

Core Entrustable Professional Activities (EPAs) and Librarian Involvement in Competency-based Medical Education

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Association of Academic Health Sciences Libraries - Competency-Based Medical Education Task Force

What is Competency-Based Medical Education?

- ▶ CBME is a learner-centered, time-agnostic, outcomes-based approach to the design, implementation, assessment and evaluation of medical education using an organizing framework of competencies (Frank et al. 2010, Boyd et al. 2017).
- ▶ Competencies are predominantly in the literature as understood as observable and measurable abilities that, when actively integrated in practice, constitute physician competence. (Frank et al. 2010, Boyd et al. 2017).

What are Entrustable Professional Activities (EPAs)?

- ▶ Developed by AAMC in 2014
- ▶ A core group of 13 activities that all residents entering their first year of residency should be able to complete without supervision regardless of specialty.
- ▶ Based on a documented performance gap
- ▶ EPAs are “units of professional practice, defined as tasks or responsibilities that trainees are entrusted to perform unsupervised once they have attained sufficient specific competence. EPAs are *independently executable, observable, and measurable* in their process and outcome, and, therefore, suitable for entrustment decisions.” (EPA Curriculum Designer Toolkit)
- ▶ Being piloted by 10 medical schools

1

• Gather a history and perform a physical examination.

2

• Prioritize a differential diagnosis following a clinical encounter.

3

• Recommend and interpret common diagnostic and screening tests.

4

• Enter and discuss orders and prescriptions.

5

• Document a clinical encounter in the patient record.

6

• Provide an oral presentation of a clinical encounter.

7

• Form clinical questions and retrieve evidence to advance patient care.

8

• Give or receive a patient handover to transition care responsibility.

9

• Collaborate as a member of an interprofessional 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.

AAHSL CBME Taskforce Activities to Date

- ▶ 12 member task force formed Spring 2016 to evaluate how the entrustable professional activity competency framework was being implemented and potential areas of engagement for librarians in clinical competency entrustment.
- ▶ Core tasks: identify how libraries were participating in Core EPA activities and develop a methodology to characterize the nature of their participation; map EPAs to ACRL framework

