Speaking the Same Language: Competency, Milestones and EPA's

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Disclosure

- Nothing to declare

- Credit and attribution of content to:
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  - Sandra Moutsios, Vanderbilt University Medical Center
  - Dr. Homboe, MD, Chief Research, Milestones, Development and Evaluation Officer ACGME
  - ACGME resources www.ACGME.org

Objectives

- Review and define:
  - Competency, Competencies, Competent
  - Milestones
  - Entrustable Professional Activities (EPA's)

Objectives

- Let's start with….
  - Competency, Competencies, Competent
  - Milestones
  - Entrustable Professional Activities (EPA's)

Competency

- **<u>An observable ability</u> of a health professional, integrating multiple components such as knowledge, skills, values and attitudes**
  - Closing an incision
  - Running a code
  - Driving a car
  - Admitting a child with respiratory illness

The International CBME Collaborators, 2009

Competent

- **An individual who <u>possesses the required abilities</u> *in all domains* in a certain context at a defined stage of medical education or practice**
  - Intern is competent in admitting a healthy child with bronchiolitis

The International CBME Collaborators, 2009

Competence

- **Entails more than the possession of knowledge, skills and attitudes; it requires the application of <u>these abilities</u> in the clinical environment to achieve optimal results**
  - Intern can admit children with simple and complex respiratory conditions
  - Teenager can drive a car in the snow, rain, when tired, etc…

ten Cate, Med Teach, 2010

# **Applied to our Learners?**

- **<u>Competency</u>** – the thing(s) they need to do

- **<u>Competent</u>** – can do all of the things

- **<u>Competence</u>** – does all of the things consistently, adapting to contextual and situational needs

Caverzagie, 2014

Objectives

- Competency

- **Introduction to Milestones**

- Entrustable Professional Activities (EPA's)

In the Olden Days......

- Curriculum was developed by 'experts' in the field
  - Varied from institution to institution and from graduate to graduate
  - Less responsive to changing health care needs
  - Irrespective of the unique characteristics of learners

