* into next Tuesday's new practice?

"What can I do by Next Tuesday?"

# Fifth "Law of Q Improvement" is "Team-Based"

Staff need a culture that acknowledges that the best care comes from people working as a team, not as "lone rangers" with the sole responsibility for the success or failure of their actions

- T ogether
- E veryone
- •A cheives
- •M ore



QI seems impossible: They Say One Person can only do so much!

They're right! That's why we do Quality Improvement (Systems Redesign) in teams!

"The people in the field are the closest to the problem, closest to the situation, therefore, that is where real wisdom is."

"Never tell people how to do things. Tell them what to do and they will surprise you with their ingenuity."

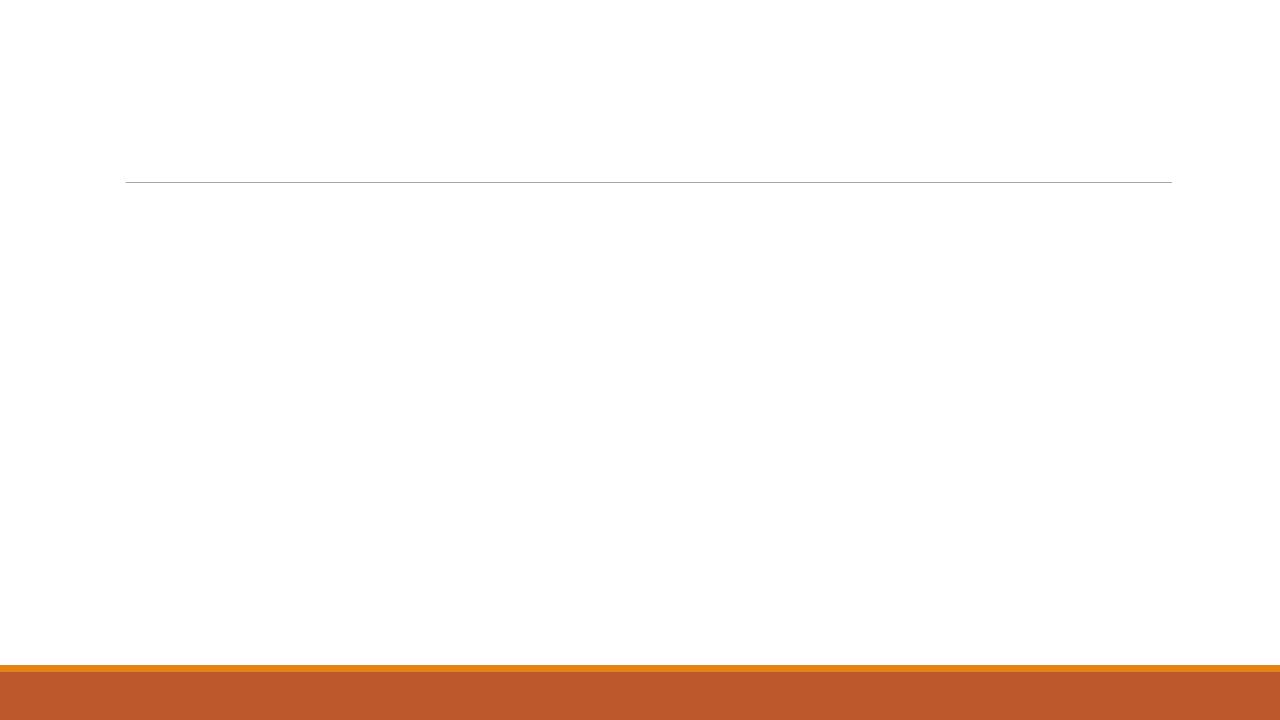
George S. Patton

# Sixth Law of Improvement – Measurement

- Measurement is key to accountability / improvement
- What gets measured gets done
- Data and measurement power QI
  - •Improvement measures are not "performance measures"
- •An improvement measure collects actual data (such as wait times) to measure the 'System" (not people performance)
  - •Why?
    - To Improved a process
- •Improvement measures create high-value data that can lead to dramatic improvement
  - Saving time and resources

# Seventh Law of Improvement – Use an "Improvement" Methodology

- 1. IHI Model of Improvement
- 2. Lean Thinking
- 3. Six Sigma
- 4. Queuing Theory
- 5. Theory of Constraint
- 6. ISO (9001)
- 7. Baldrige Criteria for Performance Excellence



#### Model for improvement

What are we trying to accomplish?

How will we know that a

change is an improvement?

What changes can we make that will result in the improvements that we seek?



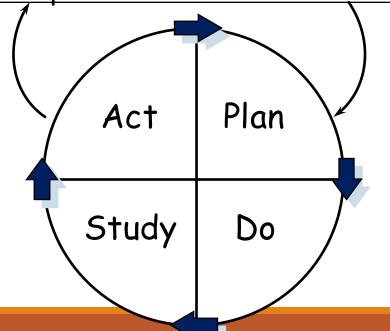
goals and aims



measurement

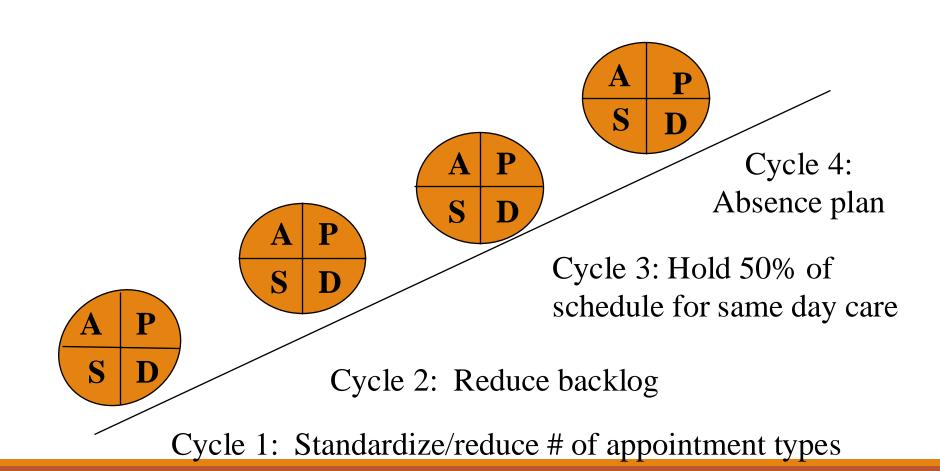


change principles



testing ideas
before
implementing
changes

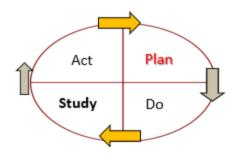
# Testing...testing...Aim: Next Available Appointment < 7 days



## Practical Application

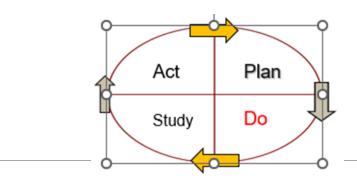
Hand-washing challenge:

•A nurse notices that physicians and nurses are not washing hands between patients.



#### Plan

- •What are the problems in the current process? [What do we want to improve?]
  - Staff are not consistently washing hands between patients
- Collect data- Observation
  - Number of times handwashing observe ("X")
  - Number of times handwashing should had been done ("Y")
  - •Calculate the compliance : Y/X \* 100 = %
- Set up improvement goal
  - Handwashing should be at least 95%



#### "Do" Phase

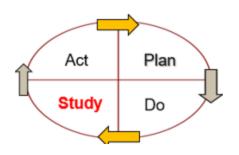
Just do it!

Educate your staff (may be visual)

Implement the Action Plan

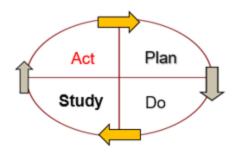
Start with a trial in one department

Do the trial for a few days or even a month



## Study

- •Several weeks later- Ask: Is the process getting better?
- Collect data by Observation
  - Number of times hand-washing observed ("Y")
  - Number of times handwashing should occur ("X")
  - •Calculate hand-washing compliance: Y / X \*100 = %
- Compare the results to initial data:
  - •Is the compliance rate higher than before?
  - Does compliance meet your goal of 95%?



