

Forming Doctors

(and...)

David C. Leach, M.D.

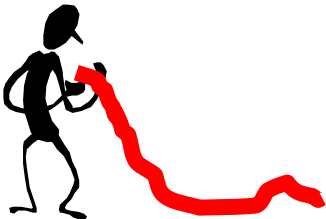
Paul B. Batalden, M.D.

June 3, 2005

The Way It Is

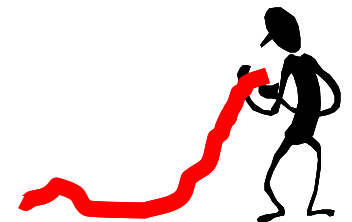
There's a thread you follow. It goes among things that change. But it doesn't change. People wonder about what you are pursuing. You have to explain about the thread. But it is hard for others to see. While you hold it you can't get lost. Tragedies happen; people get hurt or die; and you suffer and get old. Nothing you do can stop time's unfolding. You don't ever let go of the thread.

--William Stafford



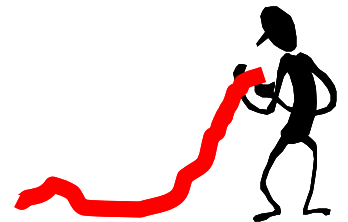
Agenda

- **Context**
- **Educational Apparatus in U.S.**
- **GME**
- **UME & related issues/content**
- **CME**



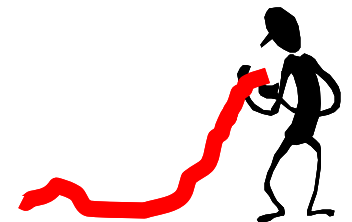
Context

- **IOM Quality Chasm Reports**
- **Assorted Commissions**
- **Physician dissatisfaction/unhappiness**
- **Perceived scarcity in midst of outrageous spending**
- **Daily news**



IOM Quality Chasm Reports

- **To Err Is Human: Building a Safer Health System (#1)**
- **Crossing the Quality Chasm: A New Health System for the 21st Century (#2)**
- **Priority Areas for National Action: Transforming Health Care Quality (#3)**
- **Health Professions Education: A Bridge to Quality (#4)**



Educational / Agency Overview

UME

GME

CME

- 125 Medical Schools
- 64,000 Students
- AAMC
- LCME
- NBME

- 385 Sponsoring Institutions
- 7800 Residency Programs
- 100,000 Residents
- ACGME
- ABMS
- FSMB

- 1000's Providers
- 600,000 MDs
- ACCME
- ABMS
- CMSS

- 19 Osteopathic Schools
- 6400 Students
- AOA

- 19 Consortia
- ~200 Residency Programs
- ~8000 Residents
- AOA COPT
- Osteopathic License

- 100's Providers
- ~50,000 DOs
- AOA COME



**Resident
Self-
learning**

Institution

**Social policy
system**

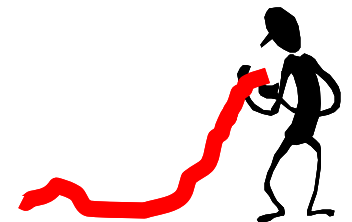


**Residency
Program**

**ACGME /
ABMS**

GME Funding

- **U.S. Federal Funds-Medicare (90%)**
 - **IME + DME = \$8b/yr.**
- **Only accredited programs receive funding**
- **Other funding sources include the Veteran's Administration, Medicaid, HMOs, other**



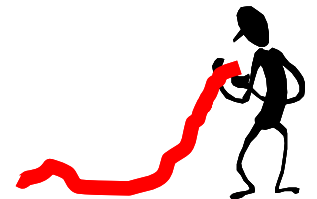
Accreditation Council for Graduate Medical Education

- **Established 1981**
- **Non-profit voluntary corporation**
- **Private, but recognized by Federal Gov't.**
- **Historic Member organizations: ABMS, AMA, AHA, CMSS, AAMC**
- **Public members/resident members**
- **\$20m annual budget derived from fees**
- **100 employees**
- **250 volunteers that donate 40,000 hours of time annually**



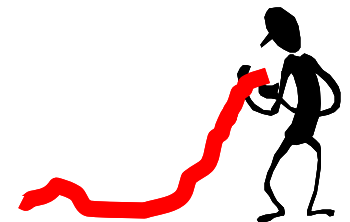
Institutional Review Committee

- 118 / 125 medical schools
- ~ 385 hospital-based sponsors
- ~ 200 community-based sponsors of single programs
- 15 members
- Separate institutional requirements for GME accountability

