Accountable Medical Education

Operationalizing Accountability

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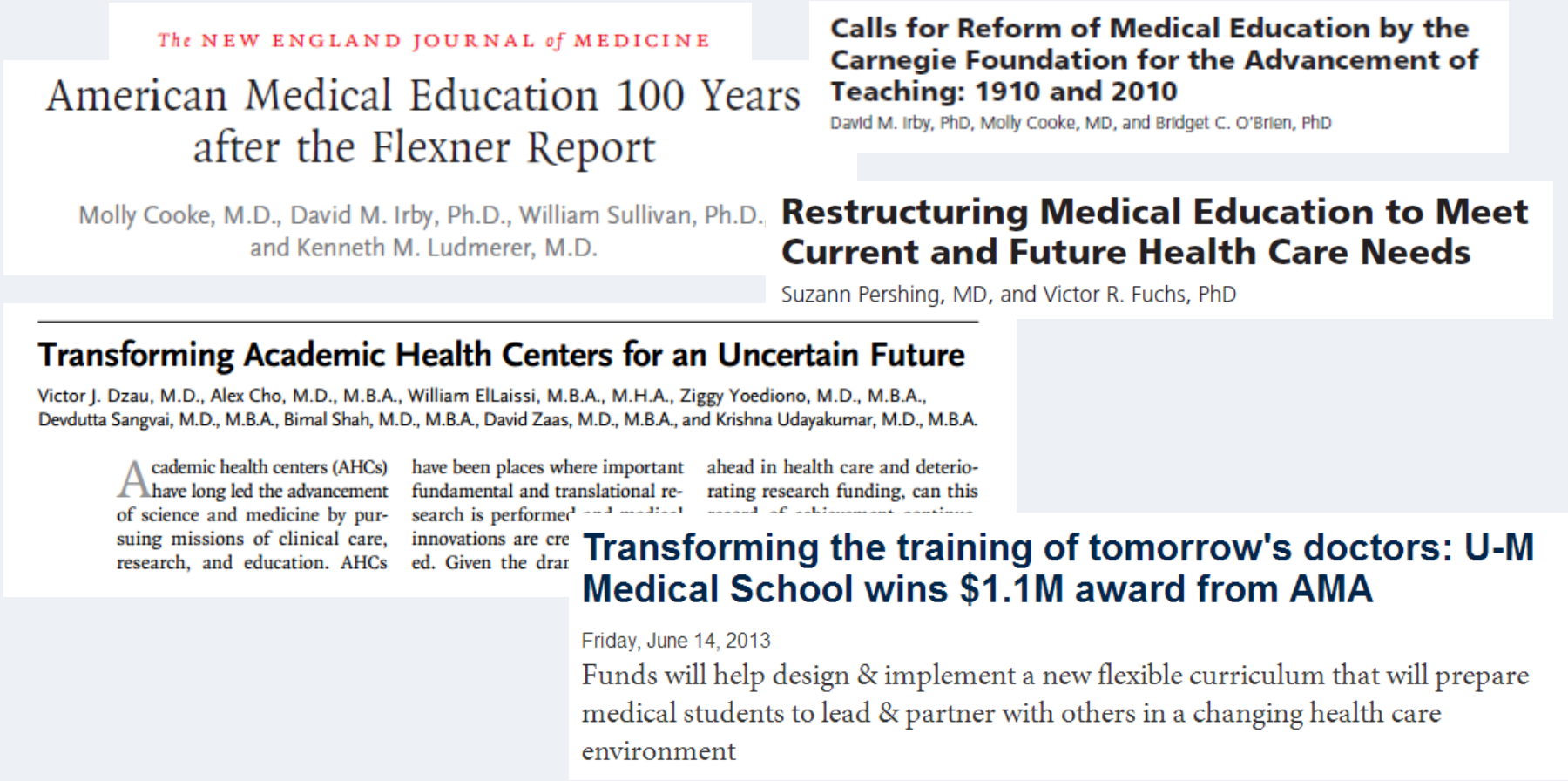
YOU
ARE
HERE

Seminar Goals

Description of a Journey

- Why change
  - To whom are we accountable?
  - The role of assessment in medical education
- Defining where we are currently
  - Competencies and milestones
- Where we are “stuck” and getting “un-stuck”
  - Work-based assessment strategies – entrustable professional activities
- The future – a roadmap to an assessment system

Change is Coming to Medical Education



The NEW ENGLAND JOURNAL of MEDICINE

American Medical Education 100 Years after the Flexner Report

Molly Cooke, M.D., David M. Irby, Ph.D., William Sullivan, Ph.D. and Kenneth M. Ludmerer, M.D.

Calls for Reform of Medical Education by the Carnegie Foundation for the Advancement of Teaching: 1910 and 2010

David M. Irby, PhD, Molly Cooke, MD, and Bridget C. O'Brien, PhD

Restructuring Medical Education to Meet Current and Future Health Care Needs

Suzann Pershing, MD, and Victor R. Fuchs, PhD

Transforming Academic Health Centers for an Uncertain Future

Victor J. Dzau, M.D., Alex Cho, M.D., M.B.A., William ElLaissi, M.B.A., M.H.A., Ziggy Yoediono, M.D., M.B.A., Devdutta Sangvai, M.D., M.B.A., Bimal Shah, M.D., M.B.A., David Zaas, M.D., M.B.A., and Krishna Udayakumar, M.D., M.B.A.

Academic health centers (AHCs) have long led the advancement of science and medicine by pursuing missions of clinical care, research, and education. AHCs have been places where important fundamental and translational research is performed innovations are created. Given the drar ahead in health care and deteriorating research funding, can this

Transforming the training of tomorrow's doctors: U-M Medical School wins $1.1M award from AMA

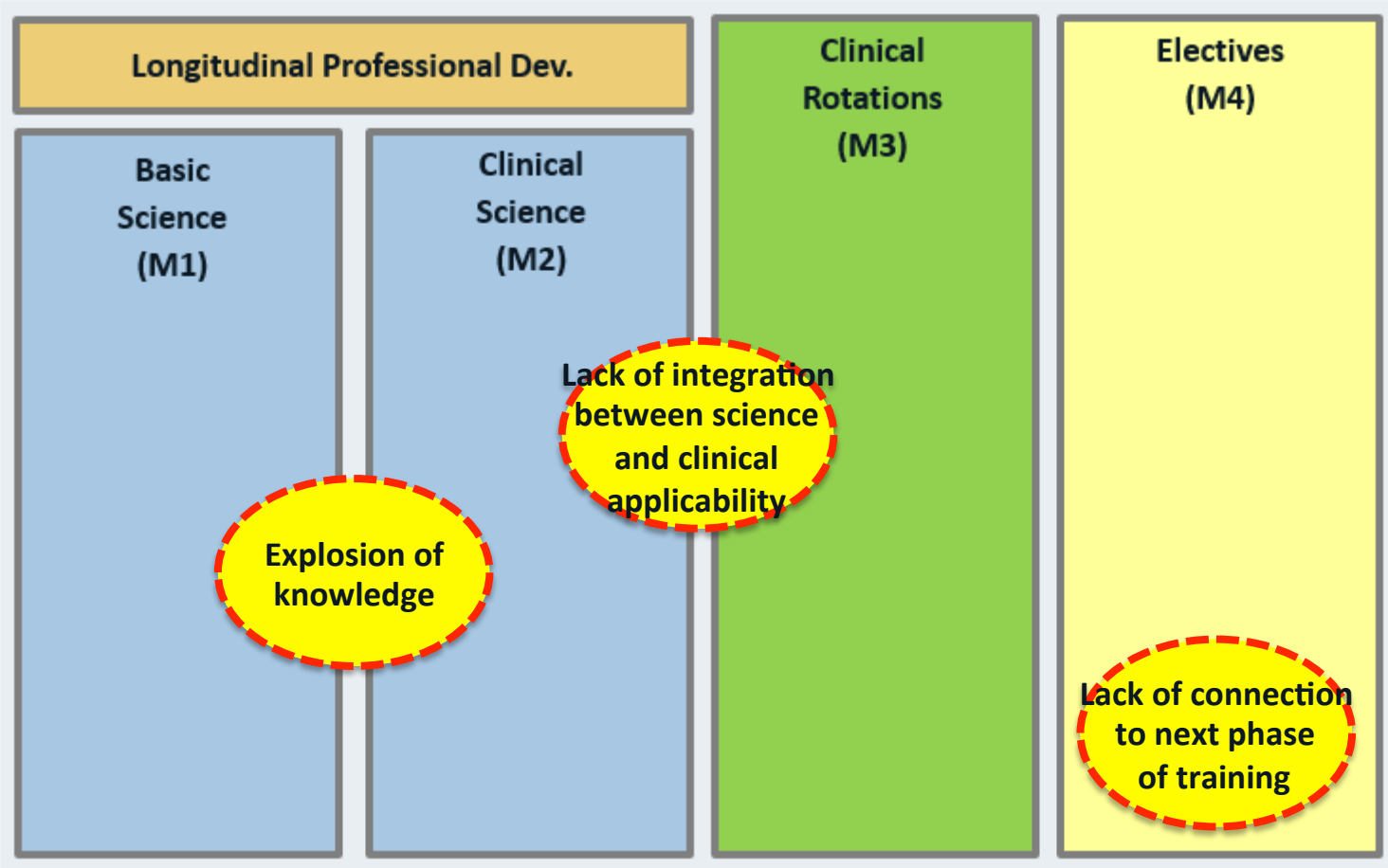
Friday, June 14, 2013

Funds will help design & implement a new flexible curriculum that will prepare medical students to lead & partner with others in a changing health care environment

Why Change?

- Our discipline is growing exponentially with regard to knowledge, skills, and attributes – far exceeding what could be covered within the confines of a medical school curriculum.
- Medical education programs are structured in serial silos: yet development must be integrated and longitudinal.

Challenges of the Current State



Why Change?

