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Tomorrow's Doctors, Tomorrow's Cures

Learn
Serve
Lead

Update from the AAMC Core EPA Pilot:

EPA Toolkits for curricular interventions, student engagement, faculty development, and assessment modalities.

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Association of American Medical Colleges

Session Structure

- Large group presentation (25 min)
  - Core EPA Concepts and Pilot Overview
  - Supervision Level Assessment
  - One-page EPA schematics
  - Clerkship Practical Implementation
- Q & A (10 min)
- Small group work (20 min)
  - Using the provided toolkit, how might you incorporate the EPA framework for
    - curricular interventions
    - student engagement
    - faculty development
    - student assessment
- Report out from small groups (20 min)
- Wrap up and next steps (15 min)

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Ensuring Learners are Prepared to Transition to Graduate Medical Education

Premedical

Medical School

Residency and Fellowships

Practice

Core Entrustable Professional Activities for Entering Residency

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Competency-based Education:

“What are the abilities needed of graduates?”

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Van Melle's Core Components of CBME

CBME Critical Activities

FRAMEWORK	Competencies required for practice are clearly articulated
PROGRESSION	Competencies and their developmental markers are sequenced progressively
TAILORED EXPERIENCES	Authentic, work-based learning environments organized to facilitate the developmental acquisition of competencies
COMPETENCY-FOCUSED INSTRUCTION	Teachers who act as coaches in a way that promotes the developmental acquisition of competencies
PROGRAMMATIC ASSESSMENT	Assessment practices support & document the developmental acquisition of competencies

ICBME COLLABORATORS

www.royalcollege.ca/rcsite/documents/.../competency-based-education-vanmelle.pdf

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Entrustable Professional Activities = EPAs

…a task of professional practice that can be entrusted to a sufficiently competent learner…

- Observable
- Pragmatic
- Authentic
- Individual
- Level of supervision

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Competencies vs EPAs

Competencies	EPAs
• An individual professional's abilities • Knowledge, skills, attitudes	• A discipline's essential professional work tasks • Abilities at a stage of development
E.g. ACGME, CanMEDS, UK GMP, etc.	E.g. AAMC: Conduct a hx & px (1), Present a case orally (6)
A spectrum	A progression

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Entrustment

A decision to delegate a task with a defined level of supervision

- Ad-hoc entrustment = daily
- Summative entrustment = formal

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Entrustment

Categories that MAY Impact **Ad Hoc** Entrustment Decisions

1) The TRAINEE
2) The SUPERVISOR
3) The CONTEXT/CIRCUMSTANCE
4) The TASK or ACTIVITY
5) The RELATIONSHIP between Trainee-Supervisor

ten Cate et al. (2016) *Acad Med*

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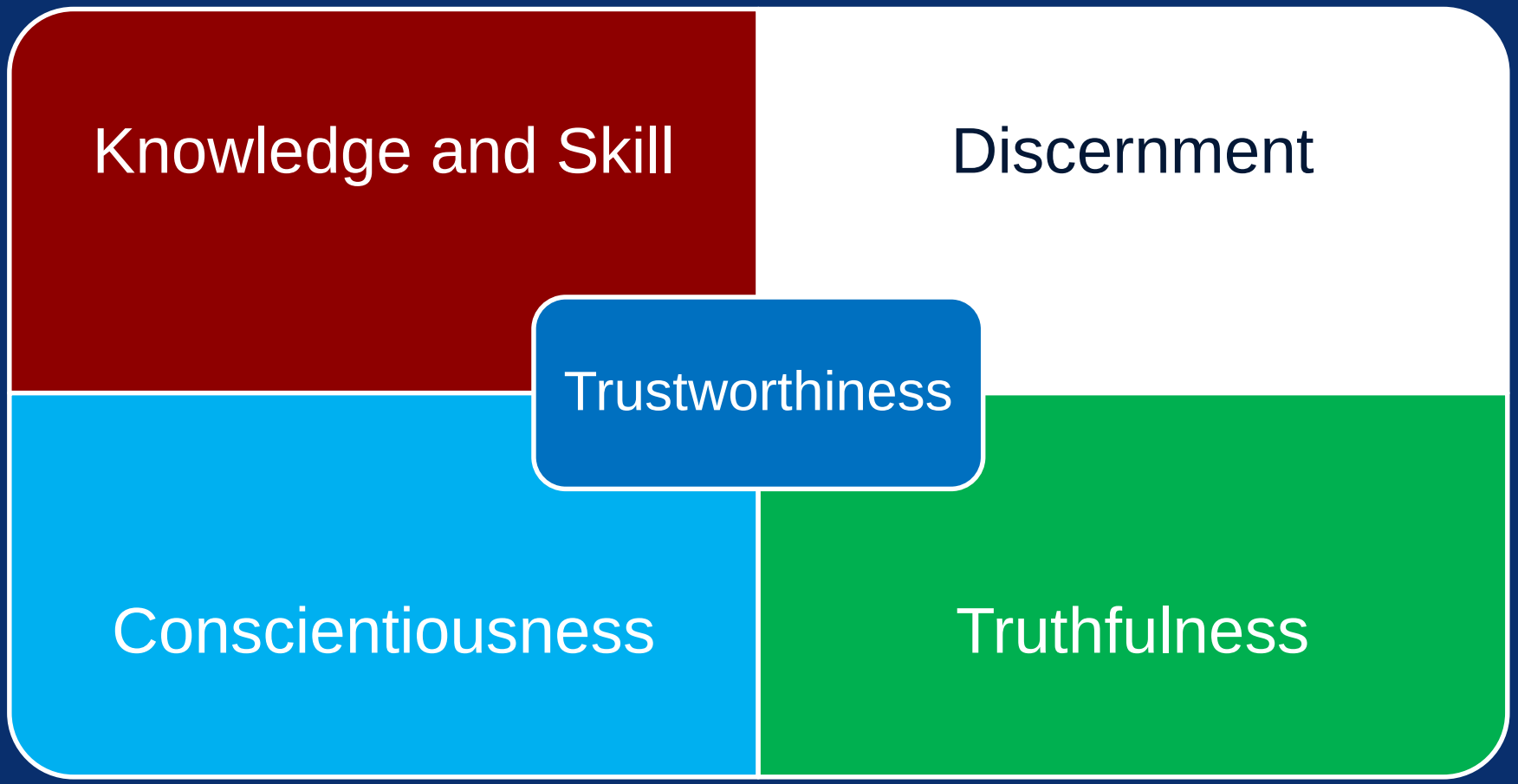
Trustworthiness of the Learner



