

**Scientific Foundations Committee/
Clinical Education Committee/CuMed Joint Meeting**

December 5, 2014

7:30 – 9:00 am

Mayo B-646

Minutes

2014-2015 Scientific Foundations Committee Members		
MEMBER	COURSE/ROLE	ATTENDANCE
Steve Katz	Chair (INMD 6814 Physiology)	x
Sharon Allen	INMD 6803/6804/6805 ECM 1, ECM 2, ECM 3A	x
Richard Amado	INMD 6815 Human Behavior	
H. Brent Clark	INMD 6819 HHD – N & P	
Eli Coleman	INMD 6816 Human Sexuality	x
Greg Filice	MS 2 ID Thread	
Glenn Giesler	INMD 6813 Neuroscience	
Bob Kempainen	INMD 6808 HHD – C & R	
Anne Minenko	INMD 6809 HHD – R, D & O3	
Kaz Nelson	INMD 6819 HHD – N & P	
Catherine Niewoehner	INMD 6810 HHD – R & E-R3	x
James Nixon	INMD 6803/6805/6806/6807 ECM 1, ECM 3A/B/C	x
Jan Norrander	INMD 6801 Human Structure and Function	
Deborah Powell	INMD 6817 Principles of Pathology, MS2 Pathology Thread	
Michel Sanders	INMD 6802 Science of Medical Practice	
David Satin	INMD 6803/6804/6805/6806/6807 ECM 1, ECM 2, ECM 3	
Lisa Schimmenti	INMD 6802 Science of Medical Practice	
Peter Southern	INMD 6812 Microbiology	x
Heather Thompson Buom	INMD 6811 HHD – GI & Heme	x
Doug Wangenstein	INMD 6814 Physiology	
Tony Weinhaus	INMD 6801 Human Structure and Function	
Kevin Wickman	INMD 6818 Principles of Pharmacology	x
Mary Ramey	MS2 Lab Med/Path Coordinator	x
Kevin Kay	MS2 Student Representative	
Nicole Cairns	MS1 Student Representative	x
<i>Mark Rosenberg</i>	<i>Vice Dean for Medical Education</i>	x
<i>Kathy Watson</i>	<i>Senior Associate Dean for UME</i>	x
<i>Jeffrey Chipman</i>	<i>Assistant Dean for Scientific Foundations</i>	x
<i>Majka Woods</i>	<i>Assistant Dean for ACE</i>	x
<i>Anne Pereira</i>	<i>Assistant Dean for Clinical Education</i>	x
<i>Marshall Hertz</i>	<i>Faculty Advisor</i>	
<i>Brad Clarke</i>	<i>ACE Curriculum Specialist</i>	x
<i>Leslie Anderson</i>	<i>Chief of Staff, Medical Education</i>	x
<i>Scott Slattery</i>	<i>Director of Learner Development</i>	x
<i>Heather Peterson</i>	<i>Medical School Registrar</i>	x
<i>Brian Woods</i>	<i>Lead Course Manager</i>	x

Guests: Suzanne van den Hoogenhof, Mark Hilliard, Jon Froehlich, John Andrews

All regular business was deferred to January 2015 in order to welcome our guest presenter from the AAMC, Dr Bob Englander, MD, MPH, who presented to the joint committees on Competencies & Milestones: The Next Step in Meaningful Assessment of Learners.

Dr Englander's presentation materials follow these minutes.

Minutes

Draft minutes from the November 7 meeting were deferred until January 9, 2015, due to the guest presentation.

Announcements

n/a

Annual Course Review

n/a

Student Issues/Concerns/Questions

n/a

2

Discussion

n/a

FUTURE AGENDA ITEMS

Suggestions from Course Directors for future SFC meeting topics:

- Student disability services and accommodations
- ExamSoft & BlackBag assessments
- ILT feedback
- Copyrights & resources (focused on what we *can* do)
- Course co-directors (not the dyad)
- Number of slides in instructor lecture presentations

The next meeting is January 9, 2015 in room Mayo B-620.