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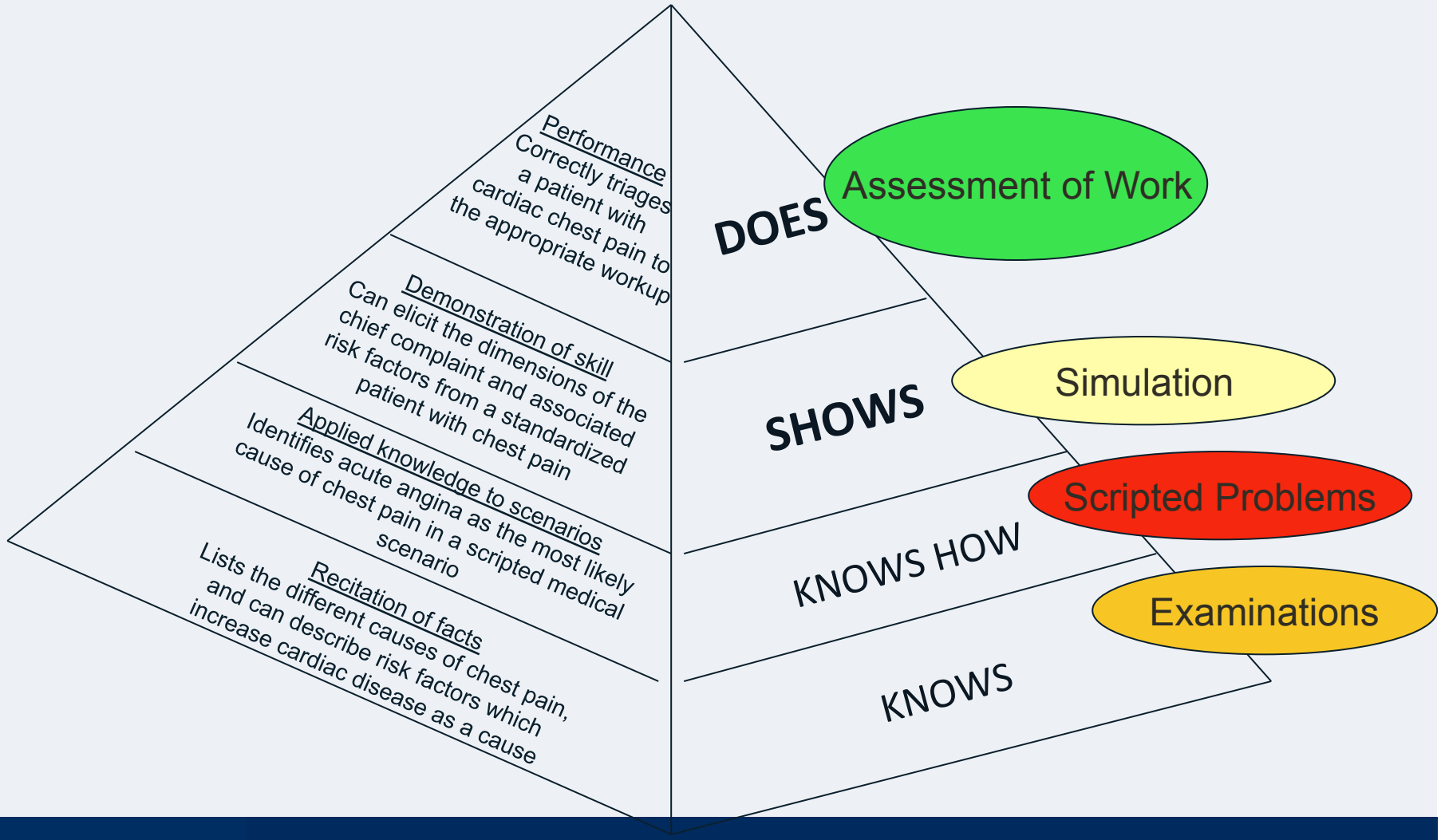
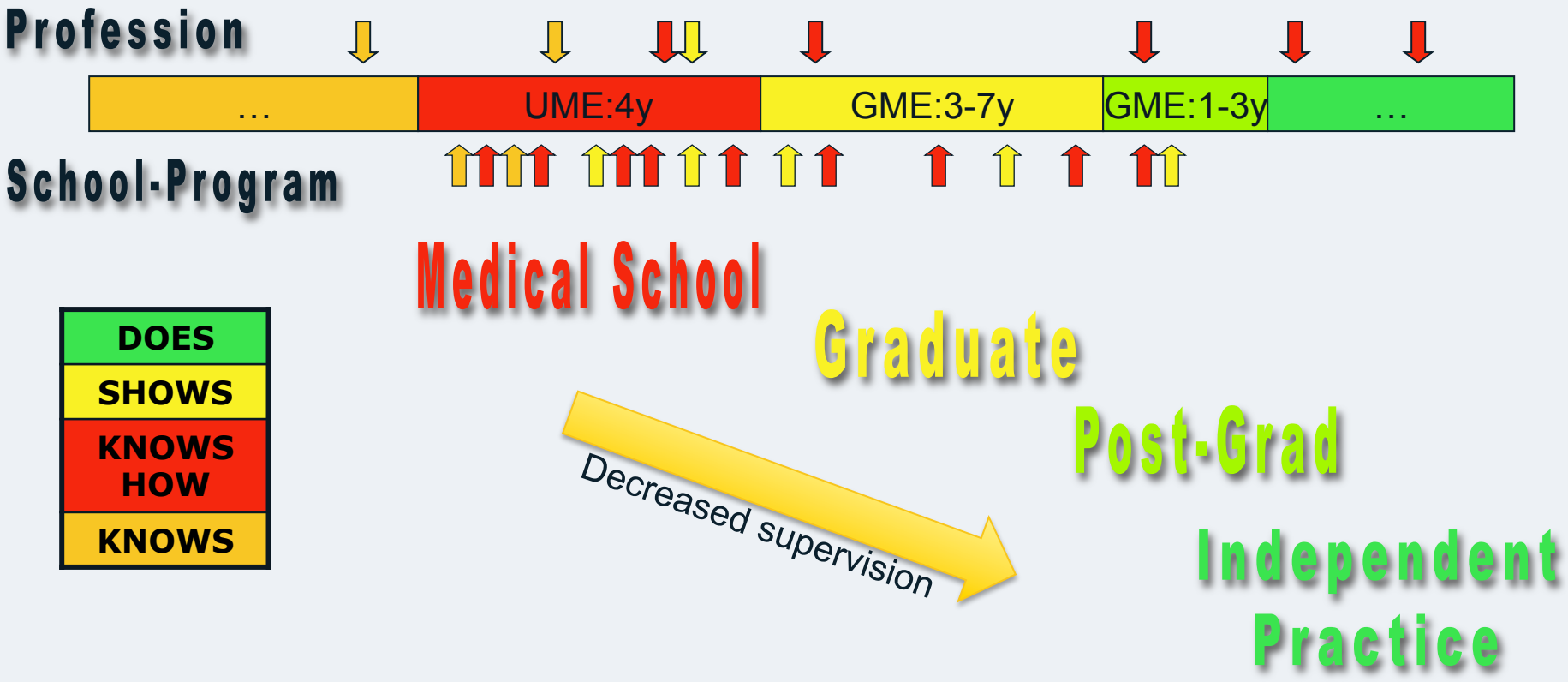
- Medical education programs are structured in serial silos: yet development must be integrated and longitudinal.
- **Assessment tools are inadequate and incomplete with regard to what students will be expected to do.**

Assessment Framework



Adapted from **Miller** GE. The assessment of clinical skills/competence/performance. *Aced Med* 1990; **65** (Suppl): S63–7

Medical Education Assessment Context



Assessment FOR Learning

January 20, 2011

To Really Learn, Quit Studying and Take a Test

By PAM BELLUCK

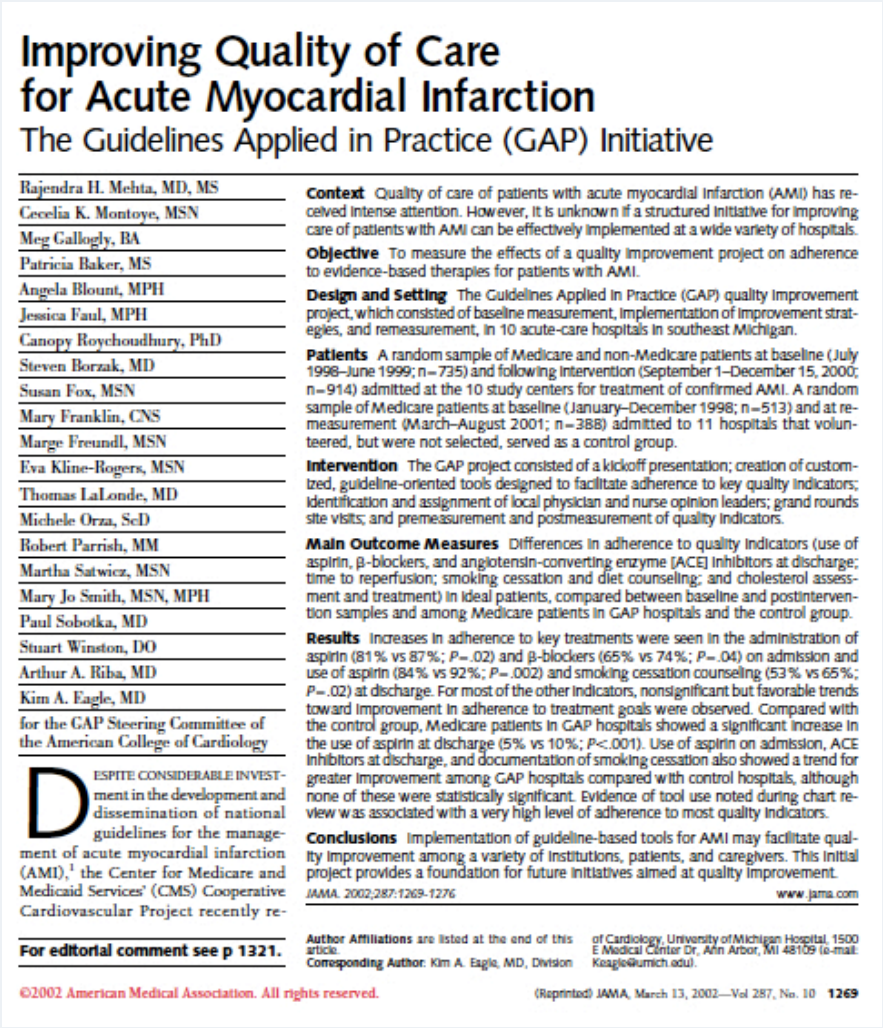
Taking a test is not just a passive mechanism for assessing how much people know, according to new research. It actually helps people learn, and it works better than a number of other studying techniques.

The research, published online Thursday in the journal Science, found that students who read a passage, then took a test asking them to recall what they had read, retained about 50 percent more of the information a week later than students who used two other methods.

One of those methods — repeatedly studying the material — is familiar to legions of students who cram before exams. The other — having students draw detailed diagrams documenting what they are learning — is prized by many teachers because it forces students to make connections among facts.

Assessment Gap-Where Do We Focus?

"Knowing what to do" vs "Doing what we know"



Improving Quality of Care for Acute Myocardial Infarction

The Guidelines Applied in Practice (GAP) Initiative

Rajendra H. Mehta, MD, MS
Cecelia K. Montoye, MSN
Meg Gallogly, BA
Patricia Baker, MS
Angela Blount, MPH
Jessica Faul, MPH
Canopy Roychoudhury, PhD
Steven Borzak, MD
Susan Fox, MSN
Mary Franklin, CNS
Marge Freundl, MSN
Eva Kline-Rogers, MSN
Thomas LaLonde, MD
Michele Orza, ScD
Robert Parrish, MM
Martha Satwicz, MSN
Mary Jo Smith, MSN, MPH
Paul Sobotka, MD
Stuart Winston, DO
Arthur A. Riba, MD
Kim A. Eagle, MD
for the GAP Steering Committee of the American College of Cardiology

Context Quality of care of patients with acute myocardial infarction (AMI) has received intense attention. However, it is unknown if a structured initiative for improving care of patients with AMI can be effectively implemented at a wide variety of hospitals.

Objective To measure the effects of a quality improvement project on adherence to evidence-based therapies for patients with AMI.

Design and Setting The Guidelines Applied in Practice (GAP) quality improvement project, which consisted of baseline measurement, implementation of improvement strategies, and remeasurement, in 10 acute-care hospitals in southeast Michigan.

Patients A random sample of Medicare and non-Medicare patients at baseline (July 1998–June 1999; n=735) and following intervention (September 1–December 15, 2000; n=914) admitted at the 10 study centers for treatment of confirmed AMI. A random sample of Medicare patients at baseline (January–December 1998; n=513) and at remeasurement (March–August 2001; n=388) admitted to 11 hospitals that volunteered, but were not selected, served as a control group.

Intervention The GAP project consisted of a kickoff presentation; creation of customized, guideline-oriented tools designed to facilitate adherence to key quality indicators; identification and assignment of local physician and nurse opinion leaders; grand rounds site visits; and premeasurement and postmeasurement of quality indicators.