Medical School →

K/S/A
Residency

→ **Independent Practice**

Time based
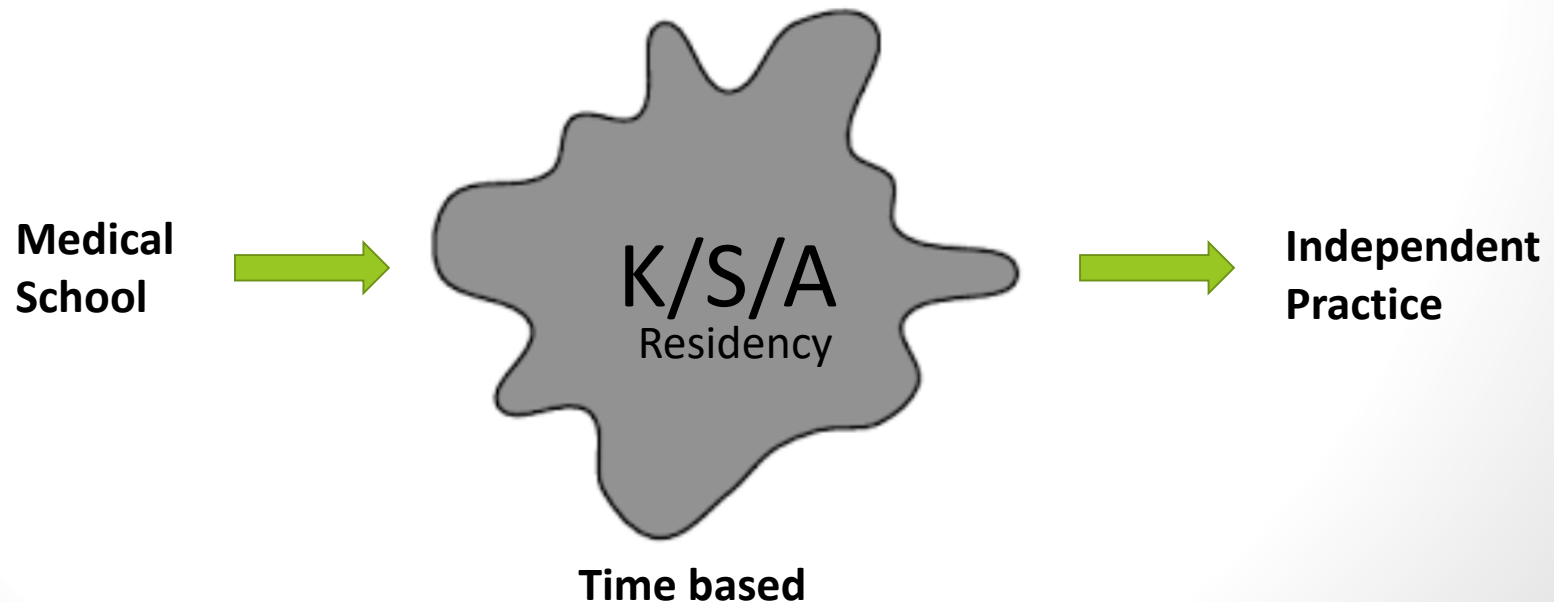
1999 ACGME Outcomes project

- Organized the large volume of K/S/A to be attained into **6 Core Competencies**
    - Patient Care, Medical Knowledge, Communication, Professionalism, Practice-based Improvement, System-based Practice
    - Helped to organize competencies
- **Focused on outcomes and competencies**

Medical School   →   [K/S/A K/S/A K/S/A / K/S/A K/S/A K/S/A]   →   **Independent Practice**
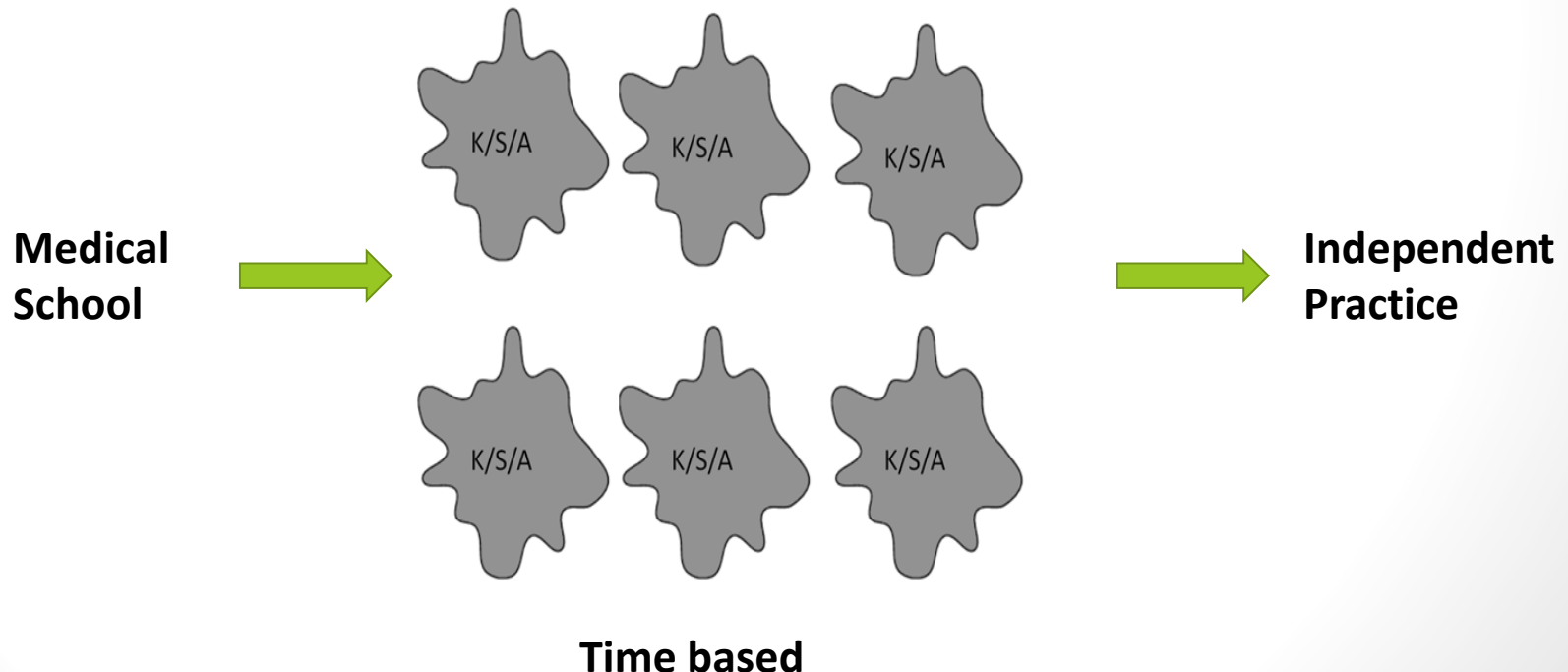
Time based