Respectfully submitted,

Brian Woods



Tomorrow's Doctors, Tomorrow's Cures

Competencies and Milestones: The Next Step in Meaningful Assessment of Learners

Robert Englander, MD, MPH
University of Minnesota
December 5th, 2014

Learn

Serve

Lead



Association of
American Medical Colleges

Objectives

- 1) Advance your working knowledge of CBME
- 2) Understand the context for the development of specialty-specific milestones
- 3) Hone your observation skills
- 4) Compare the current state of assessment to the milestones
- 5) Have fun!

Central Tenet of CBME



BEGIN WITH THE END IN MIND

Plan

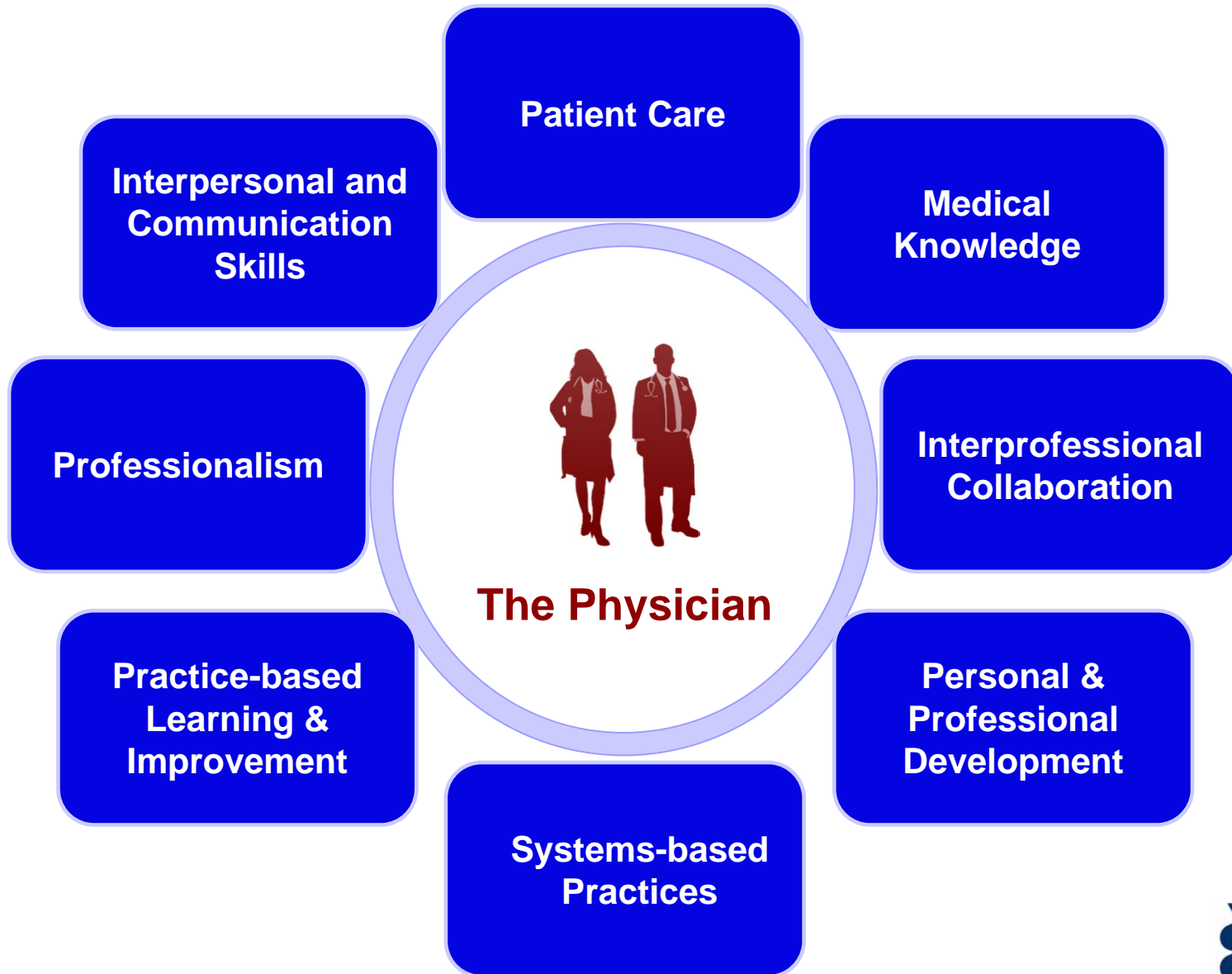
FreePosterMaker.com

The Vision

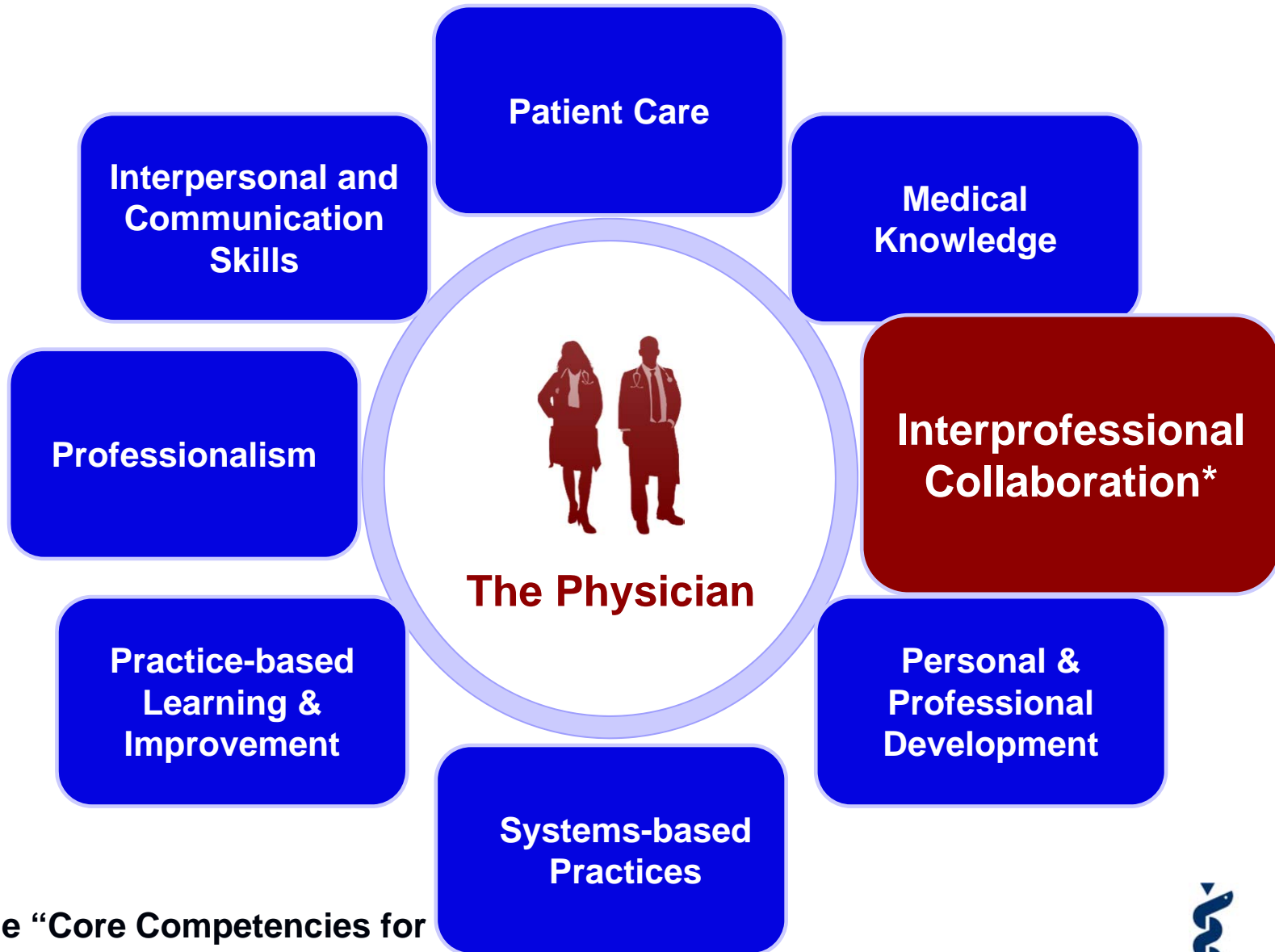
Physicians will spend their careers, from premed to exit from practice, on a developmental trajectory building mastery in 8 domains of competence