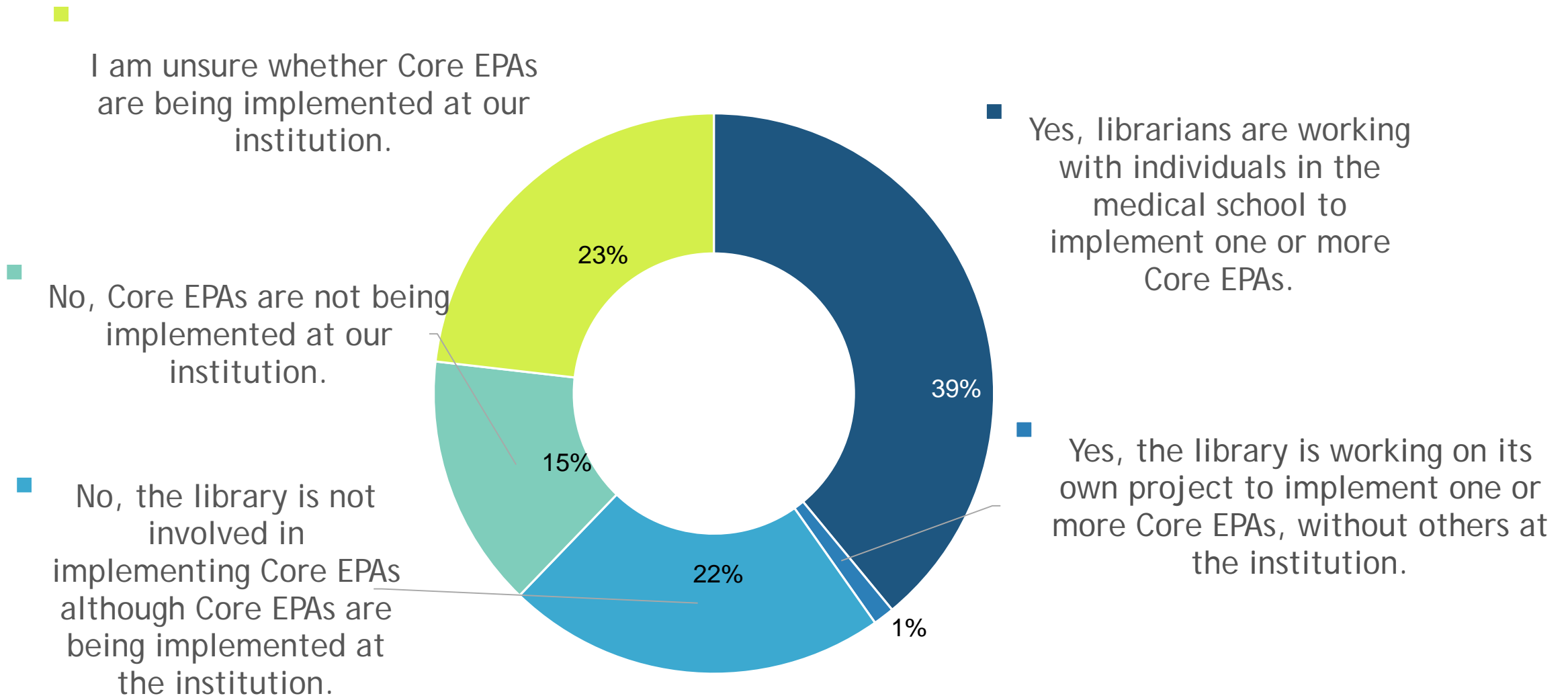
Survey Results & Analysis



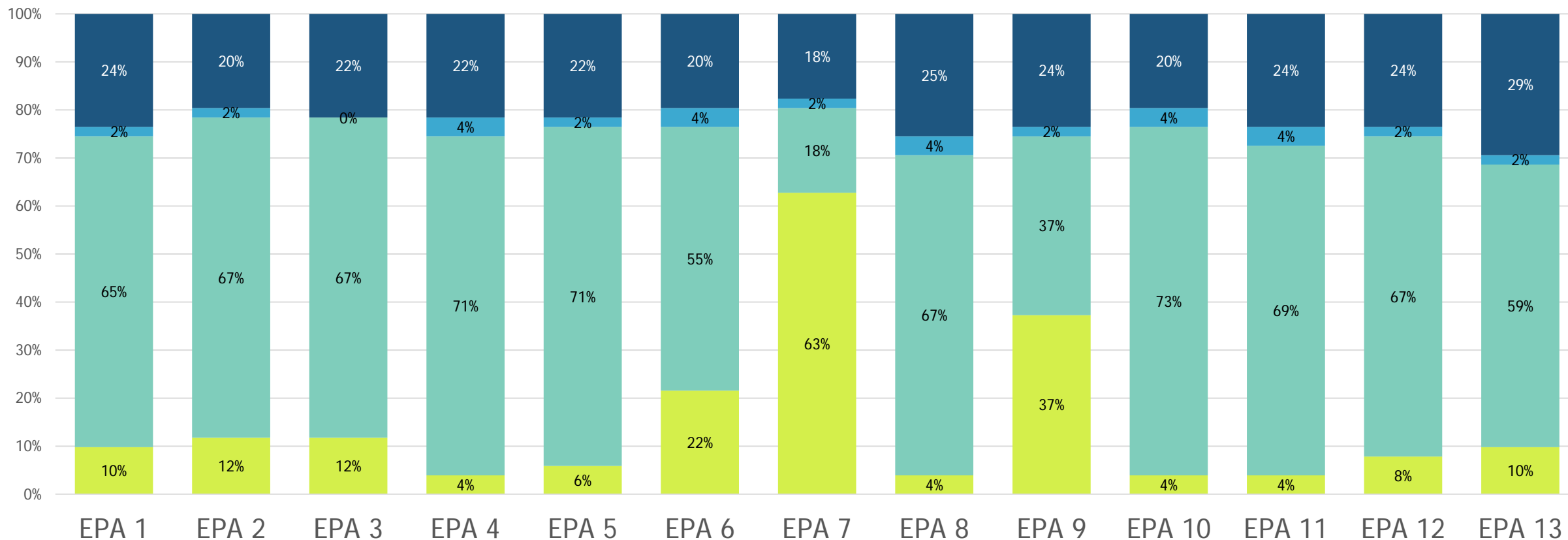
Survey

- ▶ A survey was developed in Qualtrics and sent to medical schools via the AAHSL listserv in fall of 2016.
- ▶ The survey was distributed to all 164 AAHSL member libraries in September 2016, garnering a 52% response rate or 85 members.
- ▶ Results were analyzed using SPSS and with the expertise of a statistician.

