

The Application of Entrustable Professional Activities (EPAs) in UME and GME

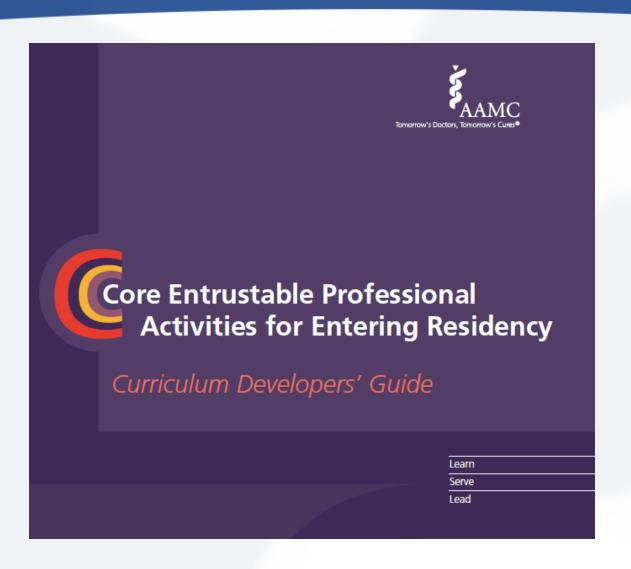
Bronwyn H. Bryant, MD and Elise N. Everett, MD University of Vermont College of Medicine Teaching Academy Med Ed Grand Rounds, October 30, 2020

Conflicts of Interest

Nothing to disclose

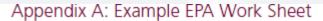


Purple Book-AAMC



Objectives

- Define competency based education, Milestones, and EPAs.
- Review the evolution of EPAs and its current role in competency based education
- Learn how to write an EPA for a learner in UME or GME.



For each EPA, we used the following template modified from the work of Olle ten Cate:

- 1. EPA title
- 2. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.
- 3. Most relevant domains of competence: We chose from the following eight domains of competence listed in the "Reference List of General Physician Competencies" 10:
 - Patient Care
 - Knowledge for Practice
 - Practice-based Learning and Improvement
 - Interpersonal and Communication Skills
 - Professionalism
 - Systems-based Practice
 - Interprofessional Collaboration
 - · Personal and Professional Development
- 4. Competencies within each domain critical to entrustment decisions: We chose the "critical competencies" from the Reference List of General Physician Competencies published in Academic Medicine in August 2013.¹⁰

The following two items needed to complete the table will be a large part of the work going forward through both the AAMC pilot and beta testing.

- 5. Curriculum development: What are the knowledge, skill, and attitude objectives required for a student to gain entrustment for the EPA? When in the curriculum will the EPA be taught? How will the EPA be assessed (formative and summative)?
- 6. Entrustment decisions: Who will make the entrustment decisions? How will they be made?

Definition of Competencies

- Medical education is moving towards competency-based training.
 - Medical school/UME: Domains of competence (AAMC)
 - Residency/GME: General Competencies (ACGME)
- Describe learner's abilities
- Competencies remain theoretical if not grounded in practice
 - Knowledge
 - Professional attitudes/behaviors
 - Communication skills
- Milestones describe the steps a learner takes towards competencies

Define Entrustable Professional Activity

"A unit of professional practice, defined as tasks or responsibilities to be entrusted to the unsupervised execution by a trainee once he or she has attained sufficient specific competence."

Specific tasks a trainee can be entrusted to execute, unsupervised, once competency is reached.

EPAs align the **assessment process** with **learner action** and **faculty observation** (nothing is implied)



EPAs and Competencies

- Entrustable Professional Activities (EPAs) focus on day-to-day activities in the medical profession.
- EPAs link competencies to actual work
- Faculty observe trainees doing EPAs through a lens of competencies
- Assessment is grounded in **TRUST**, and its implications for level of supervision (and graduated responsibility).

