Improving Genetics Education

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Tomorrow's Doctors, Tomorrow's Cures

Learn
Serve
Lead

Myths and Mistakes in Graduate and Continuing Education

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Association of American Medical Colleges

Mistakes/myths about educating health professionals

1. More information is good
2. Education = lectures, conferences
3. Lectures = behavior change
4. CME and GME are only about doctors
5. ‘CME’ is only about credit
6. CME (and GME to some extent) are isolated phenomena, unrelated to health systems, healthcare delivery or patient outcomes…i.e., the clinical care gap

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Framing questions

1. What's the clinical care gap? Why is it a special American problem?
2. What causes it?
3. What mistakes have we made in medical education that have contributed to the gap?
4. What can we learn from them? Can we apply them to genomics education?

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The clinical care gap….

Ideal, evidence-based practice

Current practice

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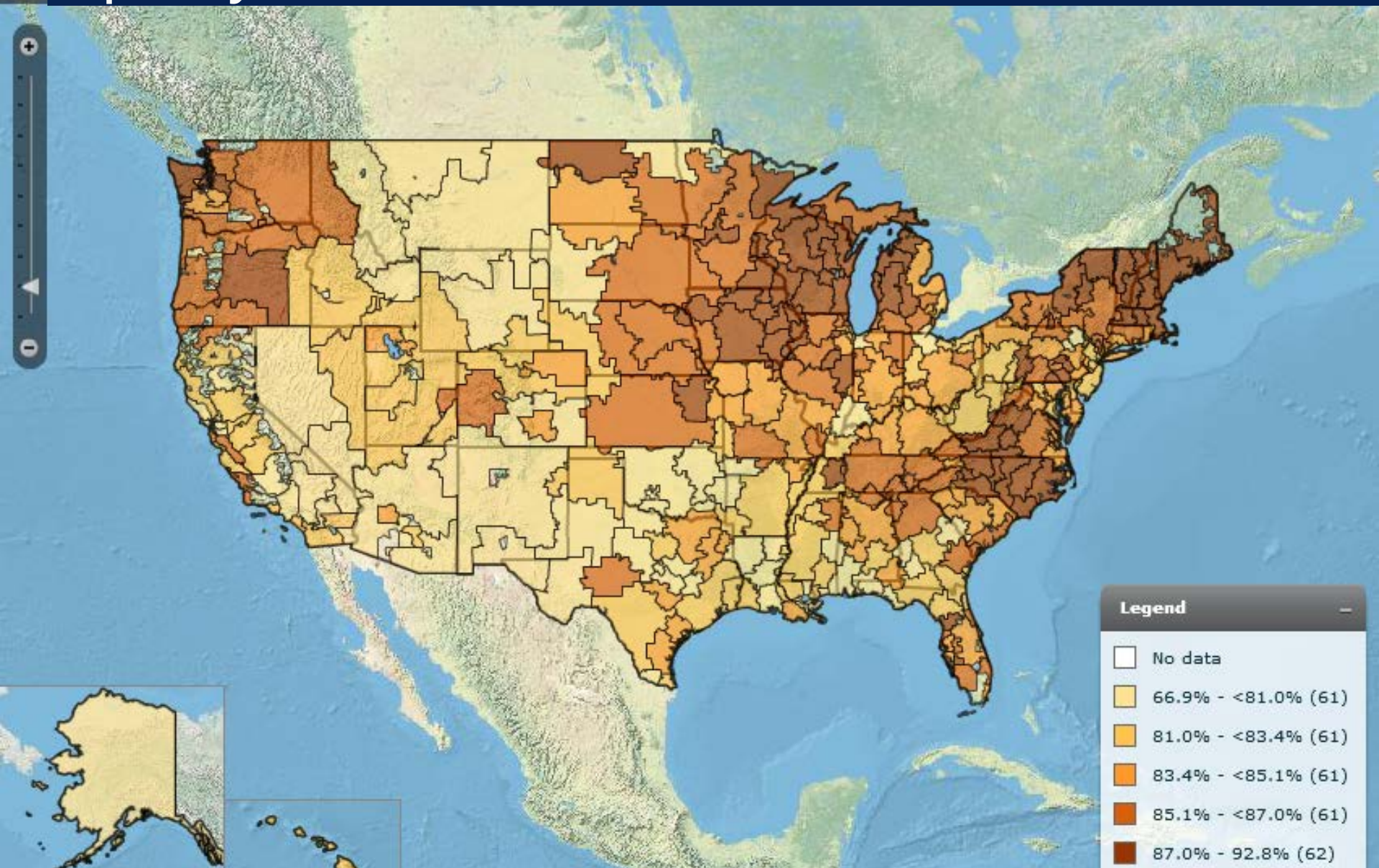
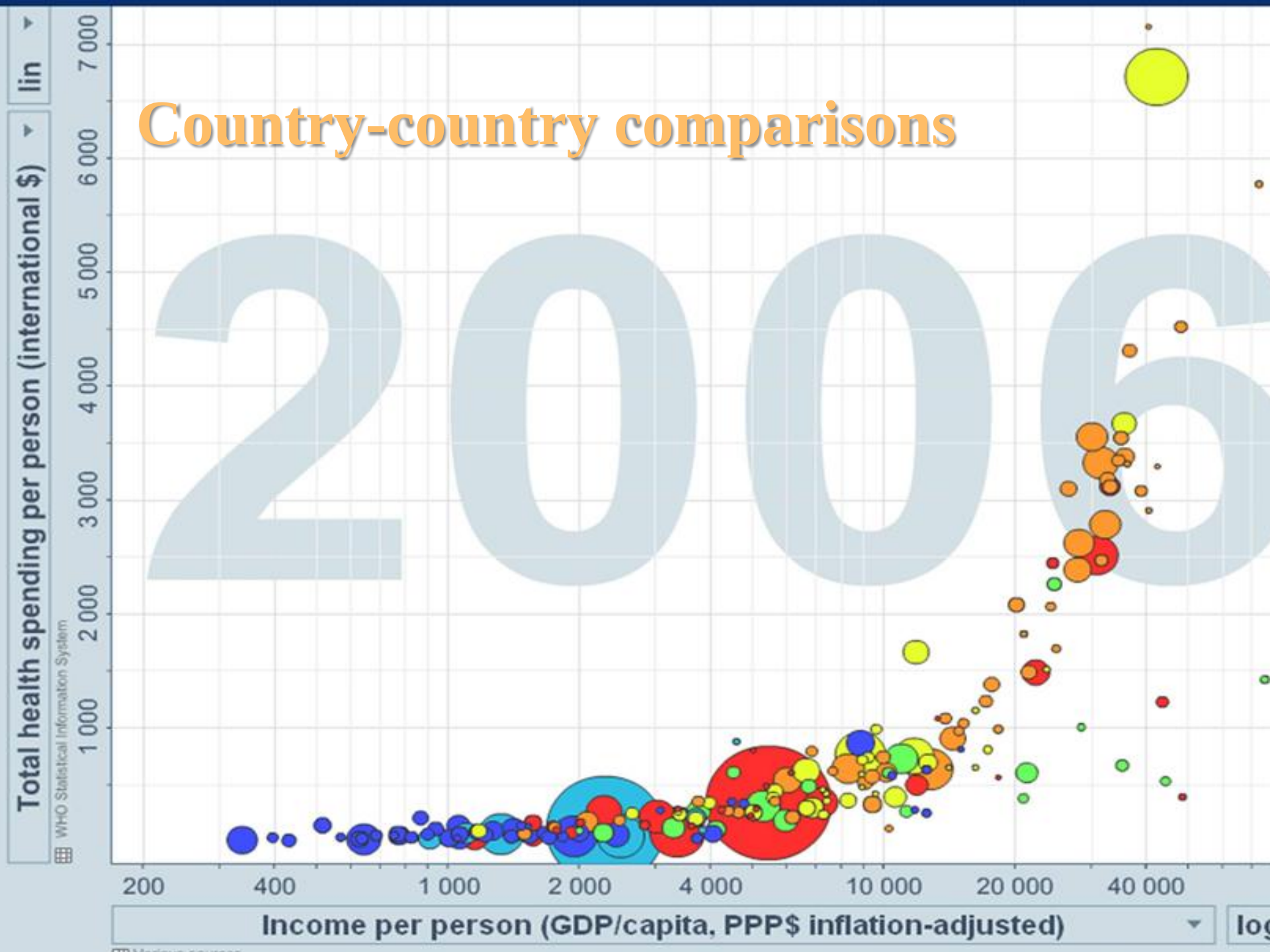
Dartmouth Atlas 2010
..quality of care indicators: HbA1c data 2010