Main Outcome Measures Differences in adherence to quality indicators (use of aspirin, β-blockers, and angiotensin-converting enzyme [ACE] inhibitors at discharge; time to reperfusion; smoking cessation and diet counseling; and cholesterol assessment and treatment) in ideal patients, compared between baseline and postintervention samples and among Medicare patients in GAP hospitals and the control group.

Results Increases in adherence to key treatments were seen in the administration of aspirin (81% vs 87%; $P=.02$) and β-blockers (65% vs 74%; $P=.04$) on admission and use of aspirin (84% vs 92%; $P=.002$) and smoking cessation counseling (53% vs 65%; $P=.02$) at discharge. For most of the other indicators, nonsignificant but favorable trends toward improvement in adherence to treatment goals were observed. Compared with the control group, Medicare patients in GAP hospitals showed a significant increase in the use of aspirin at discharge (5% vs 10%; $P<.001$). Use of aspirin on admission, ACE inhibitors at discharge, and documentation of smoking cessation also showed a trend for greater improvement among GAP hospitals compared with control hospitals, although none of these were statistically significant. Evidence of tool use noted during chart review was associated with a very high level of adherence to most quality indicators.

Conclusions Implementation of guideline-based tools for AMI may facilitate quality improvement among a variety of institutions, patients, and caregivers. This initial project provides a foundation for future initiatives aimed at quality improvement.

JAMA. 2002;287:1269-1276 www.jama.com

DESPITE CONSIDERABLE INVESTment in the development and dissemination of national guidelines for the management of acute myocardial infarction (AMI),[1] the Center for Medicare and Medicaid Services' (CMS) Cooperative Cardiovascular Project recently re-

For editorial comment see p 1321.

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Article

Are Physicians Doing Too Much Colonoscopy? A National Survey of Colorectal Surveillance after Polypectomy

Pauline A. Mysliwiec, MD, MPH; Martin L. Brown, PhD; Carrie N. Klabunde, PhD; and David F. Ransohoff, MD

+ Author Affiliations

Abstract

Background: Increasing use of colonoscopy for colorectal cancer screening and surveillance of colorectal adenomas after polypectomy has given rise to concerns about the availability of endoscopic resources in the United States. Guidelines recommend surveillance after polypectomy at 3 to 5 years for a small adenoma, and follow-up is not advised for hyperplastic polyps. The intensity of physicians' surveillance is largely unstudied.

Objective: To survey practicing gastroenterologists and general surgeons about their perceived need for the frequency of surveillance after polypectomy, to compare survey responses to practice guidelines, and to identify factors influencing their recommendations for surveillance.

Design: Survey study conducted by the National Cancer Institute.

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- **The intensity of the practice environment and its associated requirements are disconnecting our instructors and assessors from our learners.**

Problem: Assessment in the Clinical Environment

- Work-based assessment – current state*
  - Challenging and infrequent without structured programs (natural prevalence 25-33% of learners)
  - Quality is variable
  - Rarely followed up with reflection and learning plans
- Pressures
  - Administrative workload has exploded
  - Electronic Health Record burden
  - Enhanced regulations on work hours
  - Pressure of clinical throughput

*Norcini J. Medical Teacher 2007; 29:855-71

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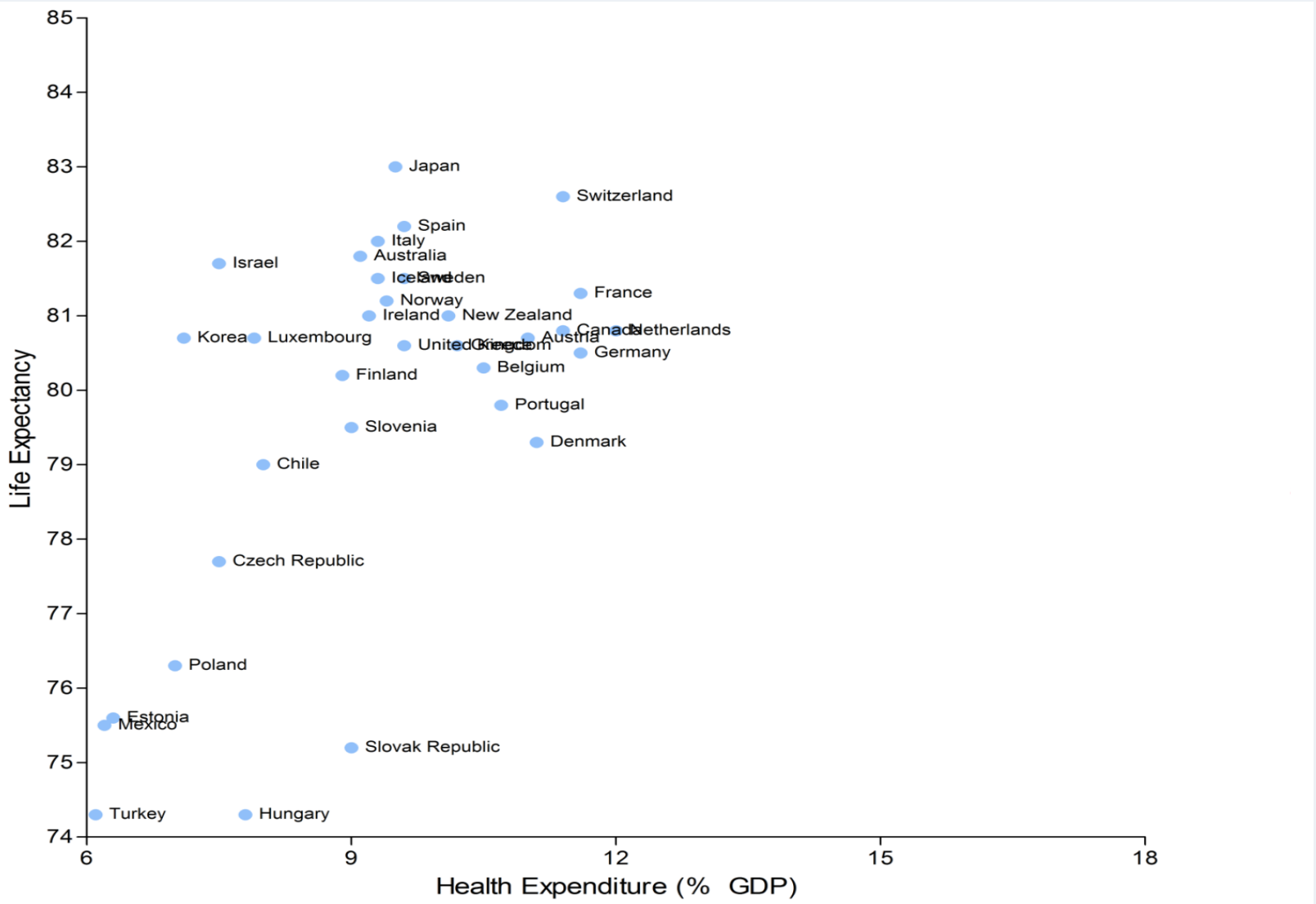
- The intensity of the practice environment and its associated requirements are disconnecting our instructors and assessors from our learners.
- **Society is asking for a different kind of health system and health practitioner.**

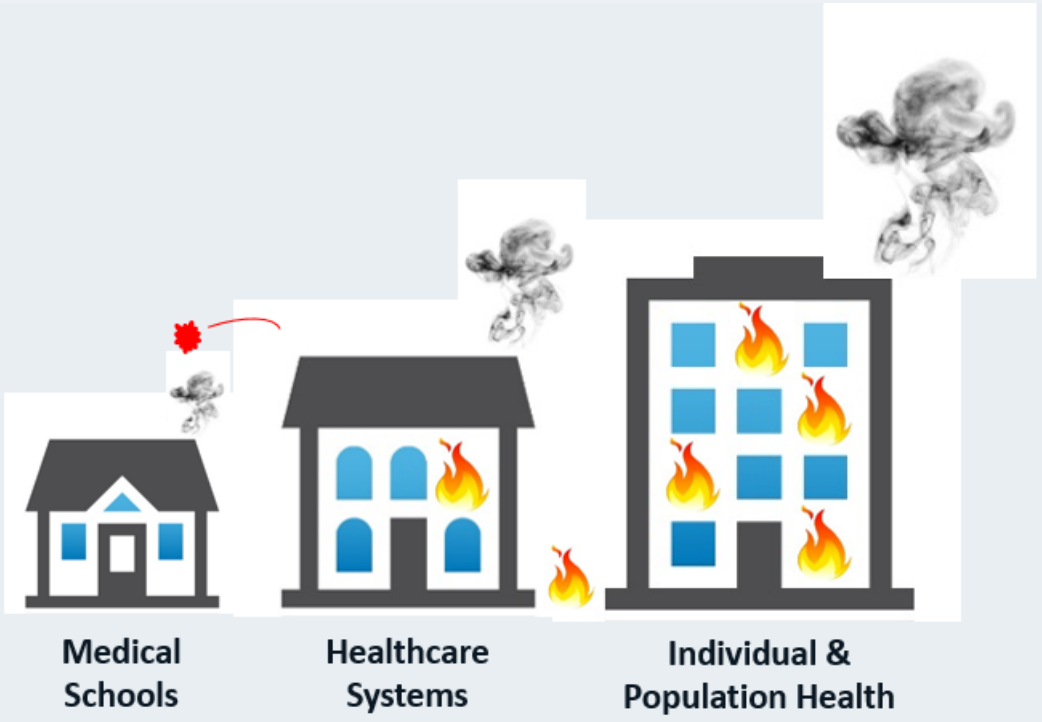
OECD Health Data



US needs a “new” system

Prevention and health maintenance	Chronic disease management	Acute disease diagnosis and treatment	Complex disease management
LPN, NP Dentist Pharmacists Physiatrists Alternative providers Technicians **Physicians**	LPN, NP, PA Pharmacists **Physicians**	**Physicians** PA	**Physicians**

Why Change?

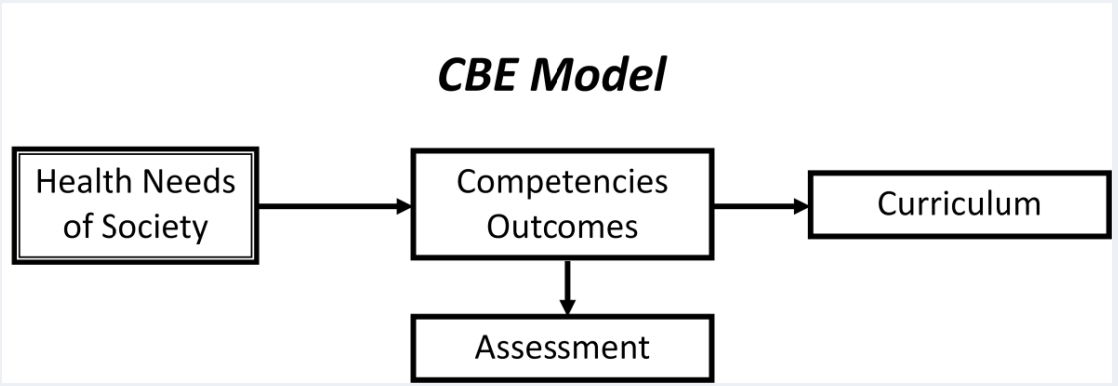


"It is clear that our system of healthcare is in need of major reforms that will dramatically impact medical education programs."