#### Act

#### Do we need to change or improve the Action Plan?

- YES- maybe it is not the right action plan. Consider:
  - Why is it not working?
  - Did staff buy in to the plan?
  - Did staff receive the tools and supplies?
  - Are rewards/incentives needed?
  - Is additional Education needed"
  - Is it a management issue?
- No-continue the current action plan and PDSA cycle
- Response 3 "A's" Adopt, Adapt, or Abandon

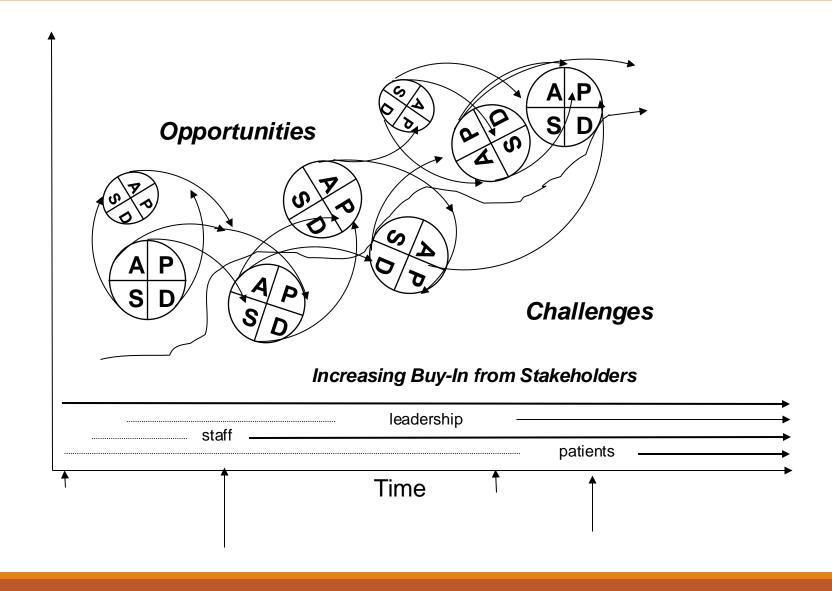
#### AIM

- •Use the Acronym of "SMART" (to help choose an appropriate "aim")
  - •**S**pecific
  - Measurable
  - Attainable
  - **R**eliable
  - Timely
- Aims should be ambitious stretch goals
  - Make it obvious that the current system is inadequate a new one is required

# Examples of Strong Aim Statements

- To improve inpatients meeting continued inpatient stay days by 10% by the end of CY2024
- By July '25, the # pts transferred from ER to ward < 1 hour from decision to admit will decrease by 40%
- To reduce the percentage of Observation stays converted to an Admission stay from 48.5% in Jan. '24 to 30% by the end of CY24
- To reduce the average length of stay from 5.48 to 5.00 by September 30, 2024

#### A Realistic Conceptual Model of Rapid Cycle Change



#### Measurement

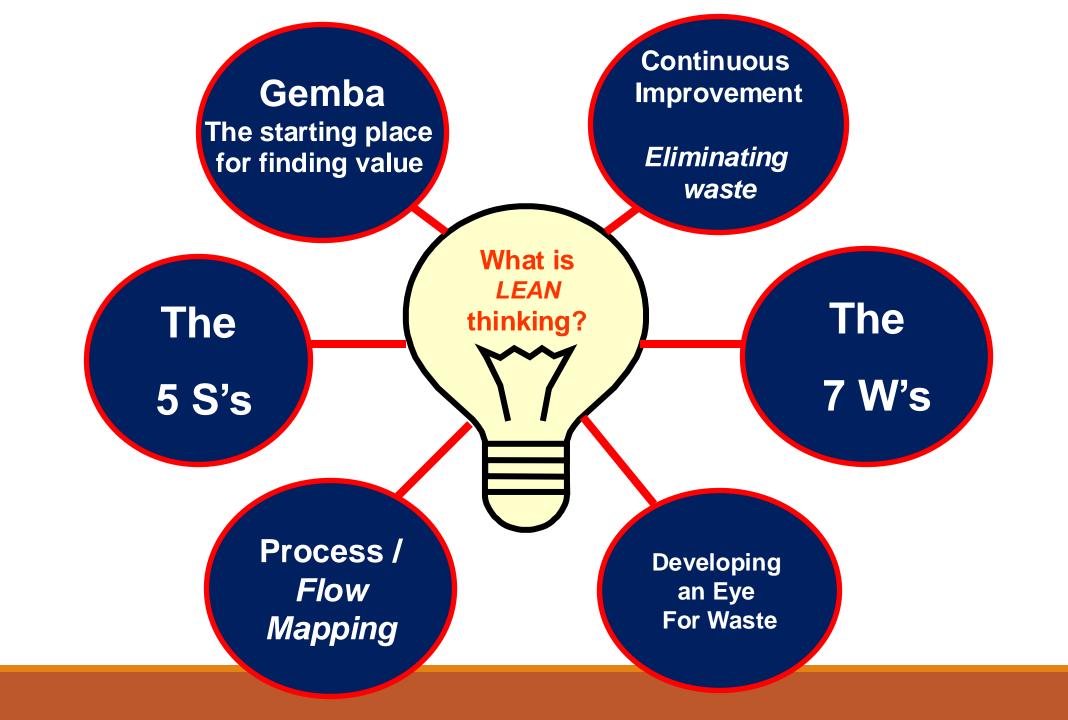
- You "can't fix something you don't Measure"
- •Remember: Measurement is not the Goal Improvement is the goal
- You need just enough data to know whether the changes you put in place are leading to improvement
  - Do not wait for a big "Master Plan"
  - •Be agile: "What can I do by next Tuesday?"
  - Track and trend your data over time (Run Chart)

# Lean Thinking

**Lean** is an improvement methodology and mindset that centers on:

- Eliminating waste
- The consistent delivery of Value
- The resolution of bottlenecks and constraints that affect the consistent delivery of value by maximizing flow

In Lean, Value is defined by the Patient and family



#### 5 S:

### Sort, Set in Order, Shine, Standardize, Systematize

- 5 S: an organized, never ending, effort to
  - Remove all physical waste out of the workplace that is not required for doing work in that area
  - Setting things in order
  - Identify, label, allocate a place to store it so that it can be easily found, retrieved and put away

#### Lean Six Sigma: 5S

5S is a workplace organization technique composed for five primary phases: Sort, Set In Order, Shine, Standardize, and Systematize.







neat and tidy.



organized workplace.



# "5S" Application

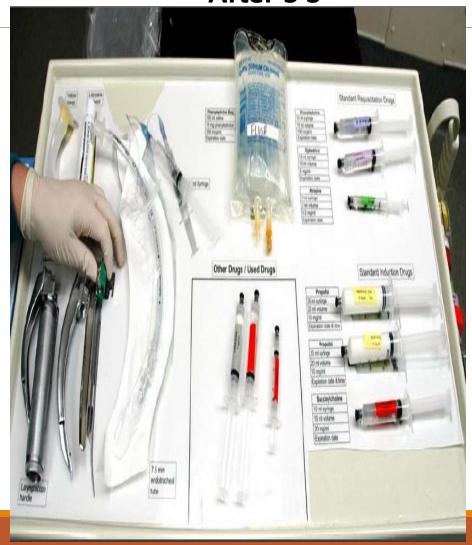
- Five "S" is
  - Sort
  - Simplify (Set in order)
  - Standardize
  - Sweep (Shine)
  - Sustain (Self Control)

- 5 "S" is NOT
  - Scrounge
  - Steal
  - Stash
  - Scramble
  - Search

## 5 S Results:

Before 5 S After 5 S





# Waste "Pre / Post- 5 S





Unit 1. Basement -Plumbing (Before) and (After)

