

Dartmouth Coach-The-Coach

Dartmouth Microsystem Improvement Curriculum

Tuesday, January 10, 2006

Paul B. Batalden, MD
Marjorie Godfrey, MS, RN
Gene C. Nelson, DSc, MPH
www.clinicalmicrosystem.org



WELCOME!

DHMC Heart Failure Team

DHMC Intermediate Cardiac Care Unit

A Great Practice

“They give me exactly what I want (and need) exactly when I want (and need) it

. . . While maintaining and improving a joyful work environment and a financially viable organization.”

**- Don Berwick, MD
President, CEO
Institute for Healthcare Improvement (IHI)**

Agenda

January 10, 9:00-3:30pm

- | | | |
|--------------|--|-------------------|
| 9:00 | Welcome and Introductions | Sandy/Gene |
| 9:30 | Introduction to Microsystem Thinking | Paul |
| | Background, timeline, micros. developmental journey | |
| 10:15 | Break | |
| 10:30 | Assessing Your Microsystem | Margie |
| 10:45 | Exercise 1: 5 Ps | |
| 12:15 | Report Outs | |
| 12:30 | Lunch | |
| 1:00 | Introduction to Model for Improvement | Gene |
| | Themes for Improvement | |
| 1:30 | Exercise 2: Choose A Theme | |
| 2:00 | Report Outs | |
| 2:15 | Introduction to Improvement Model: PDSA ↔ SDSA | Gene |
| 2:45 | Wrap up and Evaluations | Margie |

Tuesday Team Aim

**At the end of the session,
participants will be able to:**

- **Create a plan to assess and diagnose their clinical microsystem**
- **Select a theme to focus improvement**
- **Describe the improvement model**

Introductions & Why We are Here

- **Introductions**
- **Name of Practice and Team Members**
- **1 Thing that ...**
 - **Patients really love about our practice is**
 - **drives some patients nuts is**

9:00-9:30 Sandy & Gene

Why We are Here

- Learn about our practice
- Improve our practice
- Improve our work life
- Studio course for **GREEN** Belts
 - *Educating the Reflective Practitioner*
 - Donald Schön



Six Challenges from the IOM – Crossing the Quality Chasm

- **Safety**
- **Effectiveness**
- **Patient-centeredness**
- **Timeliness**
- **Efficiency**
- **Equity**

www.iom.edu

Institute of Medicine

Old / New Rules

<i>Old rule</i>	<i>New Rule</i>
1. Care based on visits	1. Care based on continuous healing relationships
2. Professional autonomy drives variability	2. Care customized based on patient need & values
3. Professionals control care.	3. Patient is source of control
4. Information is a record	4. Knowledge is shared and information flows freely
5. Decision making based on training & experience	5. Decision making is evidence based

Institute of Medicine

Old / New Rules

6. Do no harm is individual responsibility	6. Safety is a system property
7. Secrecy is necessary	7. Transparency is necessary
8. System reacts to needs	8. Needs are anticipated
9. Cost reduction is sought	9. Waste is continuously decreased
10. Preference is given to professional roles over the system	10. Cooperation among clinicians is a priority

Introduction to Microsystem Thinking

- **“Every system is perfectly designed to get the results it gets.”**
 - **Your practice is a small system**
 - **A complex adaptive system**
 - **Biological with adaptive capabilities**
 - **A clinical microsystem**

9:30-10:15 Paul

Aim

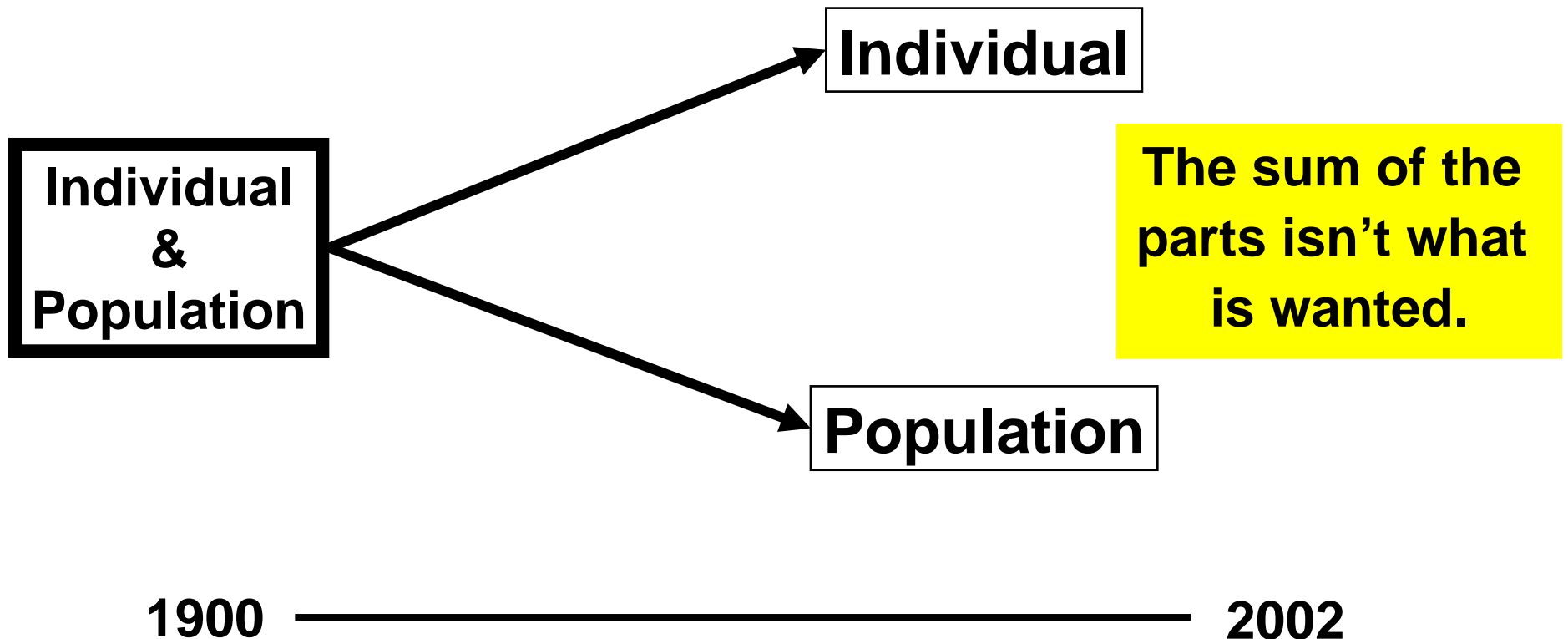
- **Offer a clear, concise introduction to the idea and its formation**
- **Survey the use(s) of the idea**
- **Introduce some helpful resources for working with the idea**

Assumptions

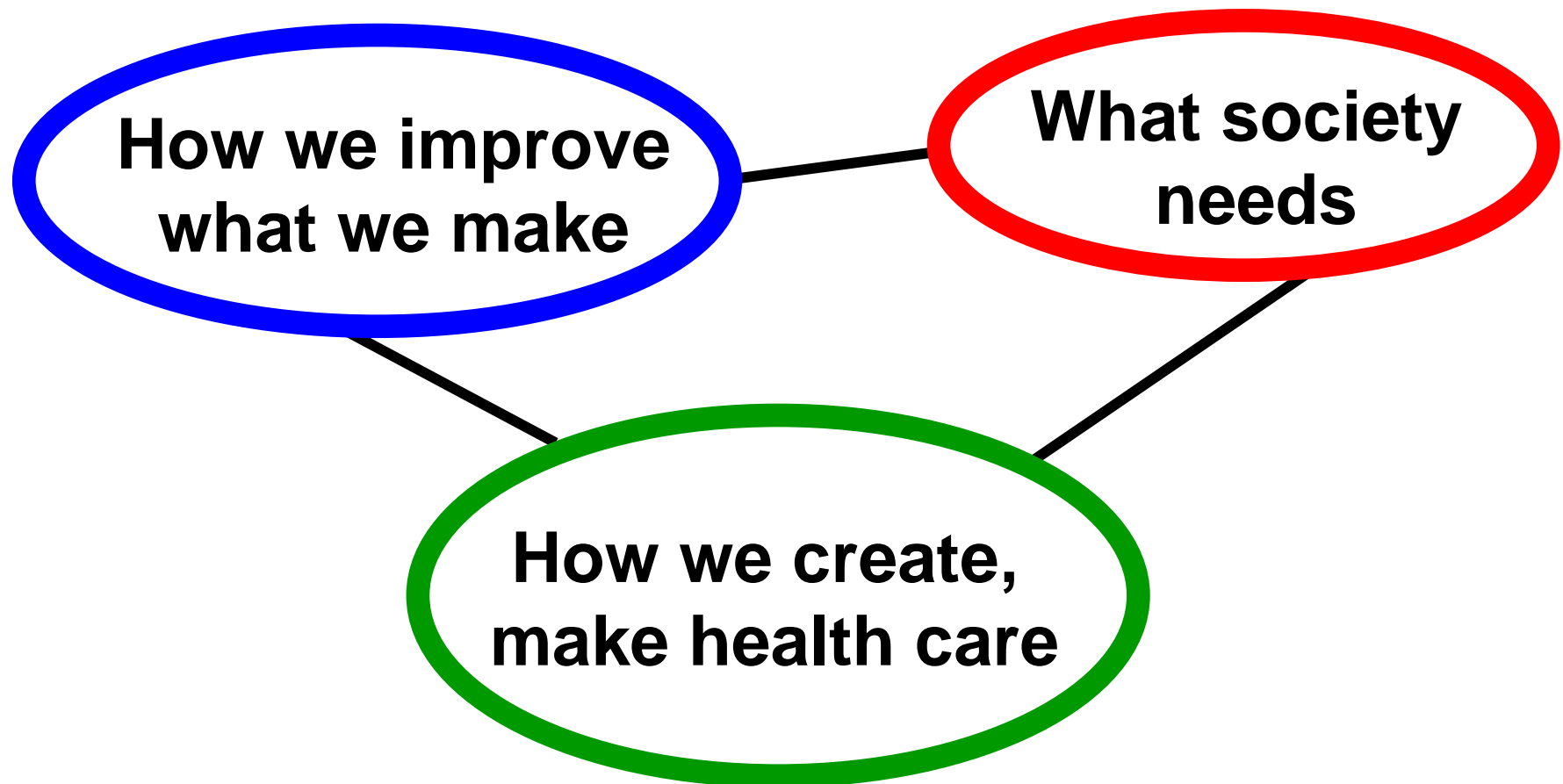
- **Everyone has heard of the idea and has various notions of what it means**
- **We all have more experience living in, working in, and using them; than we have studying, changing, and leading them**