~ Dean's charge to Curriculum Policy Committee, Dec 2012

New framework

- **Time-based to outcomes-based**
  - Fixed structure and process with variable outcomes
  - Fixed outcomes and variable structure and process



*an outcomes-based approach to the design, implementation, assessment and evaluation of a medical education program using an organizing framework of competencies.

--The International CBME Collaborators, 2009

How do we get there in 3 Steps?

- Defining where we are currently
  - Step 1: Competencies
  - Step 2: Milestones
- Where we are “stuck”, and getting “un-stuck”
  - Step 3: Work-based assessment strategies – Entrustable Professional Activities

Competenglish*

Competency – the thing(s) learners need to do

Competent – can do all of the things

Competence – does all of the things consistently, adapting to contextual and situational needs

*Caverzagie: Linking Milestones to the Core Competencies Using EPAs, AAIM Educ Redesign Comm

Step 1 – Define the Competencies

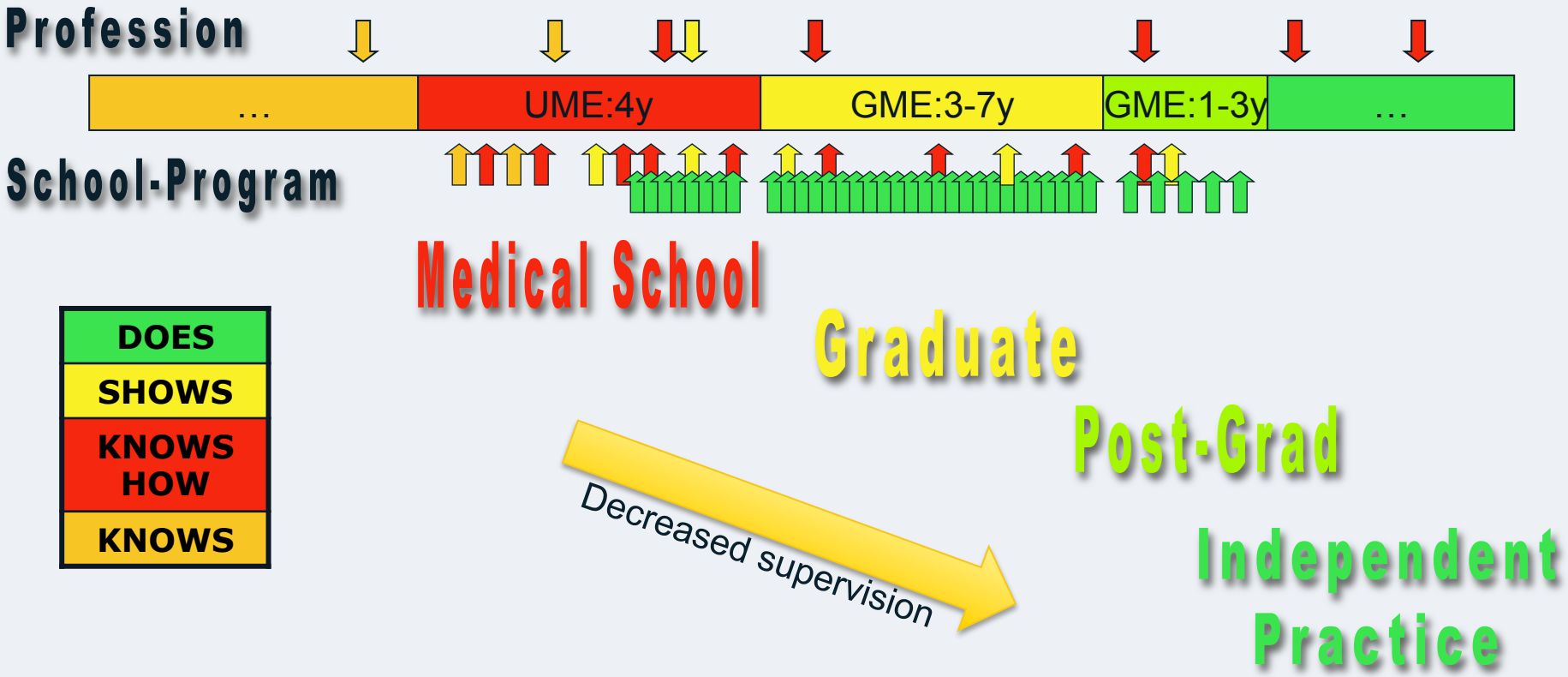
- **20 years (1993-2013)**
- **Outcomes Project (Residency Education - the core 6)**
  - DOMAINS - Patient Care, Medical Knowledge, Interpersonal Communication Skills, Practice-Based Learning, Systems-Based Practice, Professionalism
- **AAMC – medical school competencies (6+2)**
  - Towards a Common Taxonomy* – Added 2 DOMAINS
  - Inter-professional Collaboration, Personal and Professional Development

*Englander R, et al. Toward a Common Taxonomy of Competency Domains for the Health Professions and Competencies for Physicians. Academic Medicine. 2013;88(8):1088-1094.

Impact of Competencies

- Began the movement towards *accountability*
- Defined what is important
- Identified curricular needs (e.g., PBL, SBP)
- Challenged measurement
- Identified gaps in assessment

An Idealized Assessment Context



Work-Based Assessment

Mini-Clinical Evaluation Exercise (CEX)

Evaluator: _____ **Date:** _____

Resident: _____ O R-1 O R-2 O R-3

Patient Problem/Dx: _____

Setting: O Ambulatory O In-patient O ED O Other _____

Patient: Age: _____ Sex: _____ O New O Follow-up

Complexity: O Low O Moderate O High

Focus: O Data Gathering O Diagnosis O Therapy O Counseling

1. Medical Interviewing Skills (O Not Observed)

1 2 3	4 5 6	7 8 9
UNSATISFACTORY	SATISFACTORY	SUPERIOR

2. Physical Examination Skills (O Not Observed)

1 2 3	4 5 6	7 8 9
UNSATISFACTORY	SATISFACTORY	SUPERIOR

3. Humanistic Qualities/Professionalism

1 2 3	4 5 6	7 8 9
UNSATISFACTORY	SATISFACTORY	SUPERIOR

4. Clinical Judgment (O Not Observed)

1 2 3	4 5 6	7 8 9
UNSATISFACTORY	SATISFACTORY	SUPERIOR

5. Counseling Skills (O Not Observed)

1 2 3	4 5 6	7 8 9
UNSATISFACTORY	SATISFACTORY	SUPERIOR

6. Organization/Efficiency (O Not Observed)

1 2 3	4 5 6	7 8 9
UNSATISFACTORY	SATISFACTORY	SUPERIOR

7. Overall Clinical Competence (O Not Observed)

1 2 3	4 5 6	7 8 9
UNSATISFACTORY	SATISFACTORY	SUPERIOR

Mini-CEX Time: **Observing**_____**Mins** **Providing Feedback:** _____**Mins**

Evaluator Satisfaction with Mini-CEX
LOW 1 2 3 4 5 6 7 8 9 HIGH
Resident Satisfaction with Mini-CEX
LOW 1 2 3 4 5 6 7 8 9 HIGH

Comments:

_____

_____

_____

_____ _____

Resident Signature Evaluator Signature

DESCRIPTORS OF COMPETENCIES DEMONSTRATED DURING THE MINI-CEX

Medical Interviewing Skills: Facilitates patient's telling of story; effectively uses questions/directions to obtain accurate, adequate information needed; responds appropriately to affect, non-verbal cues.

Physical Examination Skills: Follows efficient, logical sequence; balances screening/diagnostic steps for problem; informs patient; sensitive to patient's comfort, modesty.

Humanistic Qualities/Professionalism: Shows respect, compassion, empathy, establishes trust; attends to patient's needs of comfort, modesty, confidentiality, information.

Clinical Judgment: Selectively orders/performs appropriate diagnostic studies, considers risks, benefits.

Counseling Skills: Explains rationale for test/treatment, obtains patient's consent, educates/counsels regarding management.

Organization/Efficiency: Prioritizes; is timely; succinct.

Overall Clinical Competence: Demonstrates judgment, synthesis, caring, effectiveness, efficiency.

Step 2 – Milestones

What does Competency Look Like?

- **5 years (2009-2014)**
- **ACGME Milestone Project**
  - A Focus on Performance Levels

The Six Competencies, and the Continuum of Clinical Medical Education - Dreyfus Conceptual Model[1]

- Medical Knowledge
- Patient Care and Procedural Skills [2]
- Interpersonal and Communication Skills
- Professionalism
- Practice Based Learning and Improvement
- Systems Based Practice

- Novice
- Advanced Beginner
- Competent
- Proficient
- Expert
- Master

- Undergraduate
- Graduate
- Continuing

[1] as presented by Leach, D., modified by Nasca, T.J.
American Board of Internal Medicine Summer Retreat, August, 1999.
[2] Patient Care Competency modified 9/2010 by ACGME and ABMS

ACGME

Milestone Definition

Describes, in behavioral terms, learning and performance levels students are expected to demonstrate for specific competencies by a particular point in their education.

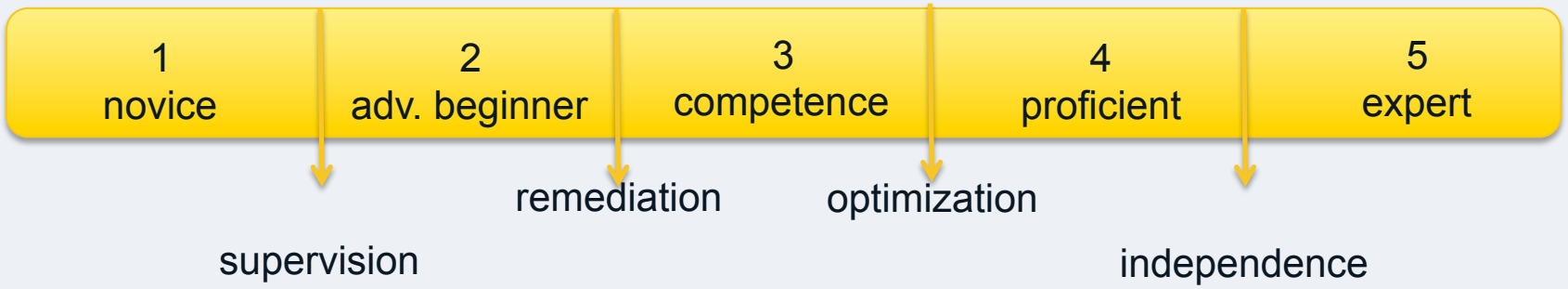
Mullan P, Lypson M. *JGME* 2011; 3(4): 574-576.
Swing SR, et al. *JGME* 2009; 1(2): 278-286.