# 2013 – ACGME introduced Milestones

What are Milestones?

- **General Definition: Skill and knowledge-based development that commonly occur by a specific time**
  - ie: babies should be sitting by about 9 months
  - ie: interns should be able to tie knots by December

- **<u>Developed discrete sub-competencies, within the 6 Core Competencies</u>**
  - Patient Care, Medical Knowledge, Communication, Professionalism, Practice-based Improvement, System-based Practice
- **Still focused on outcomes and competencies**

Medical School →

K/S/A   K/S/A   K/S/A

K/S/A   K/S/A   K/S/A

→ **Independent Practice**

Time based
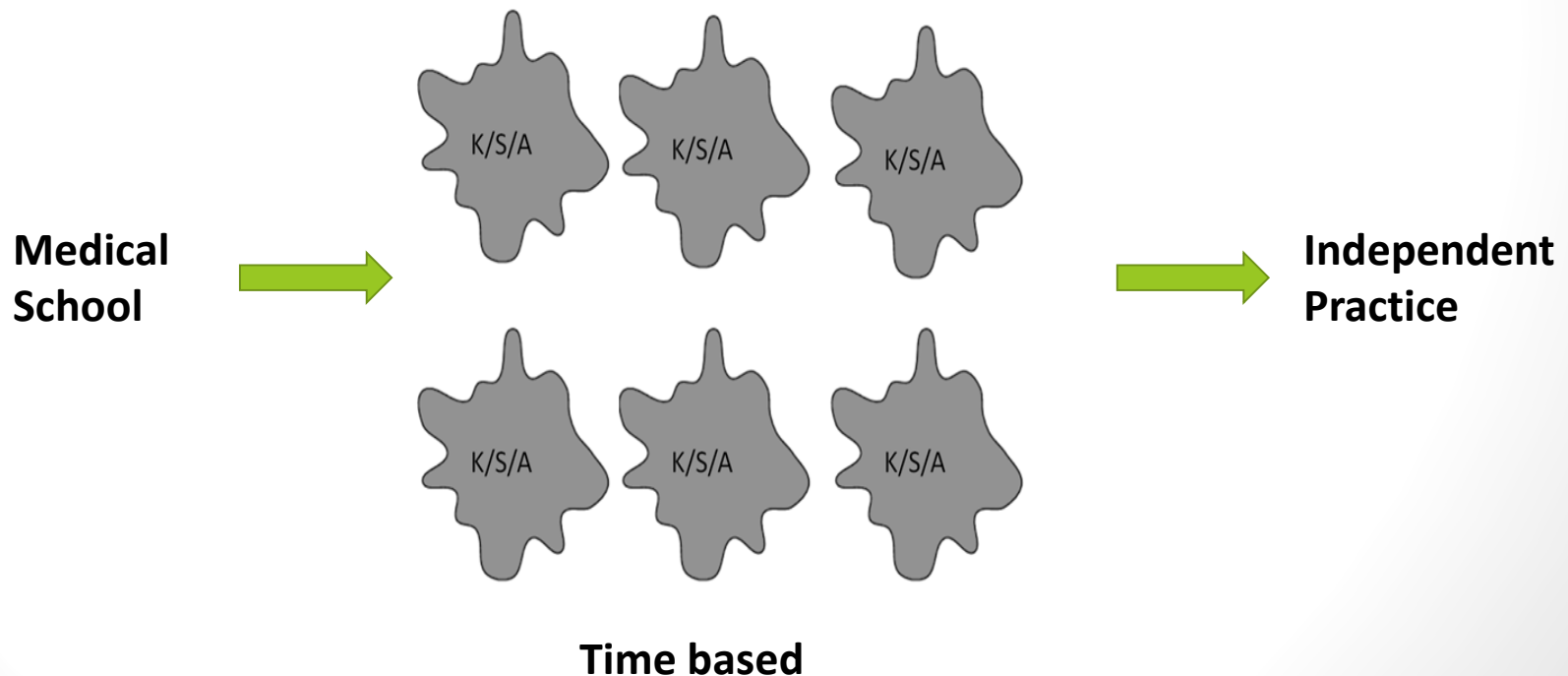
ACGME Milestones 2013

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Medical School →

K/S/A	K/S/A	K/S/A
K/S/A	K/S/A	K/S/A

→ **Independent Practice**

Time based
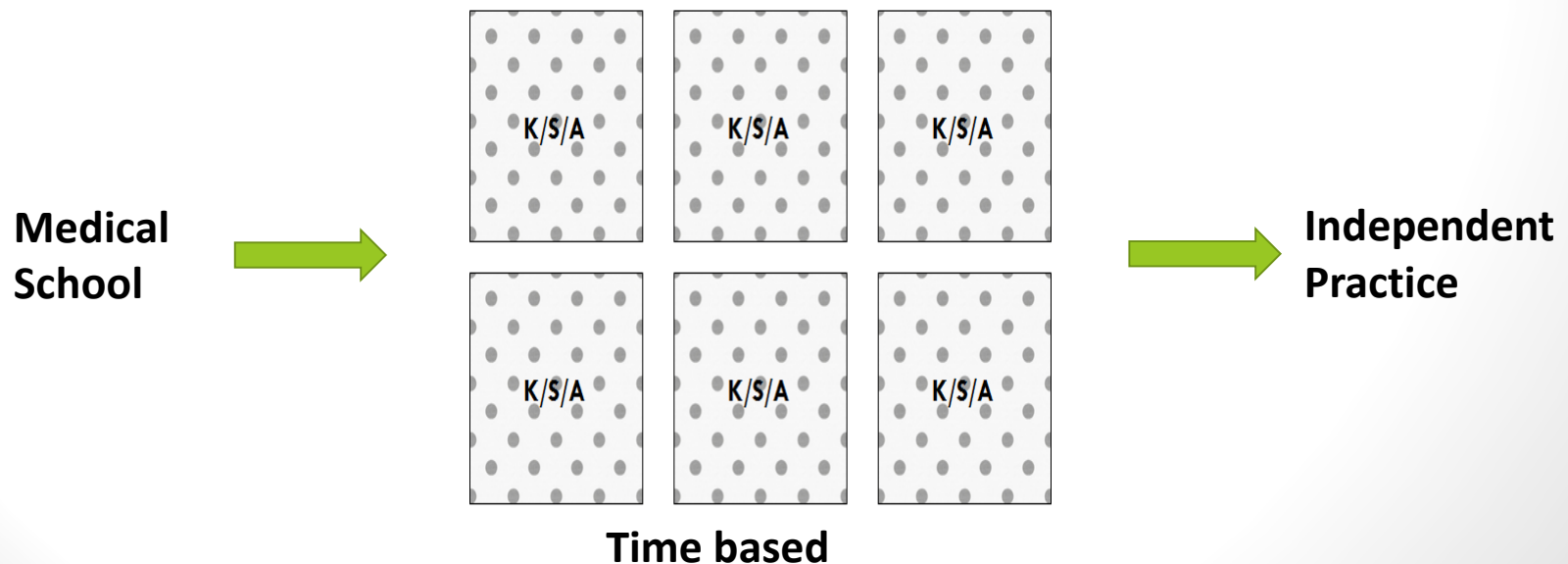
Milestones

- Observable developmental steps moving from Novice to Expert/Master (Dreyfus)
  - Describe a trajectory of development from novice to expert
  - Medicine, cello, basketball