Country-country comparisons



And for this expenditure, what do we get?

U.S. Comparison to Developed Nations

2009 Life Expectancy

Bottom Third

(78.2 yrs compared to Japan at 83)

2008 Infant Mortality

4th Highest

(6.5% compared to average 4.6%)

2008 Adult Obesity*

1st

(Over 1/3 of U.S. population)

*Only 7 nations reported data on this indicator

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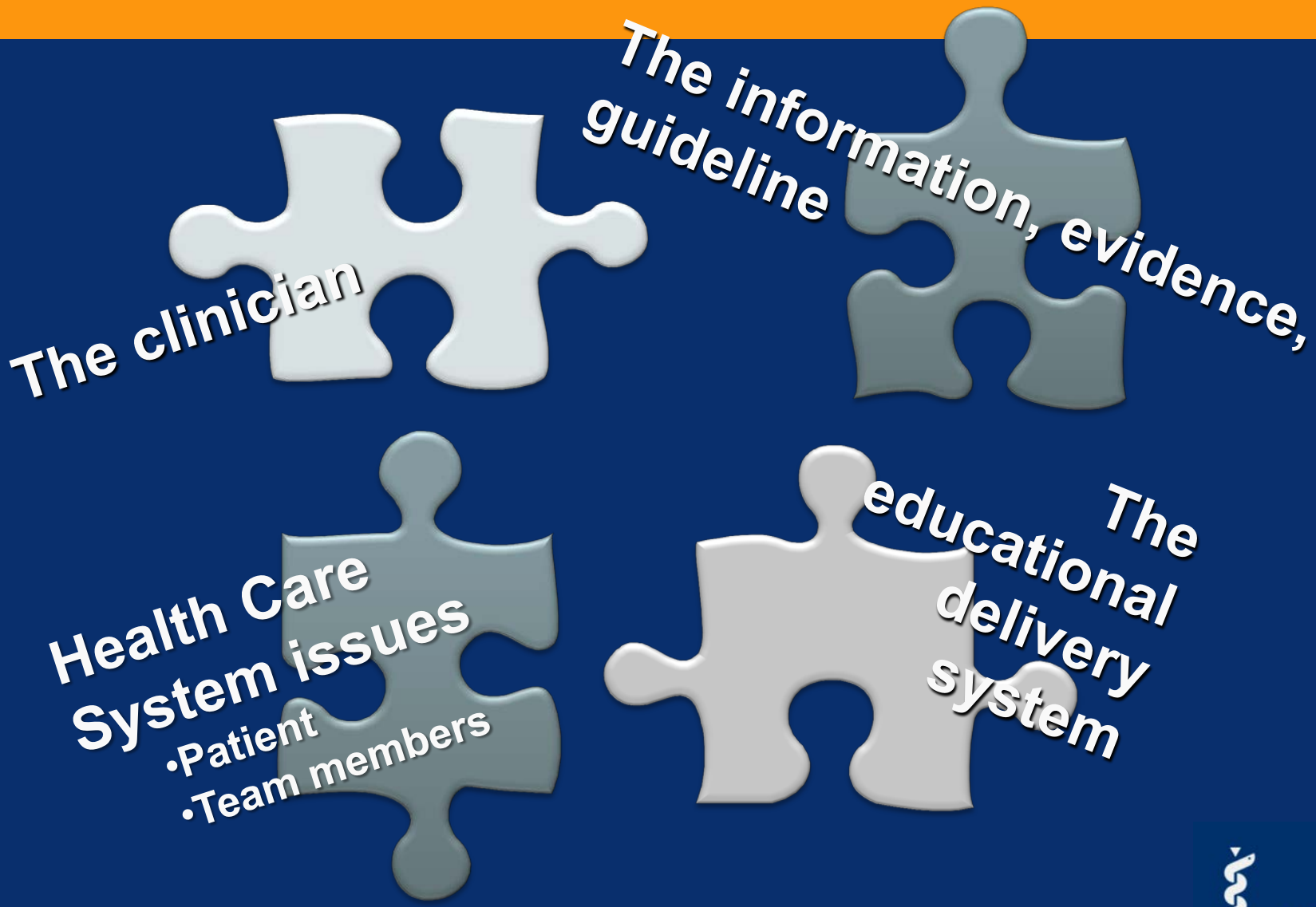
What causes the gap?

