

Faculty Development in Quality Improvement: Building Human Capital

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Agenda

- Introductions- 5 minutes
- Review the Literature and need for training-10 minutes
- Discuss the different “brands” of improvement tools- 10 minutes
- Success Stories-35 minutes
 - Case Medical School
 - VA Internal Medicine residents
 - MetroHealth Residents
 - Indiana University Faculty
- Open Discussion-30 minutes

Creighton
UNIVERSITY
Medical Center



INDIANA UNIVERSITY

SCHOOL OF MEDICINE



MetroHealth

Miracles & Hope



CASE WESTERN RESERVE
UNIVERSITY

SCHOOL OF MEDICINE

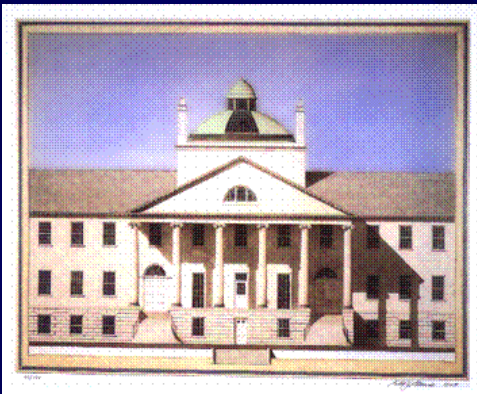
Objectives:

- By the end of the session participants will:
 - Recognize the pertinent literature regarding CQI and training
 - Describe the need to train providers at all levels of training
 - Identify successful strategies for implementing QI training
 - Formulate the beginning of a plan to implement QI training at their institution

Why should physicians learn about quality improvement or work on a quality improvement project?

- Practice Privileges
- Data are everywhere
- Residents and medical students are learning these tools
- CQI projects are fundable and publishable
- Part of the past, present and future of healthcare
- Right thing to do

The First Anesthesia Records: Codman and Cushing

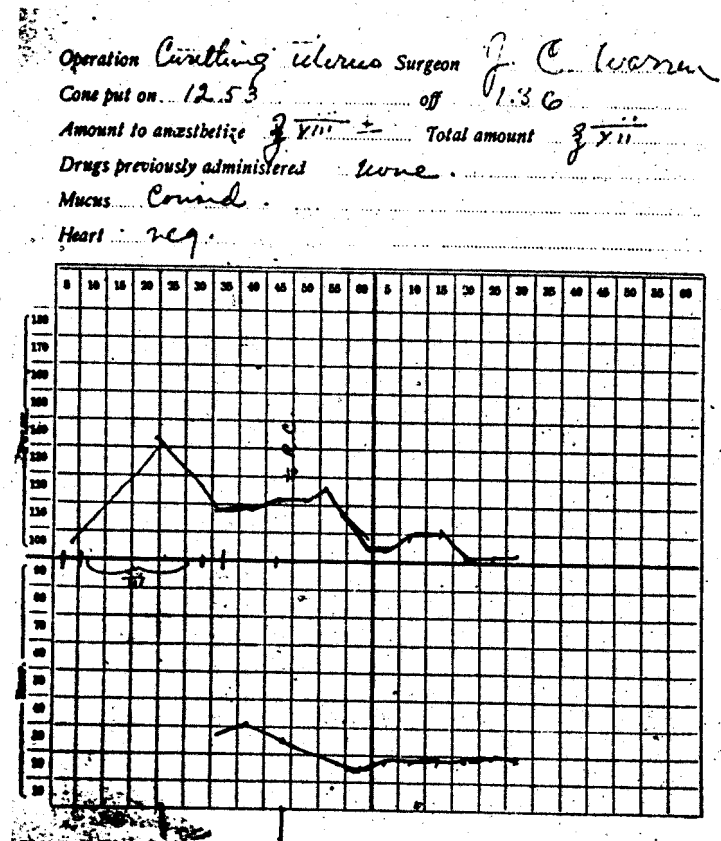


Operation Card.

Ward 24 No. 22
 Name Hora Keever Age 45
 Morning P. 80 T. 97.5 R. 3
 Diagnosis Curetting
 Drugs In. Merc. 1/100 m. & tid

RECOVERY ROOM.

Immediate Rectal Temp. _____
 Vomiting _____
 Remarks (please note shock, apnoea, intermittent pulse, etc.)
Considerable spasm while going
under. Lasting some time through
op. Recovery after persistent cough.
Food both broken & swallowed?
Considerable mucus





“Brief” History of Quality Standards in Medicine

- 1847-AMA founded
- 1855- Florence Nightingale's study on sanitary reform
- 1894- Anesthesia Record
- 1910- Flexner's Report to the Carnegie Foundation
- 1917- Hospital Standardization Program
- 1952- Joint Commission founded

How Hazardous is Healthcare?



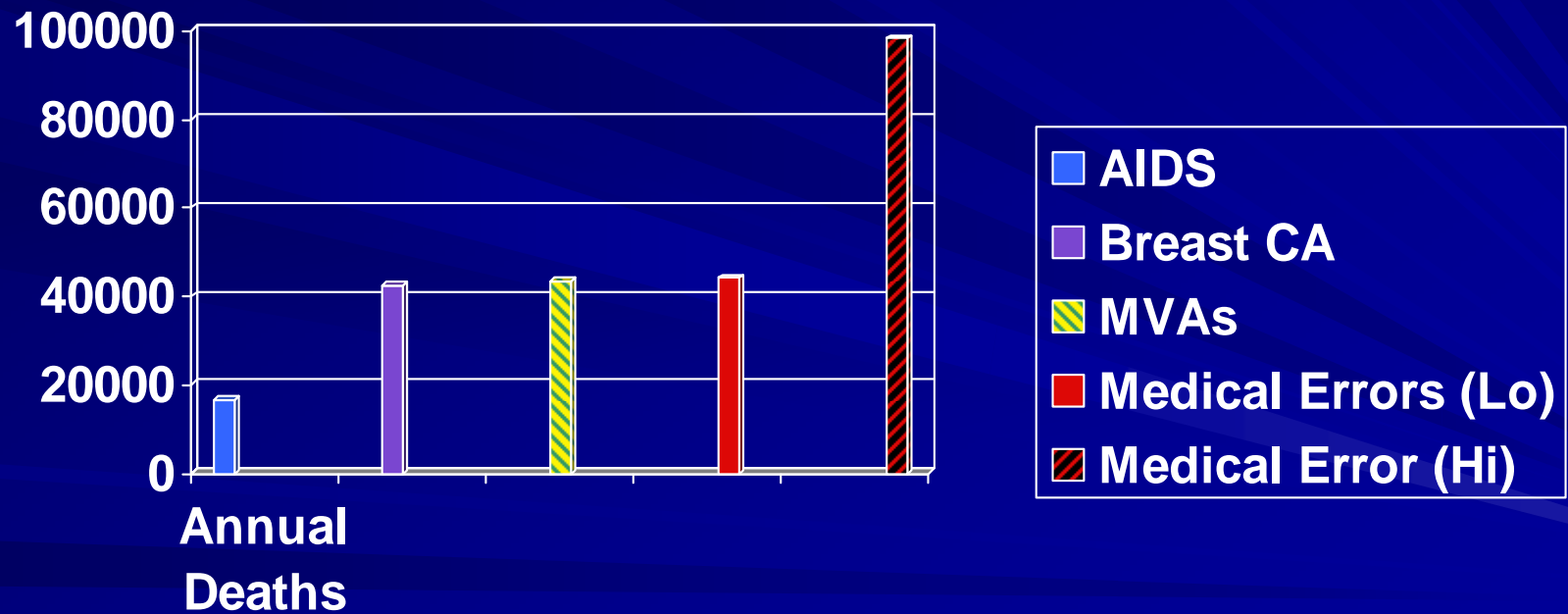


Extrapolated study results imply that between 44,000-98,000 U. S. hospital patients die each year as a result of medical errors.

March 2000

Medical Error Deaths vs. Others

Annual US Deaths



Kohn L, Corrigan J, Donaldson M: To err is human: building a safer health system. Washington, DC: National Academy Press; Institute of Medicine, 2000.

How hazardous is health care?