...Eight Domains of Competence

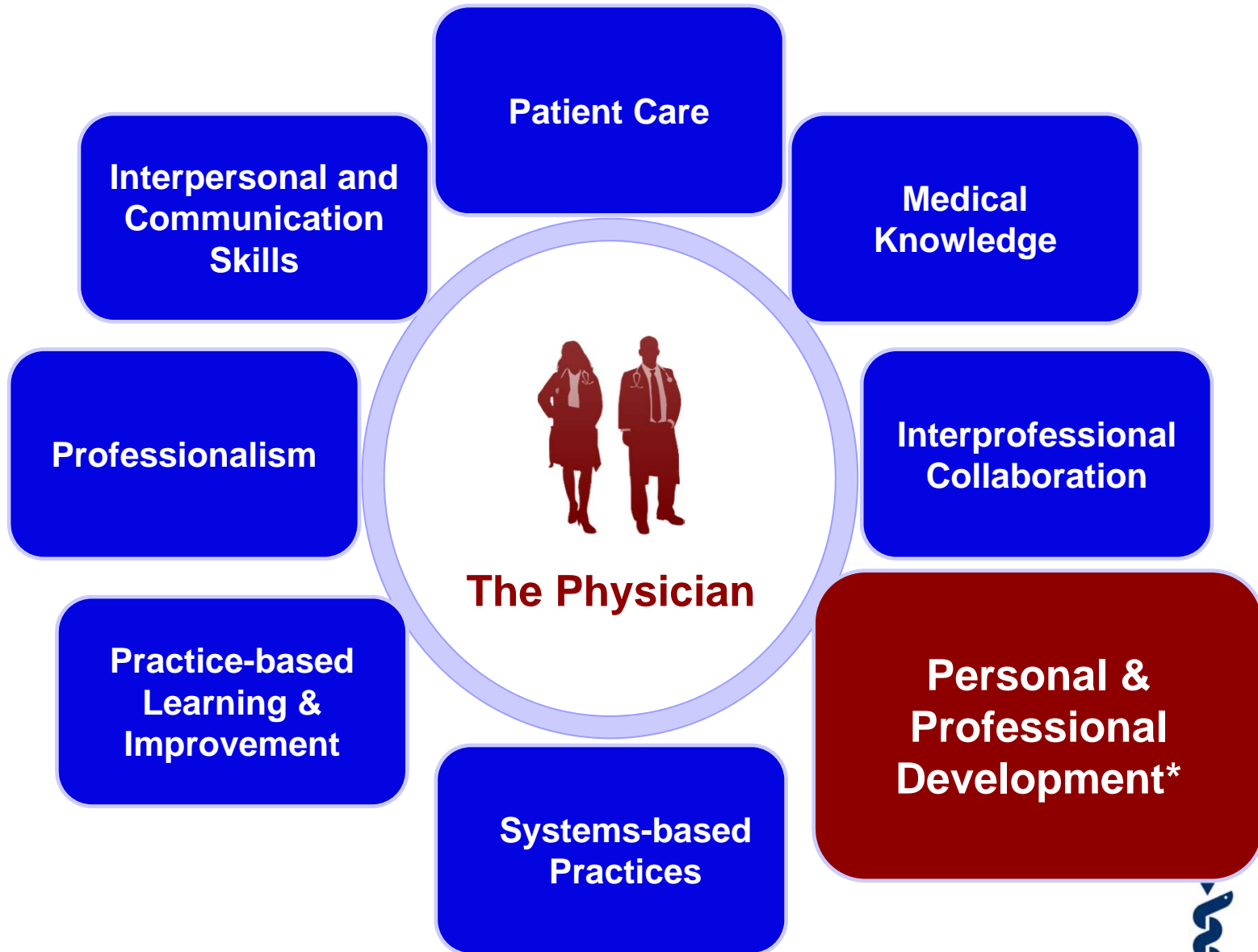


...Eight Domains of Competence



*From the "Core Competencies for Interprofessional Collaboration"

...Eight Domains of Competence



*From the Pediatrics Milestone Project

The Paradigm Shift

	Structure/Process	Competency-based
Driving Force for Curriculum	Content & Knowledge Acquisition	Outcomes & Knowledge Application
Driving Force for Process	Teacher	Learner(s)
Path of Learning	Hierarchy	No Hierarchy
Responsibility for Learning	Teacher	Student and Teacher partnership

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Framework for Evaluation of Competence