The evidence-to-practice puzzle



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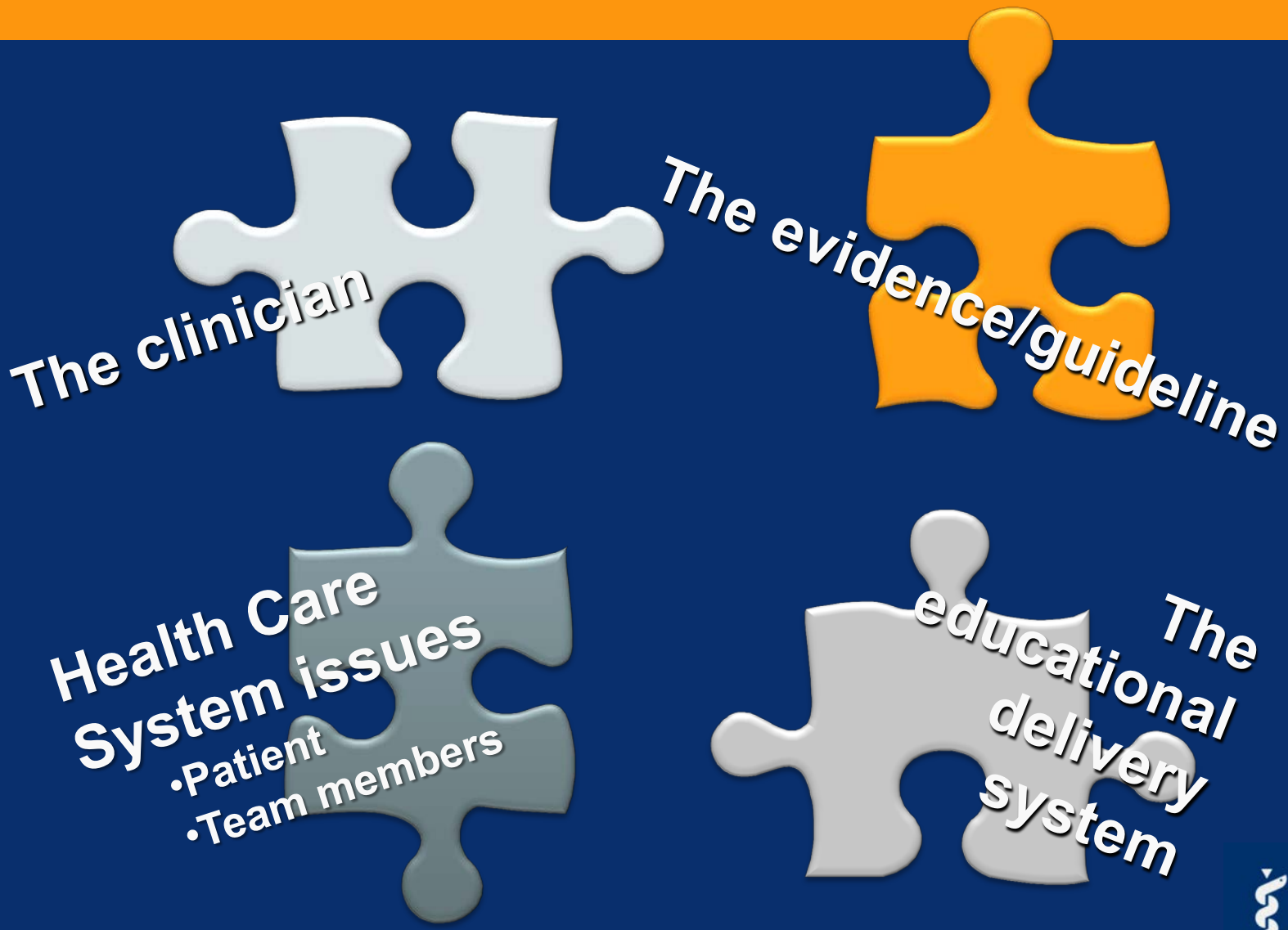

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The knowledge pyramid:
Haynes, Straus et al

NGC currently contains +/- 3000 individual guideline summaries

Think about TACOS:

- ❑ Trial-ability
- ❑ (Relative) advantage
- ❑ Compatibility, complexity
- ❑ Cost
- ❑ Observability
- ❑ Sustainability

Courtesy, David Price, U Colorado

What causes the gap?

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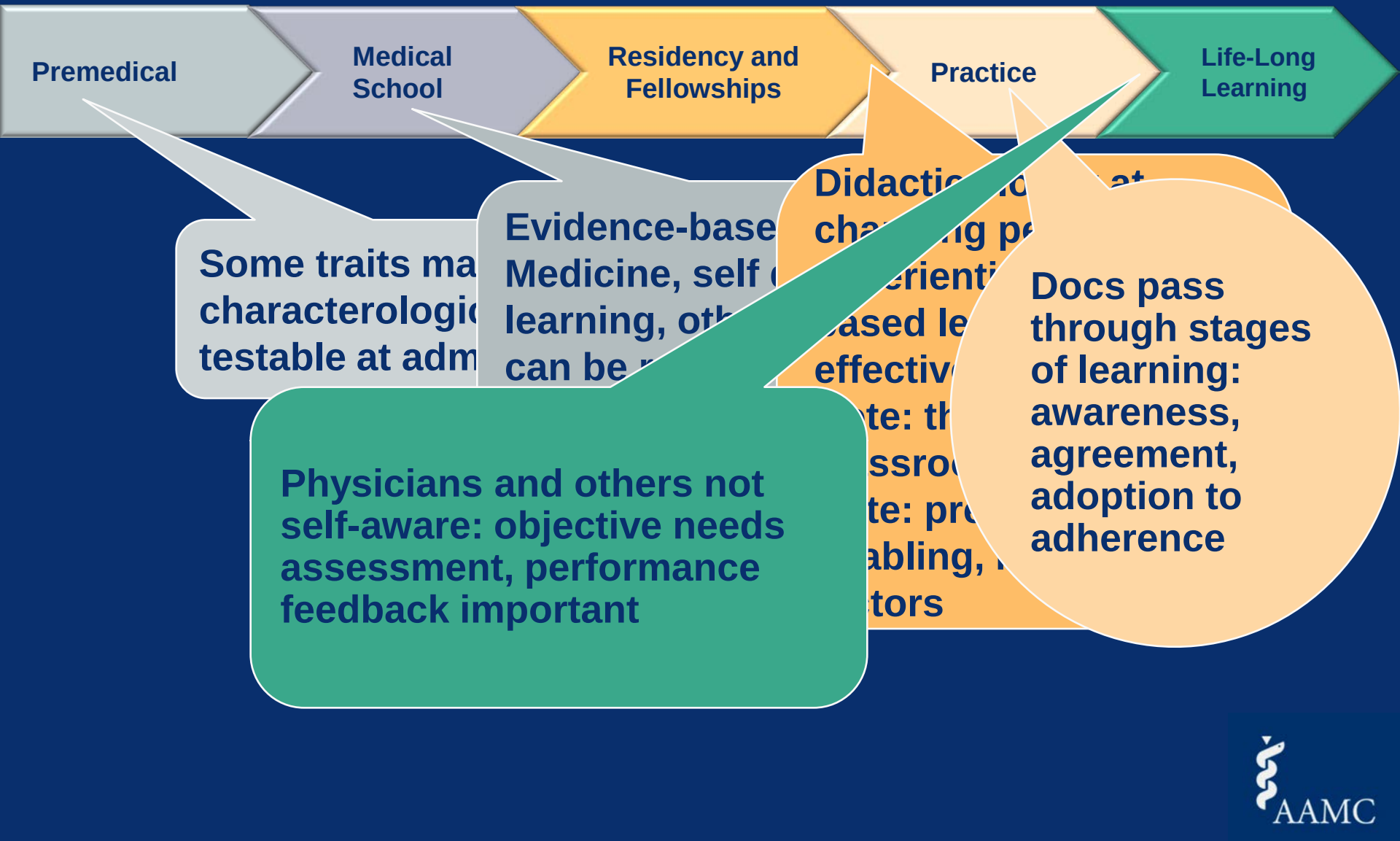
the Continuum: what we know