Kennedy et al. (2008) *Acad Med*

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Trustworthiness: Foundational to performance of all EPAs[1]

Entrustment for any EPA
Is the point at which learners possess the requisite knowledge, skills, and attitudes needed to perform the EPA and demonstrate specific elements of trustworthiness

Trustworthy Habits

Underlying entrustability for all EPAs are trustworthy habits including truthfulness, conscientiousness and discernment.[2]

Key Functions	Behaviors Requiring Corrective Response	→ Developing Behaviors → (Learner may be at different levels within a row)		Expected Behaviors for an Entrustable Learner
Discernment: Awareness of the limits of one's clinical knowledge and skill	Does not seek or acknowledge limits Overly confident Jumps to conclusions	Seeks to understand one's own role and how/when to seek help	Demonstrates understanding of one's own role, its limits, and how and when to seek help	Accepts advancing responsibility while appropriately recognizing one's own limits and seeking help when needed
Conscientiousness: Thoroughness and dependability in following through with assigned tasks	Neglects to follow protocols Is disorganized or neglects important details Fails to follow through	Follows a simple template or guide Is unable to apply past experience. May have difficulty conceptualizing information Generally completes assigned tasks on time.	Applies a variety of simple templates and guides Is able to organize aspects of common situations, though may still become disorganized with increased load or complexity Consistently completes assigned tasks on time.	Follows protocols in a variety of different clinical contexts Is mostly organized. Identifies and prioritizes tasks, though may demonstrate lapses in times of stress Is self-motivated. Almost always completes duties thoroughly and on time
Truthfulness: Demonstrate an appropriate balance of truth and tact	Misleads, misrepresents, or purposefully omits important information Appears willfully insensitive	Does not demonstrate deceit, though may not understand what information needs to be shared May lack tact or be insensitive to the effects of the truth	Is truthful Demonstrates Sensitivity	Is a trusted source of relevant, accurate information Conveys important truths sensitively even when unwelcome

References: 1. Brown, Warren, Hyderi, et al. Acad Med. 2017;92:774–779. 2. Kennedy, Reger, Baker, Lingard. Acad Med. 2008 Oct;83(10 Suppl):S89-92.