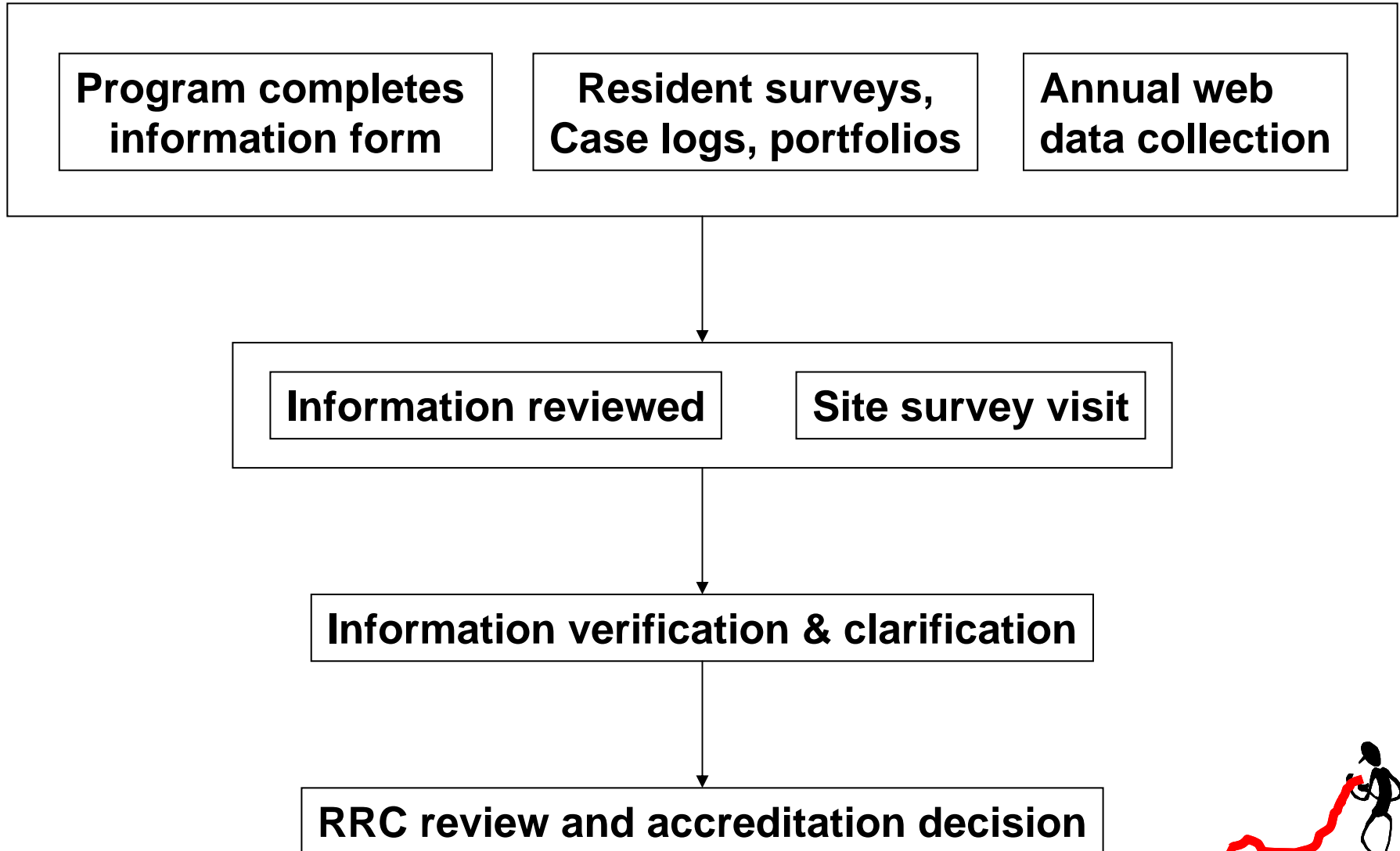


Residency Review Committees

- Set standards, accredit residency programs
- 27—one for each core specialty
- 119 specialties
- Vary from 5-16 members
- Term= 3yrs, renewable x 1
- AMA, Particular Specialty Board & Particular Specialty Society nominate
- Resident member
- Meet 2-4 x per year

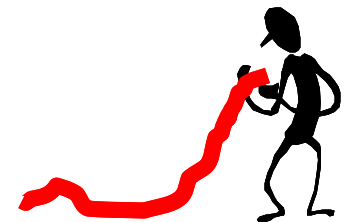


ACGME Process



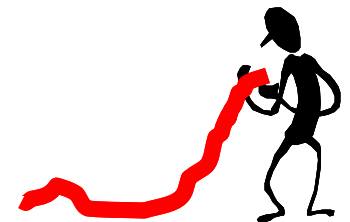
GME Current Issues

- **General Competencies / Educational Outcomes**
- **Duty Hours**



General Competencies / Educational Outcomes

- **1997 ACGME Endorsed Use of Educational Outcome Measures as an Accreditation Tool**
 - **What we measure we tend to improve**
 - **Programs need more flexibility**
 - **Enhancement of public accountability**



General Competencies

*(Adopted February, 1999 by ACGME
September, 1999 by ABMS)*

- 1. Patient Care**
- 2. Medical Knowledge**
- 3. Practice-based Learning and Improvement**
- 4. Professionalism**
- 5. Interpersonal and Communication Skills**
- 6. System-based Practice**



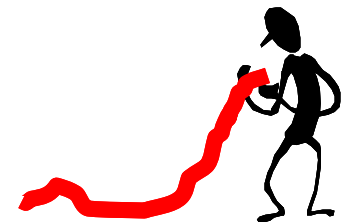
Getting agreement from all specialties and all boards

- **Being clear that current system is not working**
- **Establishing principles that were attractive**
- **Inviting full participation in the naming process**
- **Generous time line for implementation**
- **Commitment to learn together**
- **Data systems**