How did we get here?

Kerr White, Healing the Schism



Understanding Health Care as a System



“Dr. Batalden’s Pediatric Practice”

- **Theresa Baker, M.D.**
- **Mary Beth Hanson, RN, PNP**
- **Connie Van der Top, LPN**
- **Barb Malzahn, and**
- **Paul Batalden, M.D.**

In a department of 36 pediatricians, etc.

In the Park Nicollet medical center of 280 MDs, etc.

In the MedCenters Health Plan in west MSP metro area

Definition

A health care clinical microsystem can be defined as the combination of a ***small team*** of people who work together on a regular basis—or as needed—to provide care and the ***individuals*** who receive that care (who can also be recognized as members of a discrete ***subpopulation of patients.***)

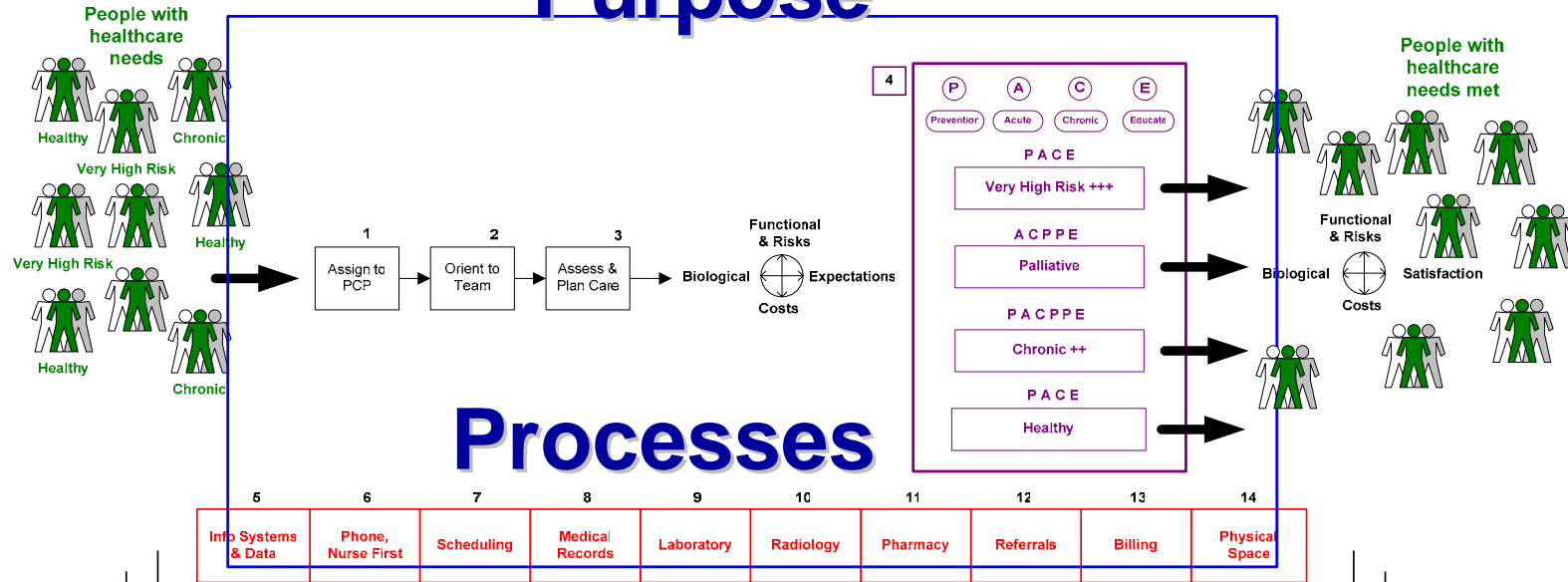
It has clinical and business ***aims***, linked ***processes***, a shared ***information*** environment and produces services and care which can be measured as performance ***outcomes***. These systems evolve over time and are (often) ***embedded*** in larger systems/organizations.

As any living adaptive system, the microsystem must: (1) do the work, (2) meet staff needs, (3) maintain themselves as a clinical unit.

Patients

Building a Team to Manage A Panel of Primary Care Patients
 Mission: The Dartmouth-Hitchcock Clinic exists to serve the health care needs of our patients.

Purpose



Processes

Professionals

Patterns

TEAM MEMBERS:		
Nashua Internal Medicine		
Sherman Baker, MD	Missy, RN	Amy, Secretary
Leslie Cook, MD	Diane, RN	Buffy, Secretary
Joe Karpicz, MD	Katie, RN	Mary Ellen, Secretary
Deb Urquart, NP	Bonnie, LPN	Kristy, Secretary
Ron Carson, PA	Carole, LPN	Charlene, Secretary
Erica, RN	Nancy, LPN	
Laura, RN	Mary Beth, MA	
Maggi, RN	Lynn, MA	

Skill Mix: MDs 2.8 RNs 6.8 NP/PAs 2 MA 4.8 LPN SECs 4

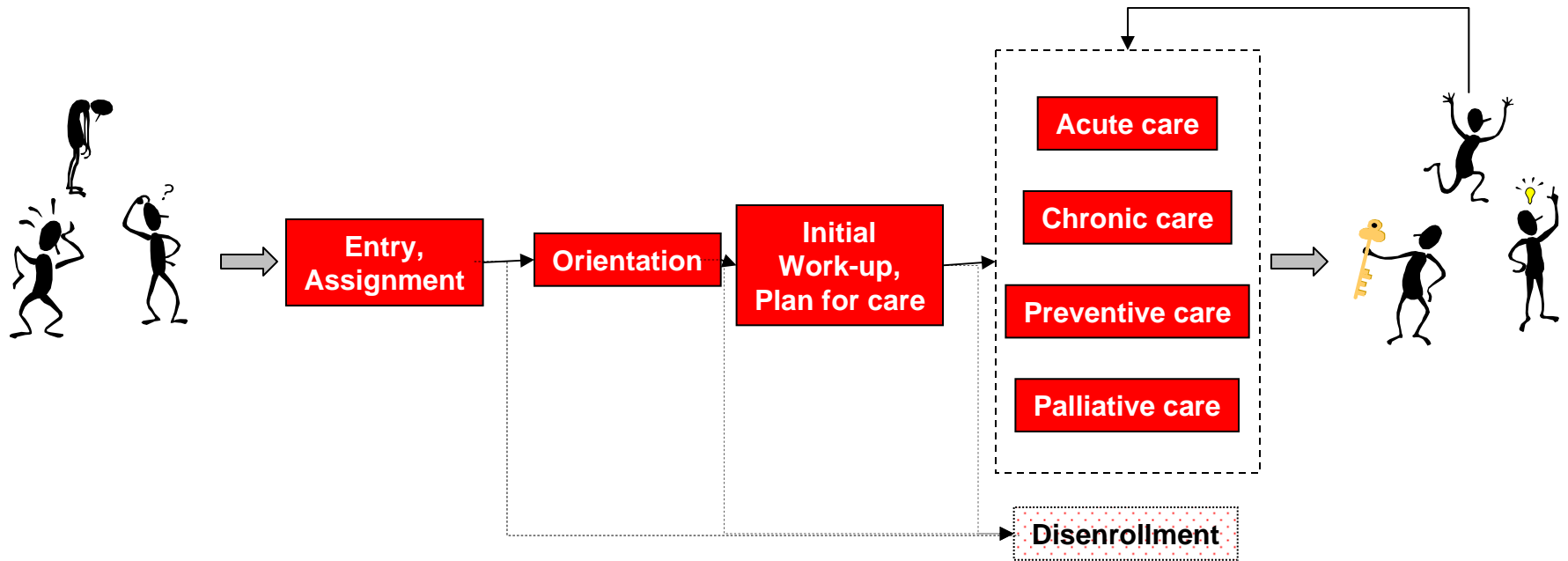
Measuring Team Performance & Patient Outcomes and Costs					
Measure	Current	Target	Measure	Current	Target
Panel Size Adj.			External Referral Adj. PMPM-Team		
Direct Pt. Care Hours: MD/Assoc.			Patient Satisfaction		
% Panel Seeing Own PCP.			Access Satisfaction		
Total PMPM Adj. PMPM-Team			Staff Satisfaction		