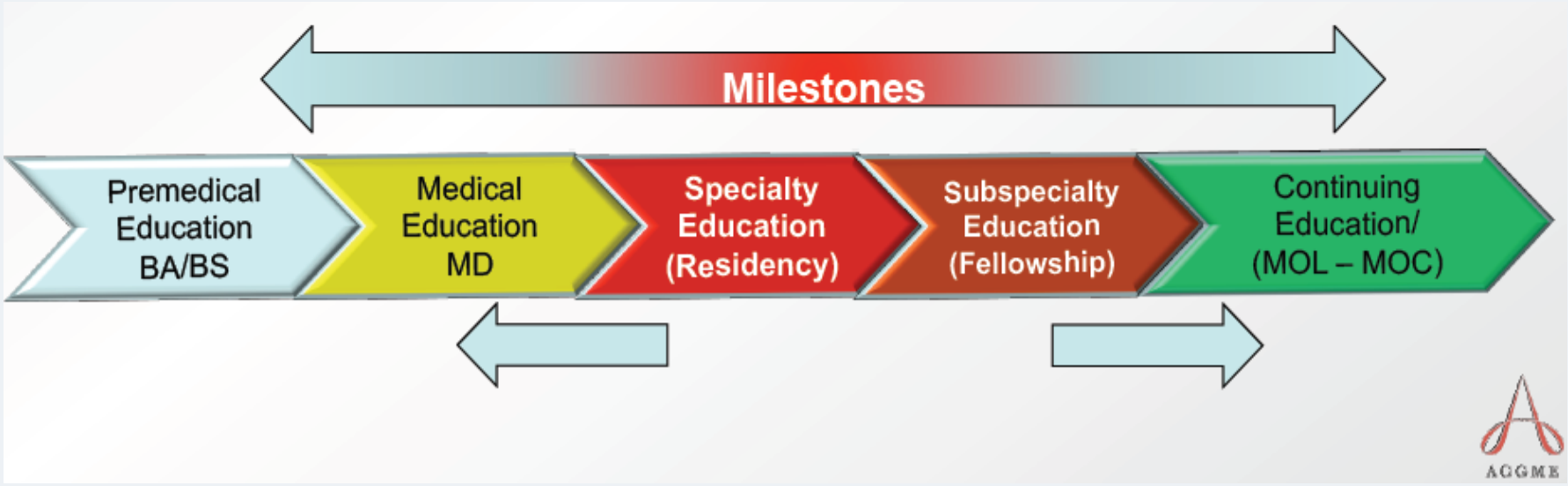
Milestone Criteria

- Goal - Reframe the competencies in the meaningful context of clinical care
- Pre-requisites:
  - Must be measurable and assessable
  - Must have assessable criteria for when a milestone is reached
  - Address the continuum of education, training and practice

Milestones

The Opportunity to Break Silos





Milestones

What does Competency Look Like?

- 5 years (2009-2014)
- ACGME Milestone Project – A Focus on Performance Levels
- **Current state**
  - Developed for every specialty
  - Mandated assessment of each resident in every residency program

20. Communicates effectively with patients and caregivers. (ICS1)				
Critical Deficiencies			**Ready for unsupervised practice**	**Aspirational**
Ignores patient preferences for plan of care Makes no attempt to engage patient in shared decision-making Routinely engages in antagonistic or counter-therapeutic relationships with patients and caregivers	Engages patients in discussions of care plans and respects patient preferences when offered by the patient, but does not actively solicit preferences. Attempts to develop therapeutic relationships with patients and caregivers but is often unsuccessful Defers difficult or ambiguous conversations to others	Engages patients in shared decision making in uncomplicated conversations Requires assistance facilitating discussions in difficult or ambiguous conversations Requires guidance or assistance to engage in communication with persons of different socioeconomic and cultural backgrounds	Identifies and incorporates patient preference in shared decision making across a wide variety of patient care conversations Quickly establishes a therapeutic relationship with patients and caregivers, including persons of different socioeconomic and cultural backgrounds Incorporates patient-specific preferences into plan of care	Role models effective communication and development of therapeutic relationships in both routine and challenging situations Models cross-cultural communication and establishes therapeutic relationships with persons of diverse socioeconomic backgrounds
☐	☐	☐	☐	☐
Comments:				

Stuck At Basecamp

Operational Challenges

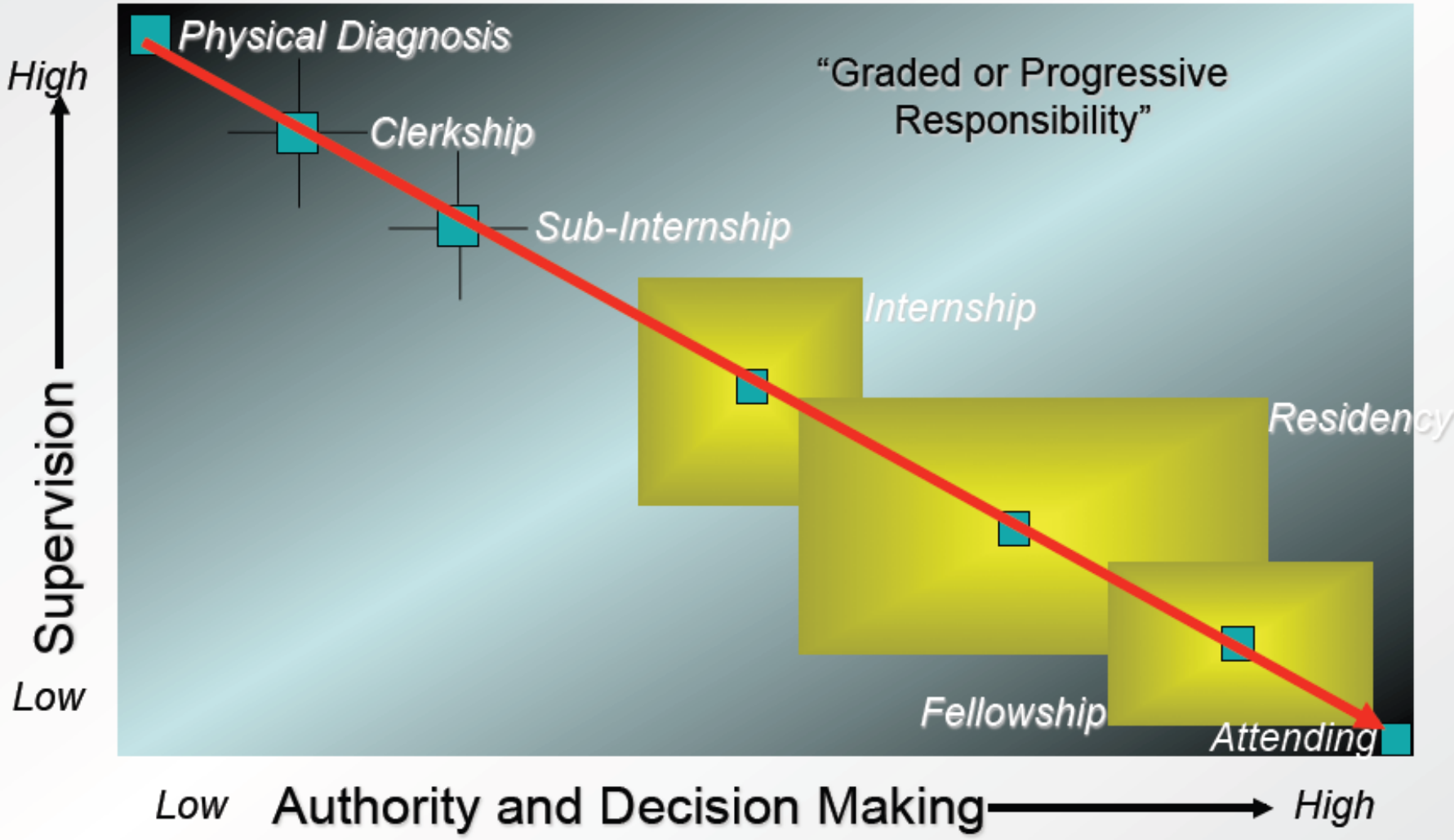
- Unfunded mandate – scarce resources
- Faculty availability for development
- IT and visualization incredibly difficult
- Incongruence with work-based assessment
  - Milestones aren't necessarily what assessors "see"

Step 3 - Trying to Get "Unstuck"

Entrustable Professional Activities*

*Ten Cate O. Entrustability of professional activities and competency-based training. Medical Education. 2005;39(12):1176-1177.

The Continuum of Clinical Professional Development
Authority and Decision Making versus Supervision



ACGME

Step 3 - Trying to Get "Unstuck"

Entrustable Professional Activities (EPA)*

- Definition: Important observable behavior that a learner can be trusted to perform without direct supervision
- PROPOSAL – EPAs become the framework for assessing competencies in a CBE system built upon *progressive responsibility*

*Ten Cate O. Entrustability of professional activities and competency-based training. Medical Education. 2005;39(12):1176-1177.

Project Charge

Develop a clear, concise list of what graduating medical students should be entrusted to do without direct supervision on DAY ONE of residency

Core EPAs for entering Residency

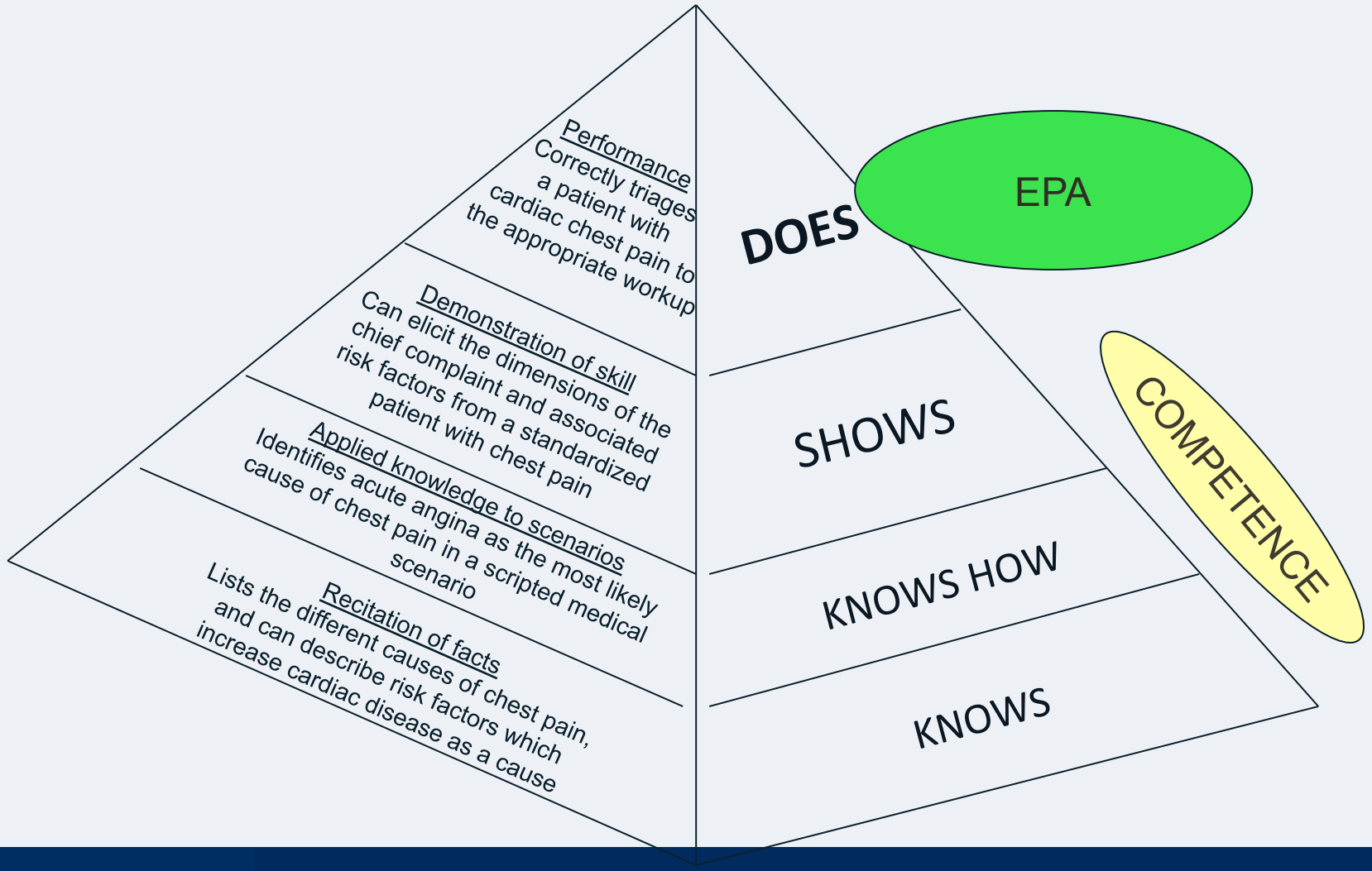
- Gather a **history** and perform a **physical examination**
- Prioritize a **differential diagnosis** following a clinical encounter
- Recommend and interpret common diagnostic and screening **tests**
- Enter and discuss orders/**prescriptions**
- **Document** a clinical encounter in the patient record
- Provide an oral **presentation** of a clinical encounter
- Form Clinical Questions and **retrieve evidence** to advance patient care
- Give or receive a patient **handover** to transition care responsibility
- **Collaborate** as a member of an inter-professional team
- Recognize a patient requiring **urgent or emergent care**, and initiate evaluation and management
- Obtain informed **consent** for tests and/or procedures
- Perform general **procedures** of a physician
- Identify **system failures** and contribute to a culture of safety and improvement

Why EPAs?