Time-phased Deployment

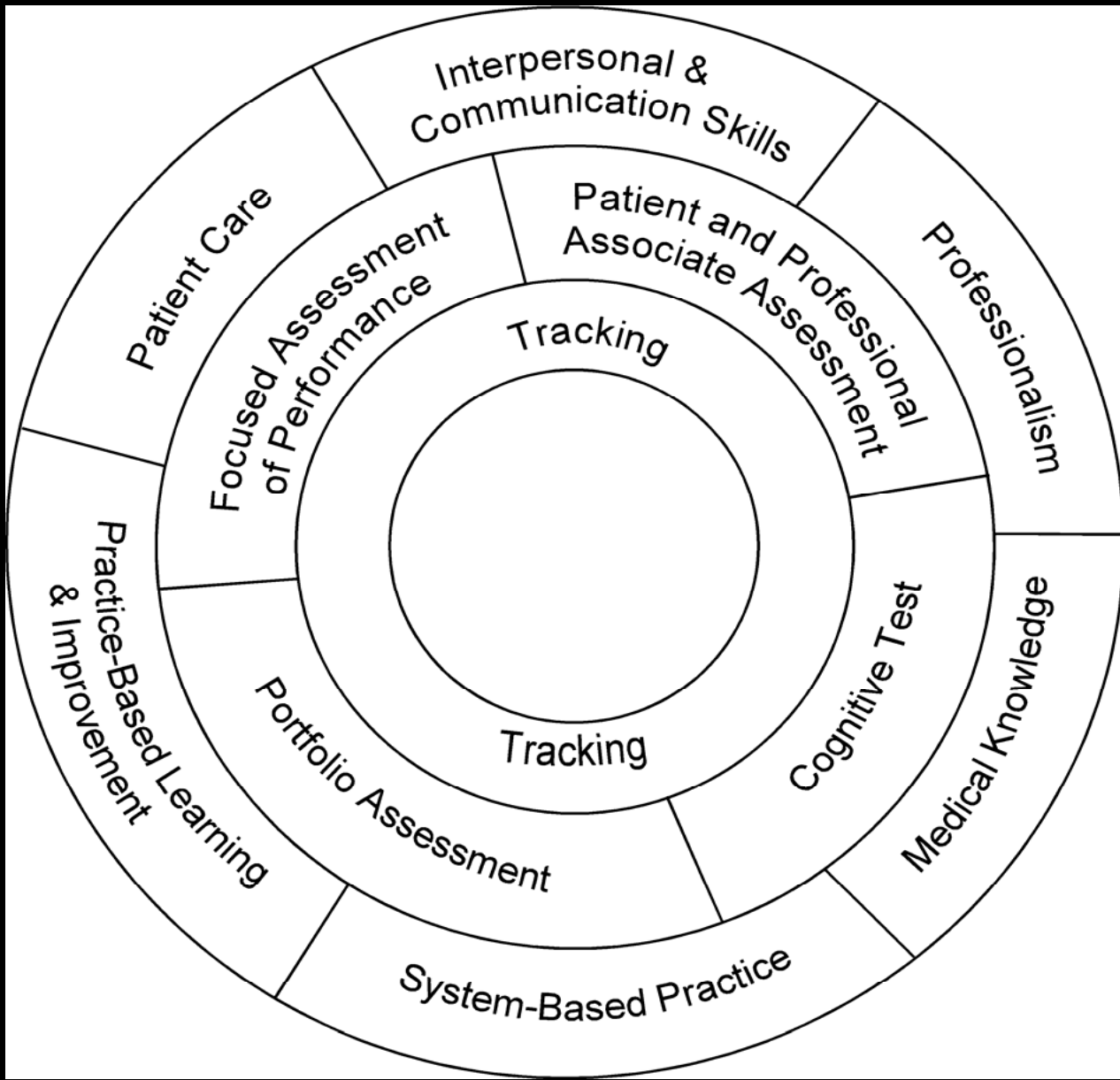
- 1. Forming the initial response**
- 2. Sharpening the focus & clarifying the definition**
- 3. Linking good learning with good health care**
- 4. Performance Excellence**



Current status

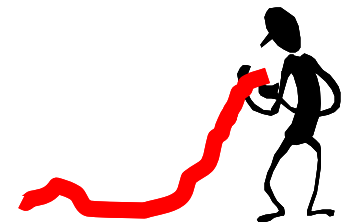
- **Competency status report prior to site visit**
- **Surveyors are reviewing, documenting method of teaching, assessing each of the competencies**
- **Adverse accreditation actions now possible**
- **ABMS drafting certification examination questions, methods**
- **Portfolios being used extensively**
- **Direct observation of resident skills**
- **360° evaluations**
- **RRCs reducing “process” requirements**





Lessons learned from work on the General Competencies

- **Competence is a habit**
- **Good learning depends on good relationships**
- **To become competent you have to feel bad**
- **Episteme, Techne, Phronesis**
- **Preparing for the unknown, dealing with uncertainty**
- **Role of context in learning**



Public Accountability

Qualified Model	Competency Model
– Graduate from ACGME program	– Graduate from ACGME program
– Pass Certification exam	– Multiple assessment tools over time
– Potentially good performance	– Demonstrated performance / habits
– No Warrant / Accountability	– Implied Warrant / Accountability
– Serves Doctor nicely	– Serves the public, but may be difficult for Doctors

Duty Hours

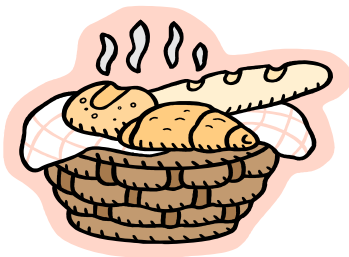
- **More work, less time, less help**
- **NY State regulations**
- **Federal legislative threat**
- **July, 2003:**
 - **80 hours per week**
 - **10 hours off duty**
 - **24 + 6 hours on duty maximum**
 - **Call no more than 1/3 nights**
 - **Away from site 1/7 days**
- **Estimated \$1m / hospital / yr cost**



Simple

“Following a Recipe”

- Recipe essential
- Recipes tested to assure replicability
- No particular expertise; knowing how to cook increases success
- Recipes produce standard products
- Certainty of same results every time



Complicated

“A Rocket to the Moon”

- Formulae critical & necessary
- Sending one rocket increases assurance that next will be ok
- High level of expertise in many specialized fields + coordination
- Rockets similar in critical ways
- High degree of certainty of outcome
- Rules helpful



Complex

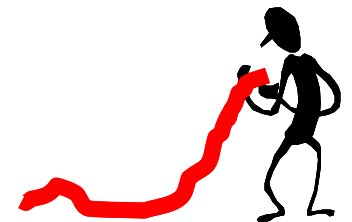
“Raising a Child”