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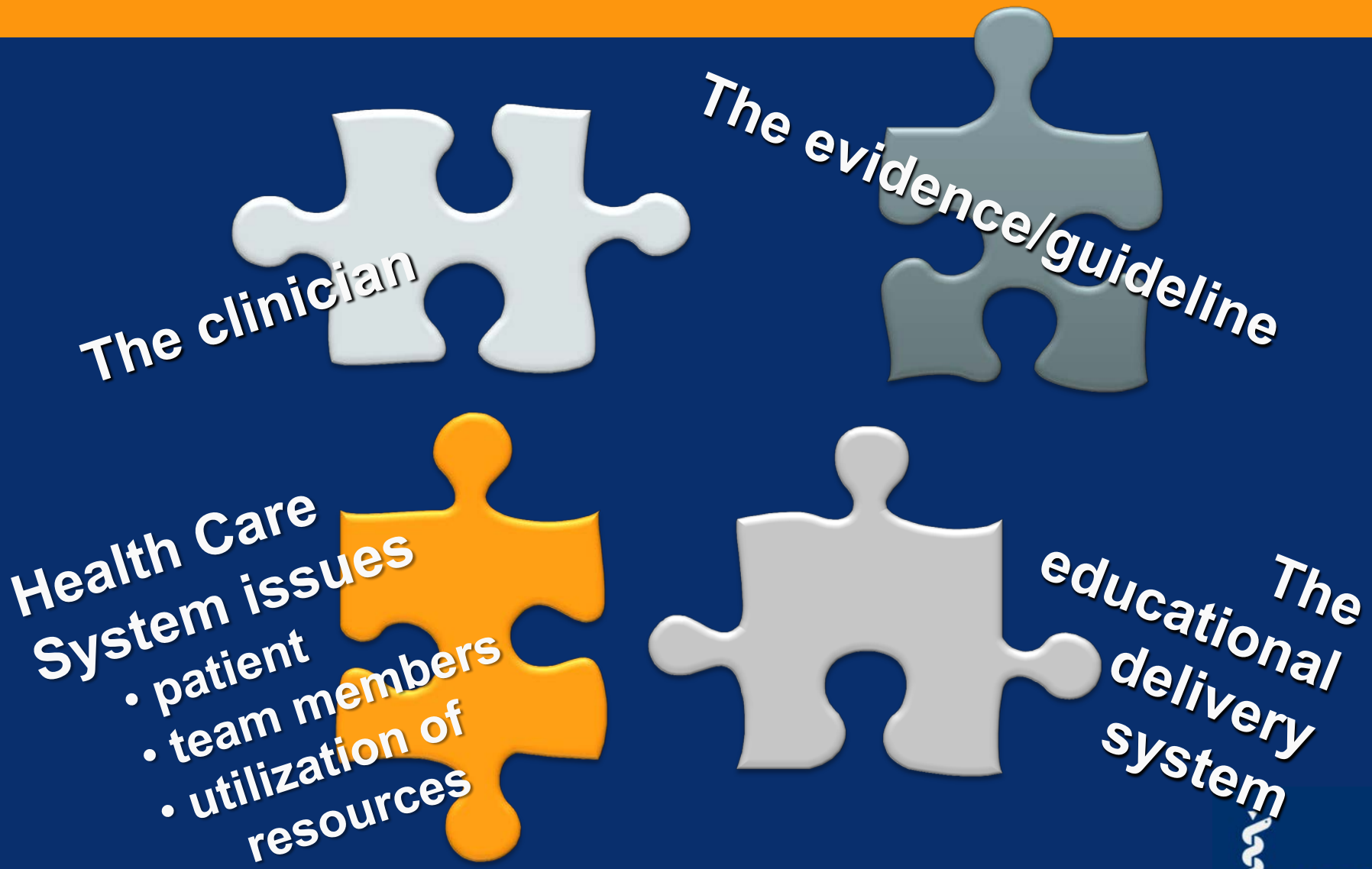