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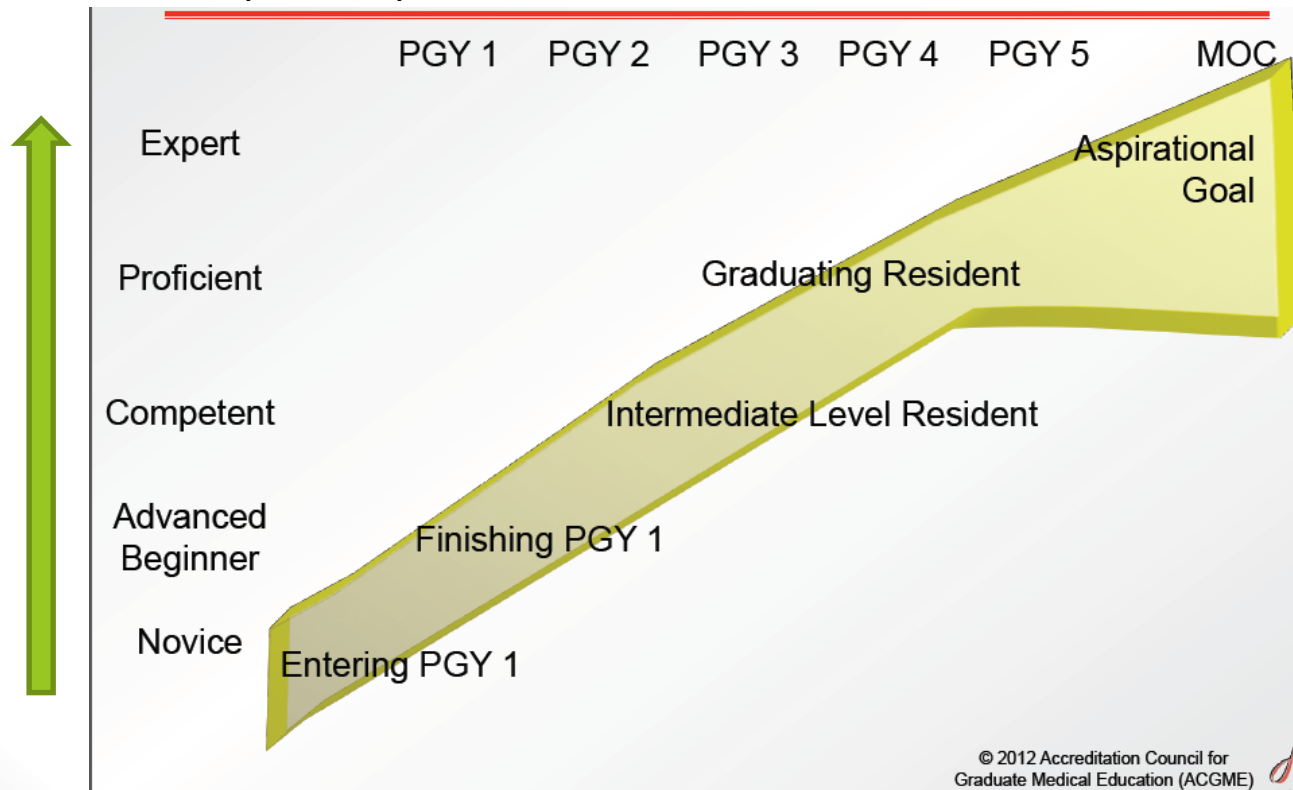
Patient Care **(Core competency)**

Sub-Competency

PATIENT CARE (PC2) – Care of Patients in the Intrapartum period				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates basic knowledge of routine/uncomplicated intrapartum obstetrical care including conduct of normal labor	Provides intrapartum obstetrical care for women with uncomplicated pregnancies (e.g., identification of fetal lie, interpretation of fetal heart rate monitoring and tocodynamometry).

Differentiates between normal and abnormal labor

Recognizes intrapartum complications (e.g., chorioamnionitis, shoulder dystocia) | Manages abnormal labor

Manages intrapartum complications (e.g., cord prolapse, placental abruption) | Provides care for women with complex intrapartum complications and conditions

Identifies indications for consultation, referral and/or transfer of care for patients with intrapartum complications.