	Structure/Process	Competency-based
Typical Assessment Context	Proxy / Removed	Authentic / “In the trenches” Direct observation
Typical Assessment Tool	Single or few, often Multiple Choice Questionnaires (MCQs)	Multiple, subjective as well as objective Portfolios
Timing of Assessment	Emphasis on summative	Emphasis on formative
Type of Evaluation	Norm-referenced	Criterion-referenced

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The Next Major Hurdle: Assessment



How We Assess Learners is Key

- Sharing perspectives to get us to the same mental image of learner behaviors

- Honing our observation skills

Observation Skills Video

Knowledge Application Exercise #1: Current state of assessment tools versus the milestones

A head-to-head
match-up



Global Rating: Patient Care

Patient Care (Question 1 of 9 - Mandatory)

- Incomplete, inaccurate medical interviews, physical examinations, and review of other data; incompetent performance of essential procedures; fails to analyze clinical data and consider patient preferences when making medical decisions.

- Incomplete, illogical, superficial

- Inept, careless, disregards risk and discomfort to patients

- Does not use information from technology or references to support patient care decisions and patient education

- Does not work effectively with other health care professionals

- Superb, accurate, comprehensive medical interviews, physical examinations, review of data, and procedural skills; always makes diagnostic and therapeutic decisions based on available evidence, sound judgment, and patient preferences

- Logical, thorough and efficient

- Proficient, minimizes patients' discomfort

- Uses information technology and references to support patient care decisions and patient education.

- Works effectively with other health care professionals

Not Applicable	1-3 = Unsatisfactory			Marginal	5-6 = Satisfactory		7-9 = Superior		
0	1	2	3	4	5	6	7	8	>> 9 <<

Trigger Encounter Video

An 18 month old child presents to the
Pediatric Emergency Department with
emesis and a first time seizure

**Special thanks to Daniel Schumacher and Brad
Benson for writing and producing this videotape.
(and to the actors whom you may well recognize!)**



Rate MS 3 Performance Using a 9-point Likert Scale

1. Unsatisfactory
2. Unsatisfactory
3. Unsatisfactory
4. Marginal
5. Satisfactory
6. Satisfactory
7. Superior
8. Superior
9. Superior

Rate PGY-2 Performance Using a 9-point Likert Scale

1. Unsatisfactory
2. Unsatisfactory
3. Unsatisfactory
4. Marginal
5. Satisfactory
6. Satisfactory
7. Superior
8. Superior
9. Superior

Where Will the “Milestones” Take Us? The Next Accreditation System.

Thomas J. Nasca, MD, MACP



*“Intermittent interaction
based on satisfaction of
rules”*



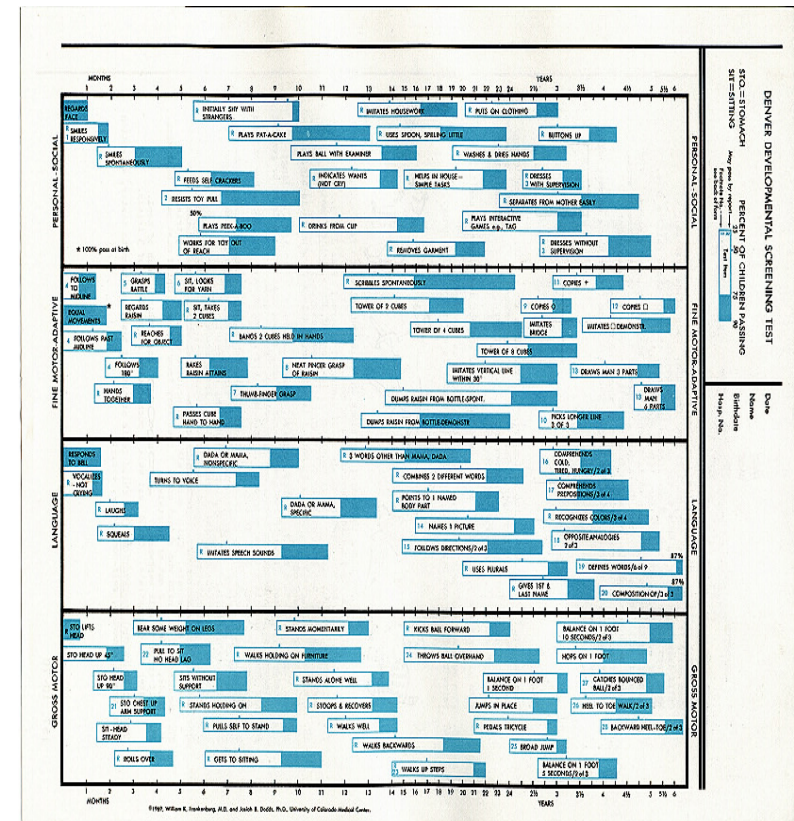
*“continuous dialogue based on
a desire to improve
educational outcomes”*