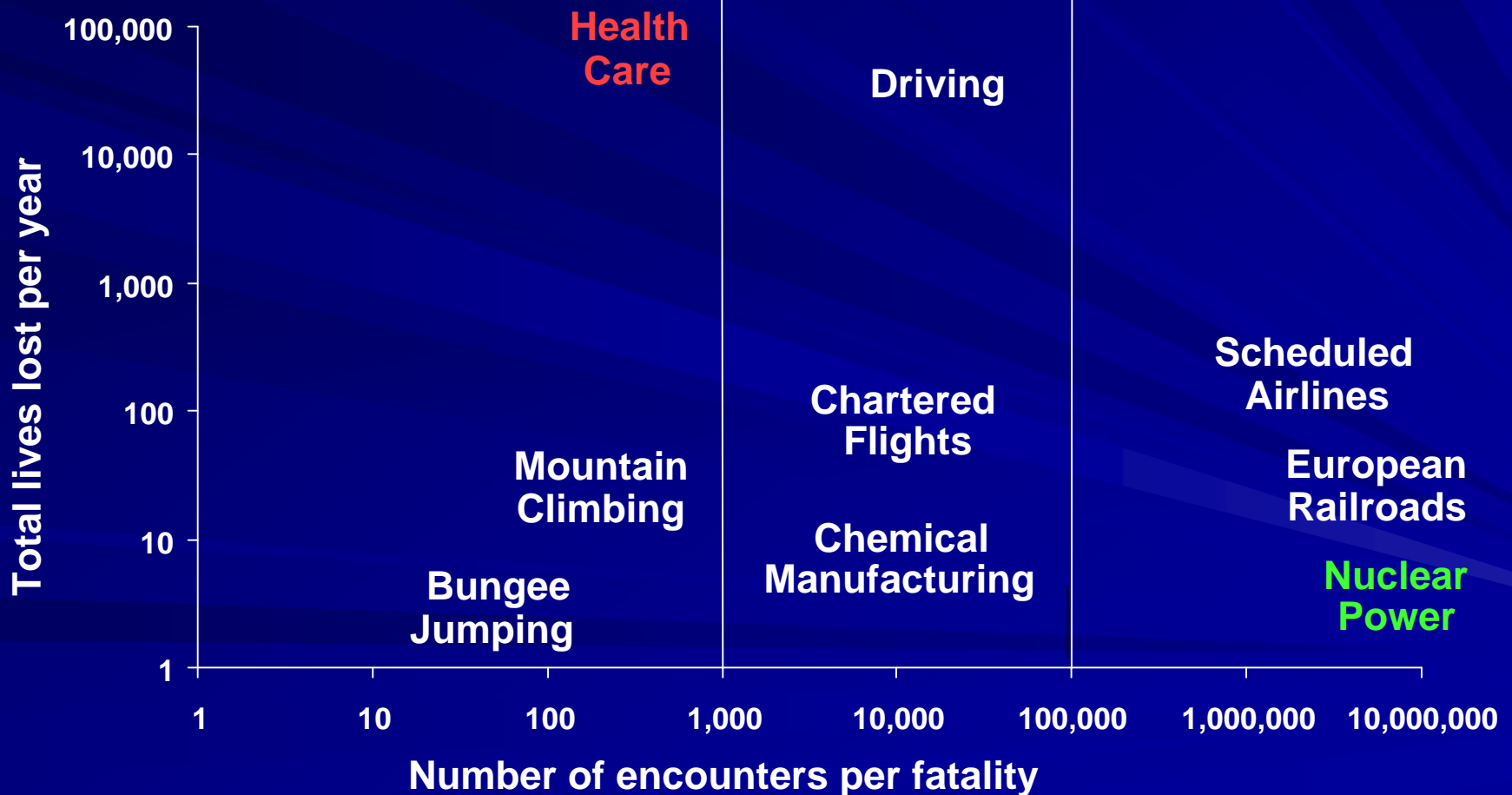
Adapted from James B. Intermountain Health Care ATP Training, 2000

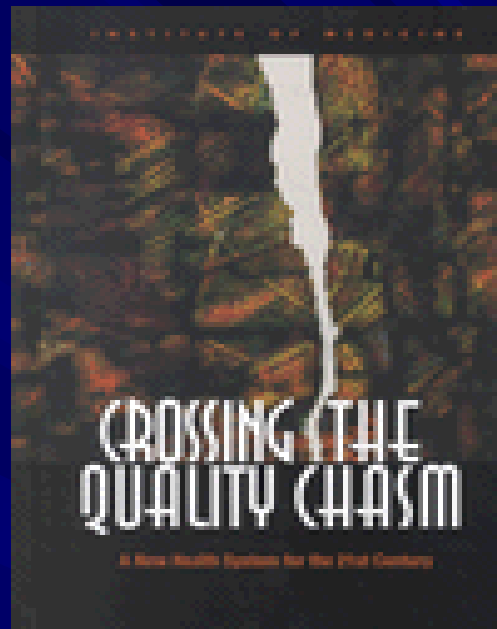
Note: both dimensions are logarithmic scales

DANGEROUS
($>1/1000$)

REGULATED

ULTRA-SAFE
($<1/100K$)





Patient Care should be:

**Safe, Timely, Effective,
Efficient, Equitable, Patient-Centered
(STEEEP)**



Quality Improvement: Present and Future

- Institute Of Medicine Reports
 - To Err is Human-1999
 - Crossing the Quality Chasm-2001
- Maintenance of Certification
- Accreditation Council for Graduate Medical Education
 - Core Competencies-1999
- Joint Commission Ongoing Provider Performance Monitoring-2008
- Hospital Compare
- Angie's List
- Pay for Performance

“Unless everyone who works in healthcare recognizes that they have 2 jobs when they come to work everyday, ie, delivering care and doing the work of improvement, medicine is likely to have difficulty meeting...continuous movement toward new levels of performance”

Batalden P, Davidoff F. Teaching quality improvement: the devil is in the details [Editorial]. JAMA. 2007;298:1059-61.

Performance Improvement Works

- CRUSADE (Can Rapid Risk Stratification of Unstable Angina Patients Suppress ADverse Outcomes with Early Implementation of the ACC/AHA Guidelines) quality improvement and educational initiative launched in >400 acute care centers in U.S.
 - Education of emergency physicians and cardiologists
 - Creation of ACS registry designed to characterize demographic patterns and risk stratification results
 - Measure use of ED treatment modalities including aspirin, heparin, beta-blockers, and platelet inhibitors
 - Practitioner feedback of institution treatment patterns given with comparisons with national norms.
- Study of 350 of these centers showed every 10% increase in composite adherence to guidelines at a hospital was associated with an analogous 10% decrease in its patients' likelihood of in-hospital mortality

Performance Improvement Works

- American College of Cardiology Guidelines Applied in Practice (GAP) quality improvement project,
 - AMI medication and treatment order sheets
 - Clinical pathways to coordinate in-hospital care
 - Discharge medication and referral forms based on ACC/AHA guidelines
 - Positive process results
 - Increased use of aspirin and beta-blockers
 - Increased smoking cessation counseling
- Acute coronary syndrome patients in 5 community hospitals in Michigan showed **improved mortality rates** after the Guidelines Applied to Practice (GAP) program was implemented in the hospitals