EPAs, Milestones, and Competencies

Competencies

Skills, knowledge, and attitudes that describe a physician, learner's abilities

EPAs

Descriptors of physician work
Specific tasks
Map to ≥ 2

competencies

Milestones

Stages (or levels) of development to reach specific competencies, a continuum

UME vs GME Terminology

UME (AAMC)

- Domains of competence (8)
- Competencies (many)
- Milestones (2 levels)
 - Novice, pre-entrustable learner
 - Entrustable learner
 - ? Intermediate leveladvanced beginner (Can perform EPA with minimal intervention from a supervisor)

GME (ACGME)

- General competencies (6)
- Sub-competencies (many)
- Milestones (5 levels)
 - Level 1 Novice
 - Level 2 Early learner
- Level 3 Proficient (mid-training)
- Level 4 Competent, ready for unsupervised practice
- Level 5 Expert, aspirational

EPAs – New kid on the block

- Gap between PD expectations and new resident performance
- In 2013, AAMC defined 13 core EPAs that every graduating medical student, intern should be able to do without DIRECT supervision on day one of residency
- ACGME milestones, while required for accreditation, can be abstract and hard to assess.
- Residency programs
 have implemented
 EPAs in various
 specialties (surgery,
 ortho, peds).

13 Core Entrustable Professional Activities for Entering Residency

- 1. Gather a History and perform a PE
- 2. Prioritize a DDX
- 3. Recommend and interpret common diagnostic and screening tests
- 4. Enter and Discuss orders/Rxs
- 5. Document a clinical encounter
- 6. Provide an oral presentation of a clinical encounter
- 7. Form Clinical Questions
- 8. Give or receive a handoff
- 9. Collaborate as a member of an inter-professional team
- 10. Recognize a patient requiring urgent or emergent care and initiate evaluation and management
- 11. Obtain informed consent for tests and/or procedures
- 12. Perform general procedures of a physician
- 13. Identify system failures and contribute to a culture of safety and improvement

Guiding Principles for EPA Development

- 1. Patient Safety
 - Clinical skills of interns are variable
 - Interns perform many patient care activities without supervision
- 2. Develop a core of common skills
- 3. Learner assessment is critical to implementation of core requirements
 - Formative assessment
 - Entrustment decisions (Summative)
- 4. Implementation must be coupled with robust resources for faculty development

Definition and Characteristics of EPAs

- Tasks or responsibilities that faculty entrust a trainee to do unsupervised once competence obtained
 - Units of work that focus on care delivery (WRVUs)
- Executable within a timeframe (start and end)
- Observable
- Measurable
- Units of work:
 - Obstetric care of an uncomplicated pregnancy patient
 - Work-up of an adverse reaction to transfused blood products.

Develop an EPA for your learning environment

What is a task in your clinical space that would be suited to an EPA?

- EPAs
 - Hx and PE
 - DDX
 - W/U, tests
 - Orders
 - Note
 - Oral presentation

- EPAs
 - Form ?, EBM
 - Handoff
 - Team
 - Recognize sick pt
 - Informed consent
 - Procedures
 - Culture of Safety

Examples: obstetric history, ddx for vaginal bleeding, pap smear, delivery note, place a foley in a female patient

Example EPA Worksheet





Curriculum Developers' Guide

Appendix A: Example EPA Work Sheet

For each EPA, we used the following template modified from the work of Olle ten Cate:

- EPA title
- Description of the activity: This included a brief rationale and a list of the functions required for the EPA.
- Most relevant domains of competence: We chose from the following eight domains of competence listed in the "Reference List of General Physician Competencies" 10:
 - Patient Care
 - Knowledge for Practice
 - Practice-based Learning and Improvement
 - Interpersonal and Communication Skills
 - Professionalism
 - Systems-based Practice
 - Interprofessional Collaboration
 - Personal and Professional Development
- 4. Competencies within each domain critical to entrustment decisions: We chose the "critical competencies" from the Reference List of General Physician Competencies published in Academic Medicine in August 2013.¹⁰

The following two items needed to complete the table will be a large part of the work going forward through both the AAMC pilot and beta testing.

- 5. Curriculum development: What are the knowledge, skill, and attitude objectives required for a student to gain entrustment for the EPA? When in the curriculum will the EPA be taught? How will the EPA be assessed (formative and summative)?
- 6. Entrustment decisions: Who will make the entrustment decisions? How will they be made?