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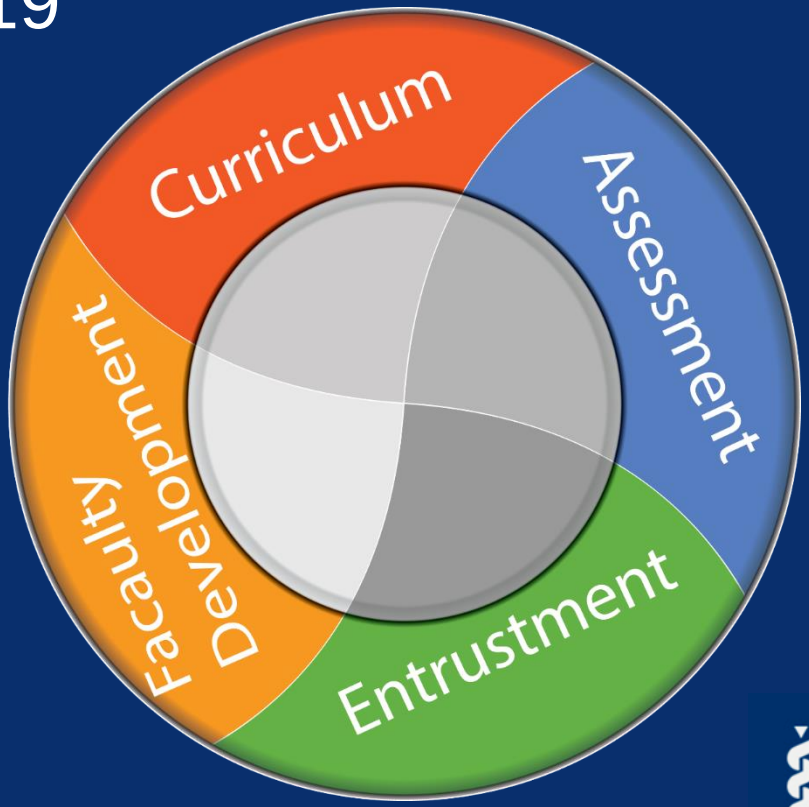
Core EPA Implementation Pilot

- Pilot group first assembled in Washington, DC in October 2014
- Implemented initial student activities in 2015 for those graduating in 2019
- Targeting summative entrustment decisions for that same cohort graduating in 2019



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Core EPA Pilot Guiding Principles

1) Systems Approach
2) Measure Attributes of Trustworthiness
3) Longitudinal View of Performance
4) Multimodal Performance Evidence
5) Incorporate Ad Hoc Entrustment Decisions
6) Entrustment Committee Process
7) Formative Feedback
8) Engaged Learners
9) Standardized Expectations

Brown et al. (2017) *Acad Med*

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Supervisory Scale

Based on this student's performance, the level of supervision this student currently requires is:

- ❑ **"Watch me do this"**
- ❑ **"Let's do this together"**
- ❑ **"I'll watch you"**
- ❑ **"You go ahead, and I'll double-check all of your findings"**
- ❑ **"You go ahead, and I'll double-check key findings."**

https://www.aamc.org/initiatives/coreepas/publicationsandpresentations/

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Ad Hoc Trust > Independence

Coactivity Scale

How Much Supervision Did the Learner Require for this Team Activity?

- ❑ "I did it"
- ❑ "I talked them through it"
- ❑ "I directed them from time to time"
- ❑ "I was available just in case"

https://www.aamc.org/initiatives/coreepas/publicationsandpresentations/

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Summative Entrustment Decisions

School-Specific Attributes that Facilitated Implementation of Guiding Principles:

1) Structures for longitudinal relationships
2) Portfolios that allow tracking of competency data
3) Analytic systems that allow the aggregation of competency assessment data into dashboards
4) Learner handovers across educational settings within UME

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Pilot best practices and next steps

- Ad hoc workplace-based assessment (WBA) via mobile technology
- E-repository
- Dashboards
- Narrative data
- Attention to entrustment committee structures and processes