# Stabilizing Equipment Availability



#### 5-S Techniques:

Sort

Set in order

Standardize

**Shine** 

Sustain

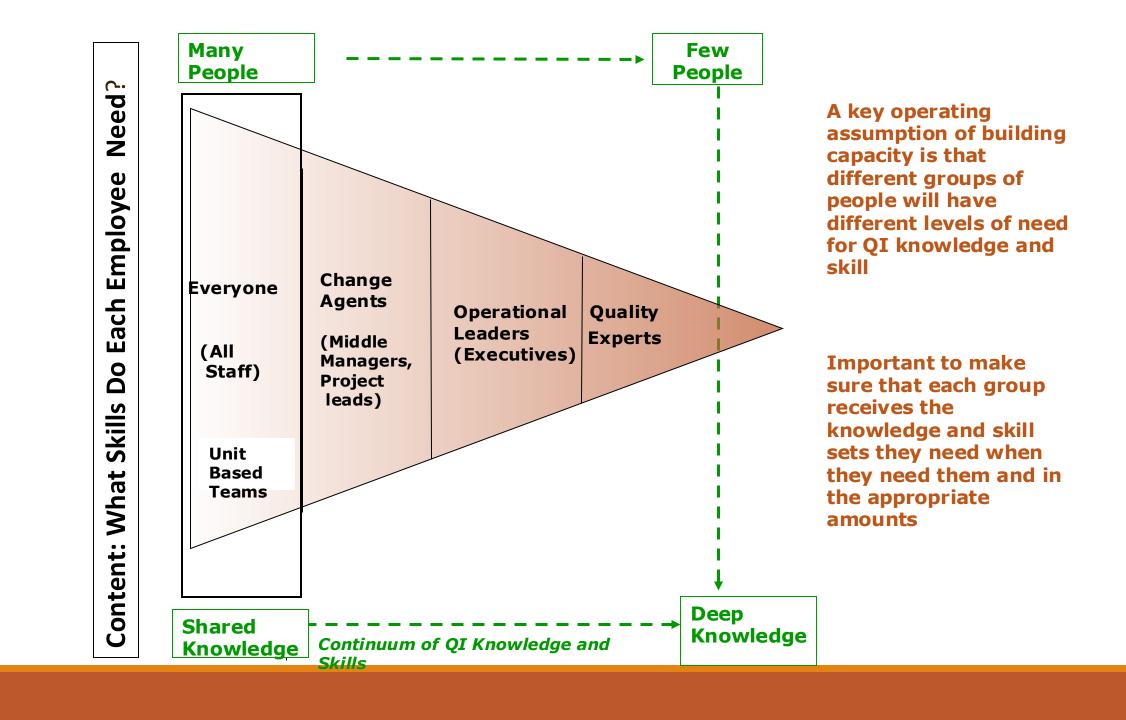


#### **Benefits**

Clean equipment = pathogen vector

Saves frustration, searching

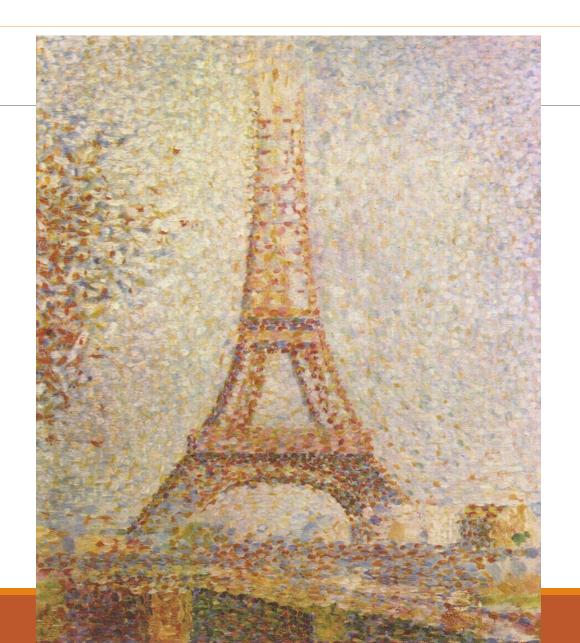




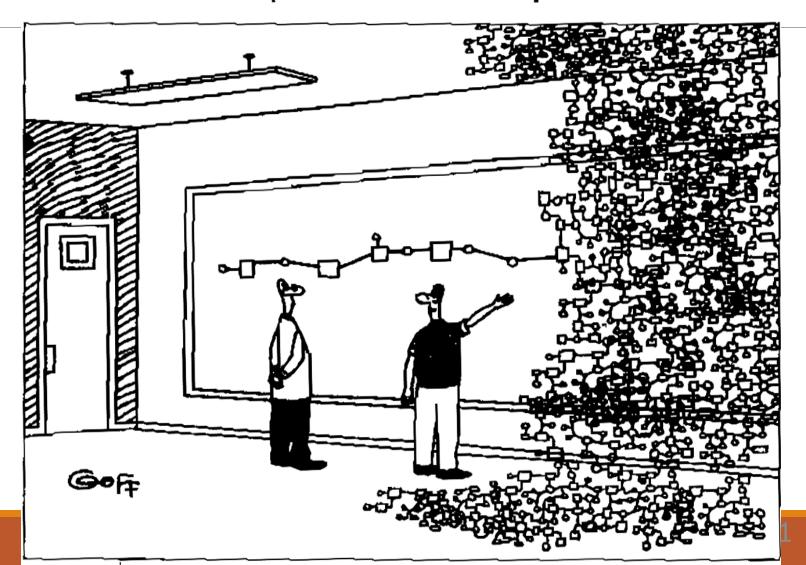
# Data



# Information



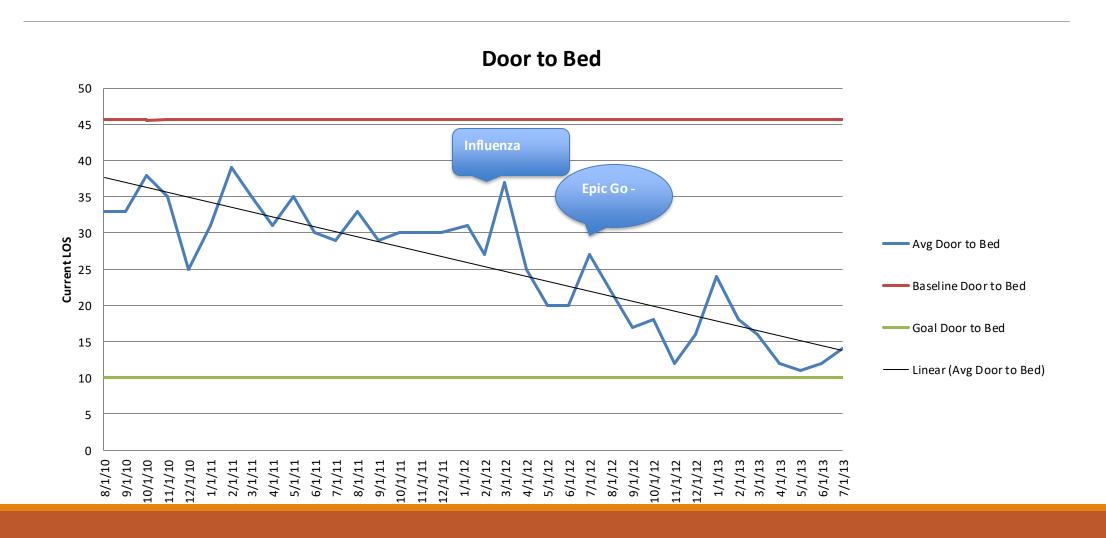
# Now this is where it gets a little complicated



#### Run Charts

- A "graph" showing trends over time
- It helps answer the question: "How are we doing?"
- Are we doing better since implementing the improvement intervention?
  - Have our changes made any difference?
  - Measures what we are trying to improve over time
- Does it tell us what us need to do?
  - No!

# Result: 30% Improvement in time from ED to Inpatient Bed

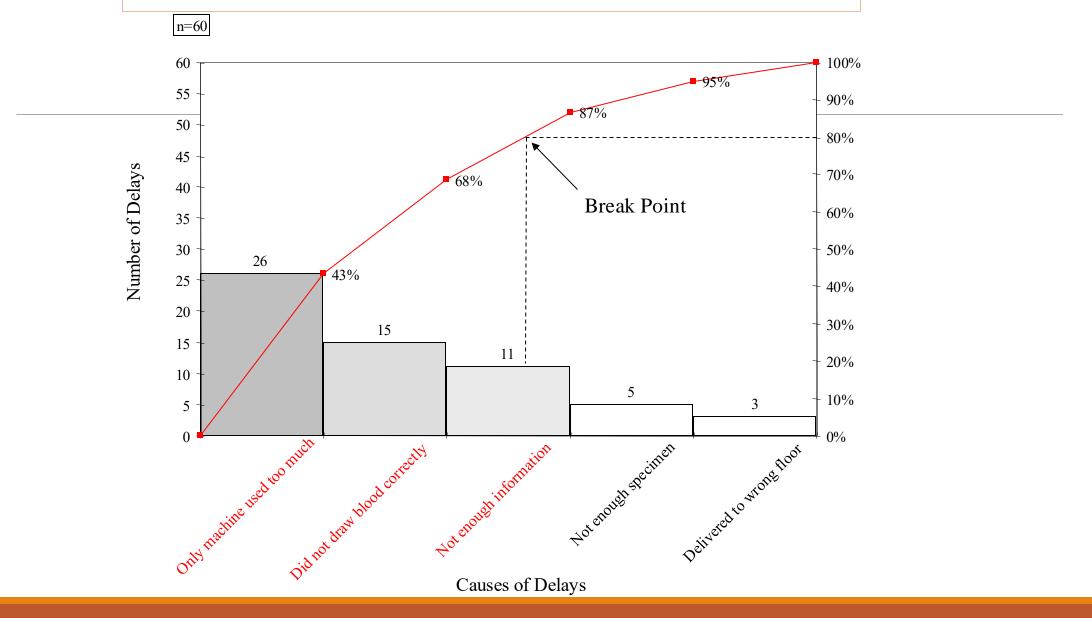


#### The Pareto Chart

- It ranks the potential contributing causes identified by the causeand-effect analysis.
- It focuses the improvement effort by identifying the main contributors to the problem.
- It is based on data collected over time.
- Invented by the nineteenth-century economist Vilfredo Pareto