Steps to Designing an EPA

- 1. Title
- 2. Map EPA to the Domains of Competency framework
- 3. Map to the Competency framework
 - Required knowledge, skills, attitudes, and behaviors
- 4. Identify information sources to assess progress (student, peers, faculty, SP)
- 5. Identify method to arrive at entrustment decision
 - Narrative descriptions of expected behaviors
 - Clinical vignettes for both novice and entrustable learners
- 6. Link to Residency Milestones Day One
- 7. Write description
- (A well-written EPA is a mini-curriculum for learner)



A UME example

Title





Curriculum Developers' Guide

EPA 1: Gather a history and perform a physical examination

 Description of the activity Day 1 residents should be able to perform an accurate complete or focused history and physical exam in a prioritized, organized manner without supervision and with respect for the patient. The history and physical examination should be tailored to the clinical situation and specific patient encounter. This data gathering and patient interaction activity serves as the basis for clinical work and as the building block for patient evaluation and management. Learners need to integrate the scientific foundations of medicine with clinical reasoning skills to guide their information gathering.

Functions

History

- Obtain a complete and accurate history in an organized fashion.
- Demonstrate patient-centered interview skills (attentive to patient verbal and nonverbal cues, patient/family culture, social determinants of health, need for interpretive or adaptive services; seeks conceptual context of illness; approaches the patient holistically and demonstrates active listening skills).
- Identify pertinent history elements in common presenting situations, symptoms, complaints, and disease states (acute and chronic).
- Obtain focused, pertinent histories in urgent, emergent, and consultative settings.
- Consider cultural and other factors that may influence the patient's description of symptoms.
- Identify and use alternate sources of information to obtain history when needed, including but not limited to family members, primary care physicians, living facility, and pharmacy staff.
- Demonstrate clinical reasoning in gathering focused information relevant to a
 patient's care.
- Demonstrate cultural awareness and humility (for example, by recognizing that one's own cultural models may be different from others) and awareness of potential for bias (conscious and unconscious) in interactions with patients.

Step 1: Title



Title ObGyn Specific EPA#1 Gather a personal and family history of gynecologic cancers or related cancers

Step 2 Map to DOC, Step 3 Map to Competency



2.	Most relevant domains of competence	■ Patient Care	 ☑ Professionalism ☐ Systems-Based Practice ☐ Interprofessional Collaboration 				
		☑ Knowledge for Practice					
		☐ Practice-Based Learning and					
		Improvement	☐ Personal and Professional Development				
		☑ Interpersonal and Communication Skills					
3.		PC 2 P 1					
	within each domain critical	KP1 P3 ICS1 P5					
	to entrustment decisions	ICS 7					
	(See Appendix C)						

DOC and Competencies

Appendix D: Tally of Critical Competencies for the 13 EPAs

Competencies	EPA 1	EPA 2	EPA 3	EPA 4	EPA 5	EPA 6	EPA 7	EPA 8	EPA 9	EPA 10	EPA 11	EPA 12	EPA 13	TOTAL
PC 1										1		1		2
PC 2	1	1		1		1				1				5
PC 3										1	1			2
PC 4		1	1		1					1				4
PC 5			1	1						1				3
PC 6				1	1					1	1			4
PC 7			1								1	1		3
PC 8								1						1
PC 9			1											1
PC 10														0
PC 11														0
KP 1	1		1										1	3
KP 2		1												1
KP3		1					1							2
KP 4		1	1				1							3
KP 5														0
KP 6														0
PBLI 1		1		1		1	1							4
PBLI 2														0
PBLI 3							1							1
PBLI 4													1	1
PBLI 5								1						1
PBLI 6							1							1
PBLI 7				1			1	1						3
PBLI 8														0
PBLI 9			1				1							2
PBLI 10													1	1
ICS 1	1			1	1	1					1			5
ICS 2		1			1	1	1	1	1	1			1	8
ICS 3								1	1					2
ICS 4														0
ICS 5					1						1	1		3
ICS 6										1		1		2
ICS 7	1								1		1			3

Step 2: Map the EPA to Domains of Competency (DOC)

- * Patient Care (DoC1)
- 2. * Medical Knowledge (DoC2)
- 3. Practice-Based Learning and Improvement (DoC3)
- 4. * Interpersonal and Communication Skills (DoC5)
- 5. Professionalism (DoC4)
- 6. Systems-Based Practice (DoC6)
- 7. Inter-professional Collaboration (DoC7)
- 8. Personal and Professional Development (DoC8)