Effectively supervises and educates lower level residents in intrapartum care

Collaborates and provides consultation to other members of the health care team in intrapartum care | Applies innovative approaches to complex and atypical intrapartum conditions and implements treatment plans based on emerging evidence |

Milestone

Comments:

Milestone assignment – check when all Milestones in the column are 'achieved'

- Milestones are NOT intended to serve as an evaluation form
- Milestone achievement is NOT a Likert scale – indicate Milestone achievement between levels when not all of the Milestones in the upper level are achieved

Patient Care

Antepartum Care and Complications of Pregnancy — Patient Care

Score 3.5

Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates basic knowledge of normal obstetrical care and common medical complications seen in pregnancy	Provides complete antepartum care for women with uncomplicated pregnancies	Manages common medical complications (e.g., hypertension, diabetes, infectious diseases)	Demonstrates a comprehensive understanding of the varying patterns of presentation and treatment options for a variety of medical and obstetrical complications	Manages patients with complex and atypical medical and obstetrical complications
	Recognizes basic risk factors, symptoms, and signs of common medical complications (e.g., hypertension, diabetes, infectious diseases)	Manages common obstetrical complications (e.g., previous Cesarean section, abnormal fetal growth, multifetal gestation)	Recognizes atypical presentations of medical and obstetrical complications; identifies indications for consultation, referral, and/or transfer of care for patients with medical and obstetrical complications	Applies innovative approaches to complex and atypical antepartum conditions and implements treatment plans based on emerging evidence
	Recognizes basic risk factors, symptoms, and signs of common obstetrical conditions (e.g., post-term gestation, abnormal placentation, third trimester bleeding)		Effectively supervises and educates lower level residents in antepartum care	
			Collaborates and provides consultation to other members of the health care team in antepartum care	

1. Gathers and synthesizes essential and accurate information to define each patient's clinical problem(s). (PC1)

Critical Deficiencies			Ready for unsupervised practice	Aspirational
Does not collect accurate historical data Does not use physical exam to confirm history Relies exclusively on documentation of others to generate own database or differential diagnosis Fails to recognize patient's central clinical problems Fails to recognize potentially life threatening problems	Inconsistently able to acquire accurate historical information in an organized fashion Does not perform an appropriately thorough physical exam or misses key physical exam findings Does not seek or is overly reliant on secondary data Inconsistently recognizes patients' central clinical problem or develops limited differential diagnoses	Consistently acquires accurate and relevant histories from patients Seeks and obtains data from secondary sources when needed Consistently performs accurate and appropriately thorough physical exams Uses collected data to define a patient's central clinical problem(s)	Acquires accurate histories from patients in an efficient, prioritized, and hypothesis-driven fashion Performs accurate physical exams that are targeted to the patient's complaints Synthesizes data to generate a prioritized differential diagnosis and problem list Effectively uses history and physical examination skills to minimize the need for further diagnostic testing	Obtains relevant historical subtleties, including sensitive information that informs the differential diagnosis Identifies subtle or unusual physical exam findings Efficiently utilizes all sources of secondary data to inform differential diagnosis Role models and teaches the effective use of history and physical examination skills to minimize the need for further diagnostic testing
☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐

Comments:

Benefits of Milestones

- Represent a graduation *target*
  - <u>do not</u> represent a graduation requirement
- Standardize expected competencies at graduation *no matter where you trained*
- Directs evaluation development
- Provides explicit expectation for learners
  - As well as aspirational goals!
- More involvement of faculty (CCC)

Programmatic benefits of Milestones

- Guide curriculum development
  - Programs can analyze evaluation data and make changes to the educational structure accordingly
    - *if none of the PGY2's are meeting H&P Milestones, then the structure of the curriculum needs to change to provide a better context for Milestone achievement*

- **Earlier identification of under-performers**
  - Allows for earlier (?more successful) efforts for remediation

- Develop directed faculty development

Disadvantages of Milestones?

- Initial confusion and need to re-vamp engrained systems, more complicated, more "work" for programs, more faculty involvement
- Deconstruction of a (previously) 'fluid' experience into ~200+ individual competencies
- Potential overuse/abuse for credentialing, licensing
- Still have observer, rater and CCC interpretation of what "competency" is – but now better informed

Harmonized Milestones 2.0

- 2017 – the ACGME charged 4 sub-groups to develop common Milestones in the core competencies of
  - Interpersonal and Communication Skills
  - Professionalism
  - Practice-based Learning and Improvement
  - System-based practice
- Allows for sharing of evaluation tools, common resources and faculty development

MMC CLER sub-committee developed a common TOC evaluation to share with all programs (!)