TQM

Process Improvement

Brainstorming

AIM / GOAL

Quality Improvement

QI

Team

CQI

PDSA

Research

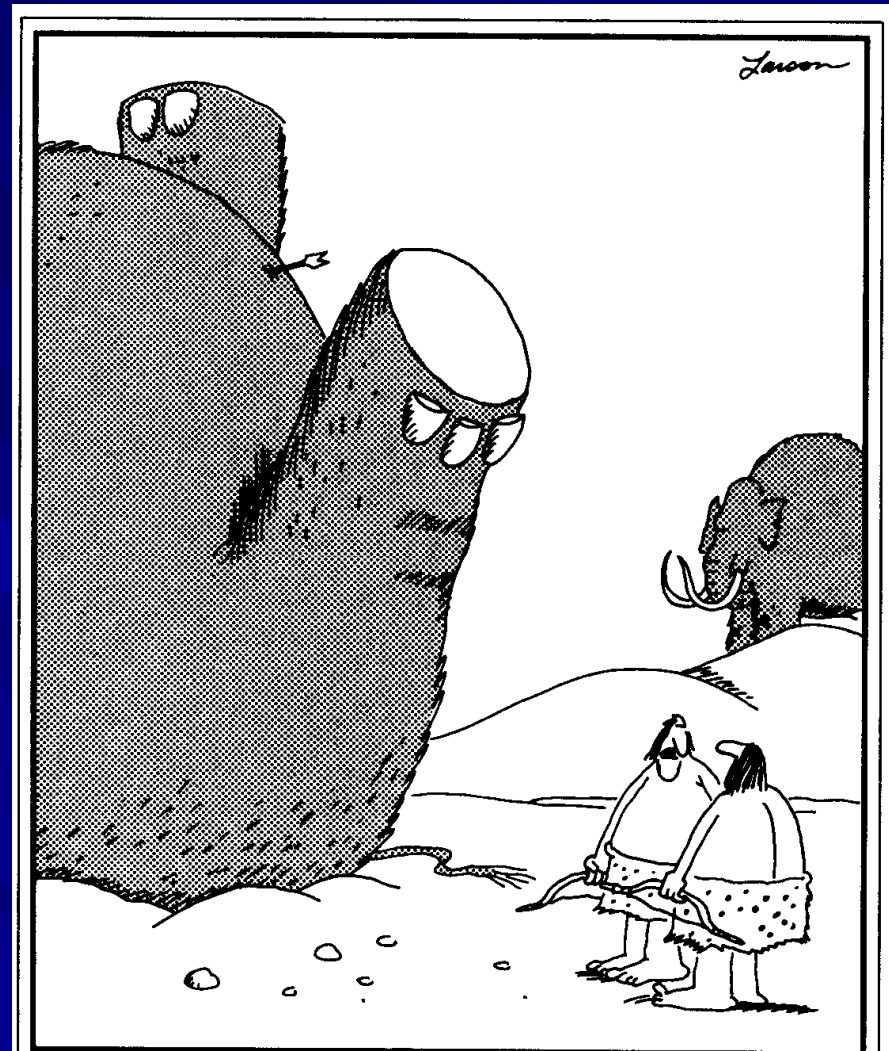
Buy-in

IRB



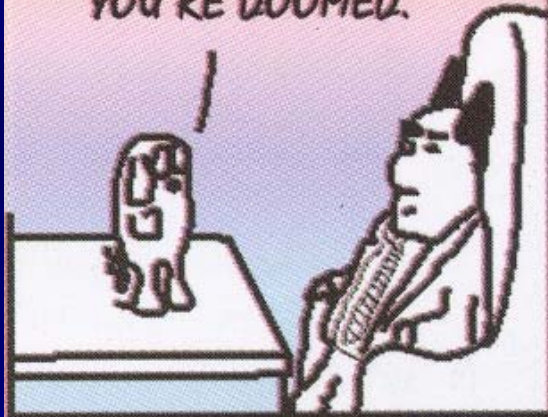
Improvement Brands

- CQI-
- Deming/Juran
- Lean Thinking
- Six Sigma
- Theory of Constraints
- Appreciative Inquiry
- Soft Systems Modeling
- Etc., etc., etc.



"Maybe we should write that spot down."

YOU'VE GOT TO
IMPLEMENT A
SIX SIGMA
PROGRAM OR ELSE
YOU'RE DOOMED.



AREN'T YOU THE
SAME CONSULTANT
WHO SOLD US THE
WORTHLESS TQM
PROGRAM A FEW
YEARS AGO?



I ASSURE YOU THAT
THIS PROGRAM HAS
A TOTALLY, TOTALLY
DIFFERENT NAME.



Synergistic Tools and Processes

- **Six Sigma** – an improvement methodology driven by the statistical analysis of data to identify causes of unwanted variation and defects
- **Lean** - an improvement methodology focused on eliminating waste through detailed analysis of workflow in relation to time
- **Theory of constraints** – an overall management philosophy contending that any manageable system is limited in achieving more of its goal by a very small number of constraints



What does Six Sigma mean?

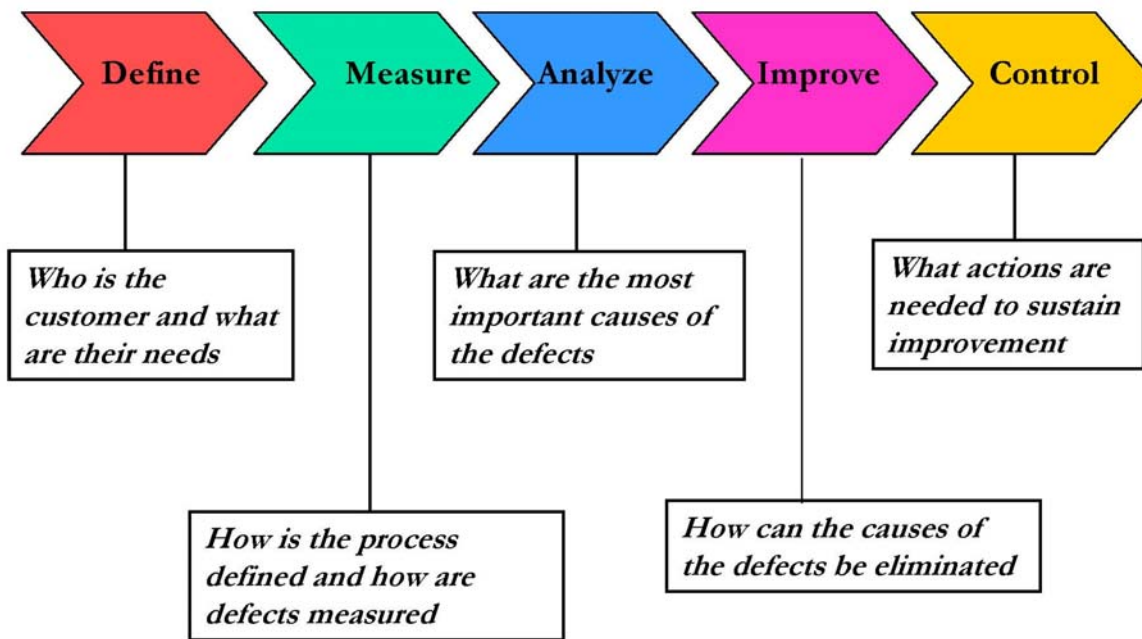
■ The term “Sigma” is a *measurement* of how far a given process deviates from perfection – a measure of the number of “defects”. Six Sigma correlates to just 3.4 defects per million opportunities.

A quality *improvement methodology* that applies statistics to measure and reduce variation in processes.

A *management system* that is comprehensive and flexible for achieving, sustaining, and maximizing success.

Z _B	DPMO
2	308,537
3	66,807
4	6,210
5	233
6	3.4

Phases of Six Sigma



What is Lean?

- The relentless pursuit of the perfect process through waste elimination...



We Spend 75-95% of Our Time Doing Things That Increase Our Costs and Create No Value for the Customer!

In healthcare, Lean is about shortening the time between the patient entering and leaving a care facility by eliminating all non-value added time, motion, and steps.

Lean Thinking Process

The 5 steps to Lean Thinking ...

Define value from the customer's perspective and express value in terms of a specific product

1
Specify Value

2
Map the Value Stream

Map all of the steps...value added & non-value added...that bring a product or service to the customer

The complete elimination of waste so all activities create value for the customer

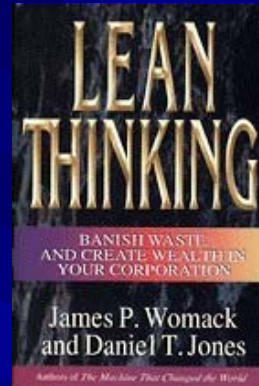
5
Work to Perfection

3
Establish Flow

The continuous movement of products, services and information from end to end through the process

Nothing is done by the upstream process until the downstream customer signals the need

4
Implement Pull



What are your customers willing to pay for?

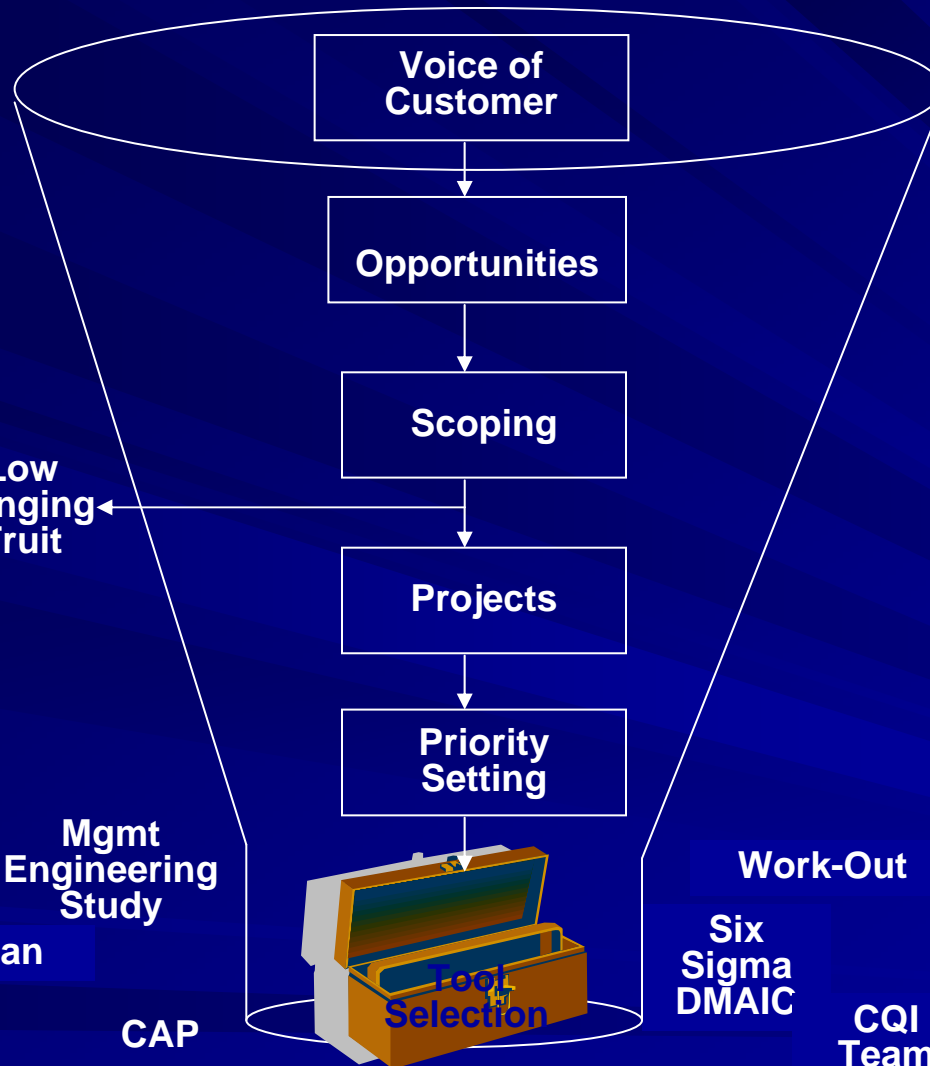
Theory of Constraints

- Key assumption is organization measured & controlled by variation on 3 measures
 - Throughput
 - Operating expense
 - inventory
- 5 focusing steps
 - Identify constraint
 - Exploit constraint
 - Subordinate all other processes
 - Elevate constraint
 - Return to step 1 if constraint has moved

What's your point of view?