EPA→Domains of Competency Mapping



Domains of Competency (DOC)

EPA	PC DOC1	MK DOC2		IPCS DOC4			IPE DOC7	PPD DOC8
Gather a PH, FH of Gyn cancer	X	X		X				
Perform a vaginal delivery	X	X	X					
Consent patient for a BTL			X	X	X	X		

PC Competencies

Appendix C: Reference List of General Physician Competencies by Domain¹⁰

- PATIENT CARE: Provide patient-centered care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health
 - PC 1 Perform all medical diagnostic, and surgical procedures considered essential for the area of practice
 - PC 2 Gather essential and accurate information about patients and their condition through history-taking, physical examination, and the use of laboratory data, imaging, and other tests
 - PC 3 Organize and prioritize responsibilities to provide care that is safe, effective, and efficient
 - PC 4 Interpret laboratory data, imaging studies, and other tests required for the area of practice
 - PC 5 Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
 - PC 6 Develop and carry out patient management plans
 - PC 7 Counsel and educate patients and their families to empower them to participate in their care and enable shared decision making
 - PC 8 Provide appropriate referral of patients including ensuring continuity of care throughout transitions between providers or settings and following up on patient progress and outcomes
 - PC 9 Provide health care services to patients, families, and communities aimed at preventing health problems or maintaining health
 - PC 10 Provide appropriate role modeling
 - PC 11 Perform supervisory responsibilities commensurate with one's roles, abilities, and qualifications

Step 3: Map the EPA to Competencies (K, S, A, B)

- PC1: Perform all medical, diagnostic, and surgical procedures essential for area of practice (Comp 1.1)
- *PC2: Gather essential and accurate information with H and P, labs, imaging (Comp 1.2)
- PC3: Organize and prioritize responsibilities to provide safe care (Comp 1.3)
- PC4: Interpret labs, imaging, and other tests (Comp 1.4)
- PC5: Make informed decisions about diagnostic and therapeutic interventions using EBM (Comp 1.5)
- PC6: Develop and carry out management plans (Comp 1.6)

A UME example

Medical Knowledge Competencies

- KNOWLEDGE FOR PRACTICE: Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care
 - KP 1 Demonstrate an investigatory and analytic approach to clinical situations
 - KP 2 Apply established and emerging biophysical scientific principles fundamental to health care for patients and populations
 - KP 3 Apply established and emerging principles of clinical sciences to diagnostic and therapeutic decision making, clinical problem solving, and other aspects of evidence-based health care
 - KP 4 Apply principles of epidemiological sciences to the identification of health problems, risk factors, treatment strategies, resources, and disease prevention/health promotion efforts for patients and populations
 - KP 5 Apply principles of social-behavioral sciences to provision of patient care, including assessment of the impact of psychosocial-cultural influences on health, disease, care-seeking, care-compliance, and barriers to and attitudes toward care
 - KP 6 Contribute to the creation, dissemination, application, and translation of new health care knowledge and practices

IPCS Competencies



- INTERPERSONAL AND COMMUNICATION SKILLS: Demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals
 - ICS 1 Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds
 - ICS 2 Communicate effectively with colleagues within one's profession or specialty, other health professionals, and health-related agencies (see also interprofessional collaboration competency (IPC) 7.3)
 - ICS 3 Work effectively with others as a member or leader of a health care team or other professional group (see also IPC 7.4)
 - ICS 4 Act in a consultative role to other health professionals
 - ICS 5 Maintain comprehensive, timely, and legible medical records
 - ICS 6 Demonstrate sensitivity, honesty, and compassion in difficult conversations (e.g. about issues such as death, end-of-life issues, adverse events, bad news, disclosure of errors, and other sensitive topics)
 - ICS 7 Demonstrate insight and understanding about emotions and human responses to emotions that allow one to develop and manage interpersonal interactions

Step 4: Identify Information Sources

- Self Assessment
- Peer Assessment
- Patient Assessment
- Faculty Assessment
- Standardized Patients
- Formative/Summative
- How many, cut points