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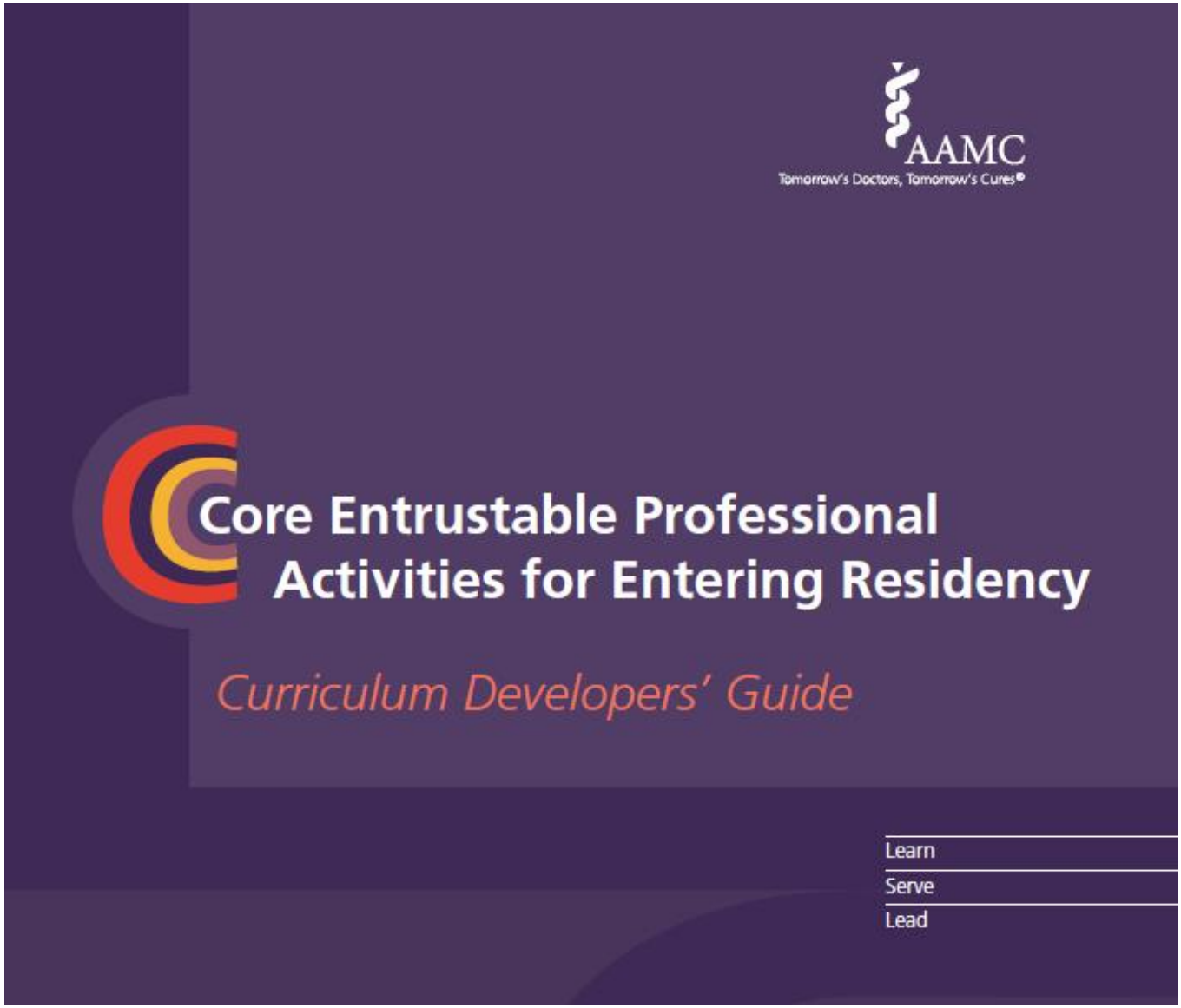
We started with…



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And now…

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EPA 6: Provide an Oral Presentation of a Clinical Encounter

An EPA: A unit of observable, measurable professional practice requiring integration of competencies

EPA 6

Provide an oral presentation of a clinical encounter

Underlying entrustability for all EPAs are trustworthy habits, including truthfulness, conscientiousness, and discernment.

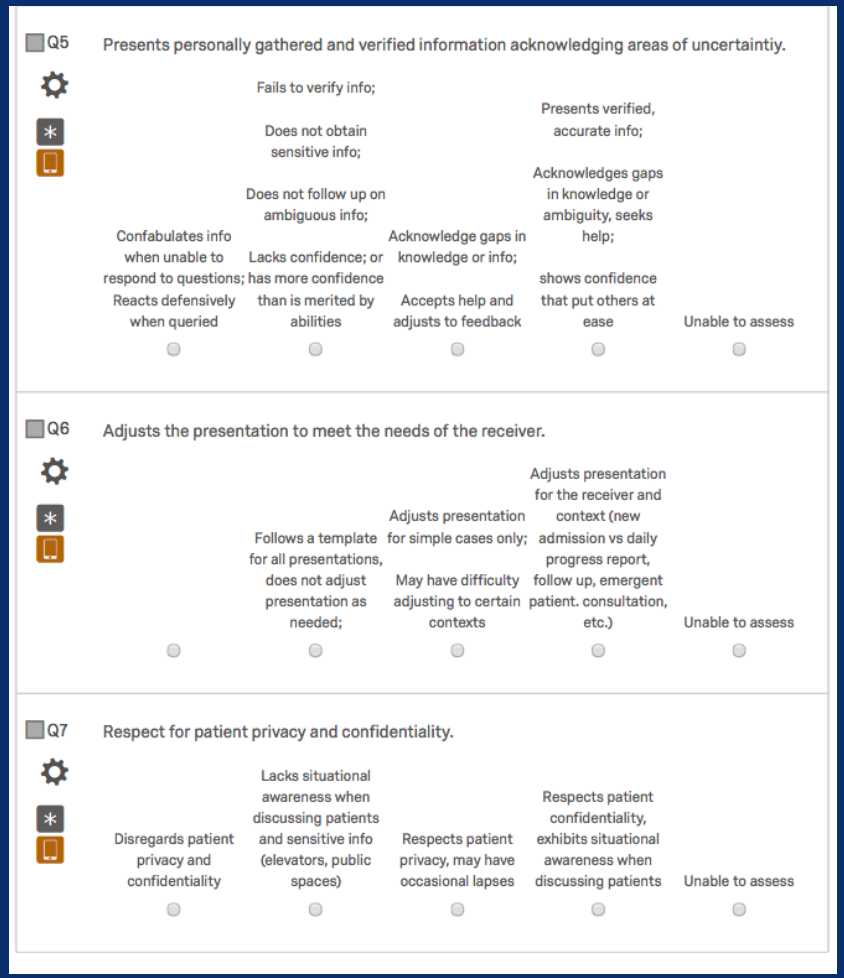
This schematic depicts development of proficiency in the Core EPAs. It is *not* intended for use as an assessment instrument. Entrustment decisions should be made after EPAs have been observed in multiple settings with varying context, acuity, and complexity and with varying patient characteristics.