Methodology	Six Sigma	Lean	Theory of Constraints
View of waste	Variation is waste	Non-value added is waste	Constraints drive waste
Application	Define Measure Analyze Improve Control	Identify value Define value stream Determine flow Define pull Improve process	Identify constraint Exploit constraint Subordinate others Elevate constraint Repeat cycle
Tool	Statistical analysis	Visualization	Systems thinking
Focus	Problem focused	Process flow focused	Constraint focused

Project funnel and tool selection



Best practice, patient satisfaction results, benchmarks, suggestions, complaints

Inefficient processes, waits, rework, errors, substandard performance

How do you know you have a problem?

Is data available?

What is expected performance or CTQ's?

What is payback/benefits of project?

Do you have the appropriate sponsor?

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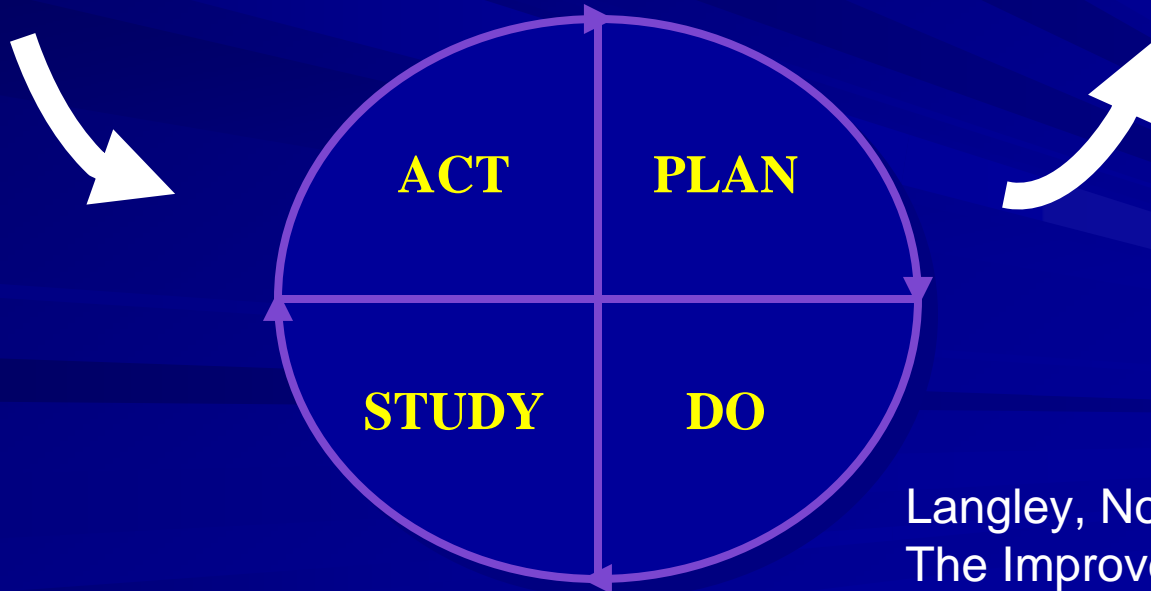


A Model for Improvement

What are we trying to accomplish?

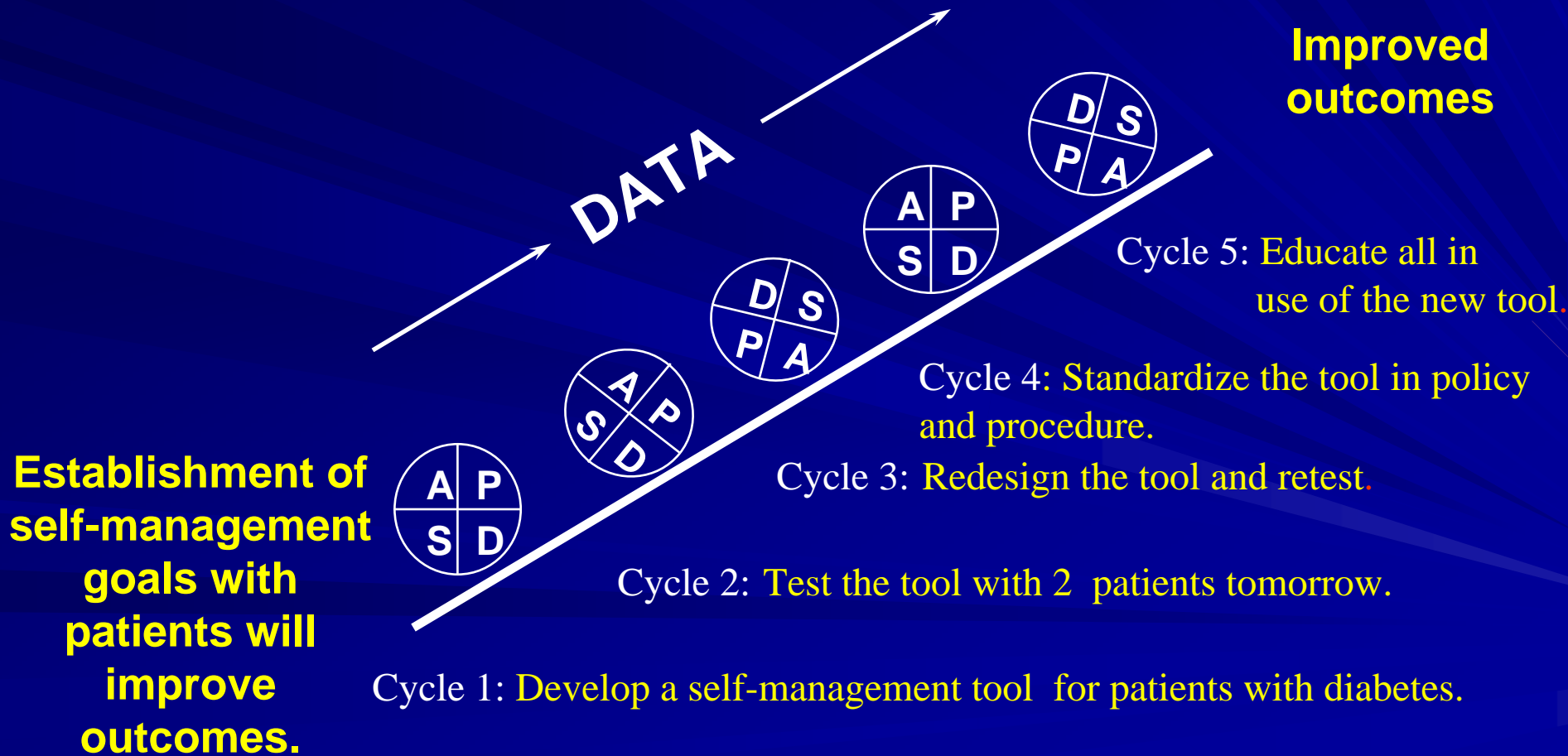
How will we know that a change is an improvement?

What change can we make that will result in improvement?