UME

Step 5: Making entrustment decisions

ENTRUSTMENT LEVEL

Observing the activity

Acting with direct supervision in the room

Acting with supervision available within minutes

MILESTONE LEVEL

Novice (Pre-entrustable)

Emerging

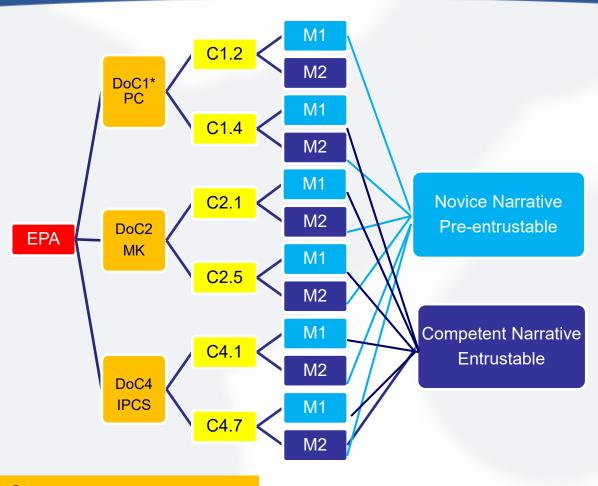
Proficient (Entrustable)

Acting unsupervised (i.e. Clinical Oversight)

Independent practice /supervision others

Competent/Expert

Relationships of EPAs, DoCs, Cs, and Ms



DoC1=Patient Care
DoC2=Medical Knowledge
DoC4=Interpersonal and
Communication Skills

A UME example

Patient Care Behaviors

Critical Competency

PC 2:

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

Pre-Entrustable Behaviors

citner gathers too little information or exhaustively gathers information following a template, regardless of the patient's chief complaint, with each piece of information gathered seeming as important as the next. Recalls clinical information in the order elicited. Limited ability to gather. filter, prioritize, and connect pieces of information. Uses analytic reasoning from basic pathophysiology knowledge without ability to link findings to prior clinical encounters. Incorrectly performs and elicits most physical examination maneuvers. May miss key physical exam findings. Does not alter the head-to-toe approach to the physical examination to meet the developmental level or behavioral needs of the patient. Does not seek or is overly reliant on secondary data. (PEDS, IM, PSYCH)

Entrustable Behaviors

Clinical experience allows linkage of signs and symptoms of a current patient to those encountered in previous patients. Still relies primarily on analytic reasoning of basic pathophysiology to gather information, but the ability to link current findings to prior clinical encounters allows information to be filtered, prioritized, and synthesized into pertinent positives and negatives as well as broad diagnostic categories. Performs basic physical examination maneuvers correctly and recognizes and correctly interprets abnormal findings. Consistently and successfully uses a developmentally appropriate approach to the physical examination. Seeks and obtains data from secondary sources when needed. (PEDS, IM, PSYCH)

MK and IPCS Behaviors

Critical Competence

Pre-Entrustable Behaviors

Entrustable Behaviors

KP 1:

Demonstrate an investigatory and analytic approach to clinical situations

information. Tends toward "intuitive leaps" to conclusions, often unsupported by the data gathered or the evidence. before fully understanding the learning task or the types of information needed; does not follow a systematic procedure for synthesis, comparison, and evaluation of information, which may result in reasoning that is slow and linear; may have stored knowledge of procedures, rules, and formulas, but, due to a lack of integrated mental models of health and disease, fails to recognize what conditions warrant the application of this knowledge or why it is relevant. Has difficulty recognizing recurring patterns of information. (This is a new milestone created for this document)

that allows more rapid connections, pattern recognition, and clinical reasoning. Can focus cognitive processes to discern relevant information, identify the unknowns, and make connections to solve problems or answer clinical questions via just-in-time-learning. Brings together multiple representations of the problem by comparing, synthesizing, and evaluating. (This is a new milestone created for this document)

ICS 1:

Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds

Communication with patients and families generally unidirectional and based on a template, without the ability to vary the approach based on a patient's unique demographic, cognitive, physical, cultural, socioeconomic, or situational needs. Frequently uses medical jargon. Does not engage patients and families in discussions of care plans (i.e., does not engage in shared decision making). Respects patient preferences when offered by the patient, but does not actively solicit preferences. Defers or avoids difficult or ambiguous conversations. (SURG, IM, PEDS, PSYCH)