- ✓ Formulae have only limited application
- ✓ Raising one child gives no assurance of success with the next
- ✓ Expertise can help, but not sufficient; relationships are key
- ✓ Every child is unique
- ✓ Uncertainty of outcome remains
- ✓ Values helpful



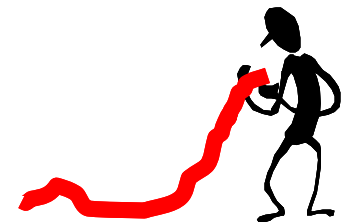
Framing

- **Competency initiative: “Complex Problem”** requiring invitation
- **Duty Hours: “Complicated Problem”** requiring a prescription



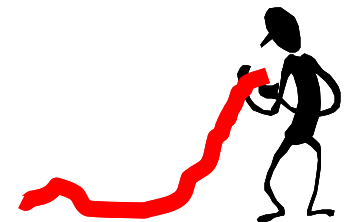
Conversations around Competencies

- **ACGME:** “We invite you to respond to the challenge of assessing the competence of your residents.”
- **Program Director:** “What would you like us to do?”
- **ACGME:** “We don’t know. Do something & we’ll let you know if you did the right thing.”
- **Program Director:** “You’ve got to be kidding!”

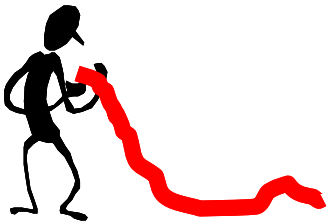


Conversations around Duty Hours

- **ACGME: “We know exactly what to do to reform duty hours.”**
- **Program Director: “That won’t work for my program.”**
- **ACGME: “Every program must do the same thing.”**
- **Program Director: “You’ve got to be kidding!”**



In Undergraduate Medical Education...



Assumptions About Professional Formation

- Health professionals (physicians) in the U.S. have three formal levels of educational experiences: undergraduate, graduate, post-graduate
- Relevant “formative” learning occurs in formal and informal ways—both of which are “experiential”
- All of this “formative learning / development” requires teachers that can model the new ways



Assumptions about Invitations for Change in the U.S.

- The IOM Quality Chasm Reports invite us to *do better*
- The ACGME/ABMS General Competencies for GME & CME learners invite us to *learn differently*
- The AAMC MSOP #5 on Quality Education for Medical Students invite us to *“begin here”*



Recent AAMC Efforts

- AAMC requested definition of the content of Undergraduate Medical Education learning about quality.
- Working committee established.
- Report printed in Contemporary Issues in Medicine: Quality of Care, August, 2001 American Association of Medical Colleges.

www.aamc.org/meded/msop/msop5.pdf

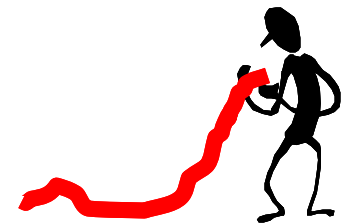


Content of MSOP #5

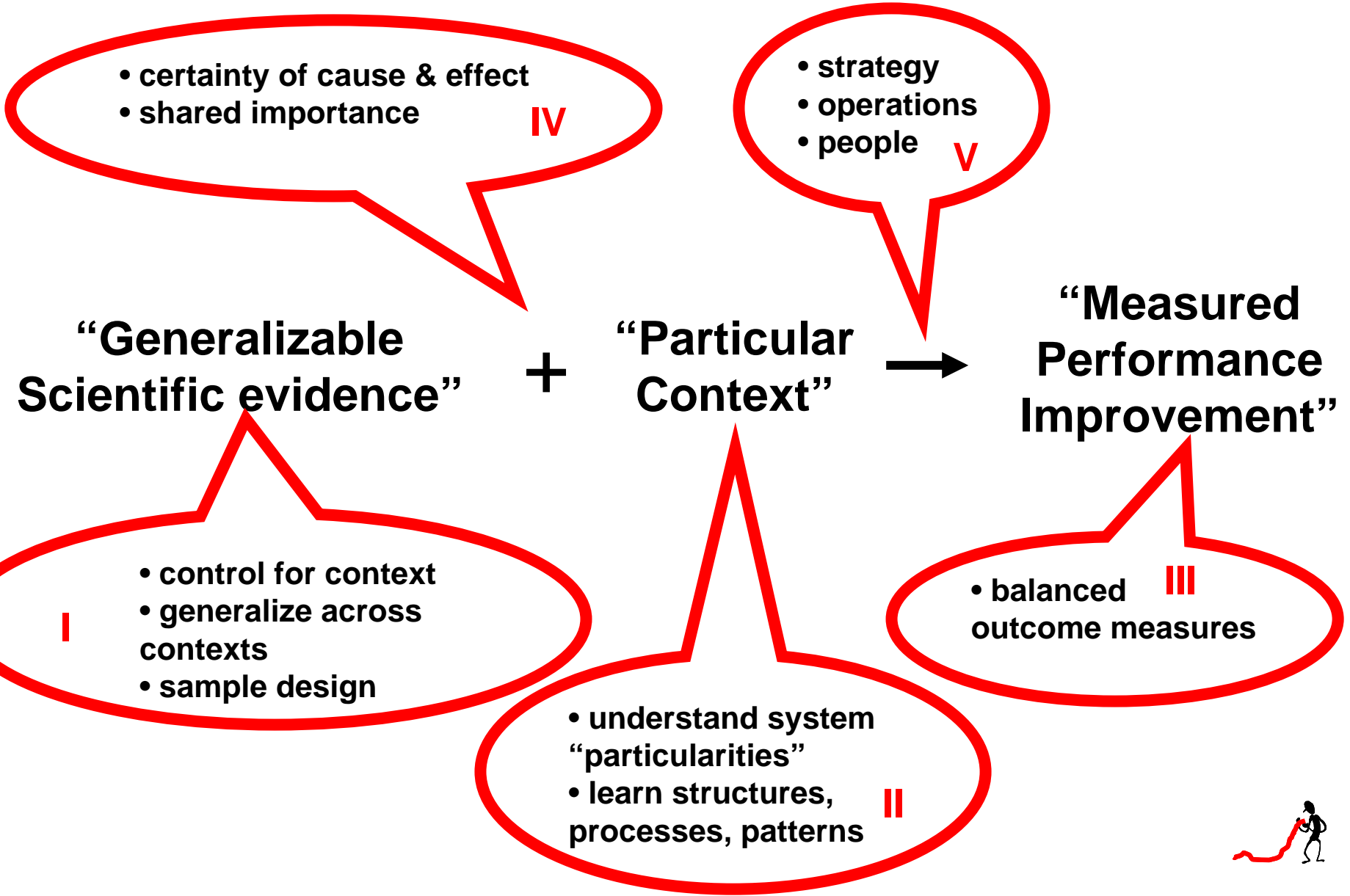
- 1. Know how to use evidence to define what “good” care is.**
- 2. Know how to measure the differences (if any) between local care and best.**
- 3. Know what actions are necessary to close gaps.**