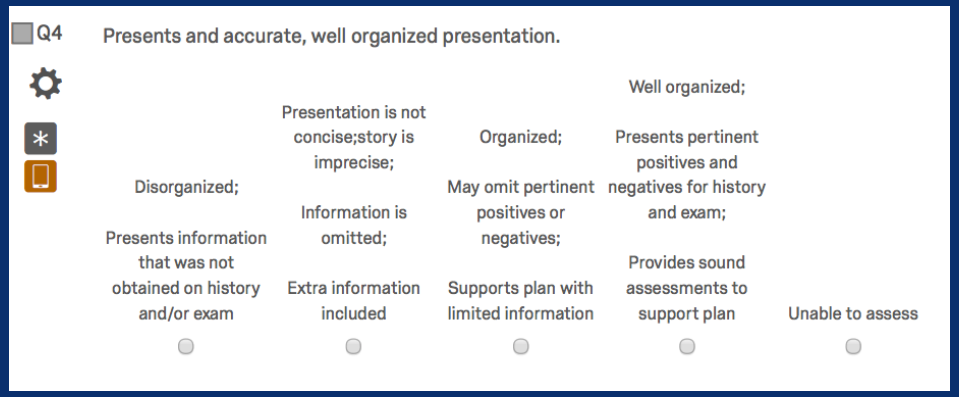
Key Functions with Related Competencies	Behaviors Corrective Requiring Response	→ Developing Behaviors → (Learner may be at different levels within a row.)		Expected Behaviors for an Entrustable Learner
Present personally gathered and verified information, acknowledging areas of uncertainty **PC2 PBL1 PPD4 P1**	Fabricates information when unable to respond to questions Reacts defensively when queried	Gathers evidence incompletely or exhaustively Fails to verify information Does not obtain sensitive information	Acknowledges gaps in knowledge, adjusts to feedback, and then obtains additional information	Presents personally verified and accurate information, even when sensitive Acknowledges gaps in knowledge, reflects on areas of uncertainty, and seeks additional information to clarify or refine presentation
Provide an accurate, concise, well-organized oral presentation **ICS2 PC6**	Presents in a disorganized and incoherent fashion	Delivers a presentation that is not concise or that wanders Presents a story that is imprecise because of omitted or extraneous information	Delivers a presentation organized around the chief concern When asked, can identify pertinent positives and negatives that support hypothesis Supports management plans with limited information	Filters, synthesizes, and prioritizes information into a concise and well-organized presentation Integrates pertinent positives and negatives to support hypothesis Provides sound arguments to support the plan
Adjust the oral presentation to meet the needs of the receiver **ICS1 ICS2 PBL1 PPD7**	Presents information in a manner that frightens family	Follows a template Uses acronyms and medical jargon Projects too much or too little confidence	When prompted, can adjust presentation in length and complexity to match situation and receiver of information	Tailors length and complexity of presentation to situation and receiver of information Conveys appropriate self-assurance to put patient and family at ease
Demonstrate respect for patient's privacy and autonomy **P3 P1 PPD4**	Disregards patient's privacy and autonomy	Lacks situational awareness when presenting sensitive patient information Does not engage patients and families in discussions of care	Incorporates patient's preferences and privacy needs	Respects patients' privacy and confidentiality by demonstrating situational awareness when discussing patients Engages in shared decision making by actively soliciting patient's preferences