**We must agree on the “*Milestones*” of
competency development in each discipline.
We must agree on and implement *common
evaluation tools* in each discipline
to...document resident achievement of these
milestones**

The Milestones Project Charge

- Refine the competencies in the context of the specialty
- Set Performance Standards
- Identify or develop tools for assessment of performance

Pediatricians LOVE Milestones !



Guiding Principles

- The 6 domains of competence are necessary, but not sufficient
- Milestones must be grounded in the literature
- Milestones describe sequential behaviors, providing a learning roadmap for trainees
- Milestones span the continuum from UGME to CME/MOC

Pediatrics Milestones: Process

- Sought the ontogeny of observable behaviors for each competency

The Product

The Pediatrics Milestone Project

A series of milestones for each of the pediatric competencies



A Joint Initiative of
the Accreditation Council for Graduate Medical Education
and
the American Board of Pediatrics



Pediatrics Milestones

Construction of a Pediatrics Milestone

- Background/synopsis of literature
- References
- Milestones
 - A sequence of narrative descriptions of observable behaviors at advancing levels of development across the continuum of education, training and practice

Head-to-head: Using the milestones to hone our observations

Domain of Competence: Patient Care

Competency: Making informed diagnostic and therapeutic decisions that result in optimal judgment

“First level”

Recalls and presents clinical facts in the history and physical in the order they were elicited without filtering, reorganization or synthesis

Non-prioritized list of all diagnostic considerations rather than the development of working diagnostic considerations

Difficulty developing a therapeutic plan

Summary: Regurgitates history and physical and then looks to supervisor for synthesis and plan.

“Second Level”

Focuses on features of the clinical presentation, making pattern recognition elusive and leading to a continual search for new diagnostic possibilities.

Often reorganizes clinical facts in the history and physical exam to help decide on clarifying tests to order rather than to develop and prioritize a differential.

This often results in a myriad of tests and therapies and unclear management plans since there is no unifying diagnosis

Summary: Jumps from information gathering to broad evaluation without focused differential

“Third Level”

Abstracts and reorganizes elicited clinical findings in memory, using semantic qualifiers to compare and contrast the diagnoses being considered when presenting or discussing the case.

Well synthesized and organized assessment of the focused differential diagnosis and management plan

Summary: Synthesizes information to allow a working diagnosis and differential diagnosis that informs the evaluation and management plan

“Fourth Level”

Reorganized and stored clinical information leads to **early directed diagnostic hypothesis** training with subsequent history, physical, and tests used to confirm this initial schema

Able to **identify discriminating features between similar patients and avoid premature closure**

Therapies are focused and based on a unifying diagnosis, resulting in an effective and efficient diagnostic work-up and plan

Summary: Rapid focus on correct working and differential diagnosis allows efficient and accurate evaluation and management plan

Which Milestone Best Reflects MS 3 Performance Level?

1. Milestone One
2. Milestone Two
3. Milestone Three
4. Milestone Four

Which Milestone Best Reflects a PGY-2 Performance Level?