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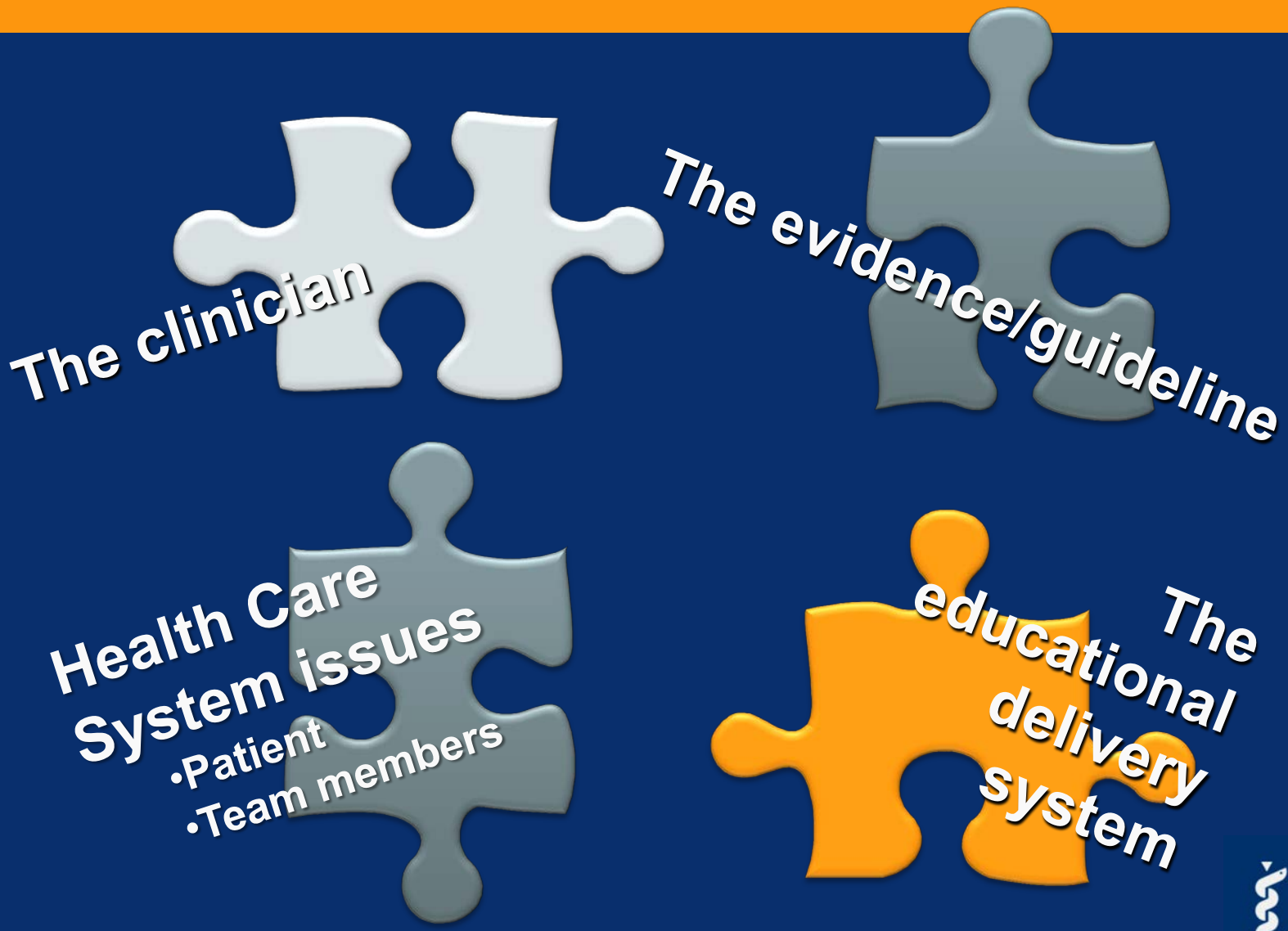

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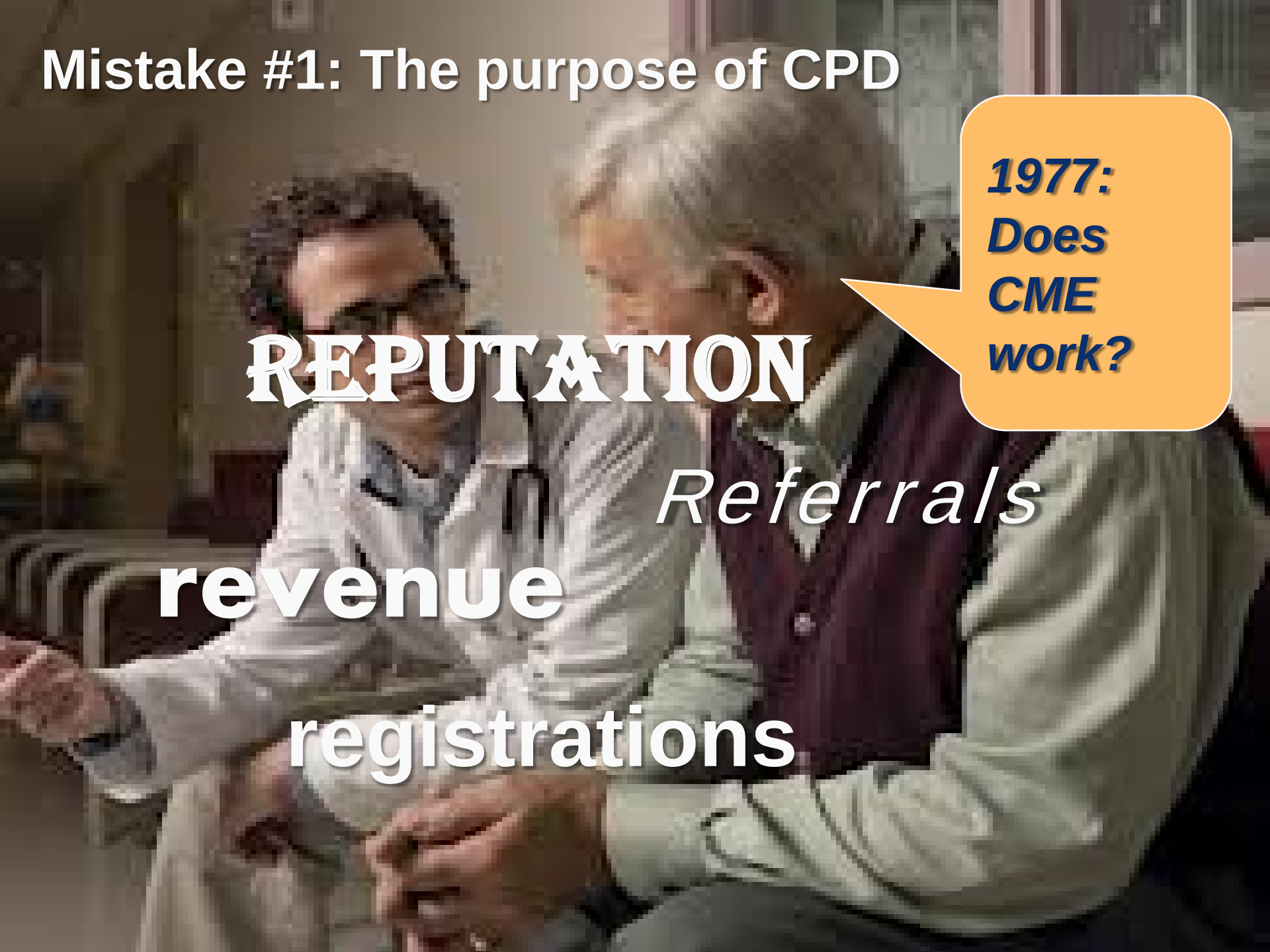
Mistake #1: The purpose of CPD




Does CME change physician behavior? Healthcare outcomes?

And in fact, there are still some mis- (and some accurate) perceptions about ‘CME*’?