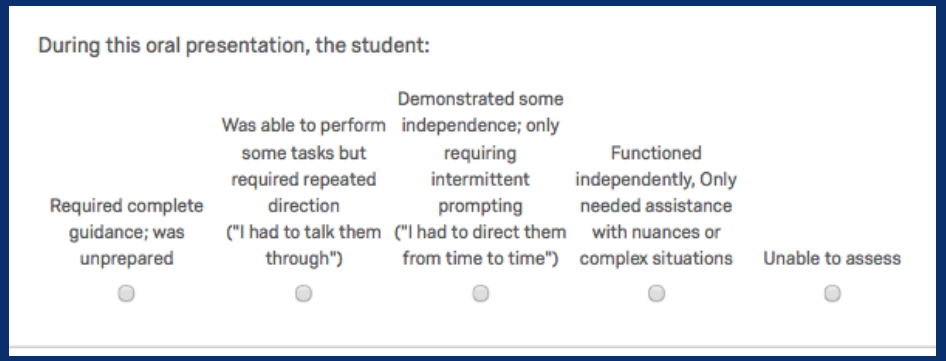
FM Clerkship Implementation at FIU

- Pilot with EPA 1, 6, 9, 11
- Adhoc brief assessments using iPads
- Student training: During clerkship orientation, midpoint feedback meetings
- Faculty training: Via newsletter, emails, in person visits using EPA one-pager overview
- Supervisory scale also included in our clerkship clinical assessment

FM Clerkship Implementation at FIU







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EPA 4: Enter and Discuss Orders and Prescriptions

An EPA: A unit of observable, measurable professional practice requiring integration of competencies

EPA 4

Enter and discuss orders and prescriptions

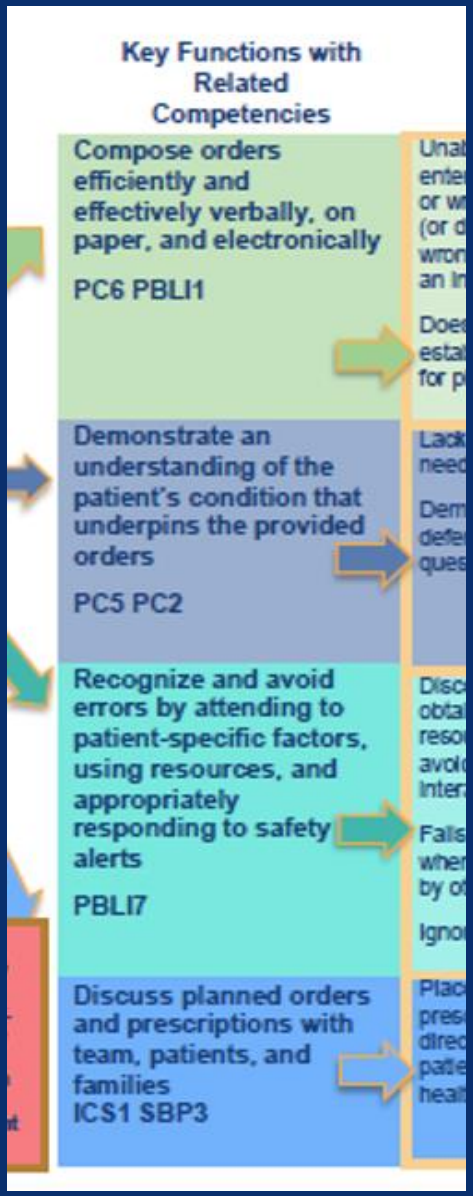
Underlying entrustability for all EPAs are trustworthy habits, including truthfulness, conscientiousness, and discernment.

This schematic depicts development of proficiency in the Core EPAs. It is *not* intended for use as an assessment instrument. Entrustment decisions should be made after EPAs have been observed in multiple settings with varying context, acuity, and complexity and with varying patient characteristics.

