Assessment Across the Continuum: Aligning UME, GME and CME/CPD/MOC

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SPECIAL THEME ARTICLE

Shifting Paradigms: From Flexner to Competencies

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ABSTRACT

Realizing medical education is on the brink of a major paradigm shift from structure- and process-based to competency-based education and measurement of outcomes, the authors reviewed the existing medical literature to provide practical insight into how to accomplish full implementation and evaluation of this new paradigm. They searched Medline and the Educational Resource Information Clearinghouse from the 1960s until the present, reviewed the titles and abstracts of the 469 articles the search produced, and chose 68 relevant articles for full review.

The authors found that in the 1970s and 1980s much attention was given to the need for and the development of professional competencies for many medical disciplines. Little attention, however, was devoted to defining the benchmarks of specific competencies, how to attain them, or the evaluation of competence. Lack of evaluation strategies was likely one of the forces responsible for the three-decade lag between initiation of the movement and widespread adoption. Lessons learned from past experiences include the importance of strategic planning and faculty and learner buy-in for defining competencies. In addition, the benchmarks for defining competency and the thresholds for attaining competence must be clearly delineated. The development of appropriate assessment tools to measure competence remains the challenge of this decade, and educators must be responsible for studying the impact of this paradigm shift to determine whether its ultimate effect is the production of more competent physicians.

Acad. Med. 2002;77:361–367.

The challenge to medical education at the turn of the 20th century took the form of the Flexnerian revolution.[1] Exposure of poor educational content and processes in the early 1900s captured public attention and concern, precipitating a chain of events that led to drastic reform. In the early 21st century, accountability and responsibility to the public for the competency of practicing physicians have become a driving force behind an initiative of the American Board of Medical Specialties (ABMS) and the Accreditation Council for Graduate Medical Education (ACGME) to establish competency-based training for all physicians. The current structure- and process-based system defines the training experience by exposure to specific contents for specified periods of time (e.g., one month of adolescent medicine), while a competency-based system defines the desired outcome of training, the outcome driving the educational process (e.g., competence in the care of adolescent patients). The paradigm shift from the current structure- and process-based curriculum to a competency-based curriculum and evaluation of outcomes is the Flexnerian revolution of the 21st century.

We reviewed the literature on competency-based education in medicine to (1) understand the evolution of this educational paradigm, (2) assess the evidence to date of the efficacy of competency-based education, and (3) provide practical insight into how to accomplish full implementation and evaluation of the paradigm shift.

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CBME: Shifting the paradigm from