The Pareto Principle, or the "80/20" rule, says that 80% of a problem is caused by 20% of the possible causes. Address the "vital few" causes and not the "trivial many", and you will achieve improvement

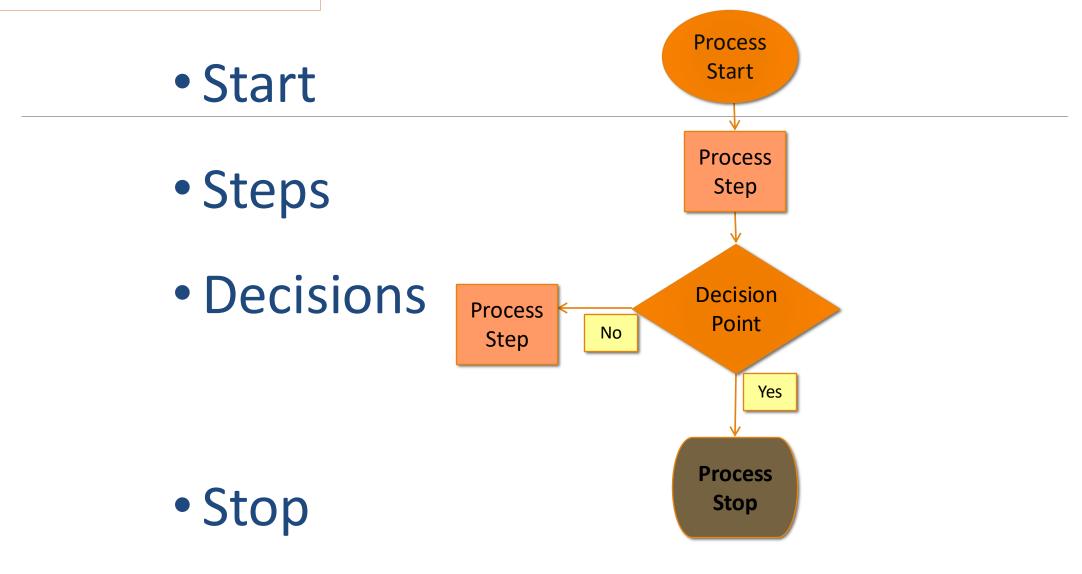
#### Pareto Chart for Late Lab Work



### Value Stream Mapping

- A set of processes that delivers value
  - every step in a process is mapped:
    - •Who does it?
    - •How long does it take?
    - Are there any problems with a step? (defects)
- ·Identified "waste" (non-value steps) to be eliminated

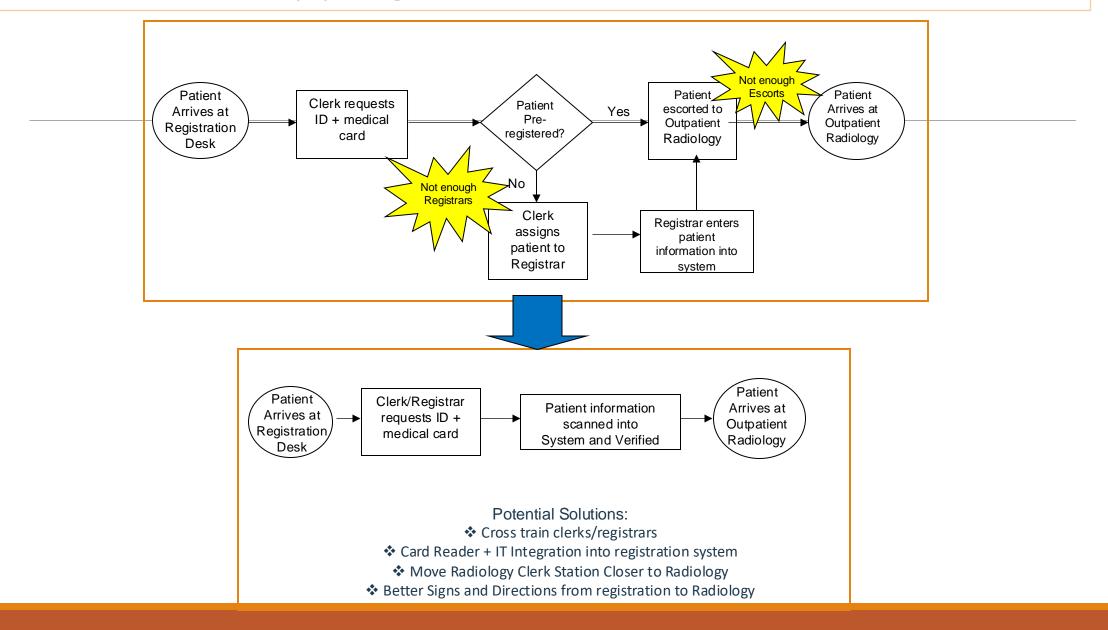
# Process Map



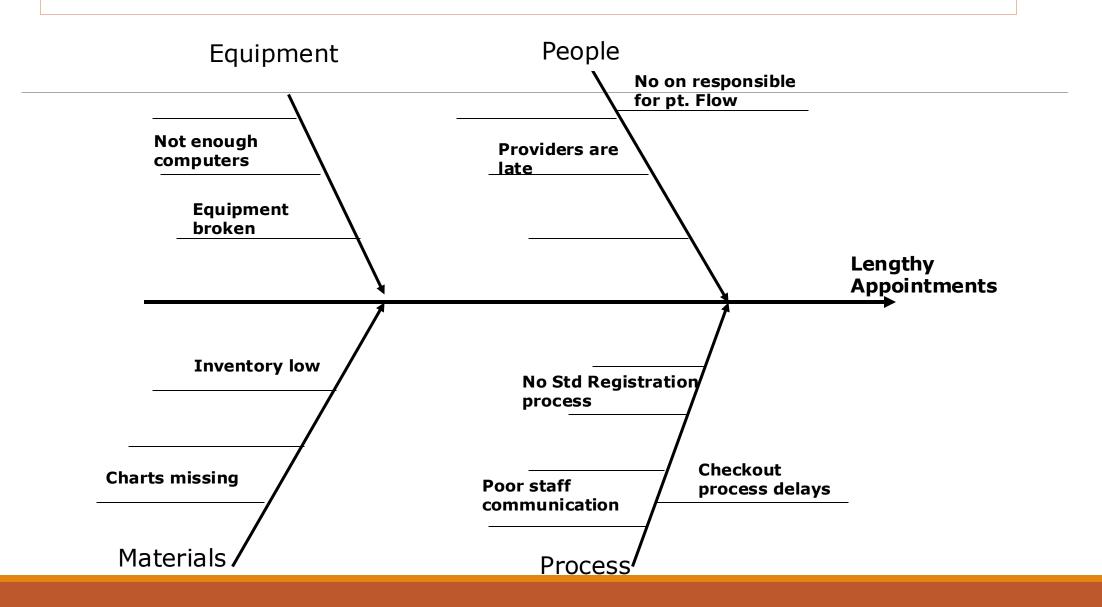
## Мар



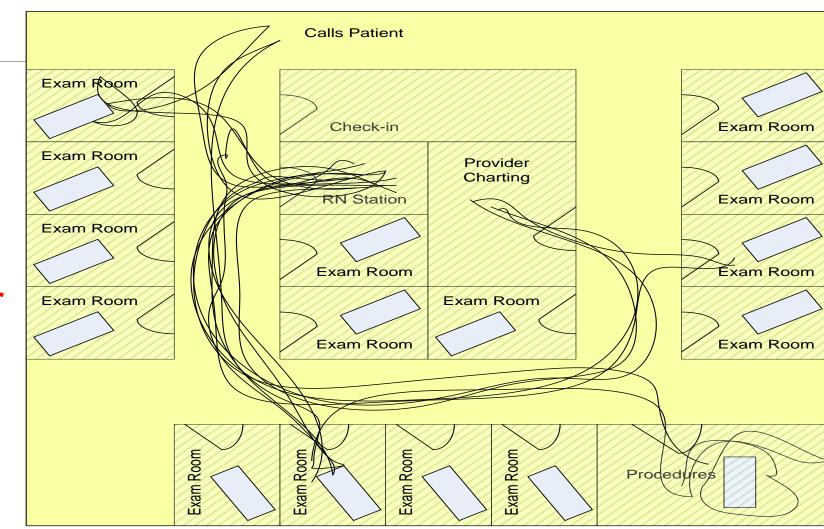
#### Process Mapping: Current State to Future State