Is your library involved in implementing Core EPAs in the undergraduate medical curriculum at your medical school?



Which Core EPAs are being planned and/or implemented in the undergraduate medical curriculum at your medical school?



- Insufficient information to answer
- Not being implemented or planned at the institution
- Implemented or planned but library is not involved
- Library is involved

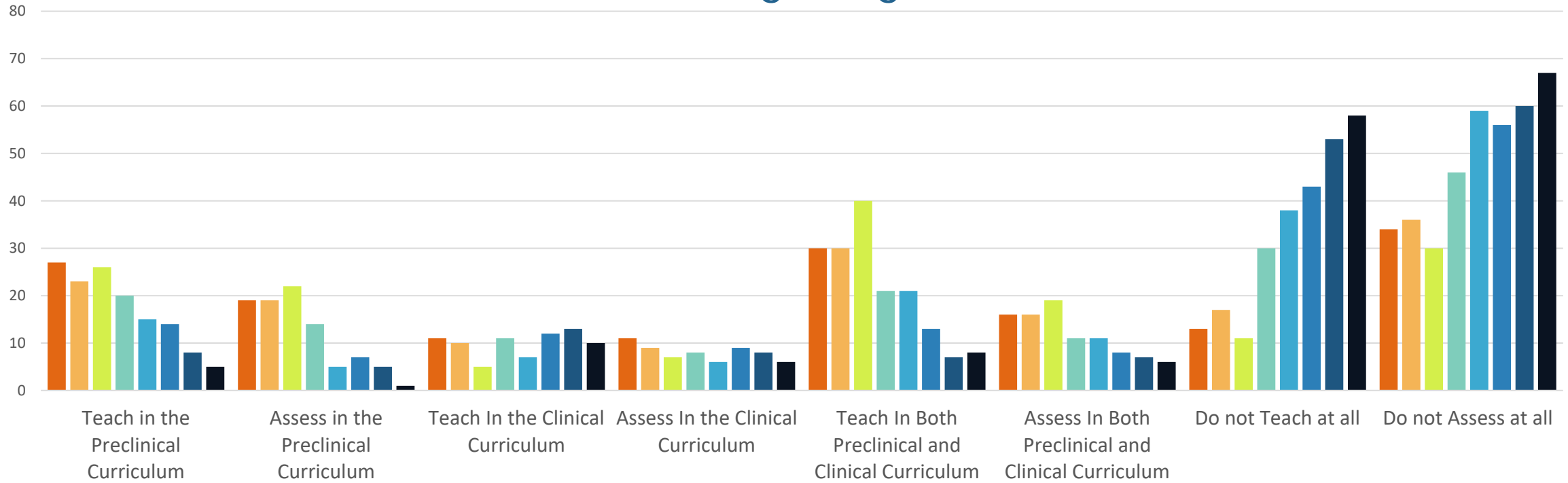
EPA 7 Description

- ▶ On day 1 of residency, it is crucial that residents be able to identify key clinical questions in caring for patients, identify information resources, and retrieve information and evidence that will be used to address those questions.
- ▶ Day 1 residents should have basic skill in critiquing the quality of the evidence and assessing applicability to their patients and the clinical context. Underlying the skill set of practicing evidence-based medicine is the foundational knowledge an individual has and the self-awareness to identify gaps and fill them.