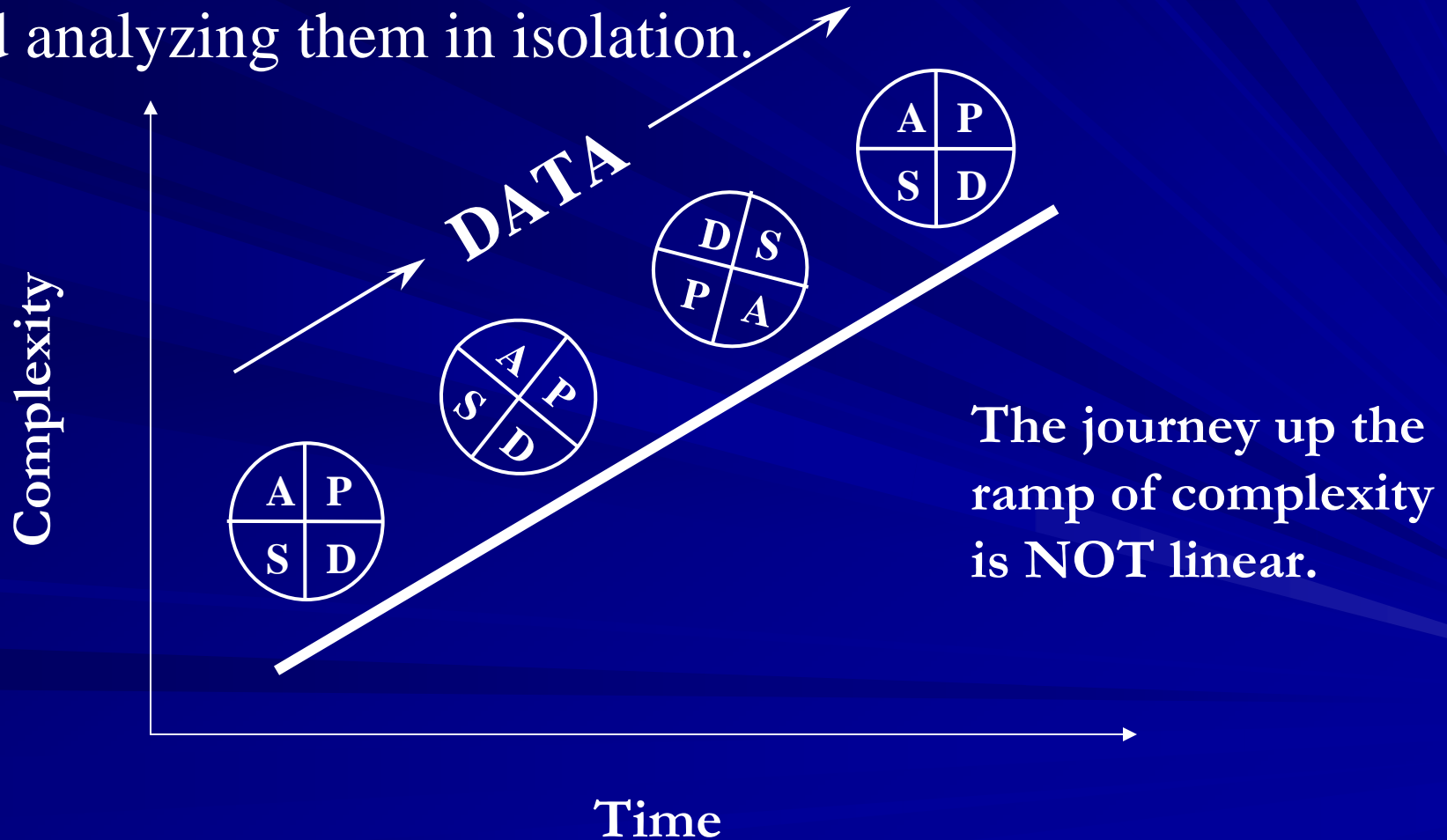
Langley, Nolan, Nolan et al.
The Improvement Guide 1996

Aim: To improve the care of patients with diabetes by creating self-management goals with each patient.



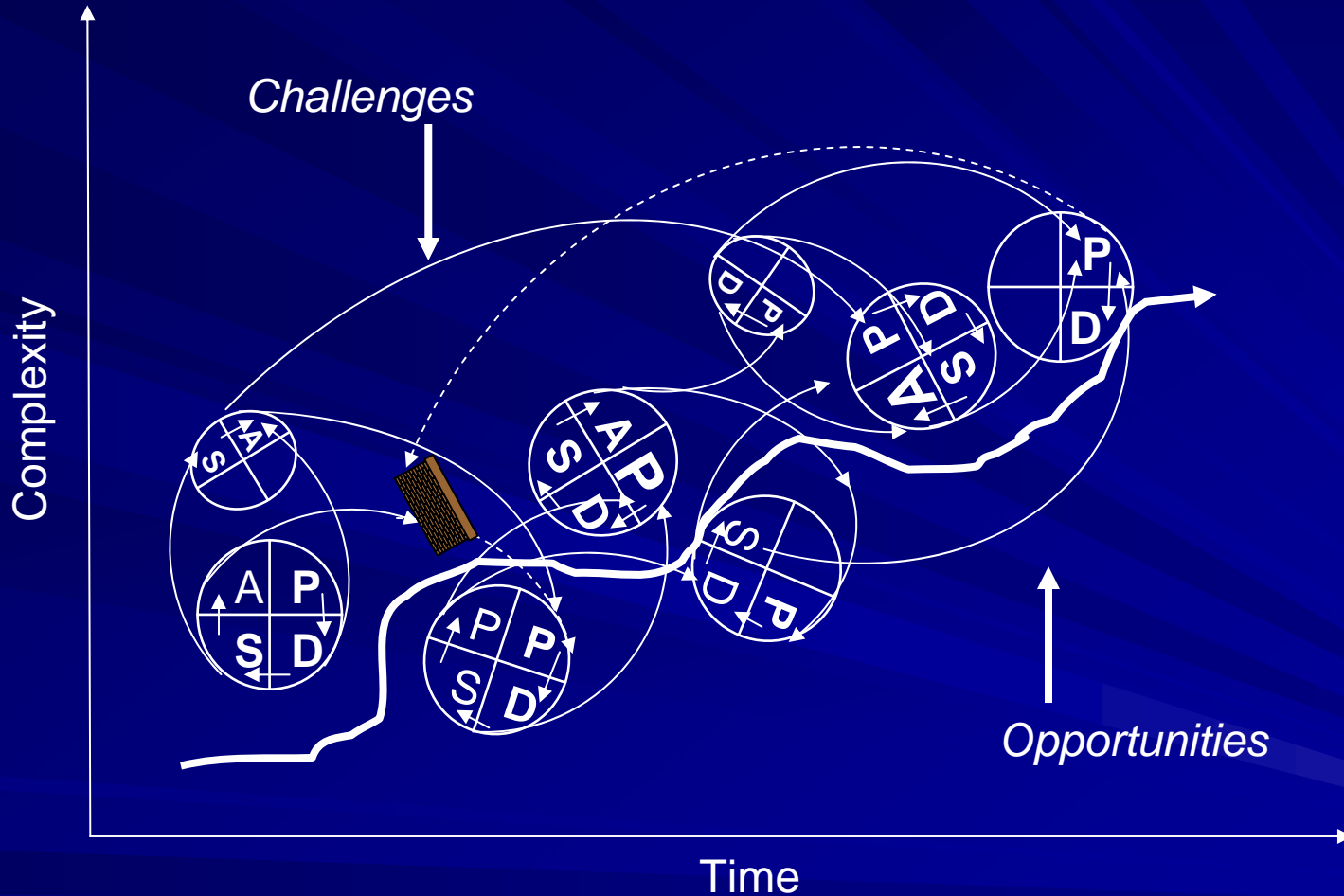
*** Danger ***

Linear Fallacy of Research and QI: Widely-held assumption that social and biological systems can be largely understood by dissecting out micro-components and analyzing them in isolation.



Revised Conceptual Model of Rapid Cycle Change

Quality and Safety in Health Care 2009;18:217-224



Legend:

P=Plan D= Do
S=Study A=Act



= Barrier

----- = Lingering background impact

———— = Direct flow of impact

Arrowhead = Feedback or feedforward

Different Sizes of letters and cycles and bolding of letters = denotes differences in importance/impact

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Training Medical Students: The Case Western School of Medicine Experience

- *“I can be a non-linear thinker- Just show me the steps.”*
- Premise 1: Waiting till graduate years to introduce Quality Improvement concepts sends an inadvertent message: “Not important”
- Premise 2: QI is not a unidirectional step wise learning process

Training Medical Students: The Case Western School of Medicine Experience

- Introducing QI concepts in the first two years of medical school in the context of
 - Health Promotion
 - Professionalism
 - Reflection

Training Medical Students: The Case Western School of Medicine Experience

- Health Promotion Project
- Year 1- July of first year – “Block 1”
- Pedometer Project
 - Wear a pedometer daily for 1 month
 - Team competition
 - Goal to walk 10,000 steps daily
 - Assess mid cycle- what worked and what did not and diagram out cause and effect and improvement action plan.

Training Medical Students: The Case Western School of Medicine Experience

- Professionalism
- Year 1 and 2 – part of pre-clerkship longitudinal clinical experiences
- Web based curriculum complementing these clinical experiences -introduce QI methods as an essential part of medical professionalism.
 - “You the Student Doctor”
- <http://casemed.case.edu/cpcpold/students/module2/default.asp>

Training Medical Students: The Case Western School of Medicine Experience

- Reflection
- “Professional Learning Plans”
- Every 6 weeks using PLPs and going through a PDSA cycle related to an academic improvement the student wants to make.
- Peer reviewed and discussed with their Advisors- Society Deans.

Professional Learning Plan

■ What is it?

- A cycle of steps to achieve and evaluate a goal related to continued learning and professional development

■ Why is it important?