1   Evidence of a system to prioritize and communicate acuity to incoming team

○ Yes
○ No

> Comment

2   Provision of a patient summary (relevant patient information, events leading up to admission, clinical course to date)

○ Yes
○ No

> Comment

3   Identification of a "to-do list" with contingency plans (i.e. "if, then statements") as applicable

○ Yes
○ No

> Comment

4   If provider receiving sign out doesn't show evidence of synthesis, a prompt is given to ensure plan understanding

○ Yes
○ No

> Comment

Harmonized Milestones

BOX Subcompetencies for the Harmonized Milestones

Interpersonal and Communication Skills (ICS)
- Patient- and Family-Centered Communication (ICS-1)
- Interprofessional and Team Communication (ICS-2)
- Communication Within Healthcare Systems (ICS-3)

Practice-Based Learning and Improvement (PBLI)
- Evidence-Based and Informed Practice (PBLI-1)
- Reflective Practice and Commitment to Personal Growth (PBLI-2)

Professionalism (PROF)
- Professional Behavior and Ethical Principles (PROF-1)
- Accountability/Conscientiousness (PROF-2)
- Self-Awareness and Help-Seeking (PROF-3)

Systems-Based Practice (SBP)
- Patient Safety and Quality Improvement (SPB-1)
- System Navigation for Patient-Centered Care (SBP-2)
- The Physician's Role in Healthcare Systems (SBP-3)

Great Resource on ACGME.org

Objectives

- Milestones
- Competency
- **EPA's**

EPA – Entrustable Professional Activity

- A <u>unit of work</u> that requires acquired knowledge, skills and attitudes to achieve
  - Limited to qualified individuals
  - Independently performed
  - Performed only in certain contexts
  - Observable and measurable outcomes
    - ie: done well or not done well
  - Requires many competencies to execute

EPA's describe work to be done

- Admit a patient
- Deliver bad news to a patient and family
- Insert a central line
- Supervise junior residents in performing a consult in the Emergency Department
- Drive an ambulance
- Perform medication reconciliation
- Do your own taxes

Driving a Car is an EPA

- A <u>unit of work</u> that requires acquired knowledge, skills and attitudes to achieve
  - (exam, driver's ed, in-car lessons, supervised period of permit driving)
- Limited to qualified individuals
  - those who have passed a driver's test and have a valid license
- Independently performed
- Performed only in certain contexts
  - in the US, for passenger cars and not school buses, in daytime for younger drivers, etc
- Observable and measurable outcomes
  - ie: done well or not done well (Accidents Tickets)
- Requires many competencies to execute
  - Manual dexterity, problem-solving, concentration, judgement, etc