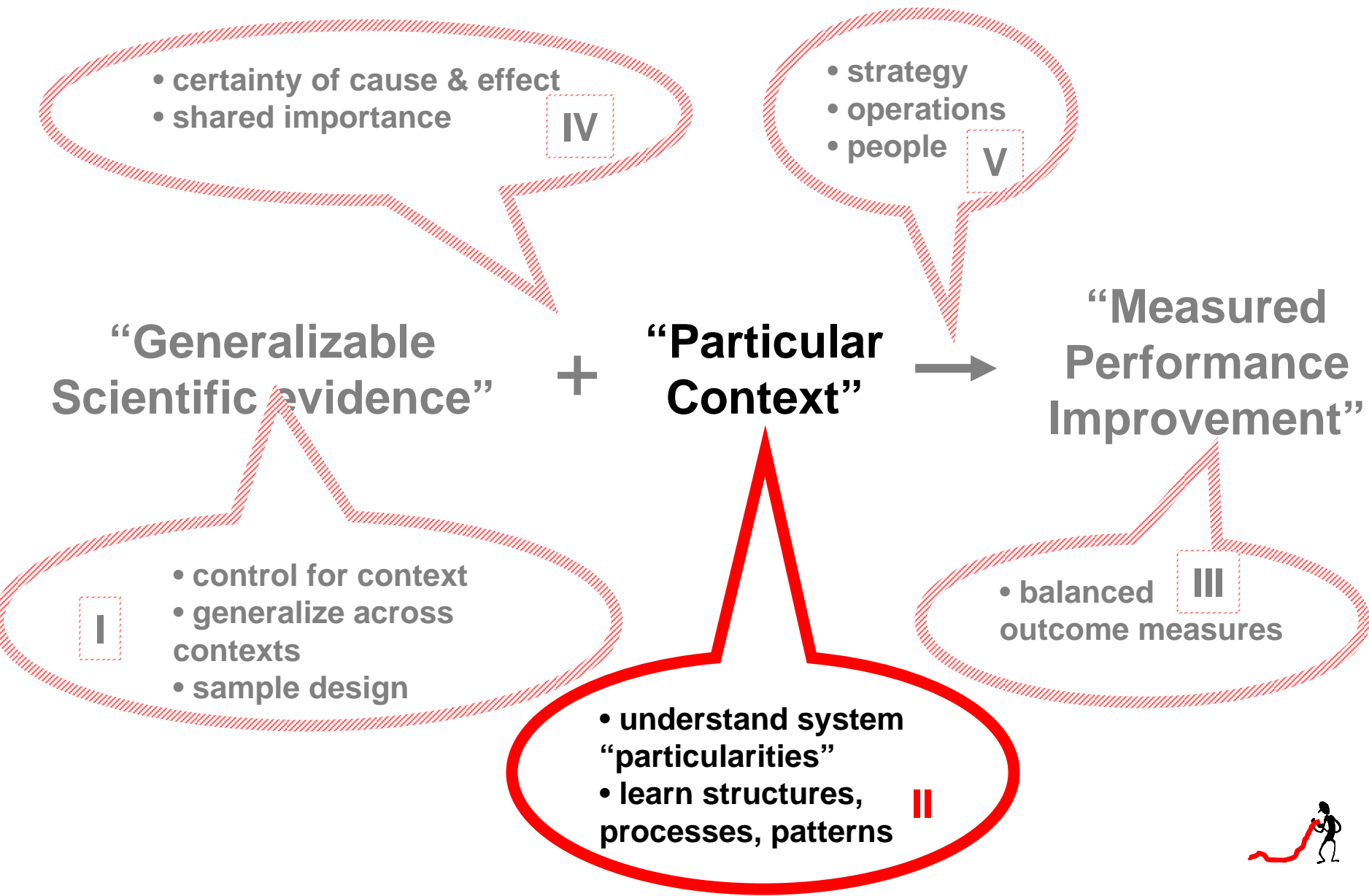
What is the underlying body of knowledge, helpful theory?