Micro-System Approach 6/17/98
 Revised: 1/27/00

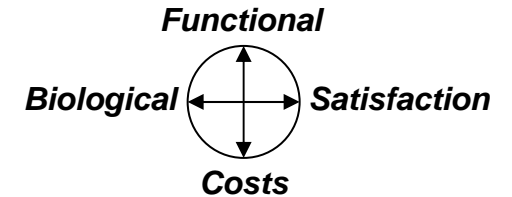
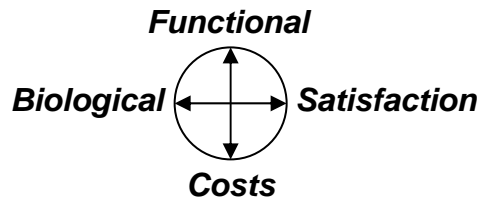
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 Paul B. Batalden, MD
 Dartmouth-Hitchcock Clinic, June 1998

A “Generic” Clinical Microsystem Model

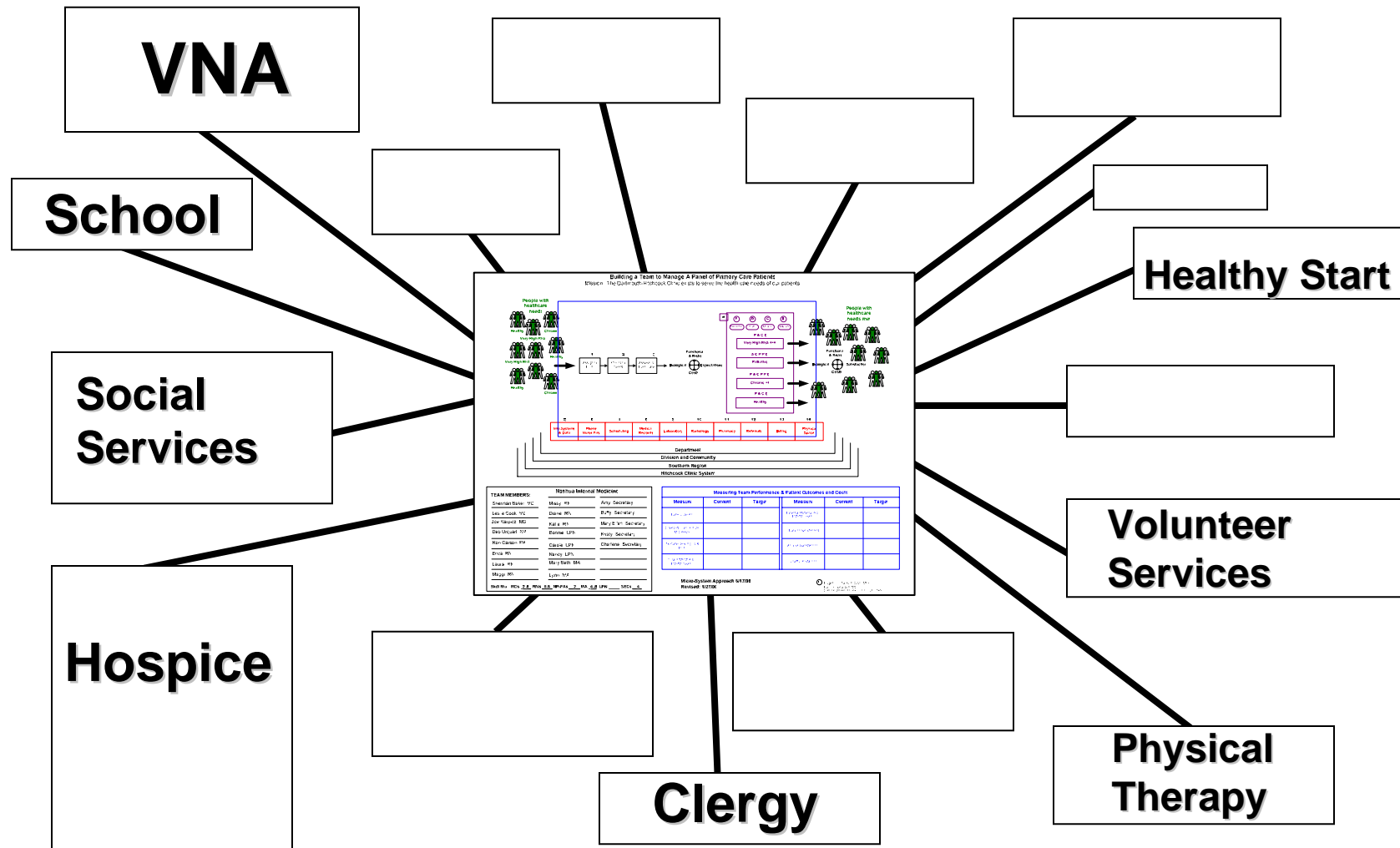
← Satisfaction of need, monitoring, assessment of outputs →



← Beneficiary knowledge, including knowledge of life while not in direct contact with the health care system →



Exploring the external context of the clinical microsystem for improving the health of a given subpopulation of patients...



Place a bold line around the rectangle of the “most important contributors” to the improved health of the subpopulation. Illustrate the relationships with a blue line. Add an arrow head if the direction of the relationship is clear. If the relationship can be significantly improved, use red for the line.

So, why focus on the “clinical microsystem?”

- **Basic “building block” of health care as a system**
- **Unit of clinical policy-in-use**
- **Locus of most workplace “motivators” and many “hygiene” factors**
- **Most variables relevant to patient satisfaction controlled here**
- **Where “good value” and “safe” care is made**
- **Where most health professional “formation” occurs after initial preparation**

Microsystems are the *building blocks* that come together to form **Macro-organizations**