- Useful tool to help you retain and build on your learning in each block
- Useful tool for life long learning as a physician
- Learning cycle is a process that is similar to other models of inquiry and problem solving, including

G A P

E L

T A

N

Three Critical Questions/Issues*

1. What is she trying to learn more about or improve (what does she want to accomplish)?
2. How will she make it happen?
3. How will she know if she has done so (improved her knowledge or instituted a change that is an improvement)?

**Based on the Langley Nolan and Nolan Model for Improvement*

Does the Student Have a Useful Learning Goal?

- Relevant to task or problem which is important to the learner
- Clear
- Realistic
- Cognizant of external requirements
- Measurable and amenable to assessment

Training Residents: The VA Experience

- Practice Based Learning Improvement Course
- Year 1 Residents “Foundations” Course
 - 4 sessions in small group setting
 - Part of ambulatory rotation in 1st year
- Year 2 and 3 Residents -Apply QI knowledge
 - Part of ambulatory rotation both years
 - Small group learning weekly for 2 hours (Friday am)
 - Get designated time weekly to work on project in teams in 2 main areas aligned with VA goals.

Training Residents: The VA Experience

■ 4 weeks -Sessions Topics:

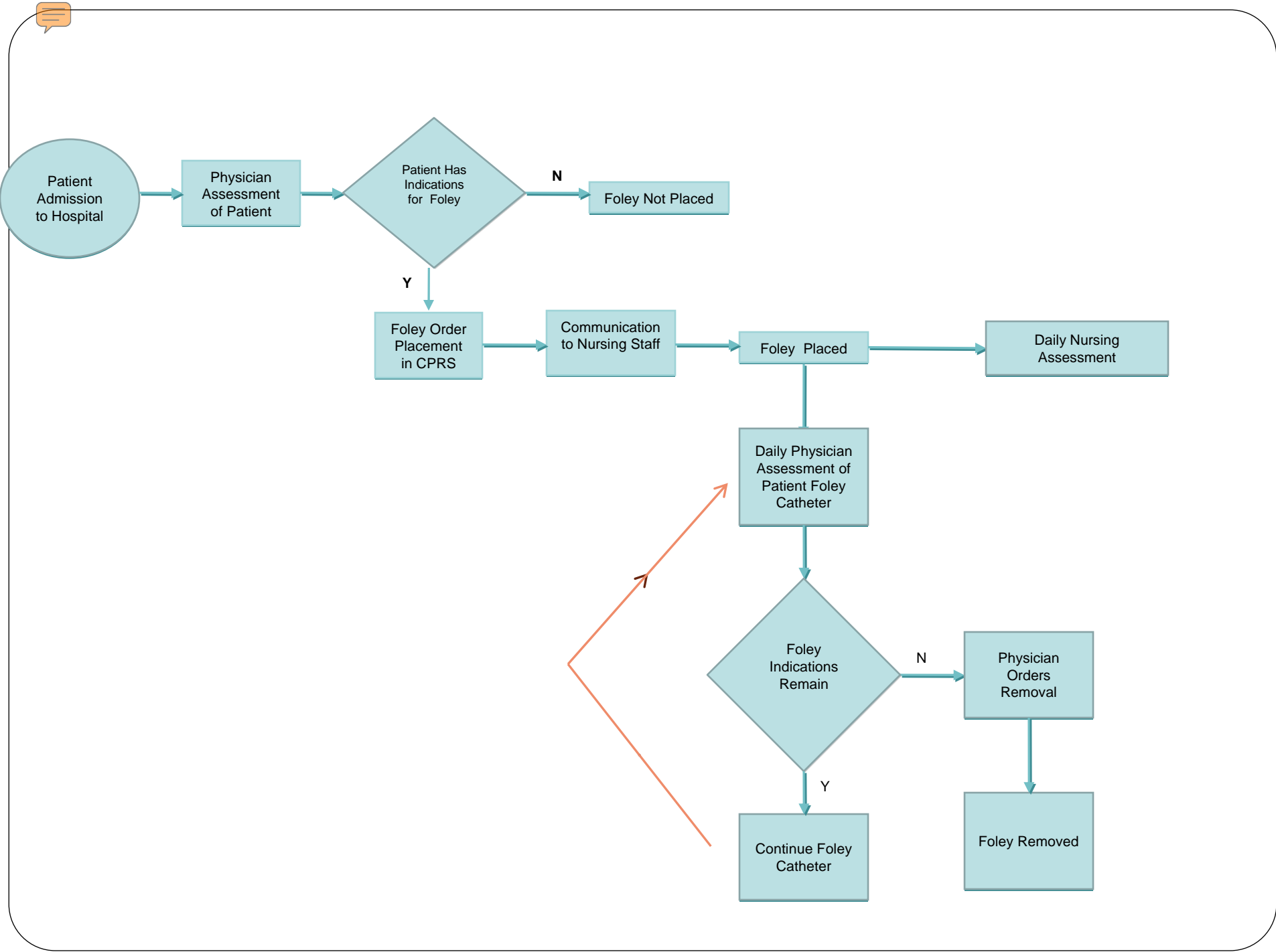
1. Pretest , overview and tools of QI
 - a) PDSA, Fishbone/CED
 - b) Flow Diagram, Identify the team/stakeholders
2. Aim Statement-description and application
3. Measures- data collection and display
4. Change Concepts and Post Test

Training Residents: The VA Experience

- In between sessions – 1/2 afternoon to work on designated projects
 - Medicine Reconciliation
 - Foley Catheter Use
 - Must meet with stakeholders and complete a storyboard power point presentation
- Team presents this to residents at noon conference
- 4 dedicated faculty/ VAQS program

Example of A Resident Led Project: Indwelling Catheter Quality Improvement Project

- Allan Chen, MD
- Joelle El Amm, MD
- Andrew Parchman, MD
- George Tannous, MD



Attending

Residents

MS

Lacking of awareness

Lack of assessment

Lack of education/teaching

Time constraints

Communication with nursing

Lacking of awareness

Lack of assessment

Lack of education

Time constraints

Perception of non-importance

Communication with nursing

Knowledge deficit

Unsure of role

Timid

**Daily
Documentation of
Foley Catheter**

Lack of awareness/assessment

Communication with physicians

Time constraints

Foleys placed without
orders

Time consuming

Not Efficient

Not Always Present

No form for Foley
Documentation

Nursing

CPRS

Bedside Chart

Aim Statement

- “We will increase daily physician assessment and documentation of indwelling urinary catheters in medicine inpatients on ward 4A to 50% over the next four months.’

Change Concept

- We will designate a member of the medical team as the 'foley champion' who will be responsible for daily bedside chart documentation.

Measures

- Outcome
 - Number of inappropriate catheter days
 - Number of catheter documentation days
- Process
 - % of Bedside Charts Filled out Appropriately
 - Frequency of Nursing Calls to Foley Champion
 - Balancing
 - Physician/Nursing Morale
 - Acute renal failure post catheter removal

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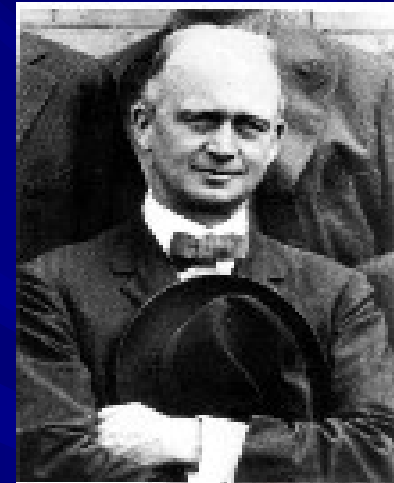


Training Residents: The MetroHealth Experience

Inspiration: Ernest Amory Codman

■ The “End Result Idea”

- Simply put - Doctors should follow all their patients long enough to assess results of their treatment.
- The “Ether Record”
- In medicine searching to record not only what he had done but also *how he could have done it better.*



Ernest A. Codman, M.D.

A factory “takes pains to assure itself that the product is a good one.” Codman wrote. But “the hospital does not.”

CQI Overview

- Pretest for all incoming residents
 - Quality Improvement Knowledge Assessment Pre-Test (QIKAT)*
- Trainees
 - Med/Peds, Pediatrics, Physical Medicine & Rehabilitation, Pulmonary Medicine
- Total of 8 one-hour training sessions
- Post test
 - Quality Improvement Knowledge Assessment Post-Test (QIKAT)*
- Project evaluation
 - Standards for Quality Improvement Reporting Excellence (SQUIRE) guidelines**

*Ogrinc G, Headrick LA, Morrison LJ, Foster T. Teaching and Assessing Resident Competence in Practice-Based Learning and Improvement. JGIM. 2004;19:496-500.

** Davidoff, et al. Publication Guidelines for Improvement Studies in Health Care: Evolution of the SQUIRE Project. Ann Intern Med November 4, 2008 149:670676

Curriculum

■ Session 1:

- Principles of Continuous Quality Improvement

■ Session 2:

- Principles of team-building and brainstorming
- Practice building a team and brainstorming

Content

■ Session 3:

- Teams brainstorm improvement opportunities. Conduct multi-voting to select projects.