***Continuing medical education, continuing education, lifelong learning, continuing professional development,**

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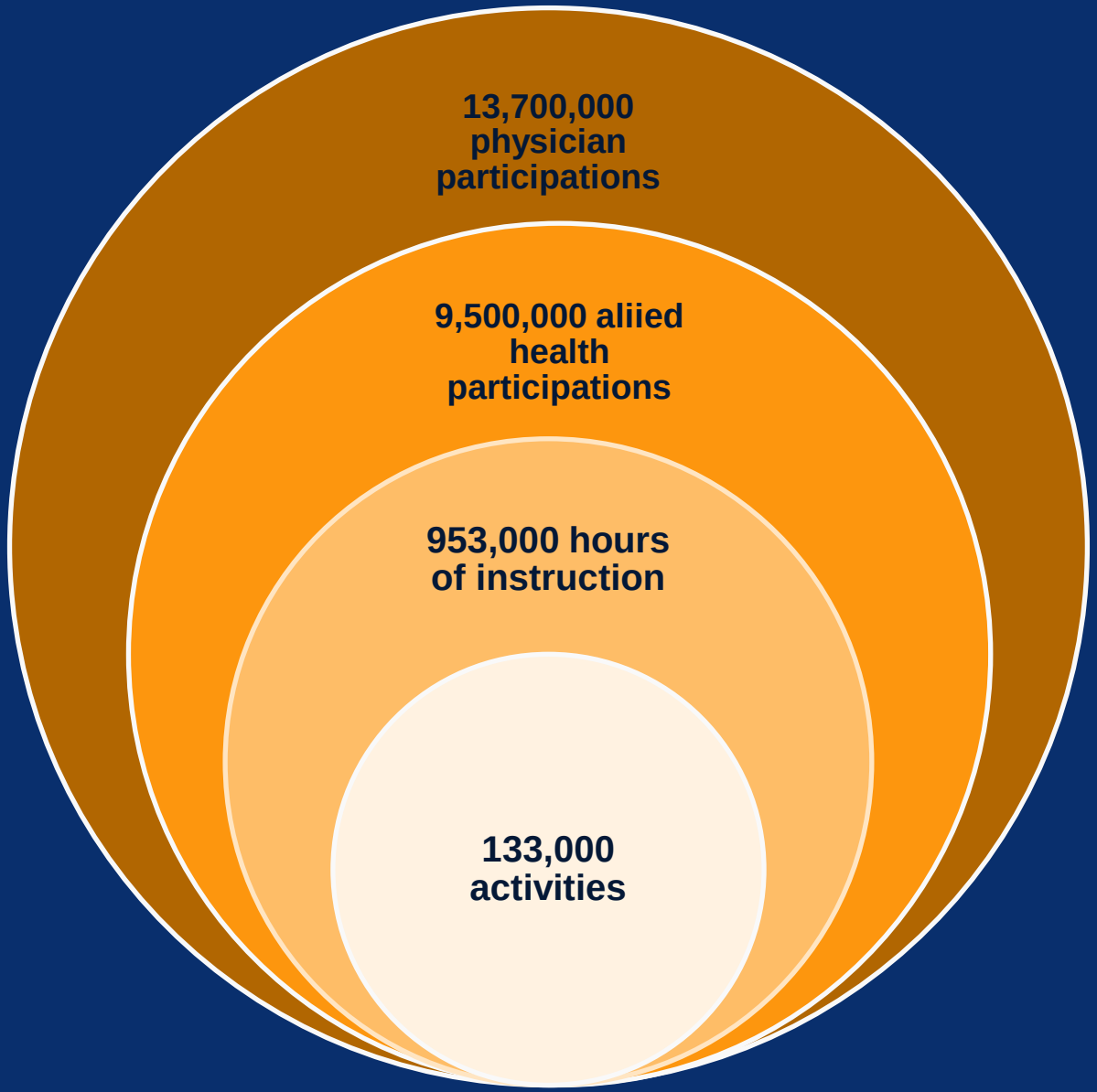
Size, scope of CME (US data, ACCME, 2011)



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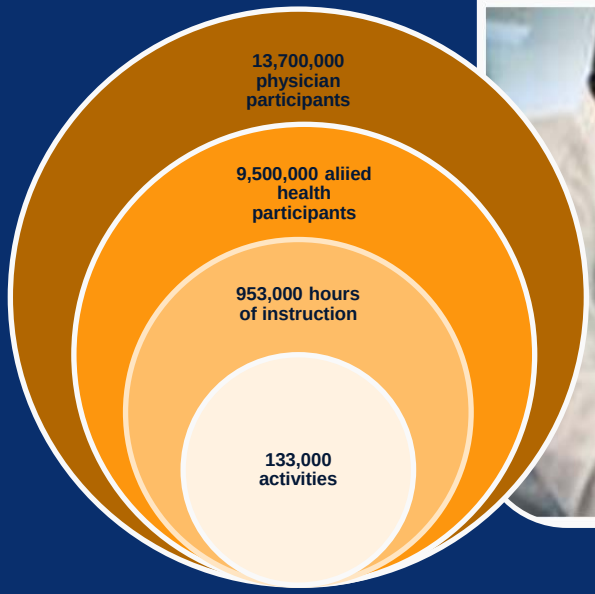
*The size, scope and effect of CME vs the clinical care gap



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Mistake # 2: not paying attention to the research in CME and GME

Physicians and others not self-aware: objective needs assessment, performance feedback important

Knowledge necessary but not sufficient for change; didactics lousy at changing performance by themselves

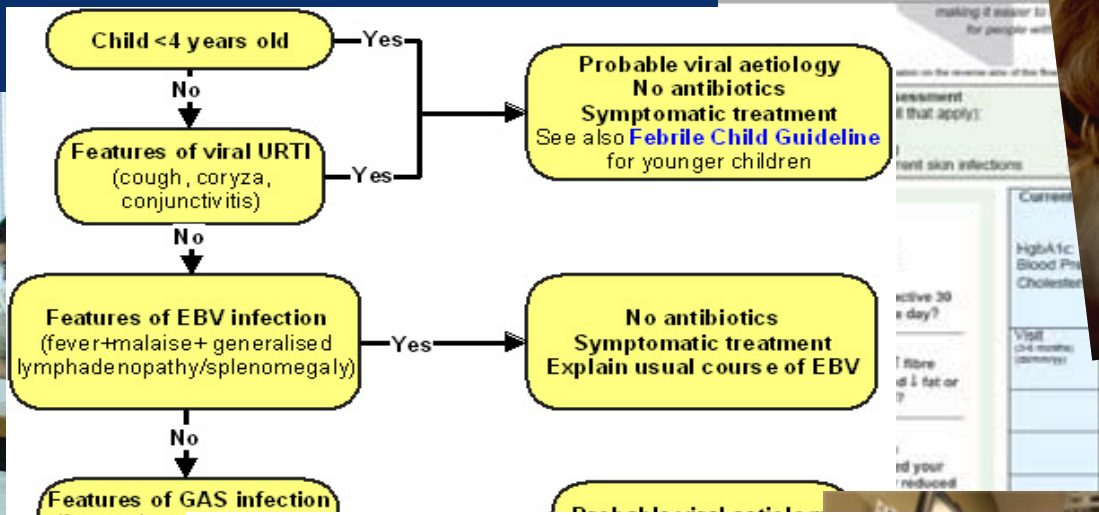
'CME' and GME > conferences; = practice-based tools (reminders, audit-feedback, protocols & training)