System Levels

Example

Macrosystem

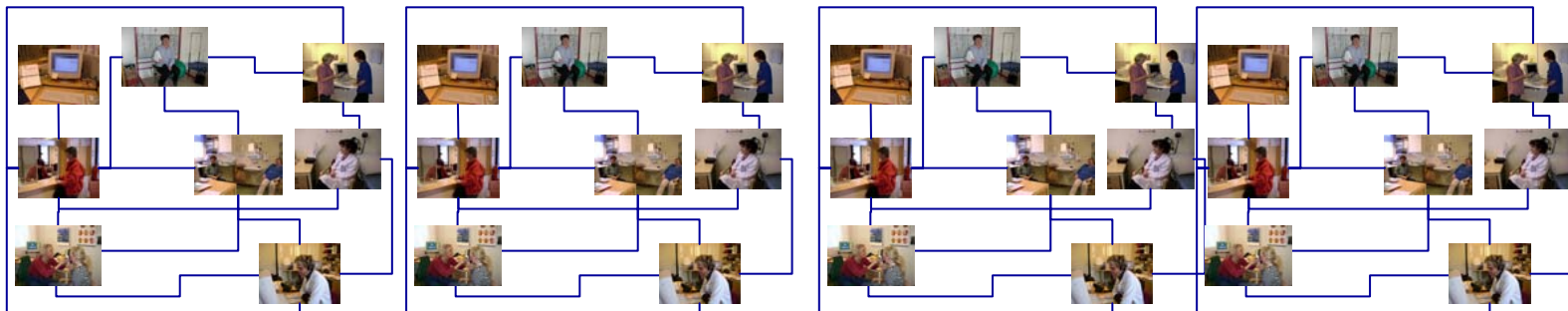
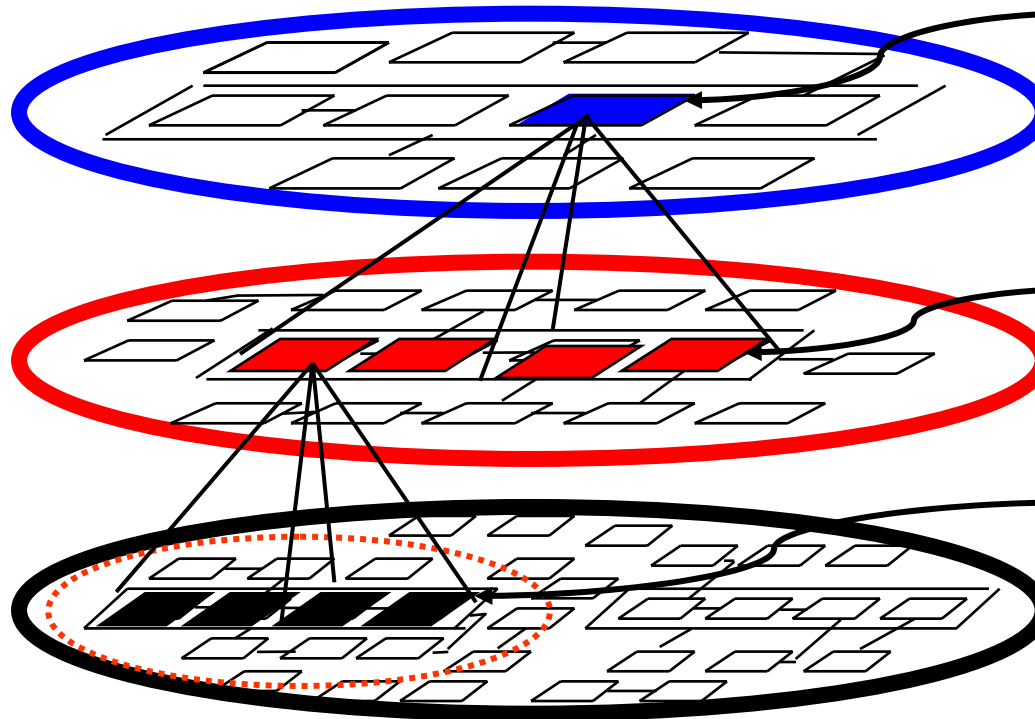
Nursing Services