## Fishbone Diagram



## Spaghetti Diagrams-Unnecessary Movement



"6+ Miles per Day"

#### Lean "A3" Chart

- •A standardized approach to problem solving:
  - For Executive Leadership Facility-wide problems/Administrative issues
  - For Front-line clinical staff very helpful in solving unit-based problems
- A step-by-step direction to problem solving
  - Continuous Quality Improvement (Patient Care + Admin. Systems)
- •The A3 provides a clear, concise, one-page overview
  - •It can consolidate large amounts of information in an understandable format using visual display
- •The A3 process should become the "default" way of strategic planning/improvements

### Why A3 "Protocol"/Thinking?

- A structured cycle of improvement
- A framework for organizing thinking
  - Can be used for any type of problem
  - •Individual and teams (and systems) a living, dynamic document
- Eliminates the waste of debating method
- Reveals the issues, problems and previous ways of thinking
- Makes problem solving visual
- Tells a Story

#### LEAN A3

Reason for Action and AIM:
 Problem statement (what you are trying to improve).
 Create and display ""

4. Gap Analysis: : (what are the "gaps" between the current and Future process maps/Ishikawa diagrams)?
Display one or two words for each 'gap' found

7. Completion Plan: Who does each PDSA Cycle:

Task	Lead	Due Date
PDSA "A		
PDSA "B"		

- 2. Current State:
  Create (and display) either a Flow
  Map (or an Ishikawa diagram) of the
  current process
  Establish your baseline measurement
  data
  - = Baseline measurement

5. Solution Approach:"Counter
Measures" Display a "If "X" then "Y"
Table that identifies possible
Steps to change (test)

If "X" Change	Then "Y" Effect

**Create Rapid Experiments (multiple PDSA Cycles)** 

8. Confirmed State: Show a new graph that demonstrates an improved outcome Sustain & Spread

- 3. Target (or Future) State:
  Create (and display) either a Flow Map
  (or Ishikawa diagram) of your Ideal
  process:
- a. PDSA "A"\_\_\_\_\_\_ b PDSA "B"\_\_\_\_\_ c. PDSA "C"\_\_\_\_\_ d. PDSA "D"

that "test" the changes in box 5

Insights: what you have learned; where you need to go next; new Ideas to help sustain and spread your changes

	Title:		Sponsor:	Co	ach: Start Date:	Λ2
	Owner:		Team Members:	Fa	cilitator: Updated on:	<b>A3</b>
	1. Reasons for Action:	П	4. Gap Analysis:		7. Implementation / Completion Plans:	
	Reason for Action:		Gap Analysis	S		
ear		Change		Sustain		
Team/Aim		ge		Đ.		
	2. Current State:	1	5. Countermeasures / Solution Approach:		8. Confirmed State:	
3	Current State:		If We: Then we expect:			
Map/Measure		웃		Su.		
de as		Change		Sustain		
are.		T .				
	3. Target State:	+	6. Rapid Experiments:		9. Insights:	
	Target State:					
Map/Measur		유				
P <sub>E</sub>		Change		Sustain		
nses		T T		ain		
ē						

#### A3 - Box 1 Reason for Action

What is the problem statement?

What is the scope of the problem?

What are the boundaries you will set?

Reason for Action	Gap Analysis	Completion Plan
1	4	7
Current State	Solution Approach	Confirmed State
2	5	8
Target (Future) State	Rapid Experiments	Insights
3	6	9

## Change

How do you eat an elephant?

One bite at a time

#### A3 – Box 2 Current State

# What does the organization look like right now?

- Data/Business case for need:
- What are the current/upcoming changes you wish to initiate?
- Have you personally visited the site you want to change?
  - Gemba Walk
- Identify what are the core process?
- Flow Map the core processes
  - Identify (high-level) major issues (Kapowie's)

Reason for Action	Gap Analysis	Completion Plan
I	4	7
Current State	Solution Approach	Confirmed State
2	5	8
Target (Future) State	Rapid Experiments	Insights
3	6	9

#### A3 – Box 3 Future (Target) State

What do we want the organization to look like at:

- •6 months
- 1 year
- •3 years from now?

What does a "Good" future look like?

How will we know when we have made an impact?

Reason for Action	Gap Analysis	Completion Plan
I	4	7
Current State 2	Solution Approach	Confirmed State
Target (Future) State	Rapid Experiments	Insights

## A3 – Box 4 "Gap Analysis"

What are the big differences (gaps to be closed) between the current and future state?

What impact do these gaps have on our ability to be successful or reach our target state?

How much control / influence do we have over these gaps?

What are some of the potential root causes of the gaps?

Reason for Action	Gap Analysis	Completion Plan
I	4	7
Current State	Solution Approach	Confirmed State
2	5	8
Target (Future) State	Rapid Experiments	Insights

### A3- Box 5 Ideas (Solutions) Approach

What ideas / strategies do we have for closing the gap?

Which of the core processes have the most potential to close gaps (attain target)

What have others done to close the gaps?

How easy or difficult are the solutions being proposed?

Reason for Action	Gap Analysis	Completion Plan
I	4	7
Current State	Solution Approach	Confirmed State
	_	
2	5	8
Target (Future) State	Rapid Experiments	8 Insights

#### A3 – Box 6 Rapid Experiments

Proposed	countermeasures to
address e	ach root cause

Predicted results for each countermeasure

Do multiple PDSAs

#### Assessment Q:

- Are there clear countermeasure steps identified?
- Do the countermeasures link to the Root Cause of the prob.?
- Who is responsible for what, by when (5 whys)
- Will these action items prevent recurrence of the problem?

Reason for Action	Gap Analysis	Completion Plan
I	4	7
Current State	Solution Approach	Confirmed State
2	5	8
Target (Future) State	5 Rapid Experiments	8 Insights

### A3 – Box 7 "Implementation"

Table to document how you will do the different PDSA cycles you do in closing the gaps

- •Who (who leads task)
- •What (task)
- When (completion date)
- Where

Learn and improve as you go

Reason for Action	Gap Analysis	Completion Plan
ı	4	7
Current State	Solution Approach	Confirmed State
2	5	8
Target (Future) State	Rapid Experiments	Insights
3	6	9

#### A3 – Box 8 "Confirmed State"

#### Accomplishments

Metrics (data)

- run charts, control charts, etc.
- Document quantified change
   (% improvement or % no longer happening, etc.)

Reason for Action	Gap Analysis	Completion' Plan
I	4	7
Current State	Solution Approach	Confirmed State
2	5	8
Target (Future) State	R <sub>i</sub> Rapid E <sub>2</sub> Experiment ts	nsight /