Key Functions with Related Competencies	Behaviors Requiring Corrective Response	→ Developing Behaviors → (Learner may be at different levels within a row.)		Expected Behaviors for an Entrustable Learner
Compose orders efficiently and effectively verbally, on paper, and electronically **PC6 PBLI1**	Unable to compose or enter electronic orders or write prescriptions (or does so for the wrong patient or using an incorrect order set) Does not follow established protocols for placing orders	Does not recognize when to tailor or deviate from the standard order set Orders tests excessively (uses shotgun approach) May be overconfident, does not seek review of orders	Recognizes when to tailor or deviate from the standard order set Completes simple orders Demonstrates working knowledge of how orders are processed in the workplace Asks questions, accepts feedback	Routinely recognizes when to tailor or deviate from the standard order set Able to complete complex orders requiring changes in dose or frequency over time (e.g., a taper) Undertakes a reasoned approach to placing orders (e.g., waits for contingent results before ordering more tests) Recognizes limitations and seeks helps
Demonstrate an understanding of the patient's condition that underpins the provided orders **PC5 PC2**	Lacks basic knowledge needed to guide orders Demonstrates defensiveness when questioned	Has difficulty filtering and synthesizing information to prioritize diagnostics and therapies Unable to articulate the rationale behind orders	Articulates rationale behind orders May not take into account subtle signs or exam findings guiding orders	Recognizes patterns, takes into account the patient's condition when ordering diagnostics and/or therapeutics Explains how test results influence clinical decision making
Recognize and avoid errors by attending to patient-specific factors, using resources, and appropriately responding to safety alerts **PBLI7**	Discounts information obtained from resources designed to avoid drug–drug interactions Fails to adjust doses when advised to do so by others Ignores alerts	Underuses information that could help avoid errors Relies excessively on technology to highlight drug–drug interactions and/or risks (e.g., smartphone or EHR suggests an interaction, but learner cannot explain relevance)	May inconsistently apply safe prescription-writing habits such as double-check of patient's weight, age, renal function, comorbidities, dose and/or interval, and pharmacogenetics when applicable	Routinely practices safe habits when writing or entering prescriptions or orders Responds to EHR's safety alerts and understands rationale for them Uses electronic resources to fill in gaps in knowledge to inform safe order writing (e.g., drug–drug interactions, treatment guidelines)
Discuss planned orders and prescriptions with team, patients, and families **ICS1 SBP3**	Places orders and/or prescriptions that directly conflict with patient's and family's health or cultural beliefs	Places orders without communicating with others; uses unidirectional style ("Here is what we are doing...") Does not consider cost of orders or patient's preferences	Modifies plan based on patient's preferences May describe cost-containment efforts as externally mandated and interfering with the doctor–patient relationship	Enters orders that reflect bidirectional communication with patients, families, and team Considers the costs of orders and the patient's ability and willingness to proceed with the plan

Mejicano, G, Ryan, M, Vasilevskis, EE., Obeso V, Brown D, Phillipi C, eds.; for Core EPAs for Entering Residency Pilot Program

FM Clerkship Implementation at OHSU



EHR ICS5 OHSU Family Medicine Clinical Experience Competency Tool

Family Medicine Core Courses

Student Name_____

OHSU SOM Competency: Interpersonal and Communications Skills #5

Effectively access, review, and contribute to the electronic health record (EHR) for patient care and other clinical activities

Pre-Entrustable	Entrust
May neglect to review parts of the EHR or verify its accuracy with external sources. May neglect to inform the team of EHR errors or omissions. Documentation in early development, and may be incomplete, or does not routinely include all important data and/or communicate clinical reasoning. Chooses templates without adequate alteration, possibly including no longer accurate or incorrect information. Documentation may take an excessive amount of time to be finalized and submitted. May be able to verbalize desired orders, but is not reliably able to pend accurate orders in the EHR.	Consistently reviews al accuracy of the information as appropriate. Documentation is accurate and comprehensive and tailored t are tailor informati consistently is able to pend accurate and appropriate orders. Clinical reasoning is well documented. Documentation is complet fashion.

Measure: Diabetes Workshop Simulated Electronic Health Record Chart Work and Notes

Element of EHR clinical activity	Unsatisfactory		
1. Completed in timely fashion **(must pass)**	☐		
2. Reviewed past labs and included them in medical decisions (2 points*)	☐		
3. Reviewed history and accurately updated in chart	☐	☐	☐
4. Reviewed allergies and documented	☐		
5. Documented vitals in note	☐		
6. Lab orders accurately ordered/pended	☐		
7. Immunizations accurately ordered/pended	☐	☐	☐
8. Medications for treatment accurately ordered/pended			
9. Problem list of EHR accurately updated			
10. Clinical reasoning well documented **(must pass)**			
11. Documentation was accurate, comprehensive, and specific to patient	☐	☐	☐
12. Templates tailored: include only accurate and pertinent information			
13. Follow up plan documented			
14. Clear lay language patient instructions written (2 Points*)			

Scoring: Satisfactory= 1 point, Some Evidence= ½ Point. To pass: Satisfactory completion of [illegible]

Notes:

Review Past Labs

Review/Update History

Review Allergies

Labs Ordered

Meds Ordered

Clinical Reasoning

Patient Explanation

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FM Clerkship Implementation at OHSU

- SOM curriculum transformation to competency based model
- Shortened core from 5-4 weeks
- Clerkships asked to define their contribution to the curriculum in outcomes language
- *Upon completion of the FM clerkship, all students will possess a thorough, deep and personal understanding of the specialty of Family Medicine.*
  - *Competencies and Educational Activities (EAs)*
  - *Current and new educational sessions to "double dip"*
  - *Common CBE framework lead to easy integration with institutional and national CBE efforts*

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Break into groups…..