A 2-year journey (2011-2013)

- Make sense (face validity)
- Aligns the continuum of medical education (progressive responsibility)
- Attempts to align assessment focus with what we do as instructors in the clinical setting
- Focus on behaviors

Assessment Framework and EPAs



Why EPAs?

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- Attempts to align assessment focus with what we do as instructors in the clinical setting
- Focus on behaviors
- **Attempts to make assessment practical and meaningful**
  - Clusters competencies and milestones together

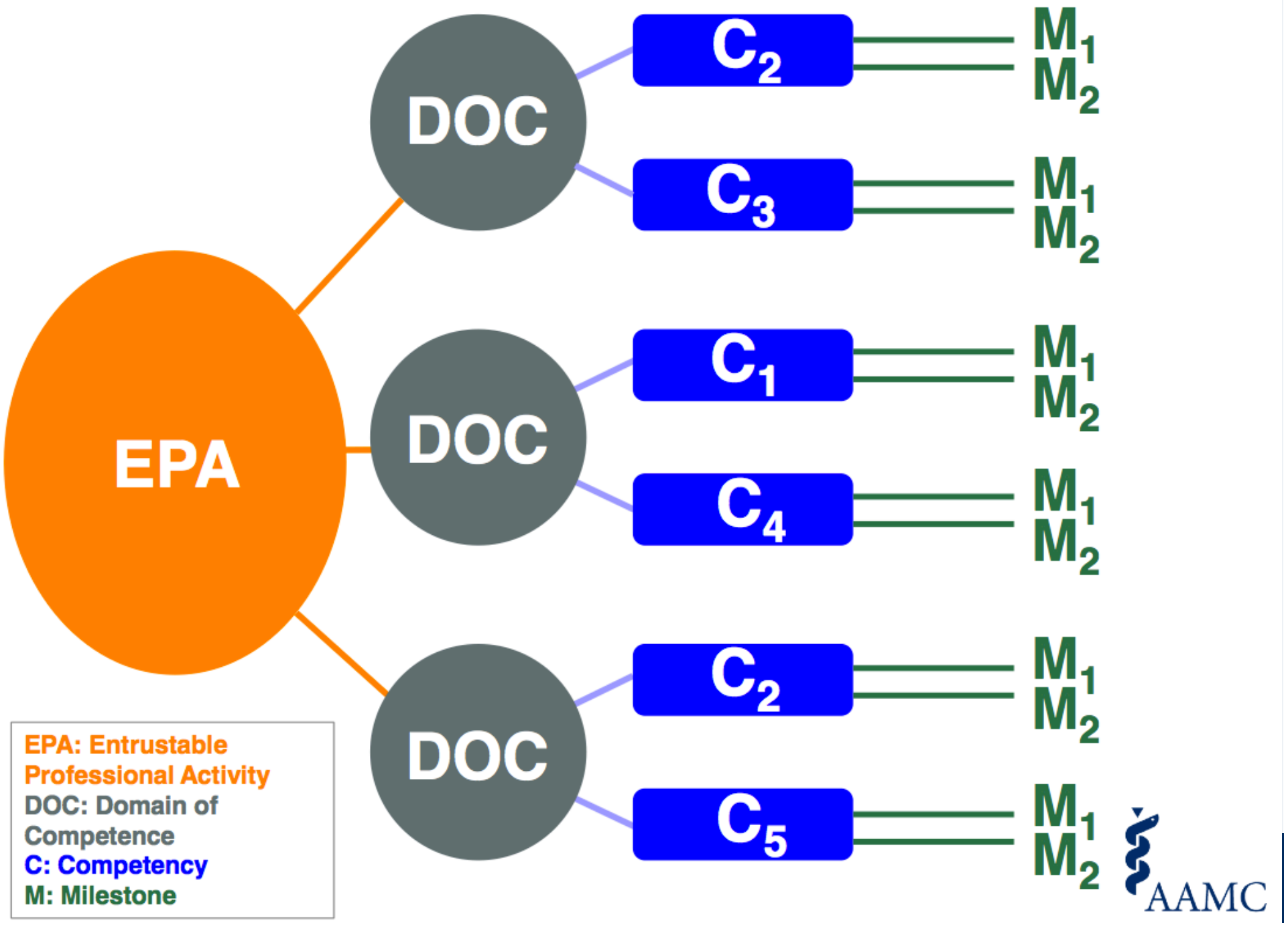
EPA and Competency

EPA

- Embedded in a context
- Multiple competencies embedded
- Focus is on the behavior (observable, measurable, authentic)

Competency

- Context-independent
- Specific ability (KSA) – often simulated, scripted
- Focus is on the individual


EPA
DOC
DOC
DOC
C2
C3
C1
C4
C2
C5
M1
M2
EPA: Entrustable Professional Activity
DOC: Domain of Competence
C: Competency
M: Milestone
AAMC

EPAs: Connecting Competencies and Milestones

From Theory to Practice: Making Entrustable Professional Activities Come to Life in the Context of Milestones

Robert Englander, MD, MPH, and Carol Carraccio, MD, MEd

Abstract

Entrustable professional activities (EPAs) are gaining traction across the globe as a practical way to teach and assess competencies in the clinical setting. Full-scale implementation, though, has only taken place in obstetrics–gynecology in the Netherlands and in psychiatry in Australia and New Zealand. As with any conceptual framework, implementation in different contexts will require adaptations. For example, implementation in the United States will need to incorporate the Accreditation Council for Graduate Medical Education's competencies and the recently completed milestones for each of the specialties.

In this issue, an article by Aylward and colleagues describes the process for implementing a handoff communication EPA, using milestones as the basis for the assessment tool. The explicit linkage of the milestones with the EPA assessment allows a more definitive "picture" of the learner to emerge at each advancing level of performance of the EPA. This "picture" can be shared with those directly observing the learner and thus provides a potential model for a more reliable assessment of learners performing EPAs and perhaps a more consistent approach to entrustment decisions.

The authors hope that Aylward and colleagues' article will be one of many that aim to help the medical education community understand how to implement EPAs as a framework for competency demonstration, as educators try to determine what works, under what conditions and in what settings. Only through a committed effort to share lessons learned can the promise of the theory be translated to practice in the field.

Acad Med. 2014;89:1321–1323.

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EPA – Oral Presentation of a Clinical Encounter

- **DOC – Patient Care, Interpersonal and Communication Skills, Professionalism, Personal and Professional Development**
- **Competencies (C1, C2, C3, C4)**
  - PC: Gather essential and accurate information about patients and their conditions through history-taking, physical examination, and the use of laboratory data, imaging, and other tests
  - ICS: Communicate effectively with colleagues within one's profession or specialty, other health professionals, and health-related agencies
  - PR: Demonstrate respect for patient privacy and autonomy
  - PPD: Demonstrate self-confidence that puts patients, and members of the health care team at ease

EPA - Oral presentation

Specified Behaviors

Expected behaviors for an entrustable learner

- Can filter, synthesize, and prioritize information and recognize patterns, resulting in a concise, well organized, and accurate presentation.
- Adjusts the presentation for the receiver of information (e.g., faculty, patient/ family, team members) and for the context of the presentation (e.g., emergent versus ambulatory).
- Does not shy away from difficult or stressful issues in obtaining or presenting the information.
- Can efficiently tell a story and make an argument to support the plan.
- Acknowledges gaps in knowledge base and/or skills in managing a given patient presentation or condition and seeks help.
- Reflects on areas of uncertainty and seeks additional information.
- Respects patient privacy and confidentiality by demonstrating situational awareness when discussing patients.

EPA - Oral presentation

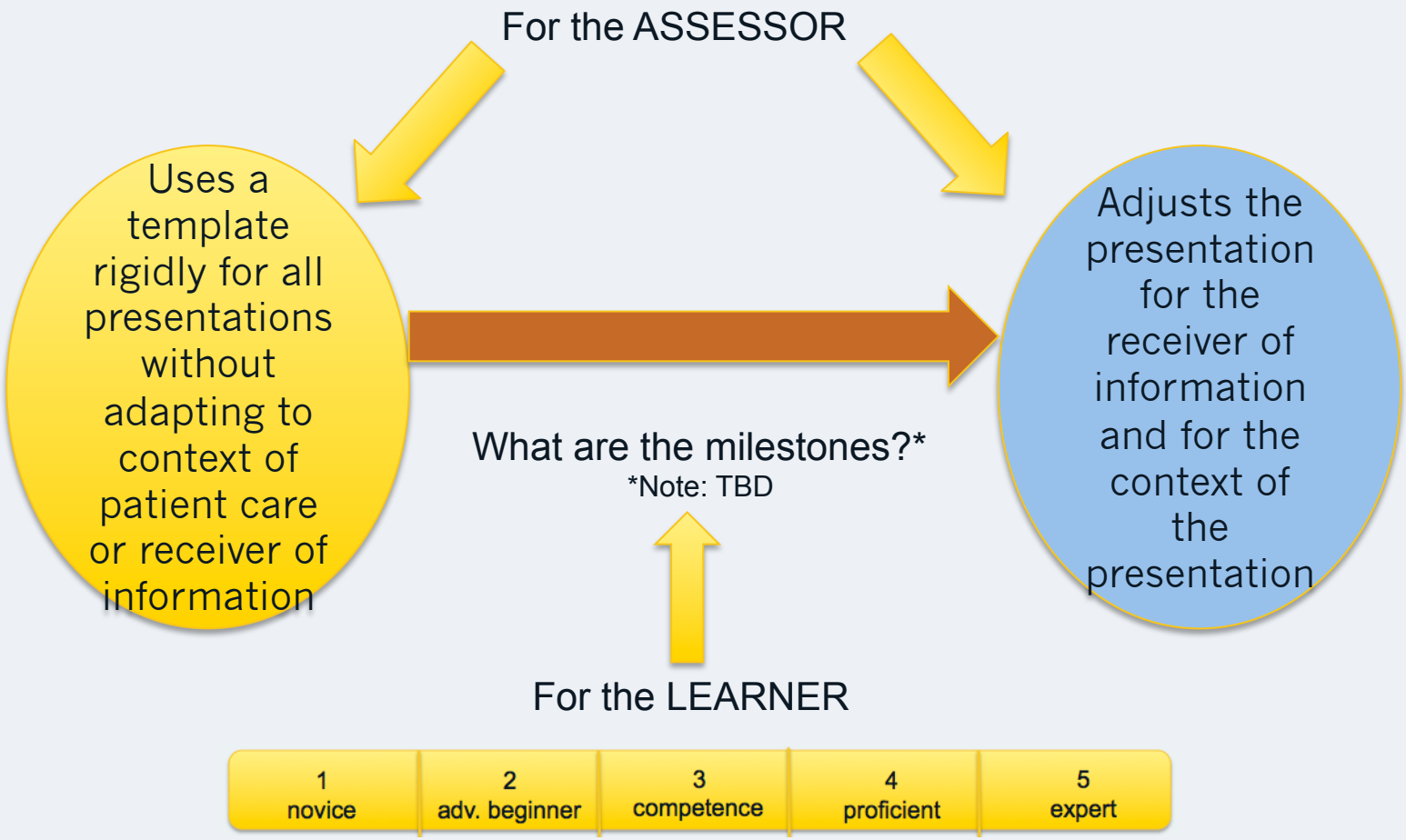
Specified Behaviors

Pre-entrustable behaviors

- Often fails to verify the information
- Avoids obtaining sensitive information from the history and does not follow up on ambiguous information.
- Does not distill the presentation or focus on the most relevant information.
- Uses a template rigidly for all presentations without adapting to context of patient care or receiver of information
- Does not generally match the needs of the communication to the tool of communication (e.g., in person, phone, email)
- May present in a disorganized and incoherent fashion.
- Does not ensure a shared understanding between the presenter and receiver of information at the conclusion of the presentation.
- Lacks situational awareness
- Takes all information in the chart at face value

From “pre-entrustable” to “entrustable”

Milestones Mediate the Journey



Why EPAs?