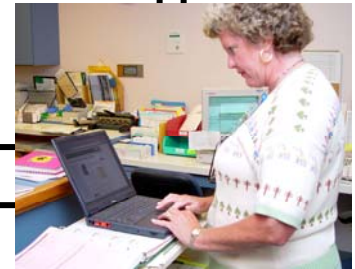
The Work: Science-based Improvement



The Work: Science-based Improvement



Understanding a “particular” system



Using Different System Lenses to Understand a Particular System

Biologic

- Emergence
- Coordination/synergy
- Structure, Process, Pattern

Economic

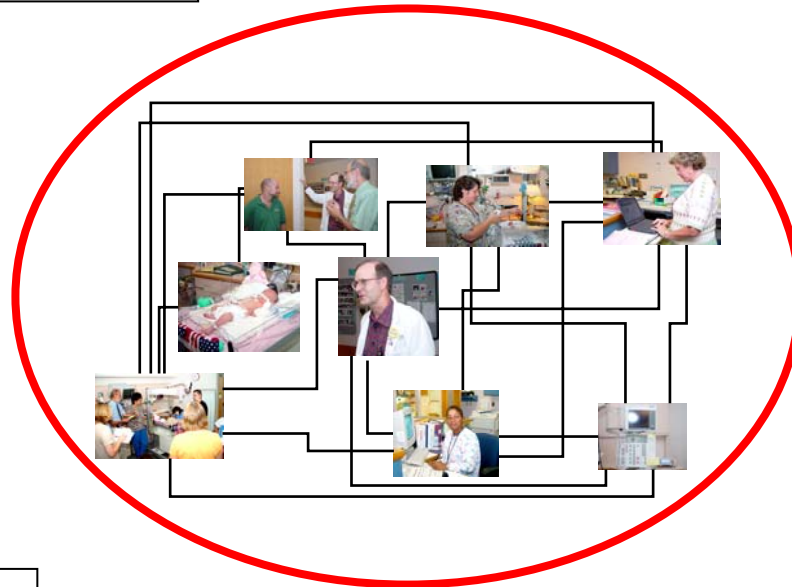
- Inputs/Outputs
- Cost/Waste/Value/Benefits
- Customers/Suppliers

Political

- Power
- Governance
- Citizenship
- Equity
- Coalitions

Sociologic

- Relationships
- Conversations
- Interdependence
- Meaning/sense



Anthropologic

- Values
- Culture/Milieu
- Learning

Mechanical / Physical

- Flow
- Temporal Sequencing
- Spatial Proximities
- Logistics
- Information

Psychologic

- Behavior / Settings
- Forces fields
- Professional development
- Motivation

Information

- Access
- Storage
- Privacy
- Cycle time
- Narrative/Documentation





Science of Disease Biology

Science of Clinical Practice

The “twin sisters” of science

- **Disease Biology**

“The science of disease biology is the hypothesis-driven observation, identification, description, experimental investigation and theoretical explanation of the phenomena associated with disease, with the goal of preventing, treating or eliminating it.”

- **Clinical Practice**

“The science of clinical practice is the observation, identification, description, experimental investigation and theoretical explanation of the phenomena associated with the relief of the human burden of illness in daily clinical care for patients.”



The “twin sisters” of science

- **Disease biology**

- Anatomy
- Physiology
- Biochemistry
- Genomics
- Molecular biology
- Pathology
- Experimental design
- Immunology
- Laboratory management
- Etc., etc.

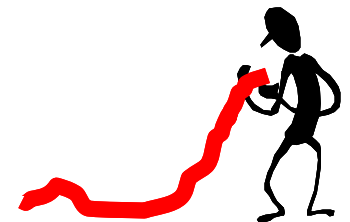
- **Clinical practice**

- Systems thinking
- Informatics
- Narrative research
- Small groups
- Psychology
- Safety sciences
- Epidemiology
- Decision-making
- Operations research
- Etc., etc.



Origins of the U.S. Medical School Collaborative

- **Some Medical School Deans—Drs. Powell, Herrod, Cassell and Headrick raised the possibility of forming a collaborative with the IHI in 2002**
- **Working group convened by the IHI**
- **Council of Deans forum**
- **Action plan formulated**
- **Initial members identified**
- **Action plan ratified**



Collaborative Objectives

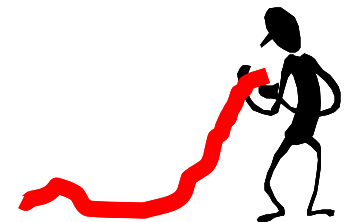
Based upon the AAMC Medical School Outcome Project V (MSOP-V) report, we will:

- Help medical schools foster learning for medical students about the improvement of health care
- Help medical schools foster faculty development in the improvement of health care
- Work together to speed educational change and take the cost out of the change process



Aim of the collaborative

Create 10 “exemplar” schools in 3 years and 60 schools in 6 years.



“Exemplar” medical schools

- A.** Offer learning in support of the three MSOP objectives
- B.** Develop their faculty’s knowledge, skill, and experience necessary to lead learning in support of these objectives
- C.** Share their insights regularly and openly with other schools interested in similar programs
- D.** Demonstrate leadership support from the dean’s office



Unexpected News

- **Schools of Nursing**
- **Schools of Pharmacy**
- **Schools of Health Administration**

**Medical School
Collaborative**



**Health Professional
Education Collaborative**

Revised aim

Create exemplar health professional education opportunities in 20 geographic settings.