1. Milestone One
2. Milestone Two
3. Milestone Three
4. Milestone Four

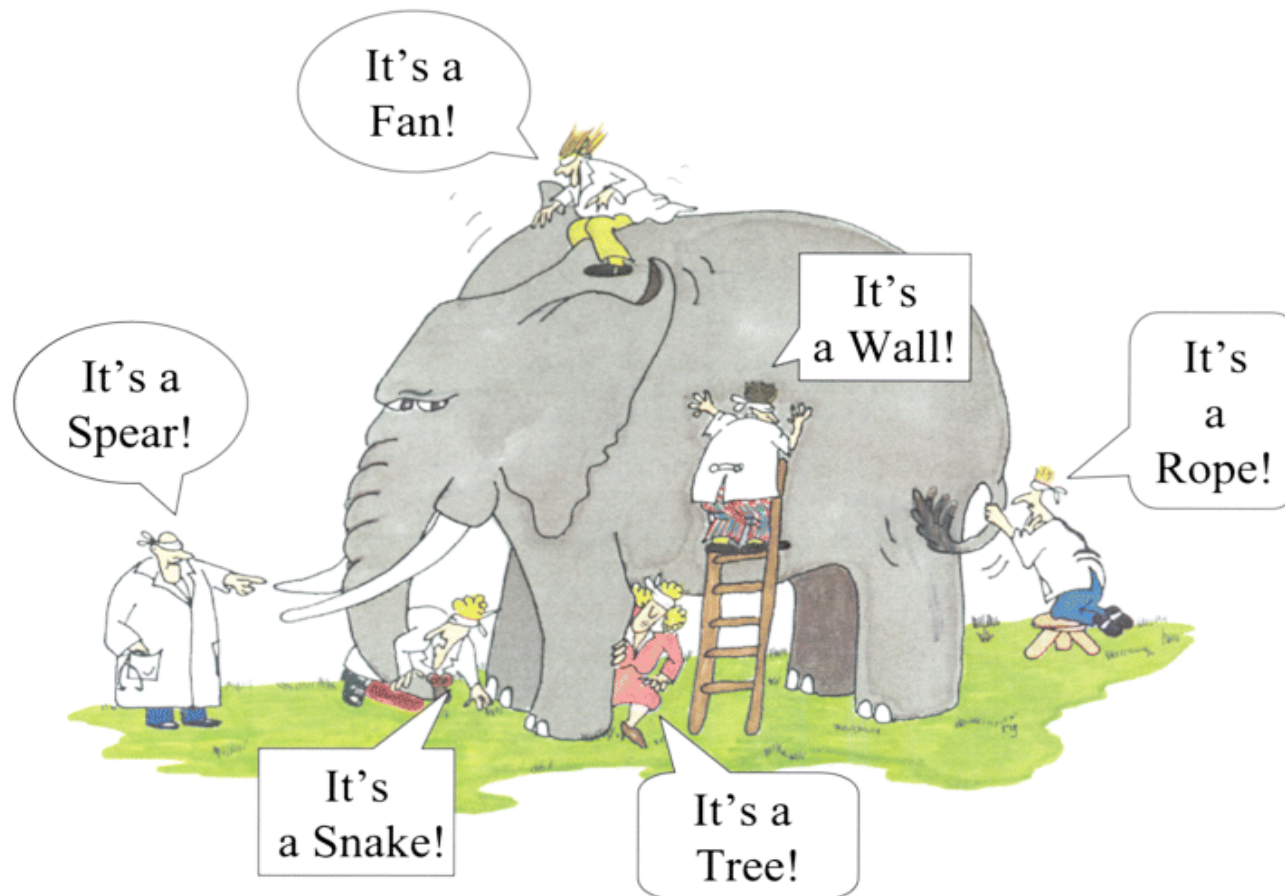
Knowledge Application #2: Professionalism

- 1) Read the milestones for the aspect of professionalism assigned to you.
- 2) Watch the video and match the learner to the milestone that most closely describes her performance
- 3) Consider one specific piece of feedback you would give her to help her move to the next milestone

Advantages of General Competencies/Milestones

- Insure comprehensive conversation
- Identify important physician attributes as such
- Improvement over “the mist of holistic waffle about professional experience and the ineffability of...intuitive wisdom.”¹
- Focus assessment on achievement of consensus competencies.

Reductionist vs Holistic Paradigms



Resolution

Provide an integrative construct that places the competencies and milestones in the context of clinical care

Putting it Back Together....

Entrustability of professional activities and competency-based training


Olle ten Cate

The idea of competency-based training (CBT) seems to have entered medical education with a

fields other than medical education.^{4,5} The way in which we succeed in defining competencies

respect, to supervise to delega

Questions?



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INCOMPETENCE

WHEN YOU EARNESTLY BELIEVE YOU CAN COMPENSATE
FOR A LACK OF SKILL BY DOUBLING YOUR EFFORTS,
THERE'S NO END TO WHAT YOU CAN'T DO.