Effective education possesses three characteristics: *predisposing, enabling and reinforcing strategies*

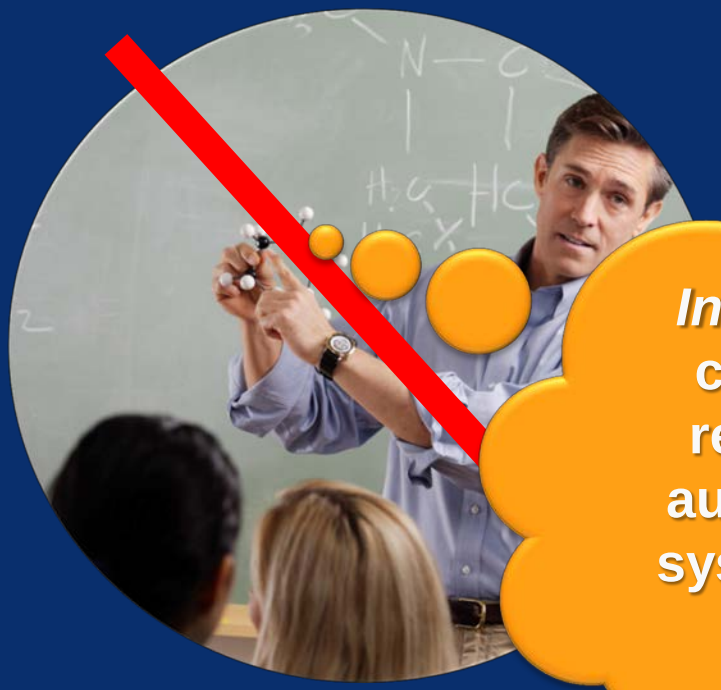
What works in standard continuing education (and probably GME)? *interactivity; sequencing*

.....Cochrane reviews, AHRQ/EB reviews, others

Mistake #3: thinking of ‘CME’ only as the event



The formats (and effect) of ‘CPD’?



***Interactivity:* Q&A, case discussion, reflection, MCQs, audience response systems, think-pair-share**

Formal CPD: lectures, courses, educational materials

PLUS

- Outreach visits
- Small group learning
- Opinion leaders
- detailing
- ed strategies
- nputerized, etc)
- nsive, QI- or practice-
- erventions
- ther ICT-enabled tools (web-based, video-conferencing, PDAs, social networking, etc)

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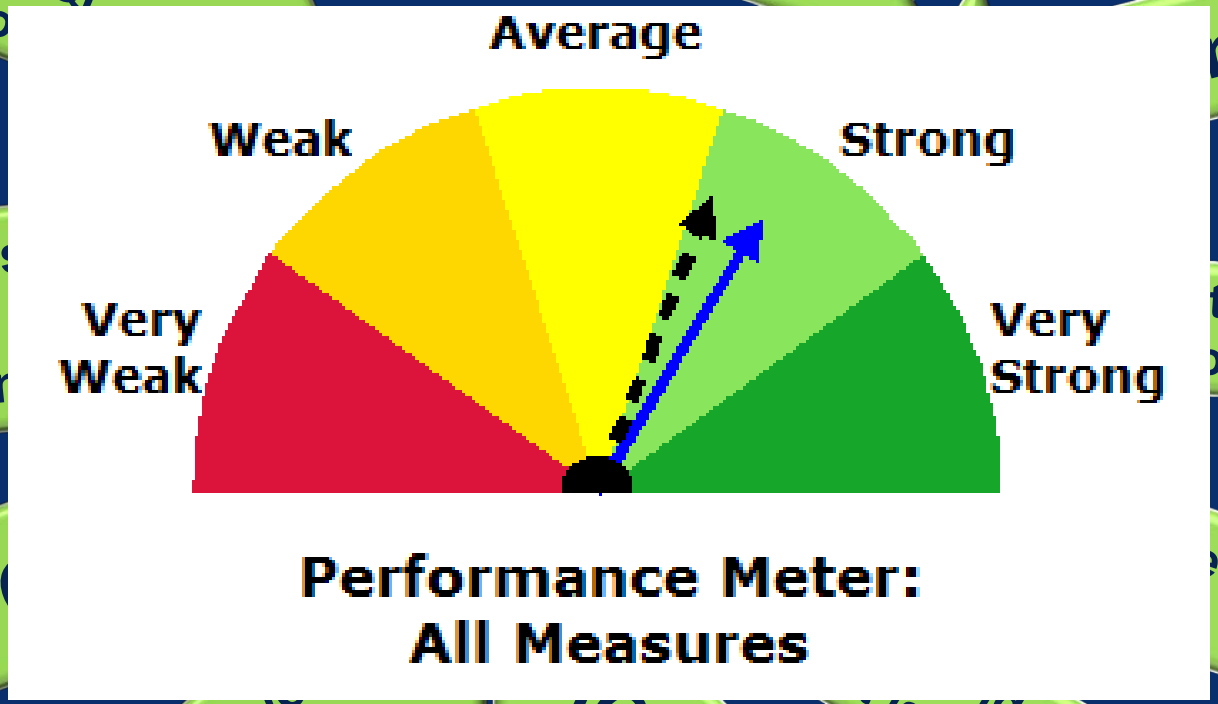
Mistake #4: thinking of CME & GME in isolation