■ Session 4:

- Overview of QI diagnostic tools (flowchart, pareto chart, fishbone, change concept, aim statement)
- Overview of measures
- Provide SQUIRES guidelines to prepare the project

Content

■ Session 5:

- Teams present their plan for intervention
- Learn measurement and variance

■ Session 6:

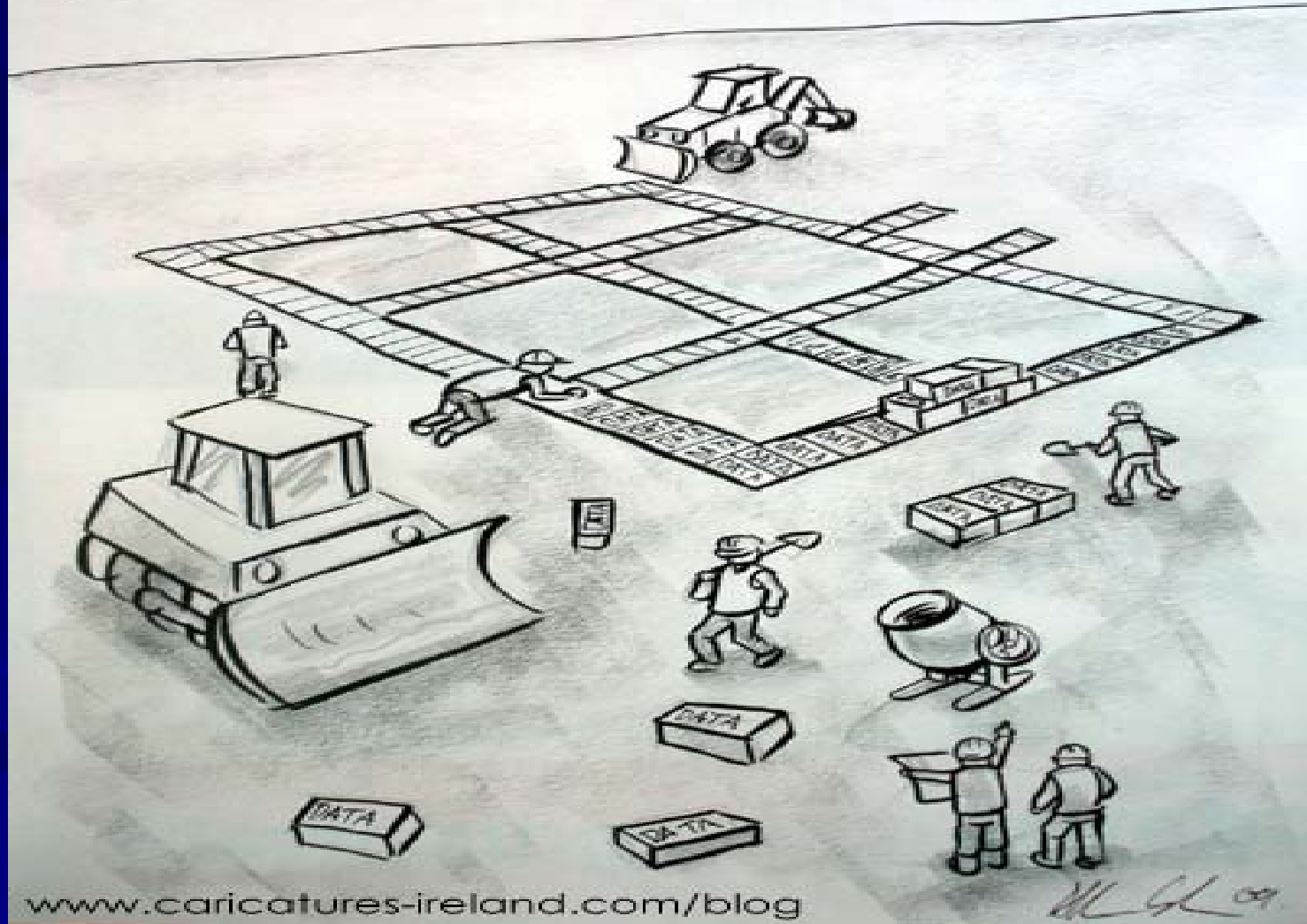
- Present an update of the project
- Discuss any hurdles

■ Session 7:

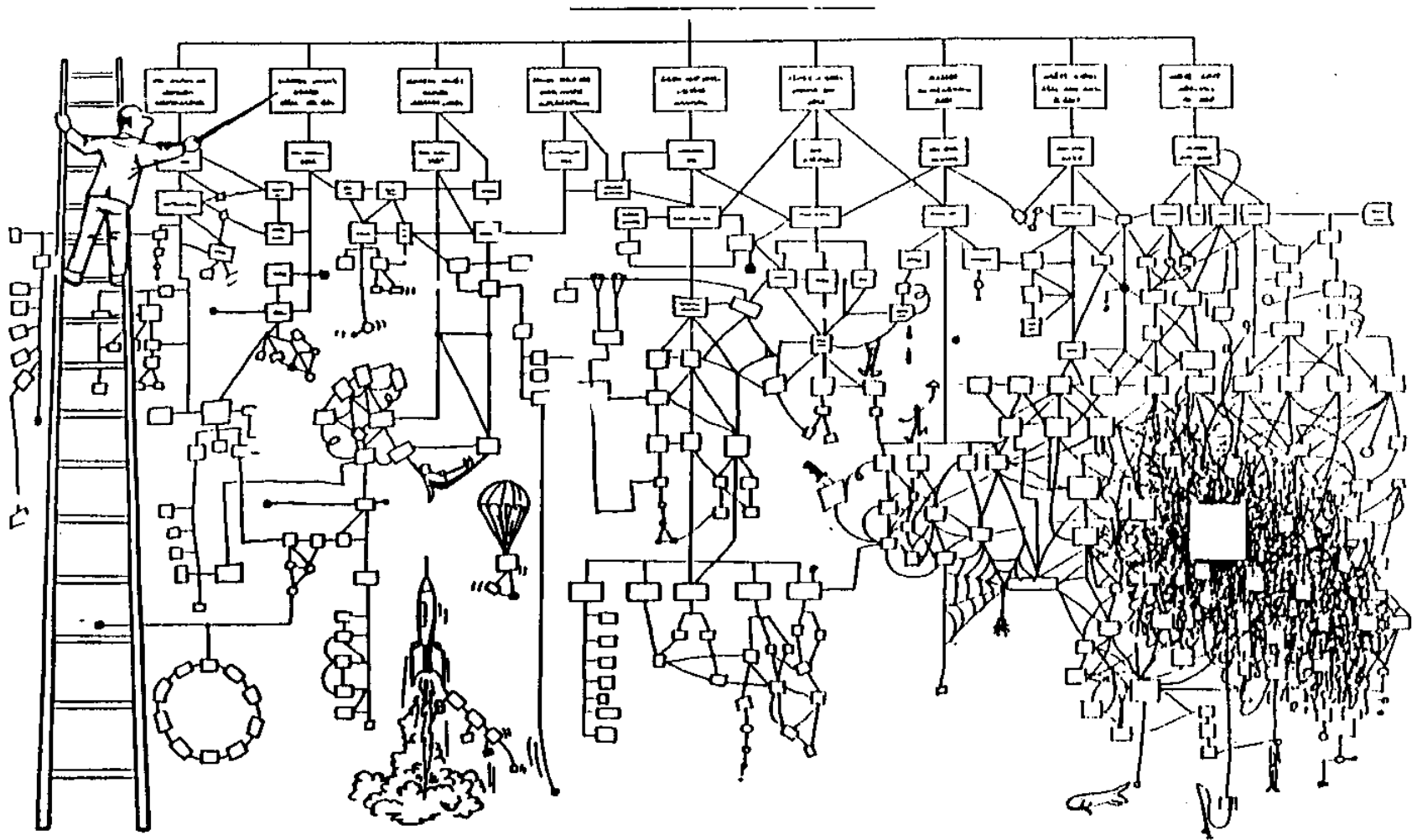
- Discuss results and plan final presentation



MEASUREMENT IS THE FOUNDATION OF BUILDING IMPROVEMENT.



Every system is perfectly designed to achieve the results it achieves



Examples of QI Projects

- Improving discharge summaries.
- Speeding up the rounds on floor.
- Narcotic drug refill.
- Utility of a pre-clinic questionnaire.
- Screening for domestic violence.
- How to be seated in a car seat.
- Screening for obesity.
- Reducing the delay for immunizations in clinic.

Barriers to Implementing the CQI Curriculum

- Faculty Support
- Resident Time
- Faculty Time
- Faculty Skills and Knowledge

Stress Reduction Kit



Directions:

1. Place kit on FIRM surface.
2. Follow directions in circle of kit.
3. Repeat step 2 as necessary, or until unconscious.
4. If unconscious, cease stress reduction activity.