Current members of the IHI collaborative

- U. Minnesota
- U. Tennessee-Memphis
- U. Missouri
- Mayo
- Dartmouth
- U. Chicago
- U. Louisville
- Michigan State
- U. North Carolina
- U. Connecticut
- Vanderbilt U.
- Penn. State U.
- Oregon HS U.
- U. Miami
- U. Cincinnati
- Organizational partners
 - AAMC
 - ACGME
 - ABMS/ABP/ABIM



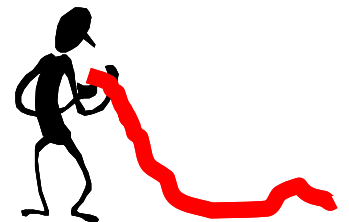
Concurrent Action Pathways

- 1. Students**
- 2. Faculty Issues**
- 3. Linking Educational and Operational Redesign**
- 4. Assessment and Evaluation**
- 5. Integration with national professional organizations**
- 6. Integrated Efforts with other Professional Schools**
- 7. Surveillance and Monitoring of other Educational Initiatives**
- 8. Funding**



Opportunity

- **Vertically integrated focus for professional formation/development**
- **Interest in cooperating to take cost, time out of the development**
- **Shared interest in “figuring it out”**



Challenges

- For many, the unexamined life has been worth living.
- Clinical performance information has been easier to talk about than to get...and people think they already know.
- The front line clinical microsystems are broken everywhere, including academic medical centers.
- To be explicitly concerned about the learning for quality invites deafening feedback about inconsistencies.



How does the collaborative work?

- **Common aim**
- **Regular conference calls**
- **IHI extranet**
- **Face to face meetings 2x per year**
- **Other TBD, faculty workshops**