www.ahrq.gov/snapshots

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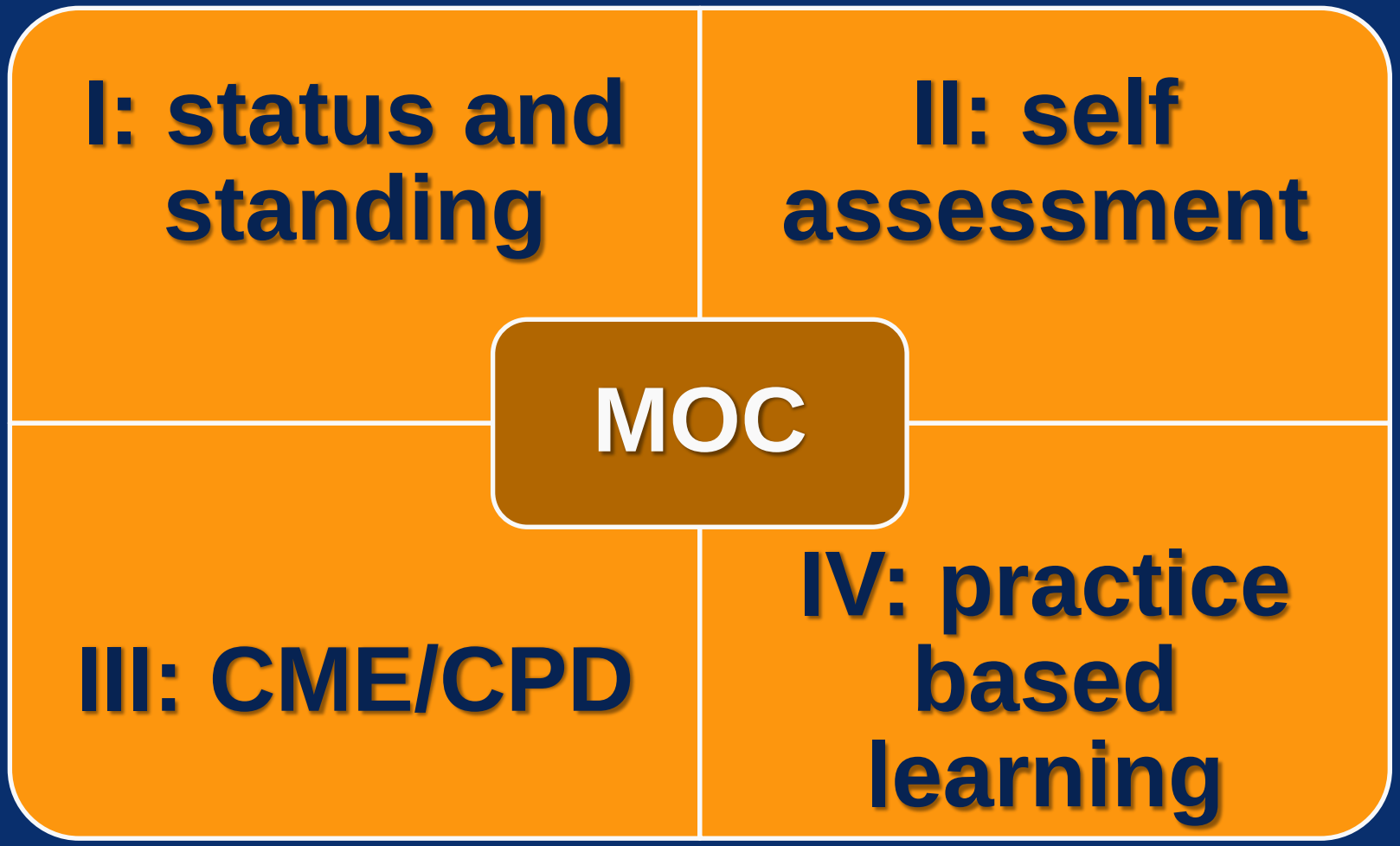
The Reports

- AAMC: interprofessional education
- IOM: Redesigning CE in the Health Professions: a call for a CPD Institute
- Health Information Technology
- Unmet Needs/Lucian Leape Report
- Evidence-based medicine, guidelines, Comparative effectiveness
- IOM Health Professional Education
- IOM Quality Chasm

National initiatives: ABMS – MOC framework



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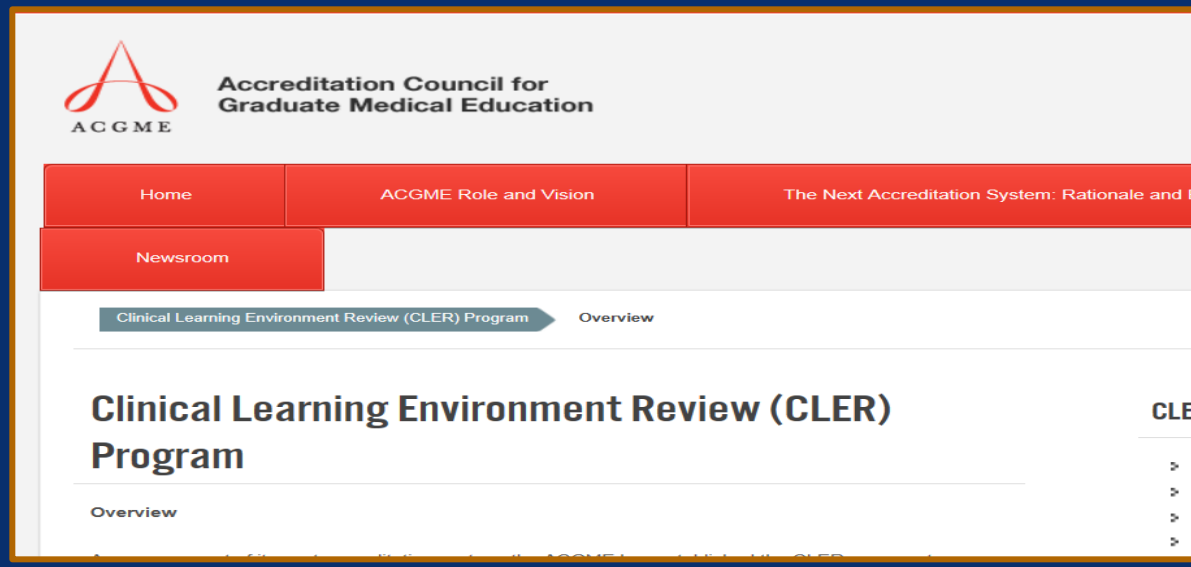
Other national initiatives

- Maintenance of licensure
- ACGME – NAS, CLER
- Government
- Others



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Lessons learned

1. Think about the message; remember TACOS
2. Leverage the change, aligned with others
3. Apply *more effective means* of education: Use all kinds of GME/CME methods, including Just in Time; increase relevance, interactivity
4. Consider all health professionals
5. Think about the pipeline
6. Stage the educational innovation or intervention
7. *Use already-present resources; imbed (ae4Q) and spread (Te4Q) the message*

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Think about the pipeline

EBM, self directed learning can be taught, modeled and *assessed…so can thinking about genomics*

Note: the flipped classroom, other educational methods

A question: where will we get the faculty?

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Stage genomics education: Pathman, PROCEED and a CME-based implementation planning guide

Davis et al, BMJ, 2003

Methods/ Stages	Awareness	Agreement	Adoption	Adherence
Predisposing				
Enabling				
Reinforcing				

Use already-developed resources

AAMC's medEdPORTAL

www.mededportal.org

Imbed the message

SPREAD THE MESSAGE

A train-the-trainer model

QI/PS trained faculty/staff

	Current picture	Possible Future
More effective		
Less Effective	Traditional, Didactic education Little attention to Genomics Little attention to system-linked, effective educational systems	

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More information:

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www.aamc.org/cei

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This morning.....

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