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Training Faculty: The Indiana University Experience

- Practice improvement
- Train the trainer
- Residents as mentors

AMA/ACCME Educational Concept

Then

- ⑩ Activities based on institutional needs assessment; unidirectional
- ⑩ Content chosen by CME provider and presenter without direct learner input
- ⑩ Measurements of change in competence, performance, or patient outcomes based on estimation of physician

Now

- ⑩ Activities linked to practice-based needs; bidirectional
- ⑩ Content matches scope of learner's practice
- ⑩ Measurements of change in competence, performance, or patient outcomes will be available

CME in the 21st Century

- Outcomes-based assessment
- Practice-based CME



Practice Improvement: PRAISING Project

- IUSM-developed program for primary care
- Approved by ABFM for Part IV recert
- Web-based, self-directed improvement modules
 - Dementia
 - Depression
 - Falls
 - Urinary incontinence
- Personalized feedback from geriatrician

Practice Improvement: PRAISING Project

Required worksheets

Practice Improvement Initiative Specialized in Geriatrics (PRAISING) American Board of Family Medicine American Board of Internal Medicine

Worksheet One

*Purpose: Worksheet One is a document on which to identify the topic you would like to use for your geriatrics practice improvement initiative. This worksheet allows you reflect on why this project is important to your practice, your target population and what potential barriers you may encounter during the implementation phase. You will **not** need to turn in this worksheet to obtain credit for your project when you are done.*

Name: _____ Date: _____

Practice Site: _____

Address: _____

Phone/Fax/Email: _____

1. What is the **topic area** of your Geriatrics PI initiative and the **specific objective**? Please select **one topic and one corresponding objective**.

Topic: Dementia

- Objective: Improve the rate of assessment of cognitive ability and functional status in older adults new to the practice
- Objective: Improve the rate of obtaining and documenting results of vitamin B12 and TSH levels in older adults with newly diagnosed dementia
- Objective: In patients with mild to moderate Alzheimer disease, improve the rate of discussing treatment with a cholinesterase inhibitor with the patient and the primary caregiver (if available)
- Objective: Improve the rate of discussions or referrals of patient and caregiver for education about patient safety and how to deal with conflicts at home, and inform them about community resources for dementia

Topic: Depression

- Objective: Improve the process for Systematically Screening for and recognizing depression in "at risk" older adults
- Objective: Improve the standardization of the diagnosis and documentation of depression in older adults
- Objective: Improve documentation of the presence or absence of suicidal ideation and psychosis in older adults with depression
- Objective: Improve the rate of not prescribing or refilling the following medications for treatment of depression in older adults: tertiary amine tricyclics, MAOI's, benzodiazepines, or stimulants (except methylphenidate)

Topic: Falls

- Objective: Improve the rate and documentation of asking older adults at least annually about the occurrence of recent falls
- Objective: Improve the performance and documentation of a basic fall evaluation in older adults who report two or more falls in the past year or single fall with injury

- Objective: Improve the rate of making specific diagnostic and treatment recommendations to older adults based on a basic fall evaluation

Topic: Urinary Incontinence

- Objective: Improve the determination of and documentation of the presence or absence of urinary incontinence in older adults new to the practice and at least annually
- Objective: Improve the performance and documentation of a rectal examination and genital system examination (including a pelvic examination in women) in older adults with urinary incontinence
- Objective: Improve the rate of and documentation of results of a urinalysis and post-void residual in older adults with urinary incontinence
- Objective: Improve the rate of discussions of treatment options with older adults with urinary incontinence

2. Why is this geriatrics topic important to you and your practice?

3. Who is your target population?

4. What is your **plan** to create change and achieve your objective?

5. What major **barriers** do you anticipate in attempting to achieve this objective?

6. How will you select charts for audit (e.g. random selection, consecutive patients, etc)?

Practice Improvement: PRAISING Project

Required patient audit forms

Pre-Improvement Data										
Demographics										
	Patient 1		Patient 2		Patient 3		Patient 4		Patient 5	
Have you screened the patient for dementia? (Select yes or no)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, what screening tool was used? (Select the tool used or enter a different tool in "Other")										
Timed 10-item test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No item test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clock drawing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Serial sevens	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mini-cog	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits
If observed, what does your script indicate? (Check all that apply)	<input type="checkbox"/> Absent		<input type="checkbox"/> Absent		<input type="checkbox"/> Absent		<input type="checkbox"/> Absent		<input type="checkbox"/> Absent	
	<input type="checkbox"/> Start acetylcholinesterase inhibitor		<input type="checkbox"/> Start acetylcholinesterase inhibitor		<input type="checkbox"/> Start acetylcholinesterase inhibitor		<input type="checkbox"/> Start acetylcholinesterase inhibitor		<input type="checkbox"/> Start acetylcholinesterase inhibitor	
	<input type="checkbox"/> Screen for depression		<input type="checkbox"/> Screen for depression		<input type="checkbox"/> Screen for depression		<input type="checkbox"/> Screen for depression		<input type="checkbox"/> Screen for depression	
	<input type="checkbox"/> Refer		<input type="checkbox"/> Refer		<input type="checkbox"/> Refer		<input type="checkbox"/> Refer		<input type="checkbox"/> Refer	
	<input type="checkbox"/> Provide patient and family education		<input type="checkbox"/> Provide patient and family education		<input type="checkbox"/> Provide patient and family education		<input type="checkbox"/> Provide patient and family education		<input type="checkbox"/> Provide patient and family education	
	<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other	
When did plan to follow up with the patient? (Select the follow up time)										
	<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other	
	<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks	
	<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks	
	<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks	
	<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months	
	<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months	
	<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months	
How visit:	<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other	
	<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks	
	<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks	
	<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks	
	<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months	
	<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months	
	<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months	
Doctor visit:	<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other	
	<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks	
	<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks	
	<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks	
	<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months	
	<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months	
	<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months	

Post-Improvement Data										
Demographics										
	Patient 1		Patient 2		Patient 3		Patient 4		Patient 5	
Have you screened the patient for dementia? (Select yes or no)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, what screening tool was used? (Select the tool used or enter a different tool in "Other")										
Timed 10-item test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No item test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clock drawing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Serial sevens	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mini-cog	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits	<input type="checkbox"/> Within normal limits
If observed, what does your plan include? (Check all that apply)	<input type="checkbox"/> Absent		<input type="checkbox"/> Absent		<input type="checkbox"/> Absent		<input type="checkbox"/> Absent		<input type="checkbox"/> Absent	
	<input type="checkbox"/> Start acetylcholinesterase inhibitor		<input type="checkbox"/> Start acetylcholinesterase inhibitor		<input type="checkbox"/> Start acetylcholinesterase inhibitor		<input type="checkbox"/> Start acetylcholinesterase inhibitor		<input type="checkbox"/> Start acetylcholinesterase inhibitor	
	<input type="checkbox"/> Screen for depression		<input type="checkbox"/> Screen for depression		<input type="checkbox"/> Screen for depression		<input type="checkbox"/> Screen for depression		<input type="checkbox"/> Screen for depression	
	<input type="checkbox"/> Refer		<input type="checkbox"/> Refer		<input type="checkbox"/> Refer		<input type="checkbox"/> Refer		<input type="checkbox"/> Refer	
	<input type="checkbox"/> Provide patient and family education		<input type="checkbox"/> Provide patient and family education		<input type="checkbox"/> Provide patient and family education		<input type="checkbox"/> Provide patient and family education		<input type="checkbox"/> Provide patient and family education	
	<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other	
When did plan to follow up with the patient? (Select the follow up time)										
	<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other	
	<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks	
	<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks	
	<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks	
	<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months	
	<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months	
	<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months	
How visit:	<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other	
	<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks	
	<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks	
	<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks	
	<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months	
	<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months	
	<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months	
Doctor visit:	<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other		<input type="checkbox"/> Other	
	<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks		<input type="checkbox"/> < 2 weeks	
	<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks		<input type="checkbox"/> 2 weeks	
	<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks		<input type="checkbox"/> 4 weeks	
	<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months		<input type="checkbox"/> 2 months	
	<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months		<input type="checkbox"/> 3 months	
	<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months		<input type="checkbox"/> > 3 months	

Train the Trainer: A Bridge to Quality Pilot

- Collaboration of IUSM CME and CME Enterprise
- Hands-on workshop provides intro to LSS
 - LSS tools
 - Lessons learned from physician QI leaders
 - Tool practice and project development and time
- Bringing the “silos” together
- Focus on physician involvement (not necessarily leadership)



Train the Trainer: A Bridge to Quality Phase 2

- New centers

- Participant support

 - Training in LSS methodologies/tools

 - Web portal

 - Tool kits

 - Database

 - Outcome analysis

 - “Community” support

Residents As Mentors

- Future initiative
- Linking groups with complimentary skills
 - Residents with practical QI knowledge
 - Faculty with practical systems-based knowledge
- Mutually beneficial educational experience
 - Residents expand systems knowledge in chosen area
 - Faculty expand QI knowledge to benefit practice

??????????