Mesosystem

Nursing Divisions

Microsystem

Frontline Nursing Units



The Chain of Effect in Improving Health Care Quality

I Patient and the Community



II Microsystem

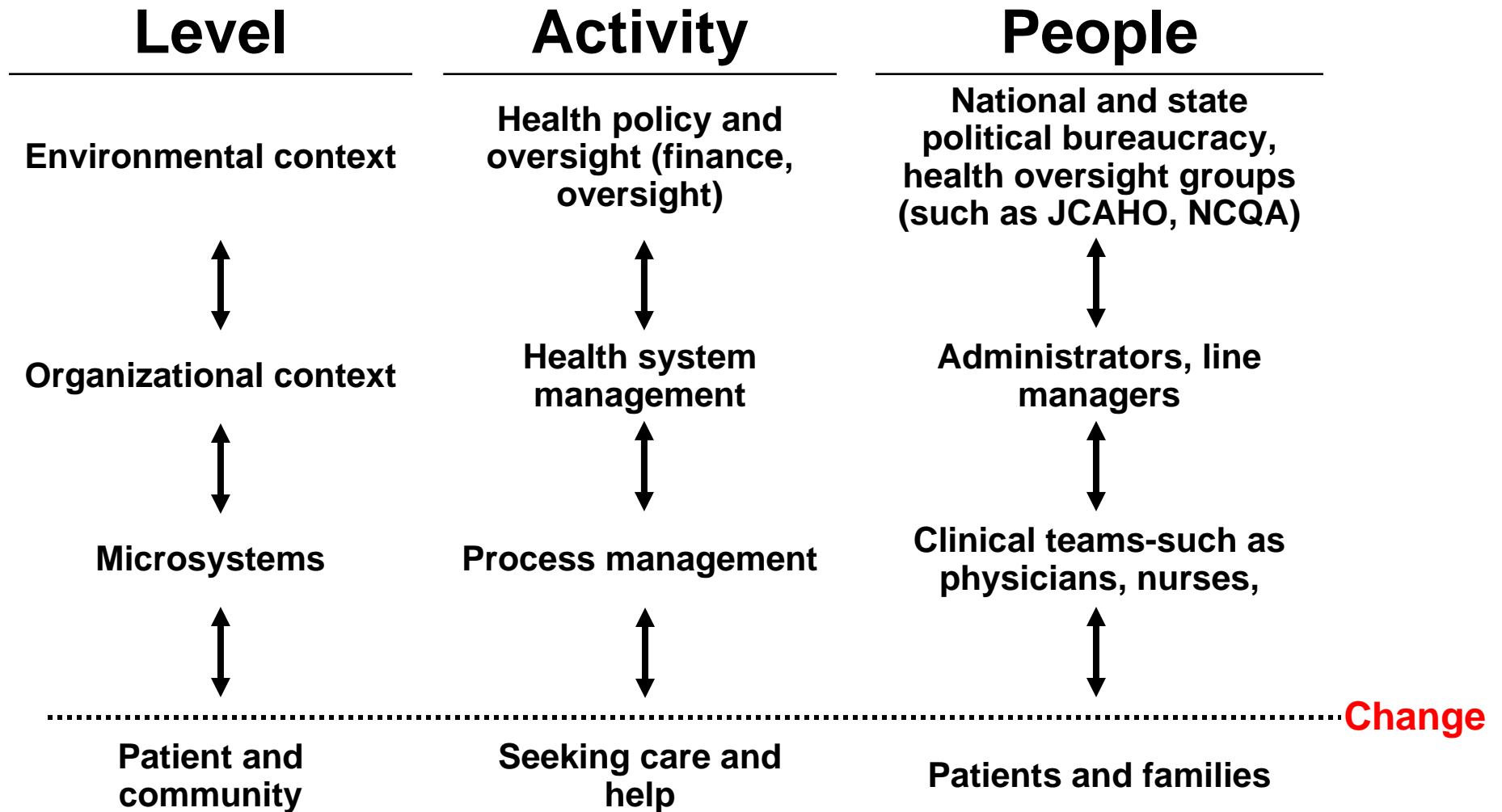


III Organizational context

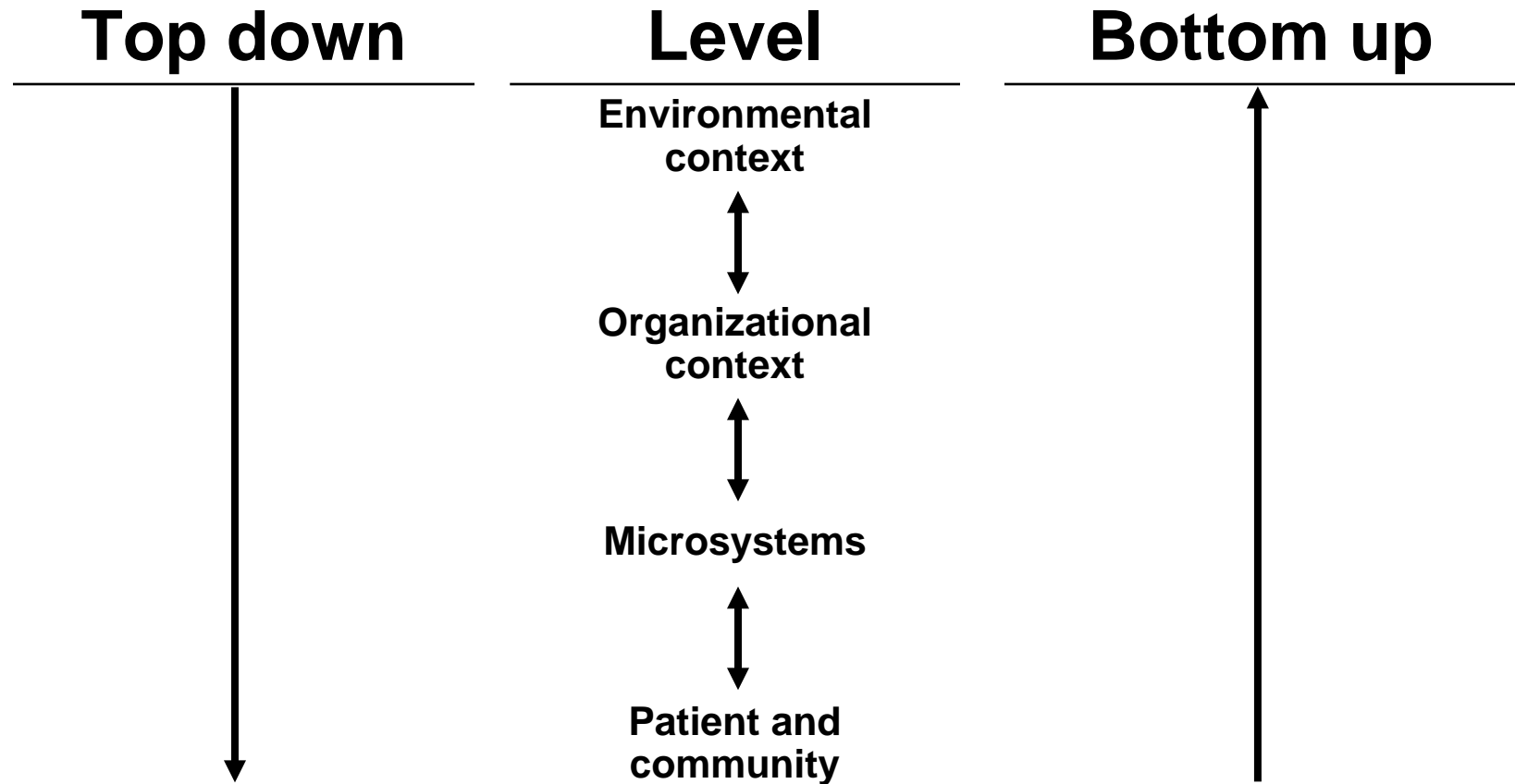


IV Environmental Context

The Chain of Effect for Quality



The Chain of Effect for Quality



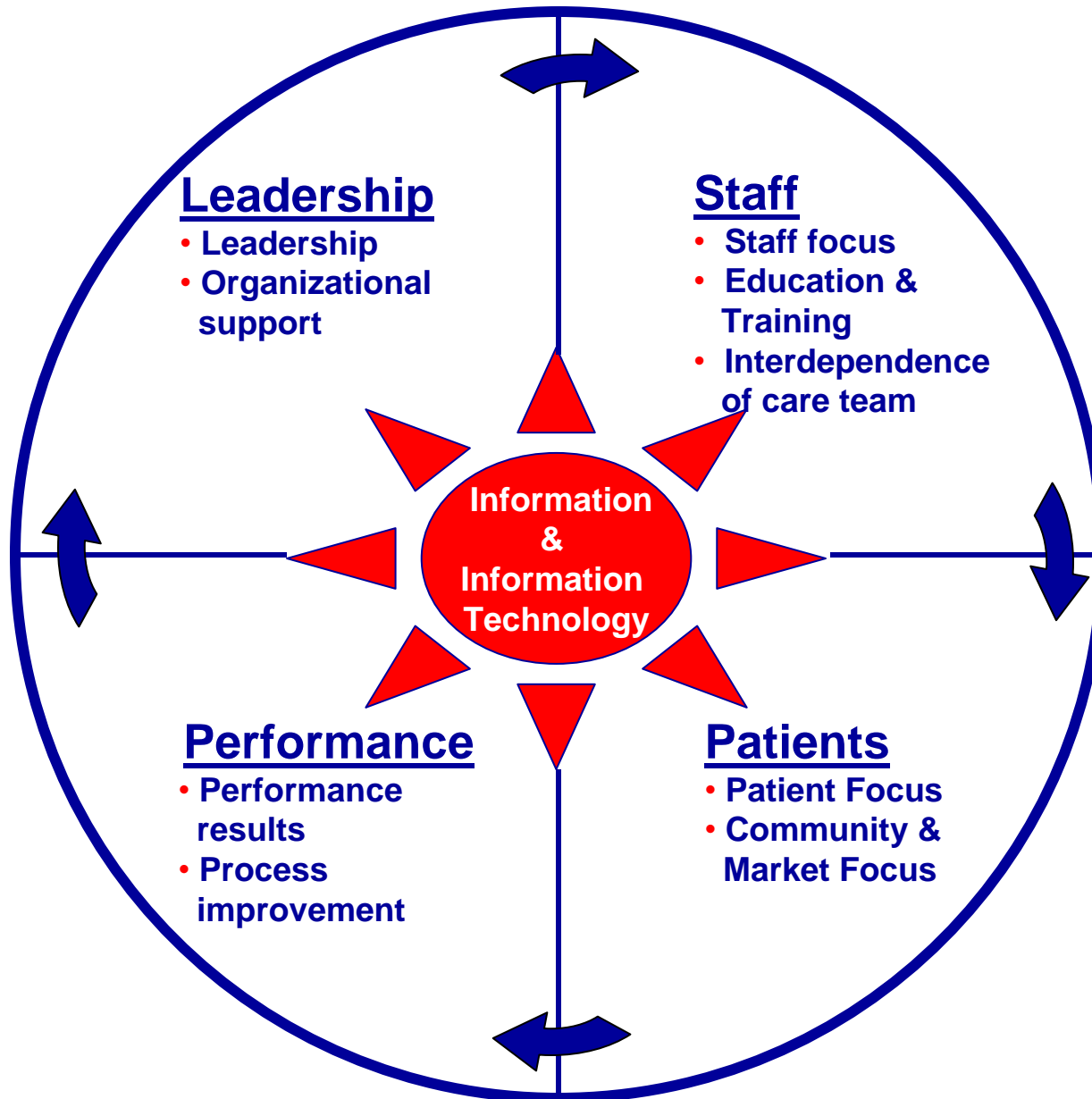
Top down

- Taylor-“hardly a competent workman can be found”
- Criticize/control
 - (helpfully) point out mistakes
 - “power over”
 - Re-educate
- Judgment (playing God)
- Heroic individualism
 - The “Lone Ranger” syndrome
- Unfunded mandate
 - Layered on top; assumes unlimited time/attention/resources
- Motivate/incentive