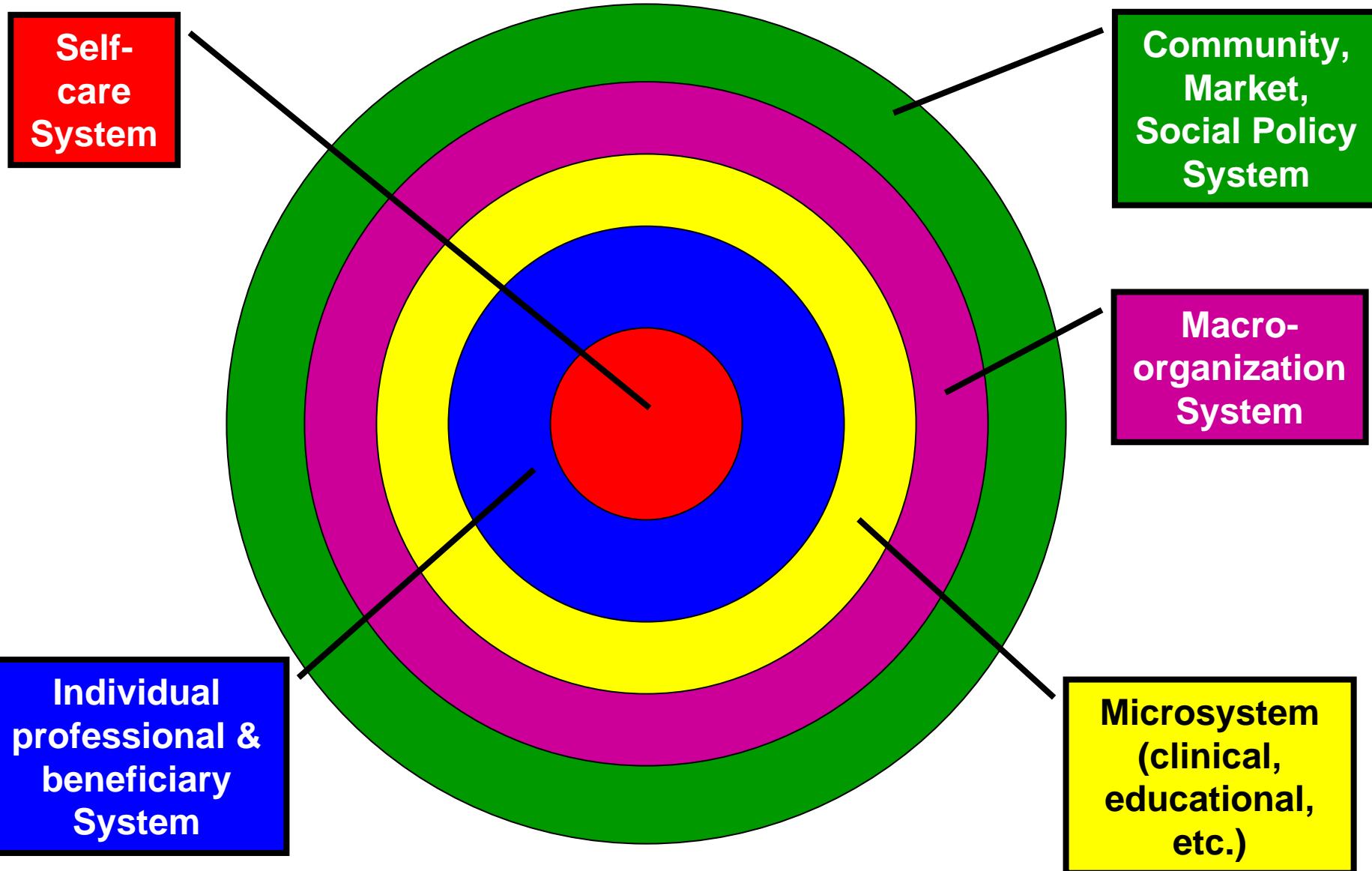


Current Theme Groups

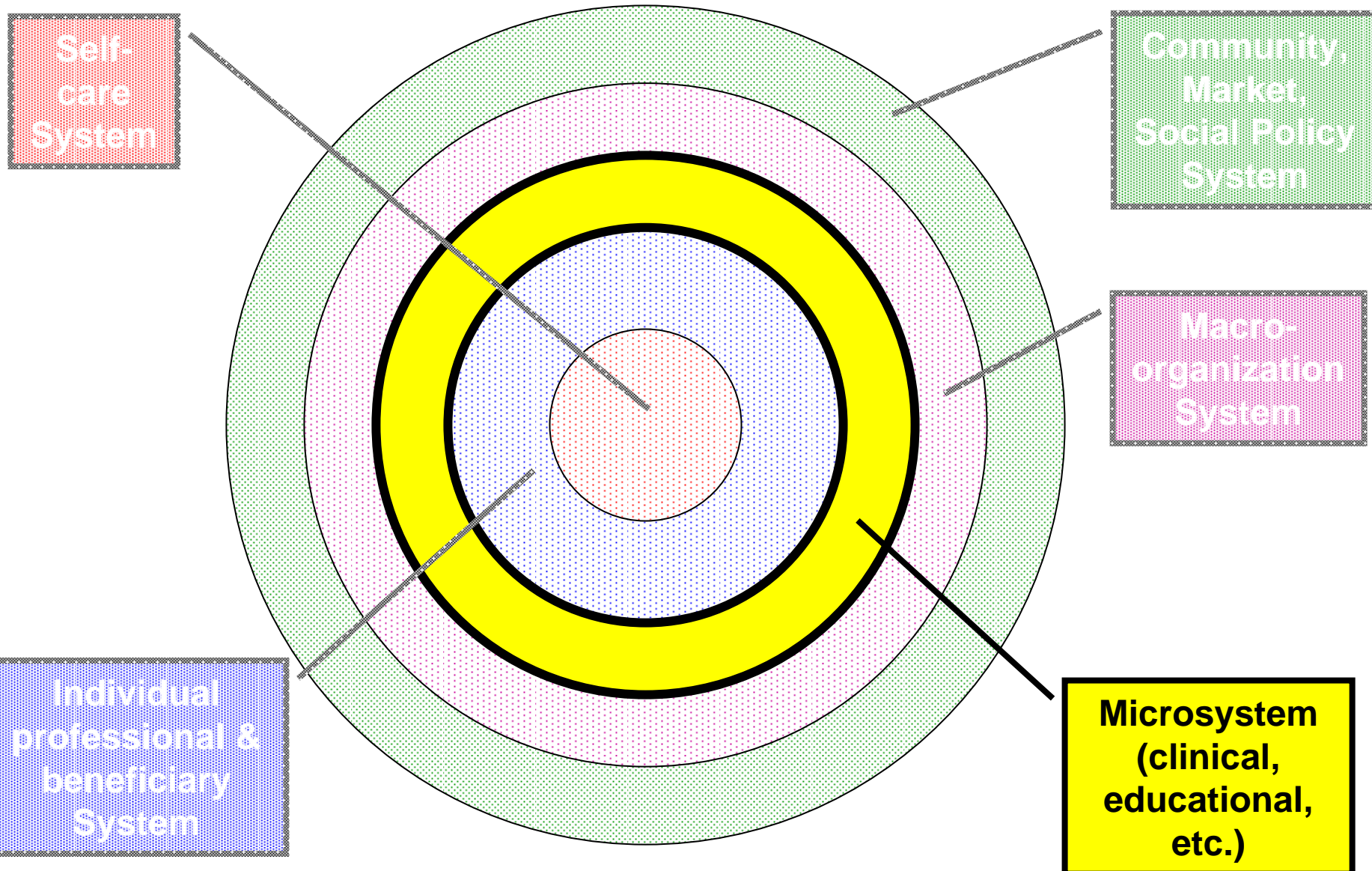
- **Exemplary learning sites**
- **Organizational infrastructure**
- **Vertical integration**
- **Faculty development**
- **Interprofessional learning**
- **Student-initiated learning**



Crafting an exemplary learning site...



Crafting an exemplary learning site...



Why do we choose to focus at the level of the microsystem?

- 1. Science of disease biology and clinical practice come together in the structures, processes and patterns of daily work.**
- 2. Health policy “in-use” vs. “espoused.”**
- 3. Client and professional satisfaction.**
- 4. Daily “formative” setting for working professionals.**
- 5. Within the power of most professionals to act, change.**



Beginning to develop the *Academic Clinical Microsystem* of the future

- **Explicit aims of exemplary patient care and professional development.**
- **Infrastructure to support both.**
- **Information as a full partner.**
- **Clear expectations of each member with specified roles.**
- **Decreased “switching.”**
- **Remove cost continually.**
- **Work on cooperation, waste, flow & integration of “sciences.”**



So,

- **The invitations are in front of us.**
- **Several schools have begun working together.**
- **Cooperation across the AAMC, ABMS, ACGME, Multiple schools.**

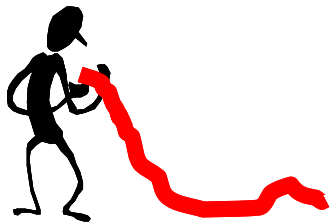


What helps?

- 1. Curious faculty**
- 2. Developmental thinking** e.g., Dreyfus & Dreyfus.
- 3. Thinking “background & foreground”**
- 4. Clarity of aims** e.g., know what, when, be able to...
- 5. Curricular opportunities “diagnosis”**
- 6. Fostering Cooperative Work**
- 7. Use “contextual” help**



In post-graduate (CME)...



Current tensions / questions

- **Relevance to daily practice?**
- **Financial sponsorships?**
- **Effectiveness?**
- **Assumption of life-long competence?**



“Maintenance” of Time-Limited Specialty Certification

- 1. Good ethical standing**
- 2. Specialty-specific CME**
- 3. Analysis and improvement of practice**
- 4. Re-certification exam after above**



Current status

- **All boards have detailed plans on implementation**
- **Some boards are actively collaborating—ABIM, ABP, ABFP**
- **Some have begun implementing—ABIM patient interviews**



**“To teach is to create a space
in which obedience to truth is
practiced.”**

Abba Felix