Communication with patients and families generally bidirectional. When based on a template, can adapt to the patient's unique demographic, cognitive, physical, cultural, socioeconomic, or situational needs. Avoids medical jargon. Uses a variety of techniques, including nontechnical language, teach back, appropriate pacing, and small pieces of information to ensure that communication with patients and their families is bidirectional and results in shared decision making. Develops scripts to approach most difficult communication scenarios. (SURG, IM, PEDS, PSYCH)

IPCS Behaviors



Critical Competency

ICS 7:

Demonstrate insight and understanding about emotions and human responses to emotions that allow one to develop and manage interpersonal interactions

Pre-Entrustable Behaviors

Does not accurately anticipate or read others' emotions in verbal and nonverbal communication. Is unaware of one's own emotional and behavioral cues and may transmit emotions in communication (e.g., anxiety, exuberance, anger) that can precipitate unintended emotional responses in others. Does not effectively manage strong emotions in self or others. (PEDS)

Entrustable Behaviors

Anticipates, reads, and reacts to emotions in real time with appropriate and professional behavior in typical medical communication scenarios, including those evoking very strong emotions. Uses these abilities to gain and maintain therapeutic alliances with others. Atypical or unanticipated situations may still evoke strong emotions in the learner, resulting in an inability to moderate one's behavior and manage the emotions. (PEDS)

Entrustable Narrative-Checklist

Expected behaviors for an entrustable learner

- Information gathering and physical exam maneuvers:
 - Obtains a complete and accurate history in an organized fashion.
 - Identifies pertinent history elements in common presenting situations, symptoms, complaints, disease states (acute and chronic).
 - Obtains focused, pertinent histories in urgent, emergent, and consultation settings.
 - Identifies and uses alternate sources of information to obtain history when needed, including from family members, primary care physicians, living facilities, and pharmacies.
 - Performs a complete and accurate physical exam in logical and fluid sequence.
 - Performs a clinically relevant, focused physical exam pertinent to the setting and focus of the patient visit.
 - Identifies, describes, and documents abnormal physical exam findings.
- Scientific foundation and/or reasoning skills:
 - Demonstrates clinical reasoning in gathering focused information relevant to a patient's care.
 - Links current findings to those from previous patients.
 - Uses analytic reasoning and activation of prior knowledge to guide process.
- Patient-centered skills:
 - Demonstrates patient-centered interview skills (attentive to patient verbal and nonverbal cues, patient/ family culture, social determinants of health, need for interpretive or adaptive services; demonstrates active listening skills).
 - Demonstrates patient-centered examination techniques that reflect respect for patient privacy, comfort, and safety (that is, explaining physical exam maneuvers, telling the patient what the physician is doing at each step, keeping patients covered during the examination).

Step 6: Link to Residency Milestone 1, Level 1 and 2

General EPA 1: Gather a history



- -Obtain a complete and accurate history in an organized fashion
- -Demonstrate patient-centered interview skills
- -Identify pertinent history elements
- -Obtain focused, pertinent histories in urgent, emergent, consultative settings
- -Consider cultural and other factors that may influence patient's care
- -Identify alternate sources of info
- -Demonstrate clinical reasoning
- -Demonstrate cultural awareness and humility and awareness of bias

ObGyn Specific EPA 1: Gather a personal and family history of gynecologic cancers or related cancers

Milestone 18: Healthcare Maintenance and Disease Prevention—Medical Knowledge Level 1:

- -Demonstrates knowledge of the characteristics of a good screening test
- -Demonstrates knowledge of indications and limitations of commonly used screening tests

Level 2:

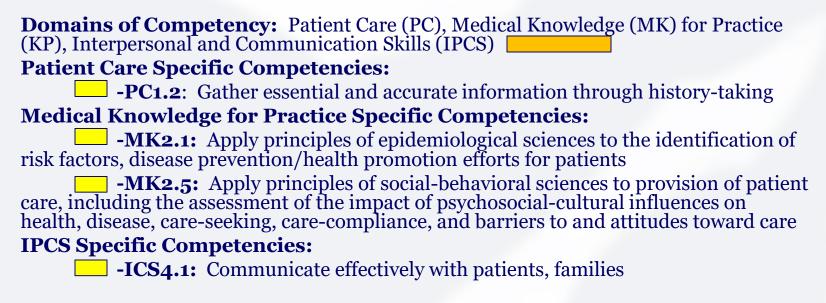
- -Demonstrates knowledge of evidence-based, age-appropriate guidelines for women's health maintenance and disease prevention (breast screening, cervical cancer screening)
- -Recommends age-and risk-appropriate vaccinations