- Take one minute per person to introduce yourself and summarize where you and your organization are in regards to the EPAs
- Using the provided toolkit, how might you incorporate the EPA framework for curricular interventions, student engagement, faculty development, and student assessment
- View Toolkits: https://www.aamc.org/initiatives/coreepas/publicationsandpresentations/

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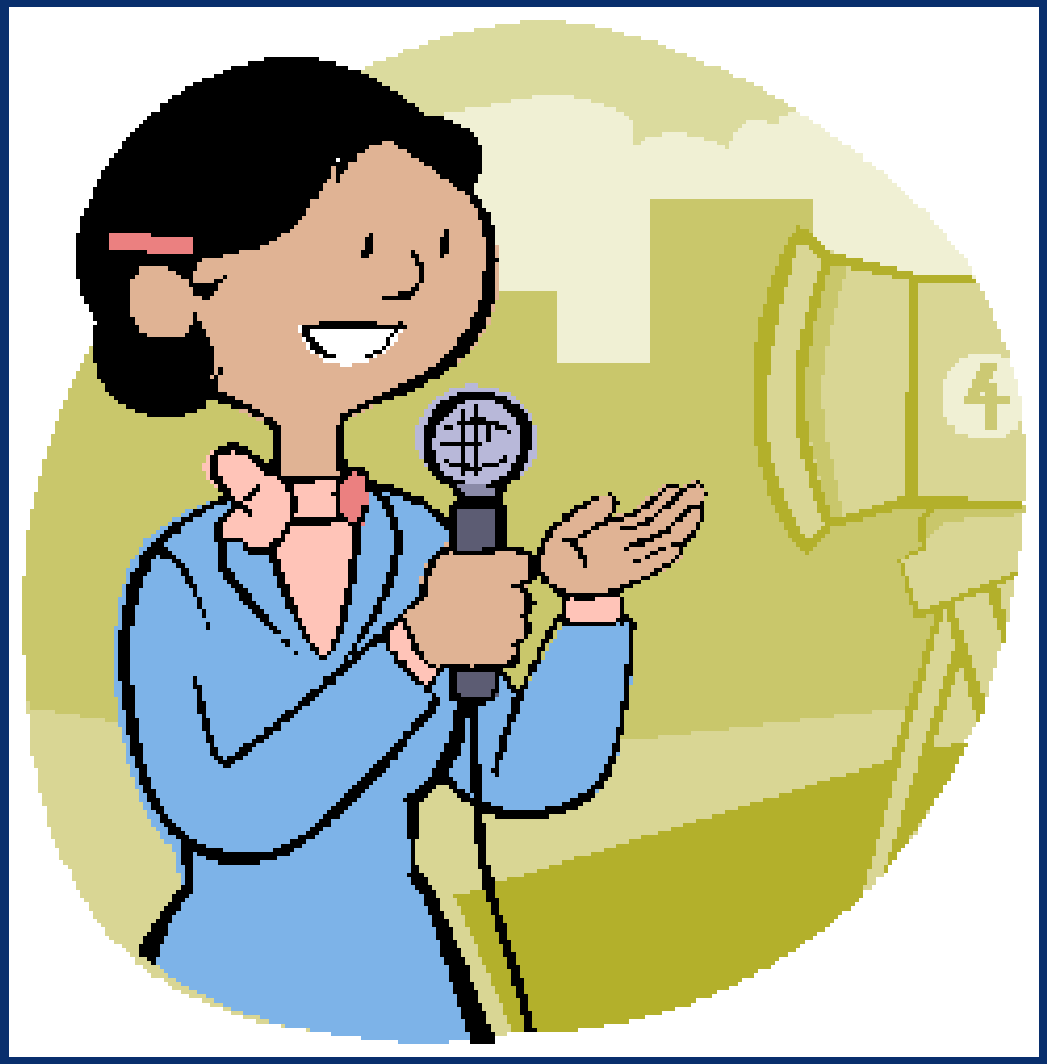
Report out



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Wrap-up and Q and A

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AAMC Core EPA Resources

https://www.aamc.org/initiatives/coreepas/publicationsandpresentations/

EPA Toolkits including one-page schematics
Supervisory Scale Task Force Report
Manuscripts

To subscribe to the AAMC Core EPA listserve, send a blank email to subscribe-coreepas@lists.aamc.org

Acknowledgment: Pilot Schools

- Columbia University College of Physicians and Surgeons
- Florida International University Herbert Wertheim College of Medicine
- Michigan State University College of Human Medicine
- New York University School of Medicine
- Oregon Health & Science University School of Medicine
- University of Illinois College of Medicine
- University of Texas Health Science Center at Houston
- Vanderbilt University School of Medicine
- Virginia Commonwealth University School of Medicine
- Yale School of Medicine

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