## A3 – Box 9 "Insights"

What have you learned from

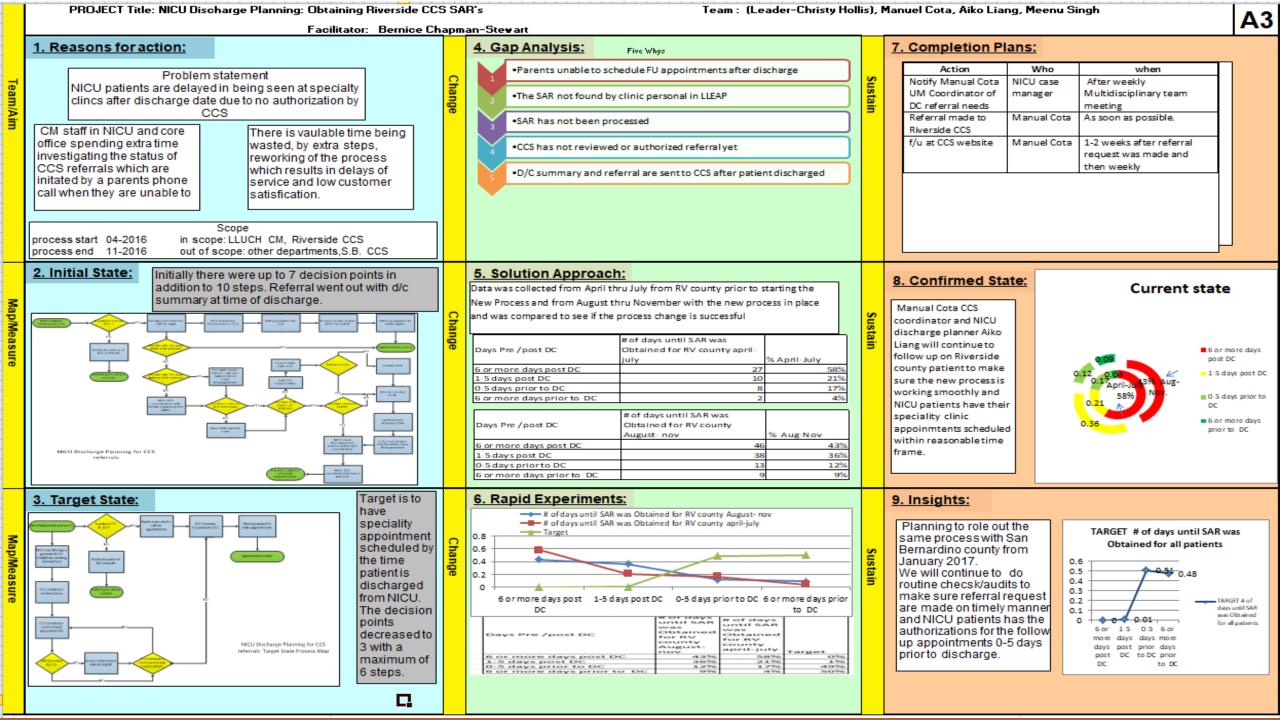
this process?

How can we make it better

next time?

Summary

Reason for Action	Gap Analysis	Completion Plan
I	4	7
Current State	Solution Approach	Confirmed State
2	5	8
Z Target (Future) State	<b>5</b> Rapid Experiments	8 Insights / Reflection





# Trystorming

 Rapid Tests of Change (Rapid Cycle Improvement = Multiple PDSA cycles)

#### SDSA Cycle

PDSA: focuses on experimentation

SDSA: focuses on standardization

Once you have run the PDSA (RCI) and have achieve a desired level of performance – you want to maintain this gain

Adopt new a new standard method (till you need to make new improvements)

SDSA cycle is how you *hold the gain* 

"Don't be afraid of learning too much;

it will never happen!"

Stephen Miles, M.D.

# Four Fundamental Principles for Senior Managers in HC Transformation

1. There is no substitute for direct observation

"You can learn a lot by Watching"

Yogi Berra

Not indirect observation (reports, interviews, survey, etc) but direct observation. You must learn to observe with precision

# Four Fundamental Principles for Senior HC Managers

2. Proposed changes should always be structured as experiments:

Follow the scientific method: experiments are used to test hypotheses and results are used to refine or reject the hypothesis [Method of Improvement: PDSA]

Problem solving should be structured so that you explicitly test assumptions in your analysis of your work

Thus, you need to explain gaps between predicted and results

# Four Fundamental Principles for Senior Managers in HC Transformation

3. Workers and Managers should experiment as <u>frequently</u> as possible:

The focus is on many, quick, simple experiments (Rapid Cycle Improvement)

For each RCI (PDSA Cycle):

- a) Predict how much change is anticipated
- b) What is your "theory" as to why this will work

Get Front-line Staff practice the process of observing and testing many time. [And thus: Process Improvement]

Again: decrease the "burden" on the staff not the system

# Four Fundamental Principles for Senior Managers in HC Transformation

#### 4. Manager should coach not fix:

Front-line staff should be constantly solving problems

The more senior the manager, the less likely he/she will be solving problems h

Senior managers become "enablers" (Teachers, Coaches not Technology specialists)

Teach front-line staff how to observe and experiment (looking for wasted effort)

Teach staff how to find opportunities for improvement

Make it "Safe" for staff to test as many ideas as possible (test many changes)

### Nurses are "High-Impact" Leaders

- Nightingale set the "Vision" for nursing as a Profession
- Established principles and priorities for Nursing Education
- •A early proponent of "evidence-based" care [EBM]
- •Nurses empowered to view, understand and transform healthcare systems
- Committed to interprofessional learning

·Hospital Leaders must ensure patient and staff safety as a core value

### Nursing Role in Quality Improvement

#### Nightingale:

- Developed and implemented action plans
  - Improve sanitary conditions:
    - Handwashing
    - Bathing
    - Principles of asepsis
    - Principles of Infection Control
- Result: lowered hospital's mortality by >67%

## Nightingale = Quality

- Improving Quality means addressing what matters to patients
  - Reduce Human suffering
  - Standards for compassionate, patient-centered care
  - Meeting patient's needs and preferences
- Treat patients with dignity and respect
  - Good nutrition- tasty
  - Clean sheets
  - Classrooms for learning

### "Keeping Patients Safe" Recommendations:

- Effective Nursing Leadership:
  - Participates in executive decision making
  - Represents nursing staff to management
  - Achieves effective communication between nurses and other clinical leadership
  - Facilitates input from direct-care nursing staff into decision making
  - Commands organizational resources for nursing knowledge acquisition and clinical decision making

#### Nursing Staffing Issues

- Nursing overloading leads to at least 25% of all sentinel events
- •When the level of training is limited, nurse overloading leads to 70% of sentinel events (communication)
- •For each additional surgical patient assigned to a RN above a 1:4 ratio, mortality increases by 7% for all patients cared for by that RN (JAMA)

#### Paradoxes in Science of Improvement

- S of I only happens at the front line
  - Front line team is the only place where the knowledge for improvement exists
- Improvement cannot be mandated (show/tell)
- Failure is valued because we learn
- The Road to Improvement passes through Change and the best way to change is to learn from the PDSA cycles
- Starting is harder than continuing
- Degree of improvement culture is almost entirely dependent on interest of top leaders - Spread is a decision to adopt

## What then is "Science of Improvement"?

- "Science of Improvement" is not about a staff title or using the latest catchy phrase
- "Science of Improvement" is a way of thinking about work
- •"Science of Improvement" is how you **approach** work every day (for those you serve)
- "Science of Improvement", therefore, is about changing the culture of your system (to continuous quality improvement)

# "Change the System"

"If you don't like the way the world is,
You change it.
You have an obligation to change it.
You just do it one step at a time."

## Change = Quality Improvement

- Not all change is improvement, but all Improvement is change
  - Real improvement comes from Changing your System

- •To implement improvement, we must have clarity about:
  - What are we trying to accomplish?
  - •How will we know that a change is an improvement?
  - What changes can we make that will improve our system?

## Change

•When you decide to change your system, "Don't wait for perfection, just start and let the process teach you.

- No one expects you to get it right from the very beginning;
  - You will learn more from your mistakes than from early success.
  - People need to believe that they can participate fully in the decisions that affect their lives and have a stake in change

# Change

"Change is Good,

You go first"

## Why Change Then?

"It is not necessary to change -

Survival is not mandatory"

W. Edward Deming, Ph.D.

## Why Do Hospitals not Change?

- Not because the problems are not complex or easy to solve
- Not because staff are not motivated, lazy or incompetent
- However, in a typical system things seem to be working reasonably well
  - The apparent calmness is illusory:
    - Employees experience an increasing sense of frustration and exhaustion
    - Worn out by the task of swimming upstream against an incessant tide of small, annoying problems, they leave [turnover]

## Why doesn't you Hospital Change (Learn new ways)?

#### Remember:

"Every System is perfectly designed to get the results it gets"

 Your ("poorly designed") system is designed to give you this result!

