Designing a Curriculum and Program of Assessment around EPAs

Rocky Vista University College of Osteopathic Medicine – Physician Assistant Program

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OVERVIEW

- RVU is in the process of developing a Physician Assistant (PA) program.
- Teaching methods and assessments will be designed using the entrustable professional activities (EPAs) identified by the AAMC as a template.
- PA and osteopathic professional competencies will be woven throughout the curriculum to ensure integration of philosophies.

INTRODUCTION

- There is a world-wide shift toward competency-based medical education.
- EPAs provide a framework from which to assess competence.
- Because residency training for allopathic and osteopathic programs will be merging by 2020, the AAMC is working collaboratively with AACOM to develop a shared list of EPAs.
- PA training follows the medical model; as RVU COM embarks upon the creation of a new PA program, it is utilizing the proposed shared EPA framework to design its entire curriculum.

METHODS

- Each of the course objectives within the PA curriculum is created based on the proposed shared EPAs.
- Expectations for learner progress are identified in each objective and are grounded in the 5-level milestone descriptors, as designated by Dreyfus. (Figure 1)
- Instructional design for each course is based on the tasks measured. For example, in courses where clinical skills competencies are most prevalent (history taking, physical exam, etc.), the course utilizes a lab format and simulation.
- Assessments will be constructed according to the milestones associated within each EPA, and appropriate to each courses' instructional design. (Table 1)

RESULTS

Figure 1. Sample Objectives from a Skills & Assessment Course in which Bloom's level taxonomy, Dreyfus levels and EPAs are identified.

- Identify pertinent history elements in common acute and chronic clinical presentations as measured by the assessment rubric for patient care sub-competency history-taking (PC 2.1); Level 1 or Level 2. (B1) EPA 1
- Identify and give examples of cultural and behavioral factors that may influence a patient's description of symptoms as measured by the assessment rubric for professionalism (PRO-6); Level 1 or Level 2. (B1, B2) EPA 1

DOMAIN: Patient Care

Competency: PC-2 - Gather essential and accurate information about patients and their conditions through history taking, physical examination and review of the medical record.

Sub-competency - 2.1 History-Taking

Level 1 (novice)	Level 2 (advanced beginner)	Level 3 (competent)	Level 4 (proficient)	Level 5 (expert)
Goal: Learner is introduced to history-taking.	Learner recalls clinical information in the order elicited; the ability to gather, filter, prioritize and connect pieces of information is limited.	Learner demonstrates the ability to filter, prioritize and synthesize information into pertinent positives and negatives, as well as broad diagnostic categories. Learner demonstrates the ability to link symptoms of current patient to those encountered previously.	Learner demonstrates the ability to prioritize and synthesize information into specific diagnostic considerations. Learner demonstrates the ability to gather essential and accurate information on most common primary care conditions.	Data gathering is driven by real-time development of a differential diagnosis early in the information-gathering process. Learner demonstrates the ability to gather essential and accurate information on all but the most complex or rare clinical problems in a targeted and efficient manner. problems.
Methods: lecture materials, reading, or small group activities. Learner observes provider(s) gathering patient history either in-person or via video means.	Observed and unobserved practice with iterative reference to reading materials and videos.	Observed and unobserved practice with iterative reference to reading materials, videos, SP and patient encounters.	Observed and unobserved practice with iterative reference to reading materials, videos, SP and patient encounters.	N/A
Primary Assessment Tools: written examination	Learner is assessed through role-play and/or Standardized Patient (SP) interactions and review of SOAP notes.	Learner is assessed through SP interactions, review of SOAP notes and/or during clinical rotations.	Learner is assessed through SP encounters, clinical preceptor observation, patient presentations, and documentation of clinical encounters.	N/A
Approaching: Learner unsuccessfully completes activities/assignments associated with introduction of information.	Learner may either gather too little information or exhaustively gather too much information regardless of chief complaint; will follow a template. Information may not be accurately documented.	Learner inconsistently integrates information, therefore may include information that is not pertinent or omit pertinent positives.	Learner inconsistently integrates information, therefore may include information that is not pertinent or omit pertinent positives – particularly with more challenging clinical diagnoses.	N/A
Meets: Learner successfully completes all activities/assignments associated with material. Passes examinations and quizzes.	Learner can name all key components of a history. Learner can take a focused history with minimal critical omissions.	Learner consistently integrates information for basic chief complaints.	Learner consistently integrates information for common primary care conditions. Learner is assessed through SP and clinical rotation interactions.	N/A

Table 1. Example of milestone progression for Patient Care competency associated with EPA 1.

- Milestone progression along each of the competencies within the 13 EPAs will be illustrated in a way that parallels the widely accepted Denver Developmental Screening Test (Table 2).
- Student performance will be plotted within each EPA and measured over time. Program expectations are that 85% of learners will reach Level 3 (competence) by late in year 2 of training.

EPA 1: Gather a History and Perform a Physical Examination											
Competency ↓	Sept-Oct	Nov-Dec	Jan-Feb	Mar-May	Jun-Aug	Sept-Oct	Nov-Dec	Jan-Feb	Mar-May	Jun-Aug	Sept-Nov
PC 2.1	1				2				3		
PC 2.2	1			2					3		
PC 2.3	1				2				3		
MK 1	1			2			3				
ICS 1	1		2						3		
ICS 5	1				2				3		
PRO 1	1	2					3				
PRO 3	1	2					3				
PRO 4	1	2							3		
PRO 6	1			2						3	
Assessment:	X	X		X	X		X		X	X	X
	Early Y1	Mid Y1		Late Y1	Early Y2		Mid Y2		Core Formative Exams		Summative Exams

Table 2. Illustration of when learners will reach each Dreyfus Level by competency. Up to 25% of learners may be at Level 1("novice") initially. The grey line at Level 2 represents the point at which 50% of learners should reach the "advanced beginner" stage; the line at Level 3 represents the point at which 75% of learners should reach "competence"; the darkest shade represents the 90th percentile.

CONCLUSION

- Competency-based medical education (CBME) more clearly delineates performance expectations of graduates. A variety of CMBE frameworks have been adopted for graduate medical education.
- While residency programs must ensure their graduates can practice medicine unsupervised and with the ability to supervise others, PA graduates must be competent to practice general medicine with distant supervision.
- The AAMC/AACOM shared EPA framework offers several advantages to PA and medical student training.
- Learner outcomes associated with competency-based curriculum design will be measured and evaluated.

REFERENCES

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