EPA's are based on Competencies

Core competencies
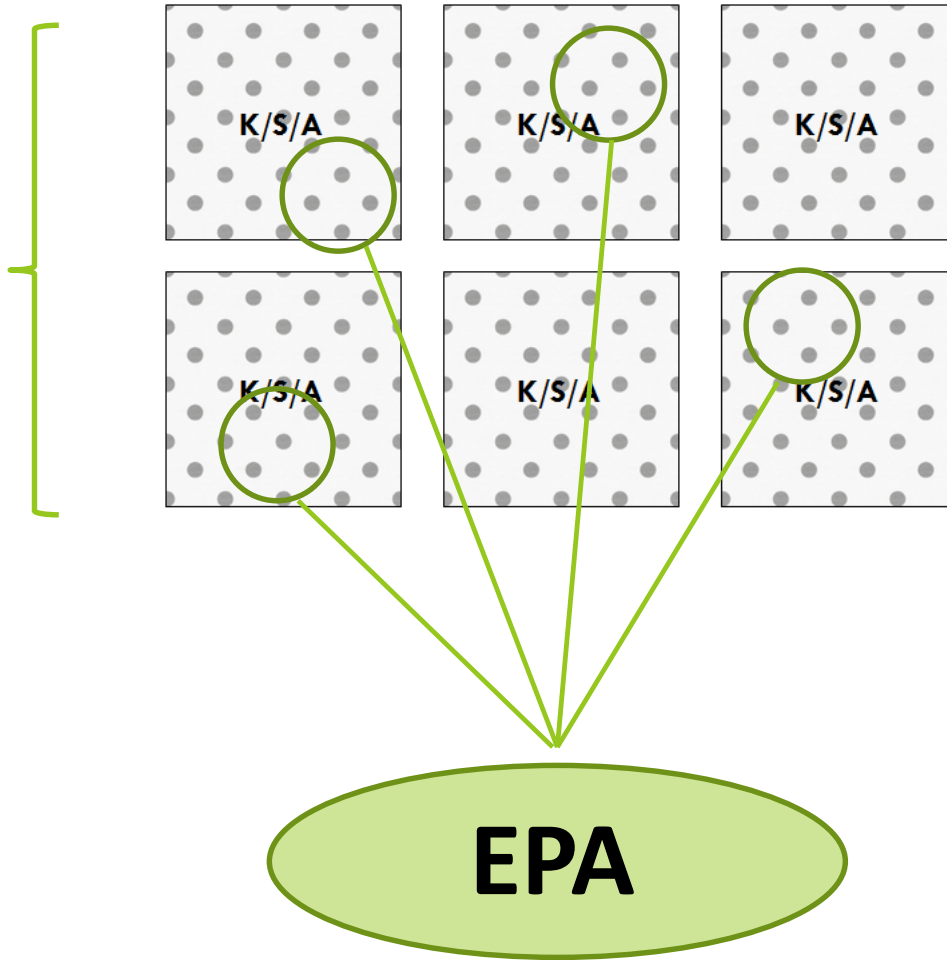
Re-organization of the Milestones into units of work that are meaningful to the day to day taking care of patients in each unique specialty

K/S/A
K/S/A
K/S/A

K/S/A
K/S/A
K/S/A

EPA

EPA's: Driving a Vehicle

Core Competency	K/S/A	Driving a BIKE	Driving a Motorcycle	Driving a Car
Driving Skills	Turning vehicle on		√	√
	Steering and braking	√	√	√
	Maintaining Balance	√	√	
	Parking	√	√	√
Problem-based Learning	Fixing chain	√		
	Changing a tire	√		√
Safety	Not driving impaired		√	√
	Seat belt			√
	Wearing a helmet	√	√	
Responsibility	License renewal		√	√
	Obeying traffic laws	√	√	√

EPA's are based on Competencies

ACGME Core Competency		EPA 1	EPA 2	EPA 3	EPA 4	EPA 5
Patient Care	Competency 1	√				√
	Competency 2	√	√			√
	Competency 3			√		
Medical Knowledge	Competency 4		√		√	√
Communication	Competency 5		√		√	√
Professionalism	Competency 6	√				
	Competency 7			√		√
PBLI	Competency 8		√			√
System-based Practice	Competency 9			√	√	

Why move to EPAs?

- More intuitive and relative to real practice

- More meaningful assessment

- Re-constructs many sub-competencies into real work that is fundamental to the specialty and represents the work to be done after graduation
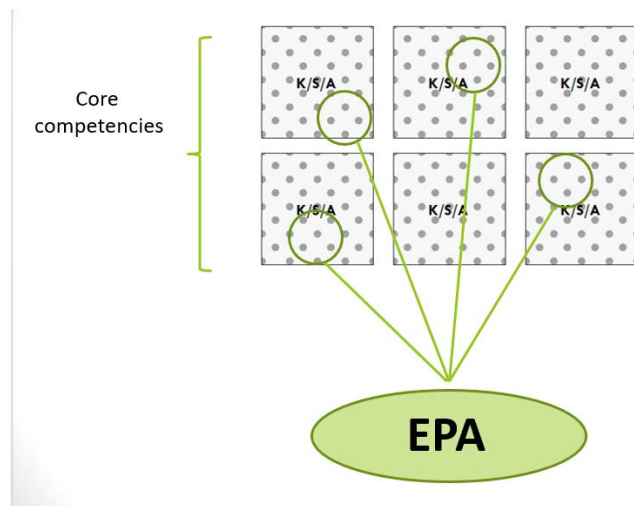
- Possibly > streamlined, less onerous evaluation system

- Facilitates credentialing and transition to practice

QUESTIONS?

Break until 10:45