fixed time : variable outcome

to

fixed outcome : variable time

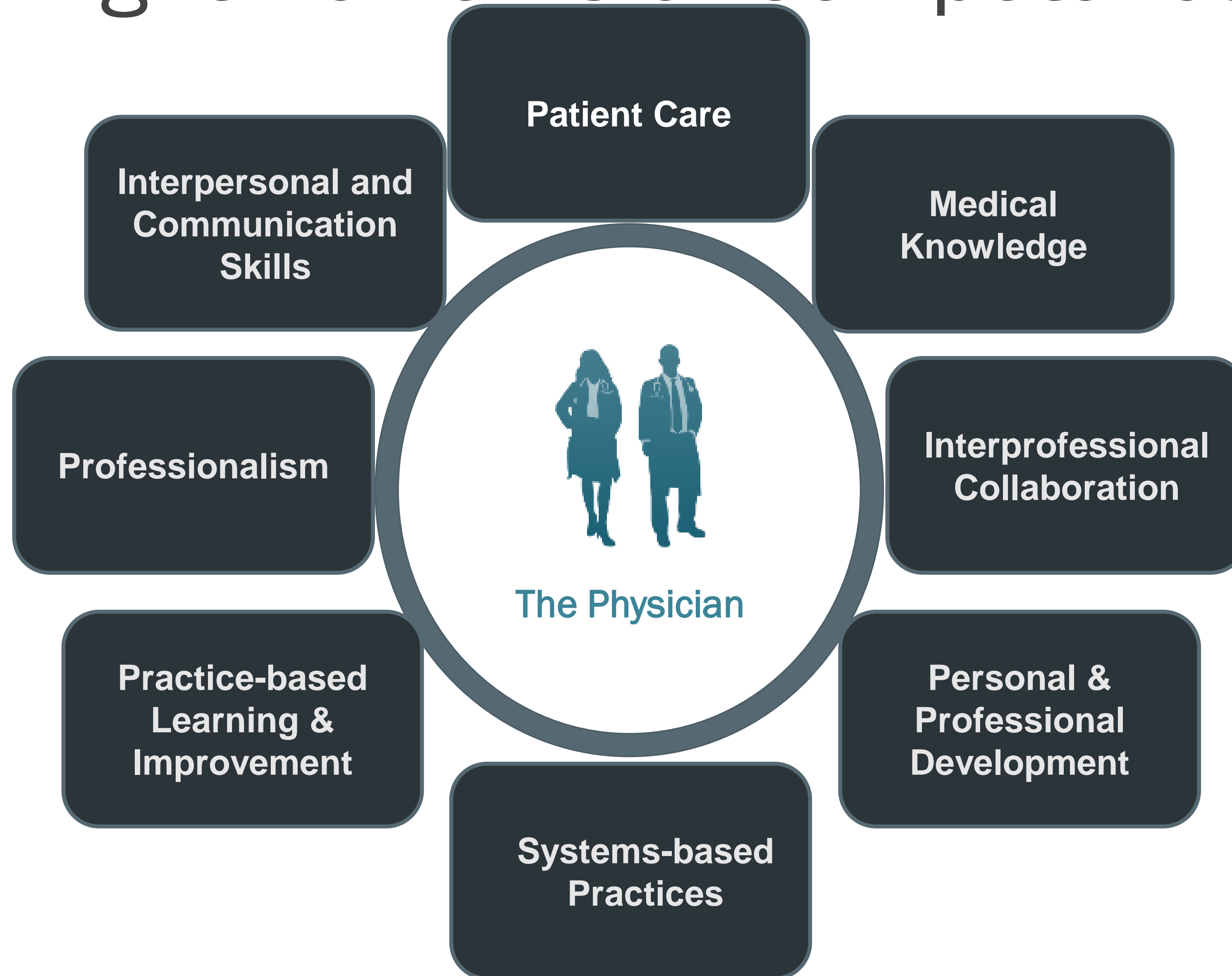
Medical Education and training

Step 1: Define the Outcomes

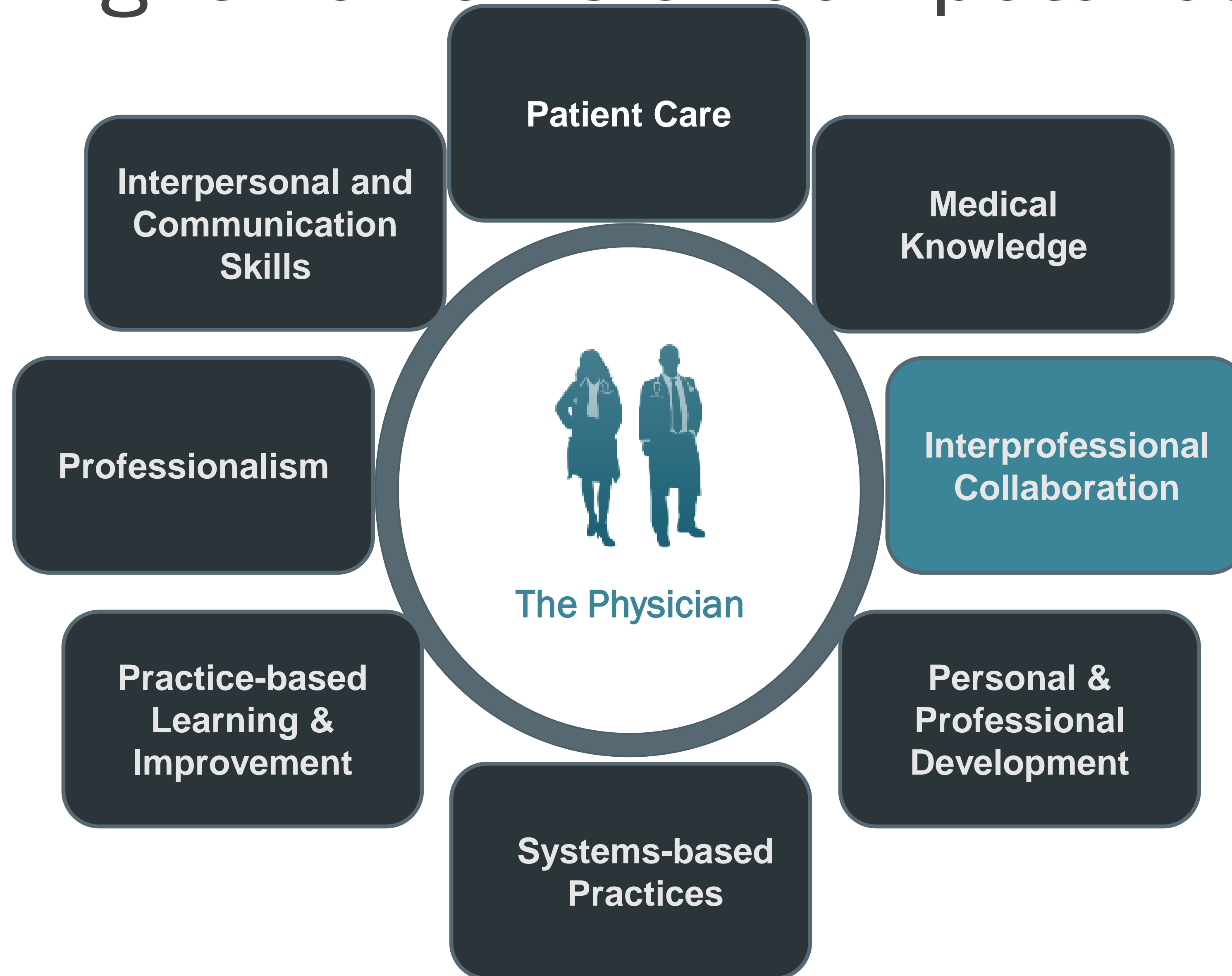
The Vision

- 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



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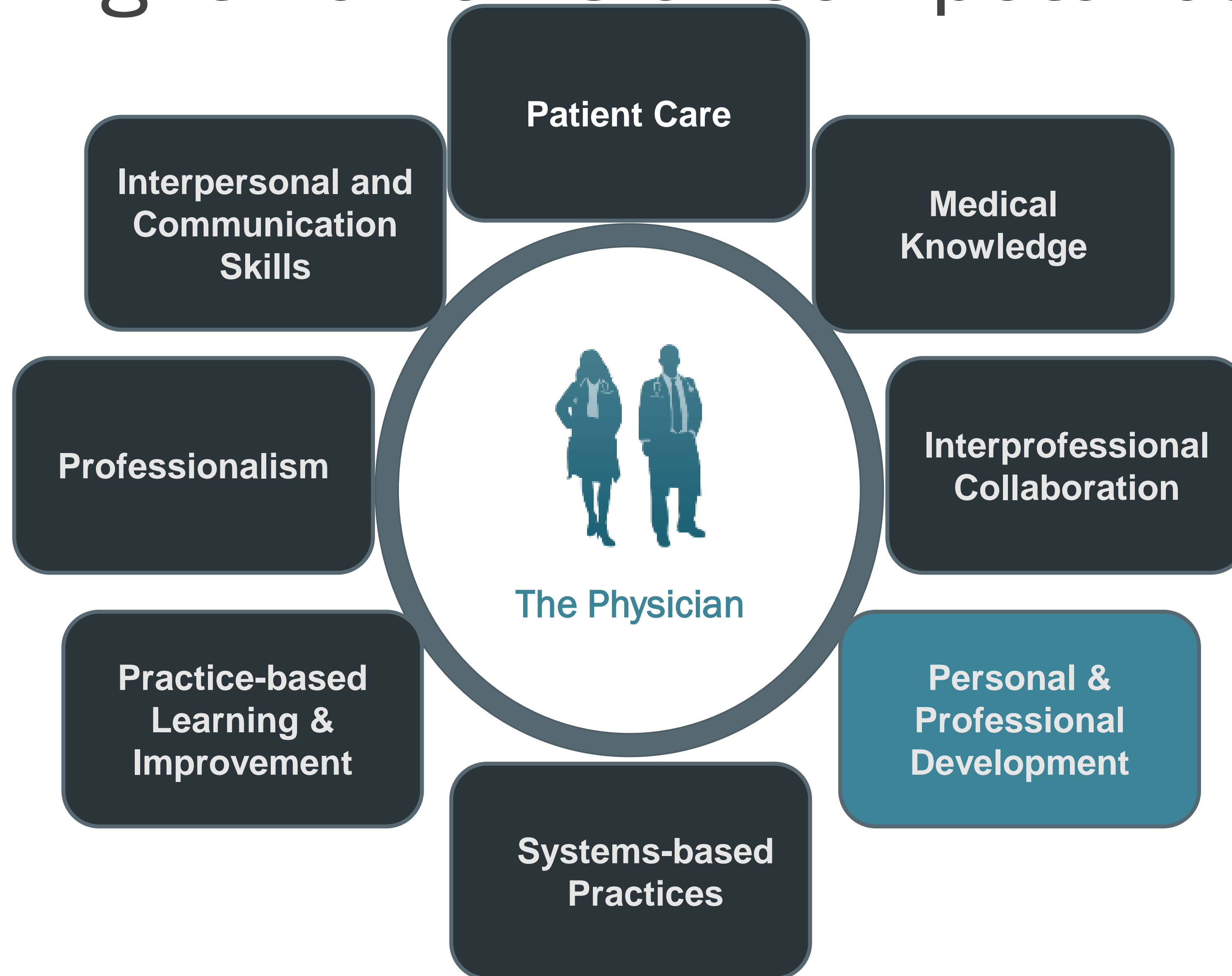


Step 2-Define the performance levels = milestones

ACGME Milestones Project

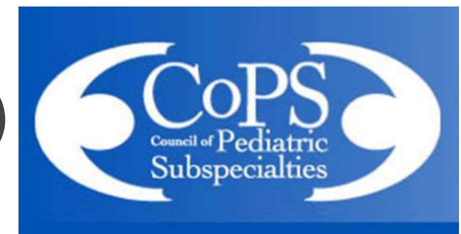
- Have GME Milestones for all Specialties
- Have milestones across the continuum for Pediatrics
- Have extracted UME milestones from five of the core specialty EPAs (IM, EM, Surgery, Psychiatry, and Pediatrics) using a backwards visioning process (or using the first two milestones in the case of pediatrics)
- Implications for CPD/MOC?

Step 3- The Next Major Hurdle: Assessment of Competence

EPAs now established for:

- Medical School (UME to GME transition)

- Pediatric Residency (GME to practice transition)
- Pediatric Subspecialties (Fellowship to practice transition)



EPAs across the continuum

- Entering Clerkship EPA:
  - Communicate information relevant to patient's care with other members of the health care team
- Core EPA for Entering Residency:
  - Give or receive a patient handover to transition care responsibility
- Pediatric and Subspecialty EPA:
  - Facilitate handovers to another healthcare provider either within or across settings

EPAs Across the Continuum

- Core EPA for Entering Residency:
  - Prioritize a differential diagnosis following a clinical encounter
  - Recommend and interpret common diagnostic and screening tests
  - Enter and discuss orders/prescriptions
- Pediatric EPAs
  - Manage patients with acute, common diagnoses in an ambulatory, emergency, or inpatient setting
- Subspecialty EPAs
  - Manage patients with acute endocrine disorders in ambulatory, emergency or inpatient settings

Final
Thoughts