## Changing Systems – How?

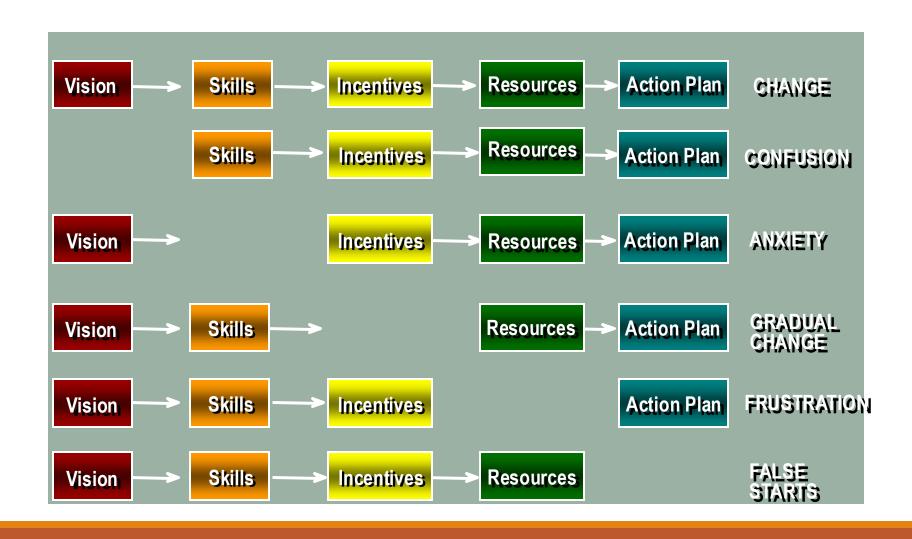
 By a journey where healthcare leadership transform themselves from rescuers arriving with ready-made solutions into problemsolvers helping colleagues learn the experimental method [Method of Improvement]

•Leaders should be spending close to 70% of their time sponsoring/facilitating Quality Improvement!

## The Quality Improvement Journey

- Break big problems into smaller, solvable pieces
  - Bring all work-arounds to attention
- Do lots of RCI rapid small changes
  - Investigate the causes
  - Develop a solution
  - Test and validate
- •Do not do ad hoc changes but basic changes in the design of work to prevent the problem from recurring

## Managing Complex Change



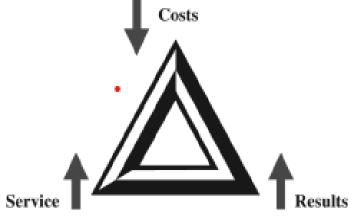
## Spread S of I by Storytelling

- Show results in other clinics (local facility, your area or anywhere)
- •Show service chiefs what's in it for them: stories where patient care improved, chaotic clinics now thriving
- •Gather stories by walking around to clinics let them tell you why this is exciting for them

Story boards/Data Wall (a physical space where you posts results for all to see) - or a "QI Fair" where QI Posters are on show to employees

## Leadership Challenge:

- Previously: to meet the Triple Aim:
  - Improving the patient Experience of care (including quality and satisfaction);
  - Improving the Health of populations
  - Reducing the per capita Cost of health care
- •Now: meet the Quadruple Aim:
  - Also, to "Improve the experience of those providing care"
    - Staff that "Thrive"



## The Currency of Leadership is Attention

- Positive signals
  - Prioritize your schedule make-time to meet with project staff
  - Conduct project reviews ask about aims, put their work into the broader context of overall organizational mission, focus on the results, help team overcome barriers, provide encouragement
  - Tell Stories: formal and informal communication: if your stories reinforce the cultural changes and practices needed to achieve breakthrough results: encourage more rapid adoption of needed practices

# Leadership

Learn how to say "No" with grace

Focus more on being "Interested" (in QI) than be in "Interesting" to your staff

## Leadership's role in Systems Redesign

System Redesign can not be implemented by Senior Management Mandate

- Instead: it is implemented by the clinical units in your facility
  - They may even come up with different ways of providing care

SR Principles are simply <u>tools</u> to change your system / culture, not the goal of your SR process

Unless you do a lot of Rapid Cycle Improvement cycles (PDSA) you won't get any change (improvement)

#### Caution

QI Principles can not be implemented by Senior Management Mandate

•Instead - implementation occurs by teams working in the clinical microsystem

Using QI tools (principles) may lead to different processes in different sites – freedom to innovate

## Courage

 Courage is the emotional resources a person has to choose to act in the face of a challenge

- •Courage comes from:
  - Knowing ourselves understanding what is going on around us
  - Creating circumstances in which others can act

## The "Science of Improvement"

Is Creating a culture of quality improvement and a "Culture of Safety"

### "Improving my Work is my Work"

[IMWIMW]

- Every employee has two jobs:
- Their "job description"
- Improving how the do their "job"

#### External Accreditation Standards

Why carefully understanding and complying with external accreditation standards is necessary:

"Anyone who competes as an athlete (remember the 2024 Paris Olympics is fast approaching) does not receive the victor's crown except by competing according to the rules (standards)"

### Can Quality be Found in Resource-Challenged Areas?

- •Is it easier or harder to improve HC in resource poor areas?
  - Resource-challenged LMIC have ~80% of the population but only ~20% of the world's wealth
- Paradox: Teams working in resource poor areas excel in creating local infrastructure.
  - Why? Being resource poor nurtures cleverness and innovation.
  - The least have the most resilience –they are able to find happiness/joy from the simplest pleasures.
  - A relationship between resource availability and willingness to change
  - Does it take a "burning platform" to motivate people to change?
  - Higher quality can cost less than defective HC
- Leadership role: unleash latent talent to make a productive change in system
  - •We can achieve bold improvements in areas with constrained resources!
  - •Dare to dream big! Large sums of money do not always translate dreams into big results.

# Myth? Improving Systems Always Costs Money

Technical Changes: (New Equipment)

- Yes

Redesigning Jobs

- No

System (Cultural) Change - QI
[New Training/new ways to interact]

-No

## In the System of the Future...

- All work is done in teams
- Flatter organization with less hierarchy
- Servant leadership
- "Improving our work IS our work"
- All teams will have and regularly use improvement skills to achieve mission
- Standardization is not a bad word or concept
- Measurement is imbedded in daily work

## Quality Improvement Concepts

- 1. Serious gaps in quality exist –shared aims are helpful
- 2. The people of your workforce are good
- 3. Trying harder is the worst plan
- 4. All improvement is change
- 5. Skills for improvement are not common yet
- 6. Strong QI Methodology (concepts) are essential

## Quality Improvement Concepts

- 7. Measurement helps learning
- 8. Local adaptation makes concepts work properly without it, they won't
- 9. "All Teach All Learn"
- 10. Improving by each individual staff member:

"Improving my work is my work"

# Quality Improvement "Communication" Guidelines

- 1. Be Quick to listen, slow to speak, and slow to be angry

  James 1:19
- 2. Speak the truth; but do it in love Eph. 4:15
- 3. Speak to those directly involved in the issues Col. 4:5
- 4. Speak respectfully -Ok to be passionate, but speak with respect Col. 4:9 Eph. 4:29
- 5. Remember you are addressing a problem, not the person you are talking to: Not testing motives, evaluating behavior, but addressing a problem

Acts 15: 6-14 Eph. 4:2,25

## Quality Improvement Themes:

Soon is not a Time!

•Some is not a Number!

•Hope is not a Plan!

## 21st Century Health Care System

#### The Healthcare workplace of the future is:

- 1. A desirable place to work
- 2. An efficient place to work
- 3. Has a Culture of Continuous Systems (Quality)
  Improvement -"Improving My Work Is My Work"

Every employee has two jobs:

- Their given "job description"
- Daily Improving how they do their "job"

## 21st Century Health Care System

- 4. Staff work in multi-disciplinary teams:
  - Teams that are peers, empowered and have data about:
    - Cost, Quality, Access
  - Teams have ability to select high priority challenges (those that are important to them) to improve
  - Teams that receive formal QI training

## 21st Century Health Care System

- 5. Teams have dedicated time to:
  - Do change (PDSA cycles = Rapid Cycle Improvement)
  - Evaluate change
- 6. Teams choose tasks that are aligned with the organization's values and culture

7. Every Employee has a Safe Forum to raise Questions

## Leadership's Role in Systems Redesign

- •What happens when QI activities fail? Usually felt to be due to leadership and culture
- However, Most of the time the problem is with the "System"
- Success at your facility depends on the "Culture" you establish
  - Gather stories by being in / walking around clinical areas what is exciting to them?
  - Facilitate development of new (local) system redesign coaches

## A New Way to Improve HealthCare

- Focus on Fixing Systems not People
  - Over the past 30 years many have worked on QI- to make it safer, more effective and more efficient
    - QI, Systems Change, Lean thinking, Performance improvement
  - But we still have a long way to go:
    - Two failures: leadership and Culture
      - Leadership failed by not creating conditions to help QI succeed
      - Culture failed to resistant to change [not fertile soil where improvement can thrive]
  - But we still have major HC problems [Yes, incremental improvement]
  - Solution: The systems need fixing far more than people!