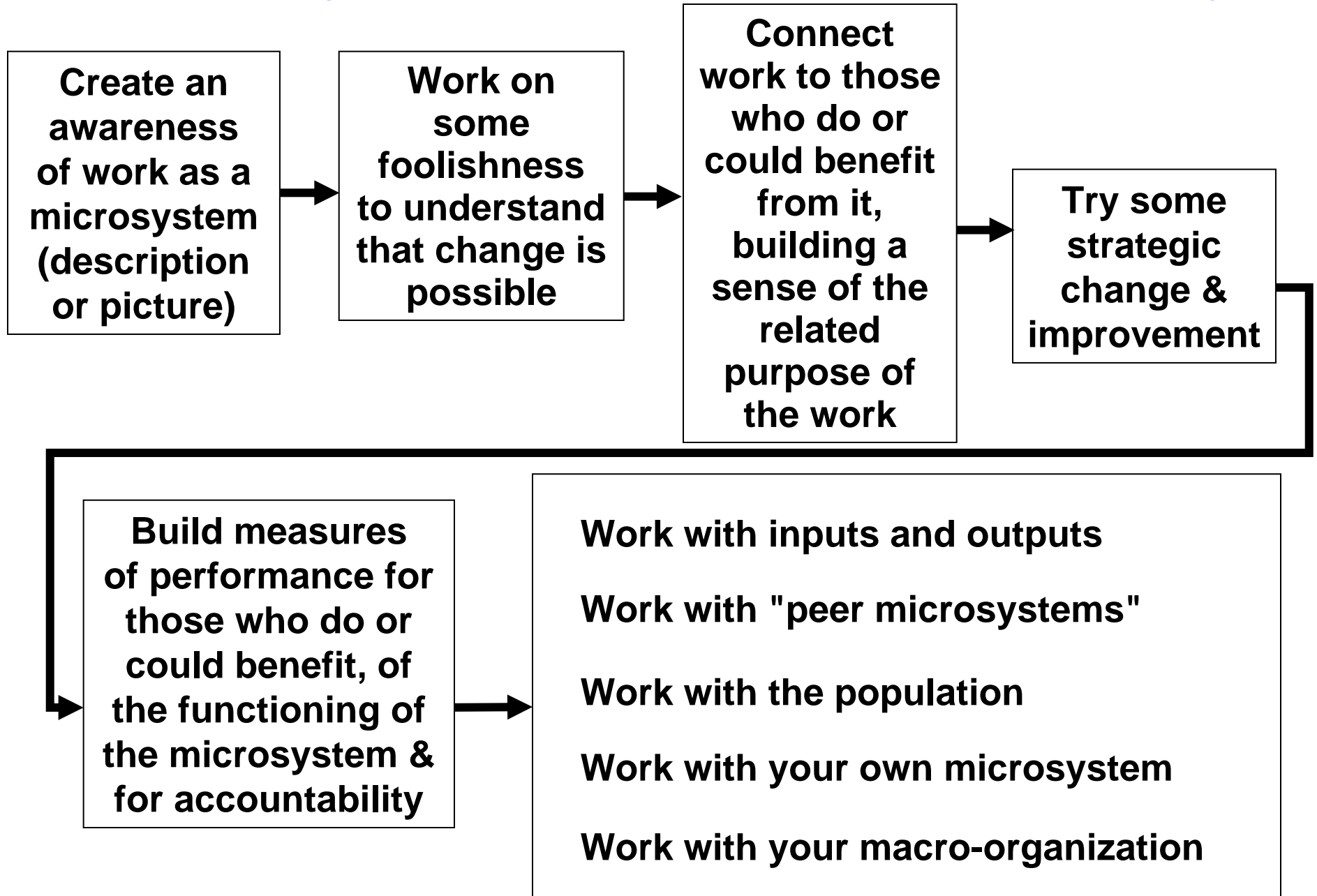
Bottom up

- Deming-almost all failures arise from underlying processes
- Empowerment
 - Drive out fear; put joy into work
 - “power to” (shared vision)
 - Supply vision, tools; facilitate
- Learning (“a servant king”)
- Teams with Fundamental Knowledge
- Integrated tools carefully built into workflow
- Make it easy to do it right (align incentives)

High Performing Clinical Microsystems



A Microsystem's Self-awareness Journey



The ways others have started their journey...

- **The ways others have started their journey...**
 - **Leader of a microsystem**
 - **Leader of a macro-organization**
 - **Had been project/theme oriented for improvement**
 - **Curious staff member who gains new knowledge**
 - **PhD student gains knowledge**
 - **Professional organization gains and adapts knowledge**
 - **Friend tells a friend (leader to leader)**

Ways Others Have Started

- Quietly in their own microsystem
- Several microsystems joining together
- Loudly as an organization effort
- Strategically from the senior leader perspective

Break

**Use the Clinical Microsystems Workbook
to continue to diagnose the strengths of
your microsystem and to start identifying
improvement opportunities**

10:15-10:30

Assess & Diagnose Your Clinical Microsystem

- *Main Idea ...
Build Capacity from Inside Out*
- **With outside in (front office) supports,
encouragement, & incentives**
- **The 5 “Ps”**

10:30-10:45 Margie

3 Thread Tactic

- **Finding ways to do better at meeting each patient's needs**
- **Making the work experience for every staff person meaningful & joyous**
- **Increasing each staff person's ability to improve his/her own work & contribute to betterment of system**

**To do things differently, we
must see things differently.**

**When we see things we
haven't noticed before, we can
ask questions we didn't know
to ask before.**

John Kelsch, Xerox

So, how might you improve your own microsystem?

- **It's just like patient care**
 - To improve a patient's health status ... You assess, diagnose, treat, and follow-up based on biomedical and care science
 - To improve a microsystem's “health” status ... You assess, diagnose, treat, and follow-up based on improvement science and the science of clinical practice

Caring For Patients & Growing Microsystems

- **PATIENTS ...**

- Assess
- Diagnose
- Treat
 - Involving the patient & family in the process

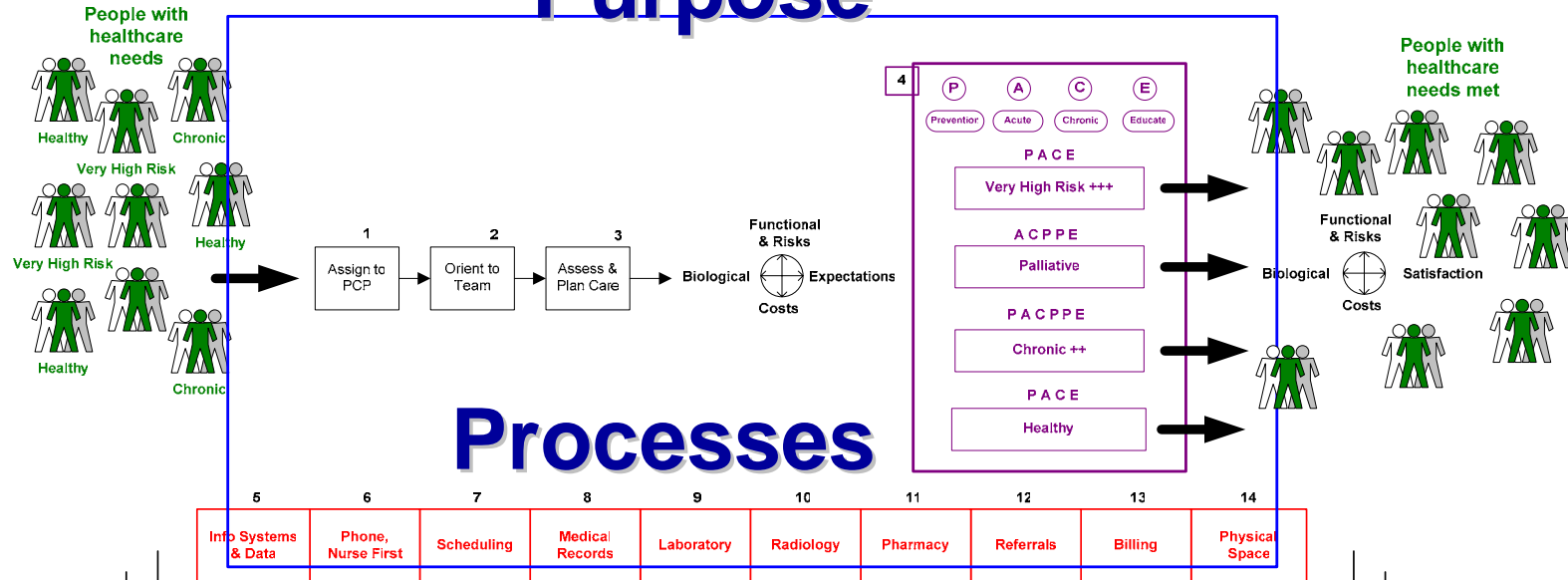
- **MICROSYSTEMS...**

- Assess
- Diagnose
- Treat
 - Involving the microsystem players in the process

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 Division and Community
 Southern Region
 Hitchcock Clinic System

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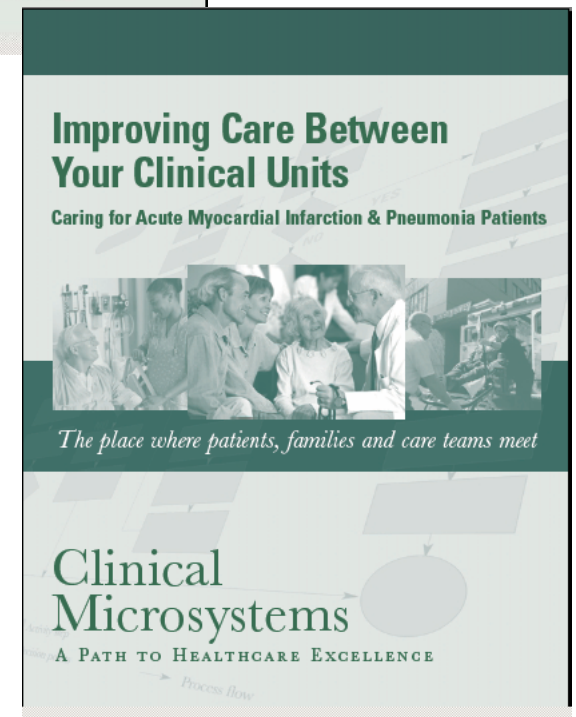
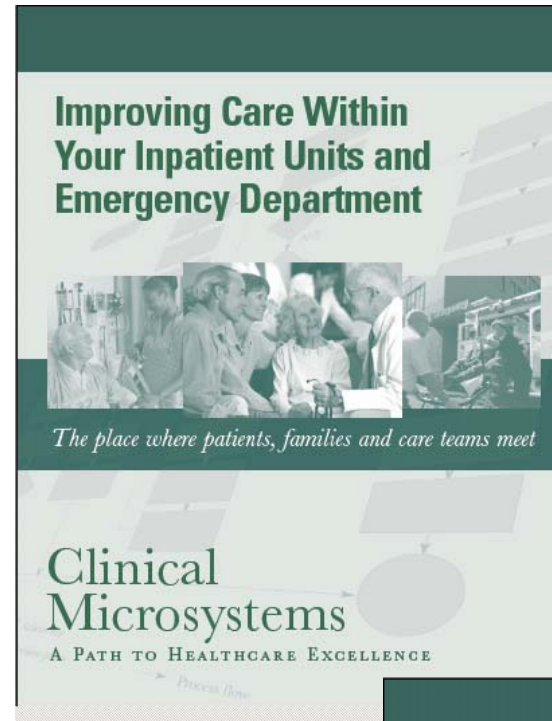
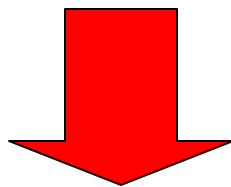
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 Dartmouth-Hitchcock Clinic, June 1998

Assessing Your Practice

Clinical Microsystem Improvement Workbook



Time to Exercise!