Level 3:

- -Interprets age- and risk-appropriate tests (DEXA, MMG, lipids, thyroid)
- -Develops patient-centered management plans to maintain health and prevent disease

A UME example

OB/GYN Example



Assessment: Observation of student by supervising physician with checklist to ensure all aspects are covered.

Number of entrustable-level observations required for entrustability: at least one cancer history from each of 3 assessment faculty

Level of situational complexity: short, focused history, ambulatory clinic, caring for a panel of 3 patients in a session. Low level of complexity.

A UME example

Step 7: Write your description, vignette, mini curriculum

Our description/vignette of an entrustable learner for the ObGyn Specific EPA 1 of gathering a personal and family history of gynecologic cancers or related cancers might be:

Asks patient about personal history of vulvar, vaginal, cervical, uterine, FT/ovary, or breast, or colon cancer.

Asks patient about family history of vulvar, vaginal, cervical, uterine, FT/ovary, or breast cancer. Ask age of diagnosis for family members with cancer.

Asks about relationship of family member with cancer to patient, i.e. first degree relative.

Asks about risk factors for HPV related cancer: age at first intercourse, number of sexual partners, history of STDs, HPV vaccination, history of abnormal pap smears, colposcopy, and cervical procedures.

Asks about risk factors for uterine cancer, i.e. early menarche, late menopause, infertility, PCOS, obesity, unopposed estrogen exposure, family history of uterine/colon cancer

Asks about risk factors for FT/ovary cancer, i.e. early menarche, late menopause, infertility, endometriosis, family history of breast/ovarian cancer, symptoms of ovarian cancer (ovarian cancer symptom index)

Asks if patient is up to date on screening pap, mammogram, colonoscopy according to age group recommendations.

Asks about any abnormal results, endometrial biopsy, pelvic ultrasound with a thickened stripe, abnormal ovary, abnormal mammogram or colonoscopy or additional tests such as breast MRI, breast US, breast biopsy.

Demonstrates clinical reasoning and recommends appropriate screening based on age, risk factors, i.e. pap/HPV testing, HPV vaccine, MMG, colonoscopy.

Demonstrates clinical reasoning and identifies patients who may be at risk for a genetic syndrome, BRCA or Lynch and recommends genetic counseling.

Obtain a complete and accurate history in an organized fashion using patient-centered interview skills Utilizes other sources of information, operative reports, pathology reports, family members to obtain the most accurate and thorough history.

A UME example



A GME example

GME Example

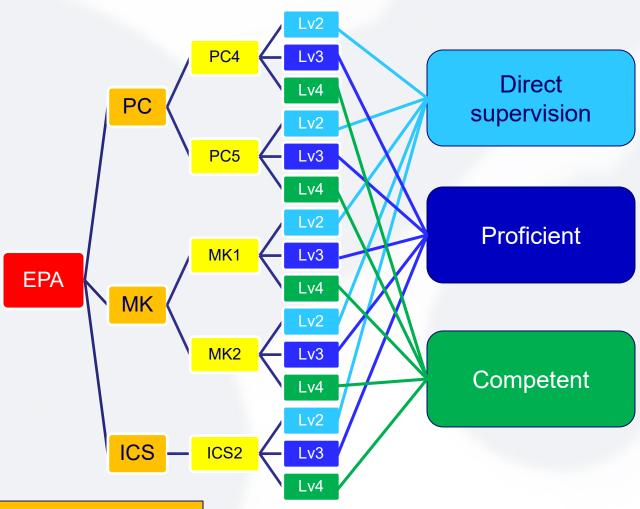
• Title: Perform an intraoperative consultation/Frozen section