A 2-year journey (2011-2013)

- Make sense (face validity)
- Aligns the continuum of medical education (progressive responsibility)
- Attempts to align assessment focus with what we do as instructors in the clinical setting
- Focus on behaviors
- Attempts to make assessment practical and meaningful
  - Clustered competencies and milestones together
- **Forced the profession to ask several important questions**

Entrustable Professional Activities

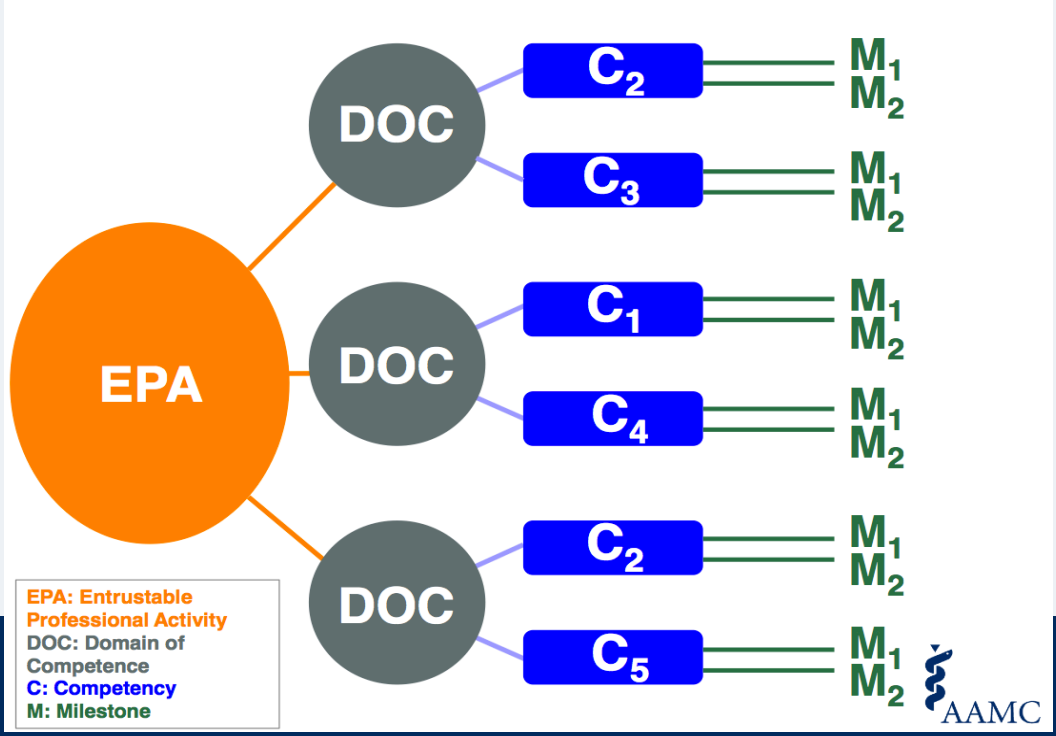
More Questions than Answers

- Definition: Important observable behavior that a learner can be trusted to perform without direct supervision
- PROPOSAL – EPAs become the framework for assessing competencies in a CBE system built upon *progressive responsibility*
- **Raises questions of:**
  - EVALUATION
  - ENTRUSTMENT – WHAT FACILITATES TRUST?
  - EXPIRATION and EXPERIMENTATION
  - ENABLERS and EXPERIENCE

Q1: Entrustment Considerations

Evaluation

- When a behavior is observed – does it really imply competence underlying? Or can behavior occur without achieving milestones?
- How do we define the milestones for early learners?



Q2: EPA Considerations

Entrustment Prerequisites

- Learner Ability
- Conscientiousness
- Follow Through
- Discernment: Knowing Limitations
- Truth-telling and Seeking Help

Q3: EPA Considerations

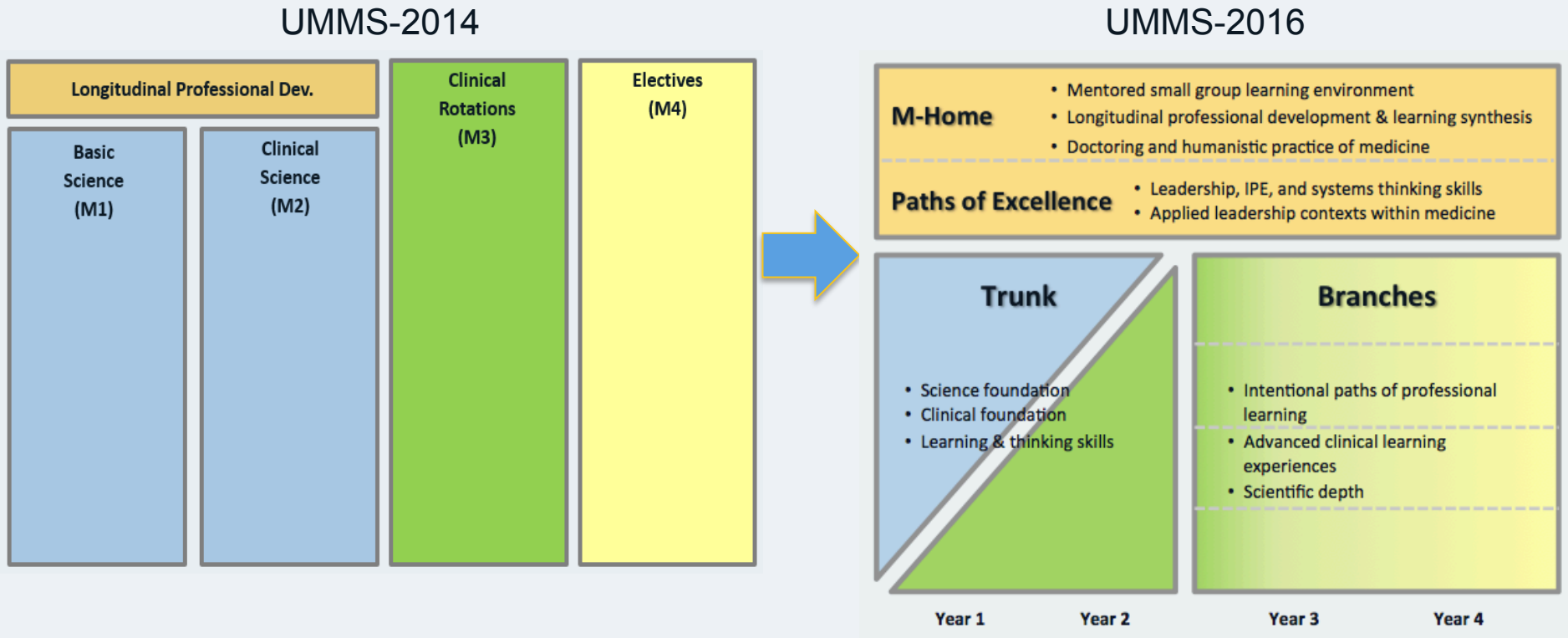
Expiration and Experimentation

- Is there decay over time at a practitioner level?
- How will we know if “trust” should be removed?
- How will we define “new” or “irrelevant” EPAs as the field evolves?

Q4: EPA Considerations

Enablers

- Longitudinal relationships between learner and assessor



Q4: EPA Considerations

Enablers

- Longitudinal relationships between learner and assessor
- **Faculty experience and comfort**
  - Can junior instructors “trust”?
  - Are certain faculty more sensitive and oriented to performance?
  - KEY - Faculty selection, training, resources, and support are all critical to quality and effectiveness of assessment

EPAs-Milestones-Competence

Integrated Script for Faculty Development

- Current state: I'll know it when I see it
- New elements using EPAs:
  - I know what is important for a learner to perform (competence)
  - I'll know specifically what to look for (entrustable behaviors)
  - I will be able to help my learners understand where they are and help them develop (use milestones to help remediate)
  - I will look for the same things as my colleague (faculty training)

An Assessment Program and System*

1. Accept that assessment catalyzes learning – focus on Desired Learning Behaviors (e.g., EPAs), built upon competencies and milestones.
2. Look for **behaviors** widely and often in the authentic work environment. 
3. Recruit and train faculty to provide judgment and develop learners over time.

*Dijkstra, J. et al. A new framework for designing programmes of assessment. Adv Health Sci Educ Theory Pract. Aug 2010; 15(3): 379–393.

A Journey Towards Accountable Education

Core References

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- Miller GE. The assessment of clinical skills, competence, performance. Academic Medicine 1990; 65(9S): S63-S67.