## A New Focus on System-wide Redesign

- 1. Leaders in prosperous organizations are focusing less on trying to get more from their workforce and more on trying to maximize what they can get from the system (a critical concept)
- 2. Don't bore your front-line workers with abstract methods, principles or theories to improve their work
  - Instead, spend time seeking feedback and understand your staff's challenges so THEY can redesign daily operations to improve system output
  - Quality and safety are the primary work product of health care

## How Can a Hospital Improve its System?

Successful care operating systems weave disparate information and improvement initiative together into a practical, technology-enabled management system that improves care for patient and reconnects clinicians to their purpose

## Care Operating Systems Principles

- 1. Systems that deeply value and appreciate the commitment and passion of their staff
  - Harness the brilliance of your employees celebrate individuals whose resilience and commitment shine by making great suggestions
- 2. Appreciate that healthcare is complex, and that complexity needs strong default systems
  - Example: exhibit a real-time dashboard that shows (during their shift) a team the results of their actions toward agreed upon priorities

Key Phrase: 'You do not rise to the level of your goals. You fall to the level of your systems" (James Clear: "Atomic Habits"]

## Care Operating Systems Principles

- 3. Organizational efforts to "Improve Culture" without strong systems rarely lead to sustainable Performance Improvement
  - Need: a Culture of learning and improvement; without a transformed "system" the effort is like trying to create music without instruments
- 4. They do not see safety, equity, and experience as silos:
  - Value is created at the point of care: you must integrate your system for safety, quality, equity, experience and efficiency into a high-functioning operating system – not operating them separately
  - When challenges are found (the experience of pain in maternity care, avoidable C- Sections, etc.) high functioning systems use clinical quality improvement to reduce these complications

# Care Operating Systems Principles

- 5. Quality and Safety teams are obsessed with improving the system!
  - Daily workflows with feedback about how their system is working

     daily identifying, and resolving real-time operational challenges
  - 6. Staff receive information in non-technical language
  - 7. These systems believe in real Transparency easily accessible to staff and patients

    Staff see and share their data on quality of care

# Lessons Learned in Successful QI:

- 1. Simplify Everything: Having "Clear Aims:" Improvement does not need to be complex:
  - Set Aims
  - Track data (initial and ongoing)
  - Find great ideas (change)
  - Change something every day to find a better way
  - Involve everyone (team)
  - Don't assume today's new rules must be the rules of tomorrow

Complexity is Waste!

Phil 4:11,12

## Lessons Learned in "QI":

2. Take Teams Seriously: Improvement is about cooperation; no one is more important than the team [Build team infrastructure]

Uncooperativeness is waste! Phil. 2:2

3. Be Pragmatic about Measurement:

Sophisticated IT is nice, but not the point of "QI." Use the least amount of measuring that helps

Too Much Counting is Waste! Luke 12:19

### Lessons Learned in Successful QI:

4. Leadership: there may be a finite pool of skilled, mature, system-oriented HC leaders in your region [Leadership Develop is key]

Lack of Skilled Leadership is Waste!

Mt. 9:37

5. Strip the Support System for Improvement to a Minimum:

Flatten the organization Consultants should become unnecessary ASAP

Dependency is Waste!

Thess 4:12

In spite of clever change (innovation) a core amount of infrastructure (resources) is needed

Despite helpfulness of consultants, it is crucial for spread and sustainability that dependency on outside advisors falls steadily (grow your own coaches!)

## Lessons Learned in "QI":

**6. Manage the Political Interface Wisely:** It is wise to know how your system works [Be agile in the political context; Does your culture have fossilized rules and job roles/]

Political Inexperience is Waste!

Ecc. 3:8

7. **Travel**: It can be difficult to bring disparate staff together to plan and implement change

Centralized Planning is Waste!

Ecc. 3:6

8. Help Patients become advocates for Change:

keeping patients silent is waste

Ecc.3:7

## Lessons Learned in "QI":

9. Go Quickly / Start Now:

Delay is Waste!

2 Peter 3:4

10. Make "QI" spread part of your new way of operating: find the channels in your system where change can flow

Isolation is Waste!

Prov. 18:1

11. Don't Complain:

Complaining is Waste!

Phil. 2:14

#### What about Failure?

- •Ok, we now have you interested in change; however, you also need to explore what does not work (learning from failures) as well as finding successful examples (from Africa) and studying and adapting them for your hospital's circumstances and heritage.
- We need success stories to build trust and expectations
- •Aim High (Stretch goals), believe in yourselves- while you hold each other accountable for reaching your goals
- •You must understand how serious the work of change is and the enormous need to build accountability into all aspects of the "Science of Improvement."

#### What Have We Learned?

- •Solutions to problems must be driven by discipline, accountability and market strength, not easy sentimentality
- •What is needed most is moral leadership willing to build solutions from perspectives of the average person rather than imposing grand ideas and plans on them
- •People eventually tell you the truth, IF you listen hard enough; otherwise, you will hear what they think you want to hear.
- •The most important characteristic for us is deep human empathy this will provide the most hope

## Learning about Quality

Make your goal to create a community that is passionate about improving healthcare quality and patient safety

Our goal is to train you as experts in the Science of Improvement by providing you skills, knowledge and network (colleagues) to tackle tough problems Your most important skills are:

- 1. *Listen*, if you do not first listen to your staff, they will never be able to address issues fully because you will not understand them.
- 2. **Focus on supporting others** (Front-line staff) to do what they already do well instead of being a senior manager simply touring their areas. You must invest in people
- 3. *Find innovations* that release the energies of your staff- you staff want to be given a chance to fulfill their own potential

## Evidence-Based Management

Learn from the people,
Plan with the people,
Begin with what they have,
Build on what they know,

Of the best leaders
When the task is accomplished,
The people all remark,
We have done it ourselves

#### Invitation

- Think about the QI/Pt. Safety Change principles presented
  - Try using these ideas and methods in your daily work. Start now!
  - Do what makes sense to you
  - Master at least one Improvement methodology; refine it with your good judgment, hard work, and intelligent adaptation to the conditions that shape your world
  - Celebrate your successes and share what you have learned with others invite them to do what you have done!

# Evidence-Based Medicine + Evidence-Based HC Delivery (QI)

EBM plus EBD means you will provide:

The Right Care, at the

Right Time, at the

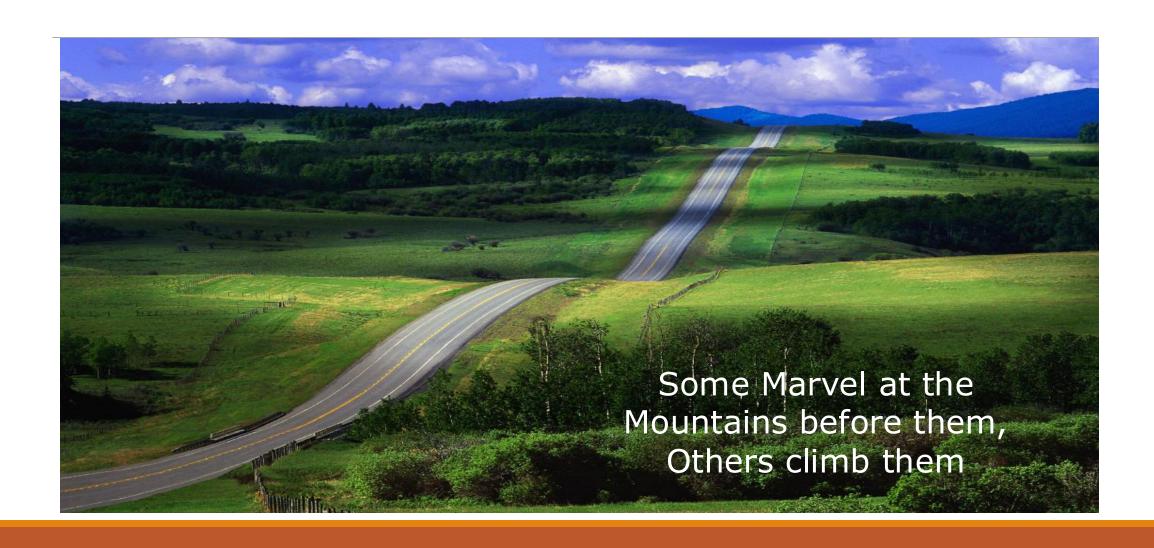
Right Site, in the

Right Way

To Every Patient, Every Time

If this occurs, you will "Delight" your Patients

# Quality Improvement is a Journey, Not a Destination



# Institute for Healthcare Improvement

IHI's Open School

http://www.ihi.org/education/
ihiopenschool/overview/Pages/default.aspx