Exercise Process:

1. Review agenda and set roles: leader, recorder, timer, facilitator (1 min)
2. Follow instruction sheet
3. Focus on the Challenge

10:45-12:15



Exercise

“Discovery of 5 Ps”

- **Choose roles**
- **Set up your agenda**
- **Review instruction sheet**
- **Listen for the chimes to signal moving through agenda**
- **Make a “picture” of your practice using microsystem model**
- **Prepare a 3 minute report out**

Report Outs

- **What did you learn and want to know more about?**
- **How could you use the “Green Book” to help learn new information and data about your microsystem?**

12:15-12:30 Margie

Remember that every clinical microsystem must

- **Do the job**
 - meet patient's needs
- **Meet staff needs**
 - for respect, challenge, growth, joy, & earnings
- **Maintain self as an organization**
 - mission, values, finances, image

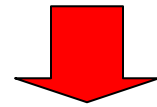
LUNCH

12:30-1:00

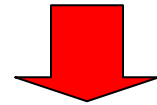
Introduction to Improvement Model & Themes for Improvement

1:00-1:30 Gene

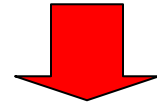
Assessing Your Practice Clinical Microsystem Workbook 5 Ps



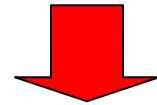
Theme



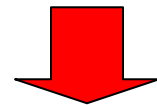
Global Aim



Specific Aim 1

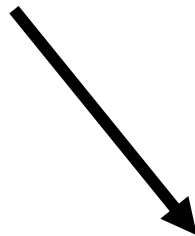


Change Ideas



PDSA ↔ SDSA

**(Storyboard ...
Bite of the elephant)**



Time to Exercise!

Exercise Process:

1. Review agenda and set roles: leader, recorder, timer, facilitator (1 min)
2. Set times for agenda
3. Focus on the Challenge

1:30-2:00



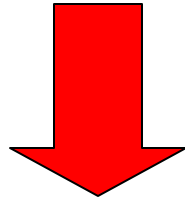
Exercise

Choose a Theme

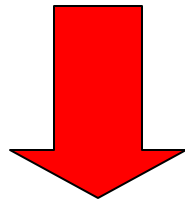
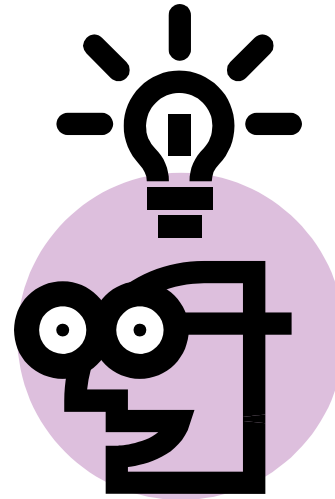
- **Think about...**
 - **What you learned from your discussions, experience**
 - **Assess, Diagnose Workbook 5 P exercise**
 - **What delights and disappoints patients**
 - **What is intolerable for staff**

Report Outs

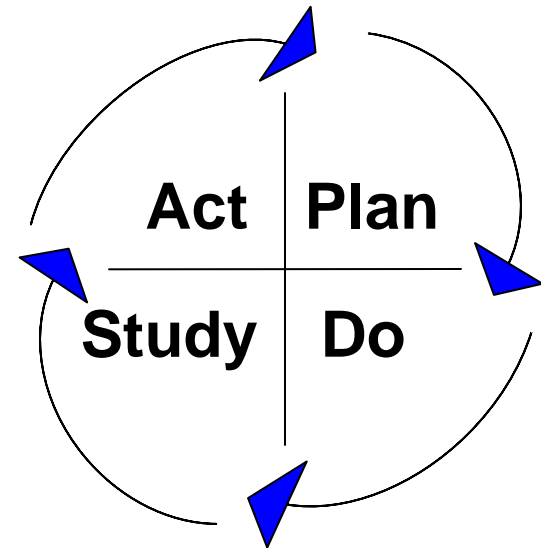
2:00-2:15



Change Idea

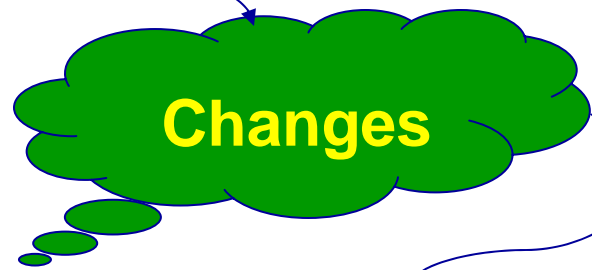


PDSA ↔ SDSA

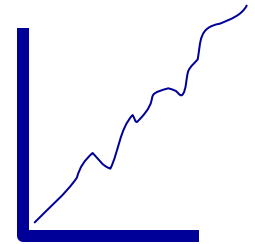


Aim

Measures



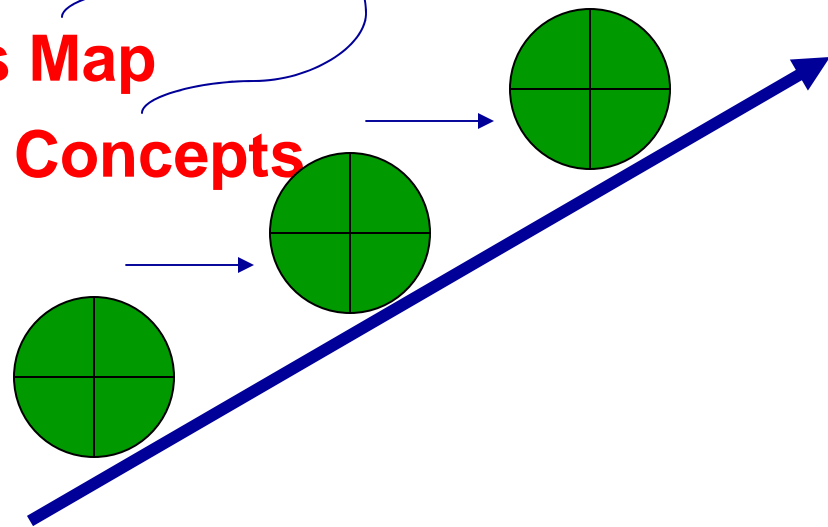
Aim



**“Fishbone”
Process Map
Change Concepts**



1

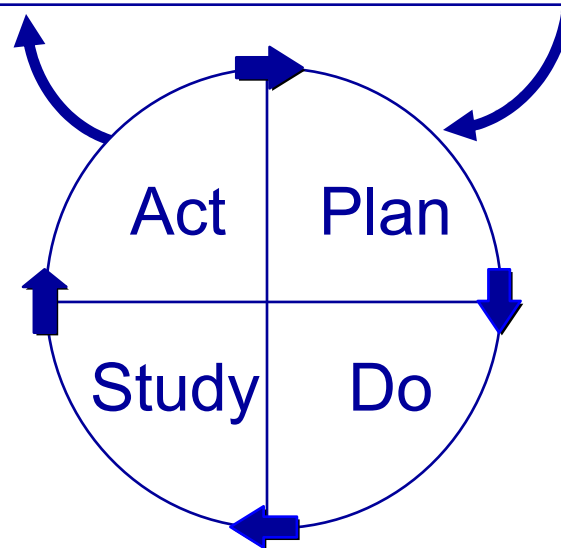


Model for Improvement

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 an improvement?