Mapping EPAs to ACGME Milestones

- 1. *Patient Care (PC)
- 2.* Medical Knowledge (MK)
- 3. Practice-Based Learning and Improvement (PBLI)
- 4. Professionalism (PROF)
- 5.* Interpersonal and Communication Skills (ICS)
- 6. Systems-Based Practice (SBP)

Relationships of EPAs, Competencies, Subcompetencies, and Milestones



Patient care (PC)
Medical Knowledge (MK)
Interpersonal Communication Skills (ICS)

A GME example

Level of Entrustment vs Milestone

ENTRUSTMENT LEVEL

MILESTONE LEVEL

Observing the activity

Acting with direct supervision in the room

Acting with supervision available within minutes

Acting unsupervised (i.e. Clinical Oversight)

Independent practice /supervision others

Novice (Pre-entrustable)

Entrustable/Proficient

Competent/Expert

GME

Pathology Example: Frozen

- 1. Properly identify patient specimen before and throughout the frozen section/intraoperative consultation process (PC5)
- 2. Determine correct method of tissue preparation needed (e.g., frozen section, cytologic preparation, gross evaluation, etc.) (MK1, PC5)
- 3. Sample tissue appropriately for diagnosis and/or evaluation of margins (MK1, PC5)
- 4. Prepare (e.g., cut frozen sections on cryostat, perform cytologic touch preparations) and stain slides for microscopic evaluation (PC₅)
- 5. Evaluate and interpret microscopic findings (MK1, MK2, PC4, PC5)
- 6. Communicate diagnosis, including limitations of technique or interpretation in a timely manner (ICS2)
- 7. Apportion tissue for special studies if needed and prepare tissue in appropriate fixative or media for transport, storage, or further processing (MK1, PC5)

A GME example



Incorporating EPAs across training

(the big picture)

Learner Portfolio Report Card

Portfolio of: Learner Jones	MS1		MS2		MS3		MS4		PGY1		PGY2		PGY3	
EPA A	1	2	3	3	3	3	3	3	4	4	4	5	5	5
EPA B	1	1	2	3	3	3	3	3	3	4	4	4	5	5
EPA C	1	1	1	2	2	3	3	3	3	3	4	4	4	5
EPA D	1	1	1	1	1	2	2	2	3	3	3	4	4	5

Manageable # of EPAs for 4 year program=20-30

- 1. Observing the activity
- 2. Acting with direct supervision in the room
- Acting with supervision available within minutes
- 4. Acting unsupervised (i.e. Clinical Oversight)=Proficient
- 5. Independent practice / Supervising others

Summary/Next Steps

- General Advantages
 - Align assessment with learner action/faculty observation (nothing is implied)
 - Describe specific expectations
 - Promotes SMART (formative) feedback
 - EPAs introduce TRUST and its implication for level of supervision
 - Entrustment rating
 - Summative feedback
- Learner Advantages
 - A well-written EPA is a mini-curriculum, outline K/S/A/B to complete an activity
 - Clear expectations of "competent"
 - Entrustment assessments make it clear when learner can advance to more graduated responsibility
- Evaluator Advantages
 - Promotes direct observation of learner
 - Checklist of K/S/A/B to observe, allows for SMART feedback
 - Overall "Entrustment Score"
 - Multiple evaluations can inform when learner can advance to more graduated responsibilities or decreased supervision

Questions





References

- Englander R, Flynn T, Call S, Carraccio C, Cleary L, Fulton T, etc. Toward Defining the Foundation of the MD Degree: Core Entrustable Professional Activities for Entering Residency. Academic Medicine. October 2016;91, No. 10:1352-1358
- Englander R, Carraccio C. From Theory to Practice: Making Entrustable Professional Activities Come to Life in the Context of Milestones. Academic Medicine. October 2014;89, No 10:1321-1323
- Cate O. AM Last Page: What Entrustable Activities Add to a Competency-Based Curriculum. Academic Medicine. April 2014;89, No. 4:691
- Englander R, Cameron T, Ballard A, Dodge J, Bull J, Aschenbrener C. Toward a Common Taxonomy of Competency Domains for the Health Professions and Competencies for Physicians. Academic Medicine. August 2013;88, No. 8:1088-1094
- AAMC Core Entrustable Professional Activities for Entering Residency, Faculty and Learner's Guide