BETTER EDUCATION - BETTER HEALTH

QUESTIONS, INPUT, DIALOGUE

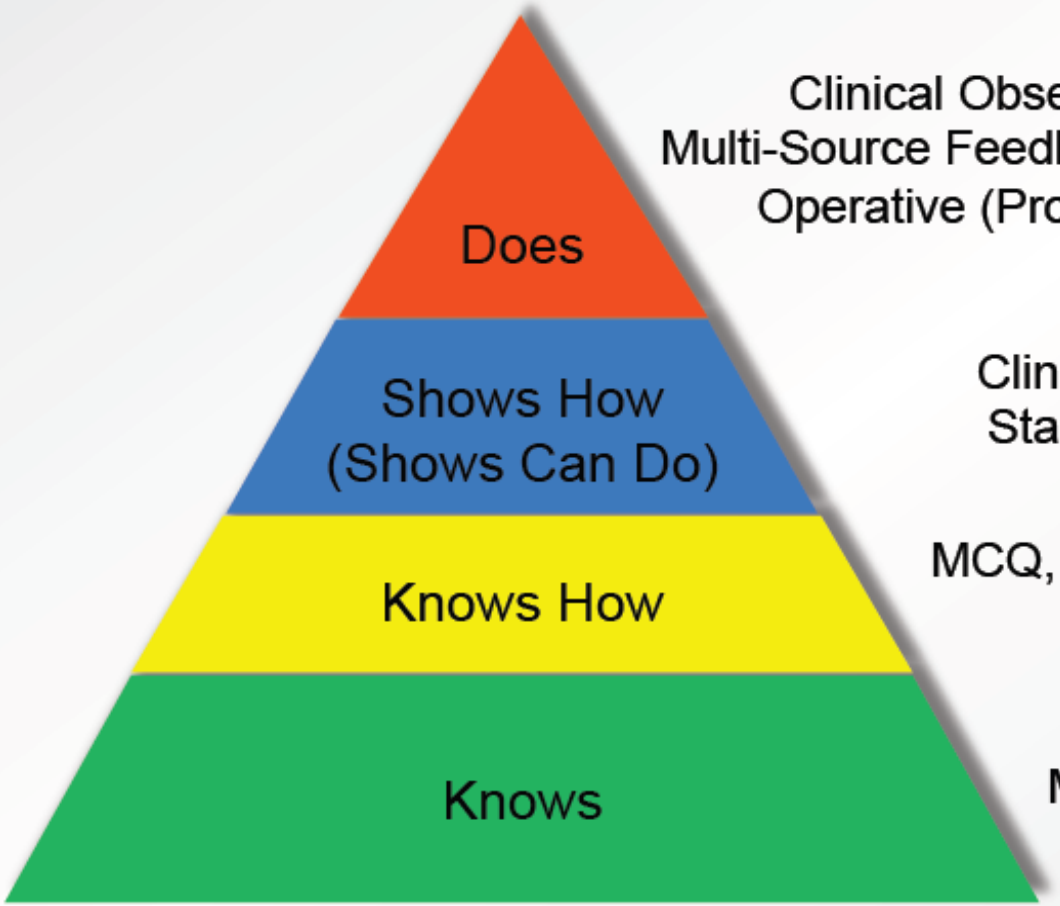
Thank You

"The best way to predict the future is to invent it."

--*Alan Kay*

Miller's Pyramid of Clinical Competence[1]

[1]Miller, GE. Assessment of Clinical Skills/Competence/Performance. Academic Medicine (Supplement) 1990. 65. (S63-S67)



Clinical Observations, Mini CEX, Multi-Source Feedback, Teamwork Evaluation, Operative (Procedural) Skill Evaluation

Clinical Observation, Simulation, Standardized Patients, Mini CEX

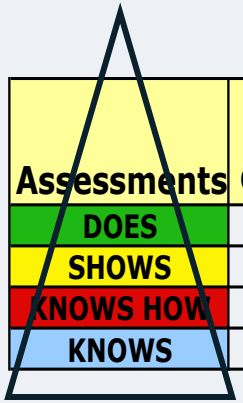
MCQ, Oral Examinations, Standardized Patients

MCQ, Oral Examinations

van der Vleuten, CPM, Schuwirth, LWT. Assessing professional competence: from Methods to Programmes. **Medical Education 2005; 39: 309–317**

ACGME

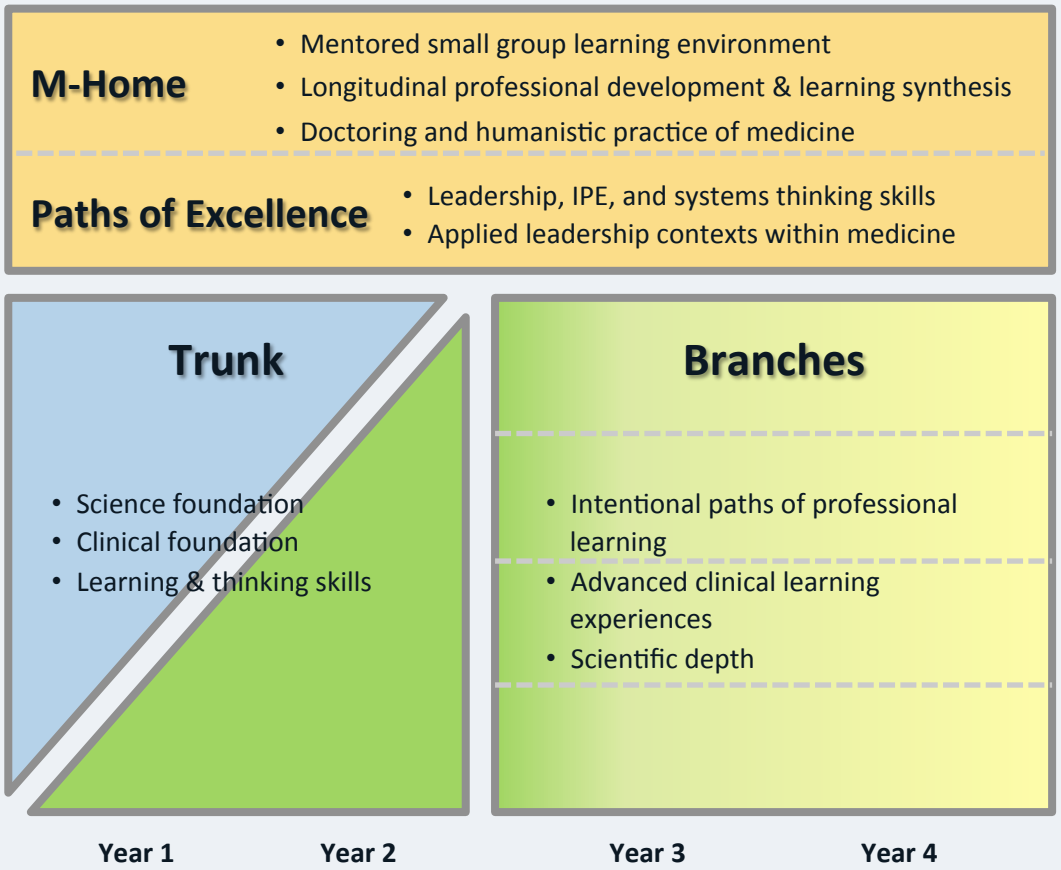
Assessments and Evaluations
Unpacked



Assessments	Course Quizzes	Course Final Examinations	USMLE Step 1	Rotation-specific Shelf Exam	Comprehensive Clinical Assessment	USMLE Step 2-CK	USMLE Step 2-CS
DOES							
SHOWS					X		X
KNOWS HOW		X	X	X	X	X	X
KNOWS	X	X	X	X		X	


"Excellence"
Future Care Environment
Ethics
Professionalism
Introspection
Leadership/ Agent of Change
Inter-Personal Skills
Self-Knowledge
Life-Long Learning
Self-Management
Communication
Teamwork & Groups
Questioning
Inter-Professional Collaboration
Information Mgmt
Critical Thinking
Foundational Skills & Knowledge
Coordination of Care
Technology Proficiency
Chronic Disease Mgmt
Creation & Discovery
Preventative Care
Working in & Navigating Systems
Health Data
Patient-Centered Care
Trust & Intimacy
Partnership
Access & Affordability
Value
Patient Care & Engagement
Equity
Cost Effectiveness

UMMS New Curricular Model
Summary

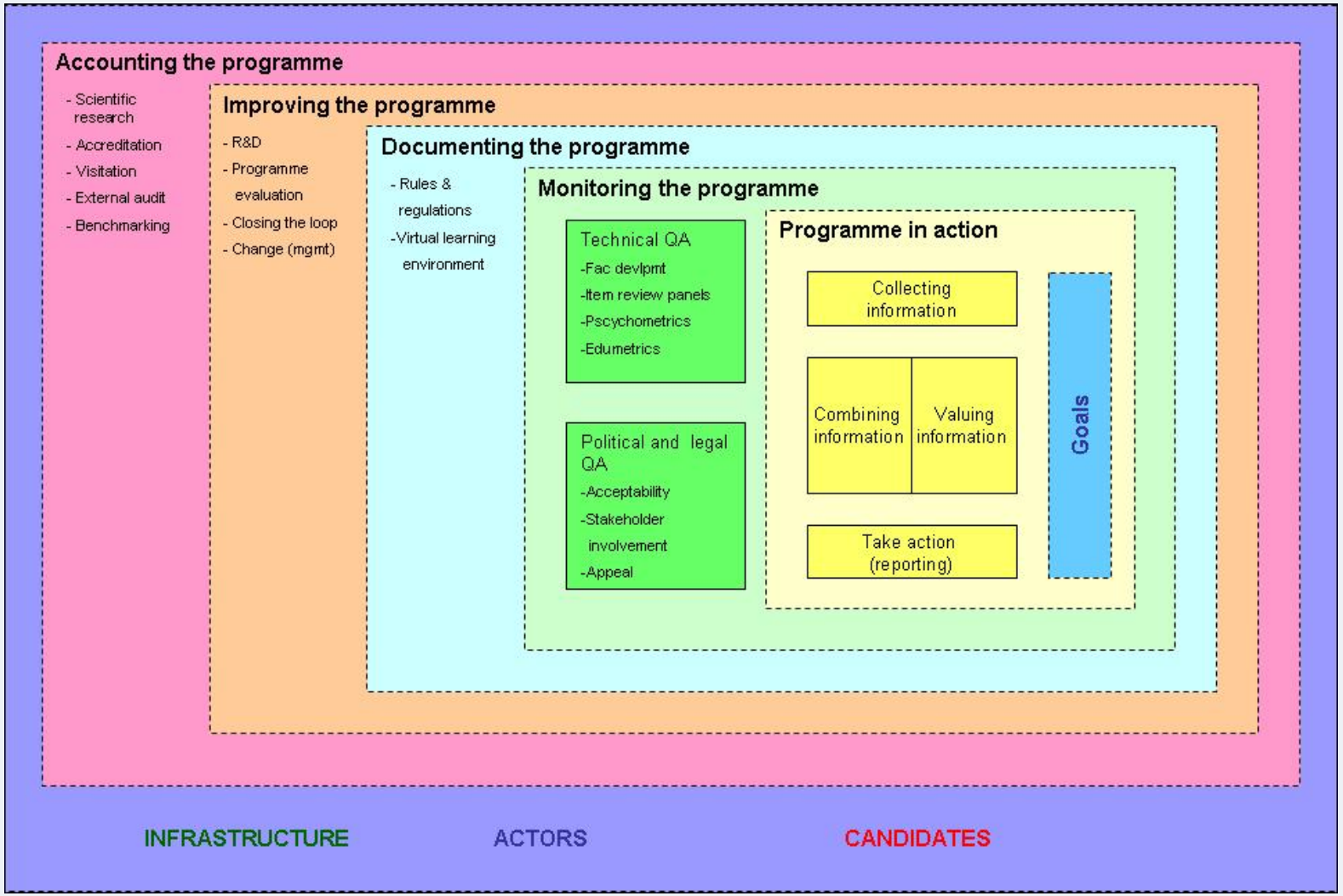


- Program designed to train the **future leaders** in medicine
- Forward-looking curriculum incorporating **innovations** in medical education
- **Strong foundation** with the ability to adapt to individual professional contexts and objectives
- Advanced **professional development** for a career in medicine and preparation for residency
- **Leverages the extensive community** and expertise of UMMS and the University of Michigan

Timeline and Major Milestones

- 2013 – Explore and develop model for curriculum transformation
- 2014 – Convene work groups to design curricular elements
- 2014 to 2015 – Determine content and logistics for curricular elements
- Fall 2015 – New building opens, early curricular elements begin within same structure
- Fall 2016 – New structure for the curriculum begins
- 2017 to 2019 – phased, modular implementation of mature curricular program

An Assessment System and Program



*Dijkstra, J. et al. A new framework for designing programmes of assessment. Adv Health Sci Educ Theory Pract. Aug 2010; 15(3): 379–393.