2:15-2:45 Gene

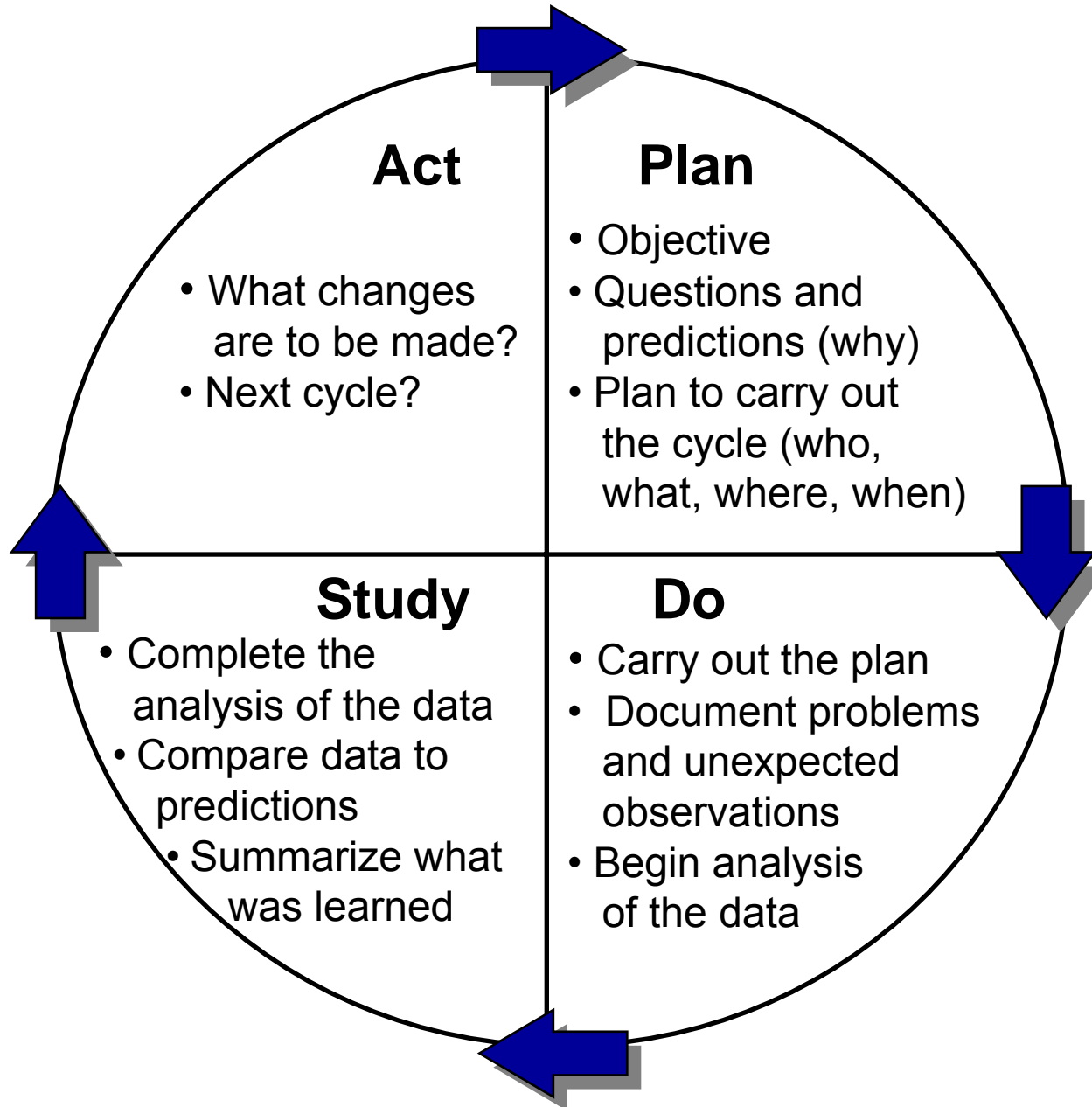
Model's Logic

- **3 Fundamental Questions**
 - **Aim:** What are we trying to accomplish?
 - **Measures:** How will we know that a change is an improvement?
 - **Changes:** What changes can we make that will result in improvement?

Model for Improvement

- **Aim**
- **Measures**
- **Changes**
 - 1
 - 2
 - 3
 - 4
- **Plan**
- **Do**
- **Study**
- **Act**

The PDSA Cycle



PDSA

- **Plan**

- **Describe objective & specific change**
- **Identify possible “upstream/downstream” impacts**
- **Specify where fits into process flow**
- **Who, does what, when, with what tools and training**
- **Data collection plan: who measures what and displays how and where**
- **Timeline, owners**
- **Small sample**
- **Short period of time**

PDSA

- **DO**
 - **Carry out the detailed plan**
 - **Provide support**
 - **Huddle before starting the pilot**
 - **Check midway**
 - **Encourage debriefs end of day . . .**
 - **Participants keep notes**

PDSA

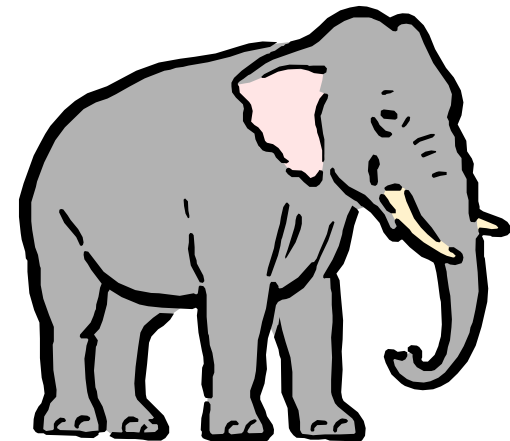
- **Study**
 - **Debrief at end of pilot**
 - **What went well?**
 - **What could be improved?**
 - **Lessons learned**

PDSA

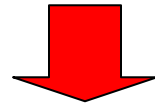
- **Act**
 - **Plan next steps**
 - **Re-test**
 - **Enlarge sample**
 - **Adapt**

Selecting first “theme” for improvement

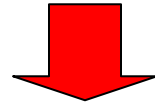
“How do you eat an elephant?”



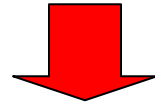
Assessing Your Practice Clinical Microsystem Workbook



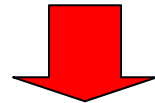
Theme



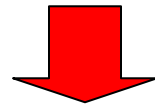
Global Aim



Specific Aim 1



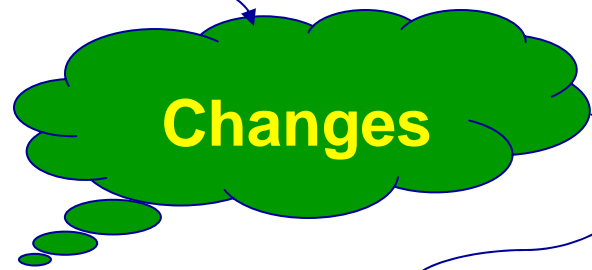
Change Ideas



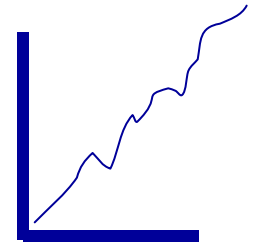
PDSA ↔ SDSA

Aim

Measures



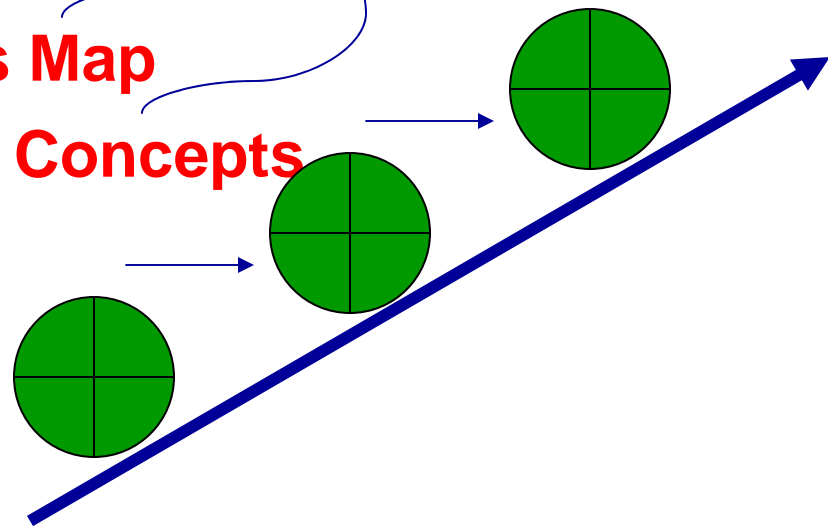
Aim



**“Fishbone”
Process Map
Change Concepts**



1



Wrap up and planning for short and long term

- **Introduction to microsystems in practice**
- **Beginning of assessing and diagnosing your practice**
- **Selection of a theme to focus improvement**

2:45-3:00 Margie

Review of the Day

- **Meet One Another**
- **Microsystem Introduction**
- **Assessing Your microsystem**
- **Themes for Improvement**
- **Introduction to Improvement Model**

Preview of Tomorrow

- **Meeting Skills/Timed Agenda/Ground Rules**
- **Themes and Aims**
- **Process Mapping**
- **Cause and Effect Diagrams: Fishbones**
- **NOTE:** Location Change to Daniel Webster Dining Room at Hanover Inn

Evaluate Today

Note: Wednesday Change of Location
Alumni Hall, Hopkins Center