EPA 7 Functions

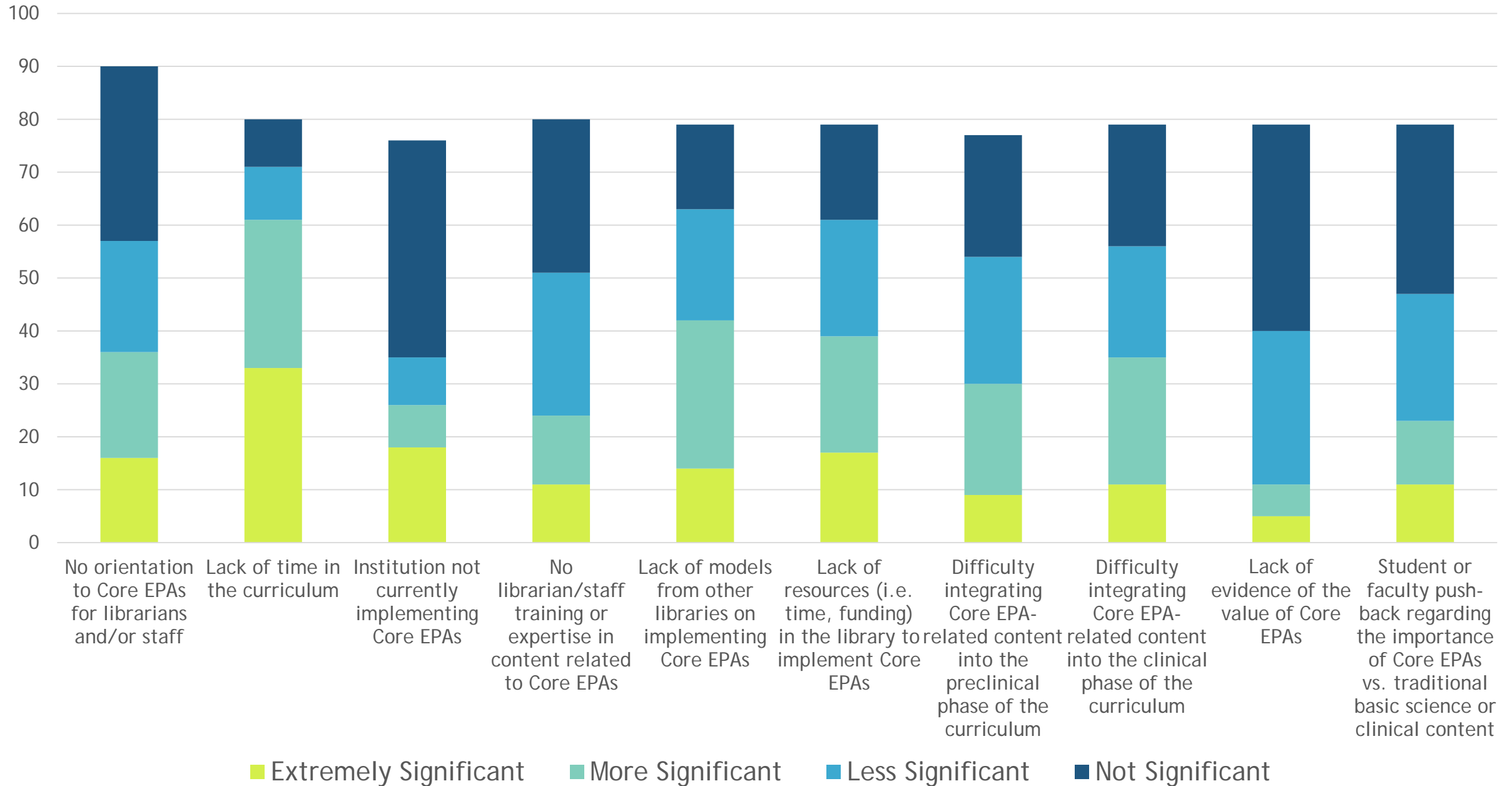
- ▶ Develop a well-formed, focused, pertinent clinical question based on clinical scenarios or real-time patient care.
- ▶ Demonstrate basic awareness and early skills in appraisal of both the sources and content of medical information using accepted criteria.
- ▶ Identify and demonstrate the use of information technology to access accurate and reliable online medical information.
- ▶ Demonstrate basic awareness and early skills in assessing applicability/ generalizability of evidence and published studies to specific patients.
- ▶ Demonstrate curiosity, objectivity, and the use of scientific reasoning in acquisition of knowledge and application to patient care.
- ▶ Apply the primary findings of one's information search to an individual patient or panel of patients.
- ▶ Communicate one's findings to the health care team (including the patient/family).
- ▶ Close the loop through reflection on the process and the outcome for the patient.

What Functions of EPA 7 Are Being Taught or Assessed?



- Develop a well-formed, focused, pertinent clinical question
- Demonstrate basic awareness and early skills in appraisal of both the sources and content of medical information using accepted criteria
- Identify and demonstrate the use of information technology to access accurate and reliable online medical information
- Demonstrate basic awareness and early skills in assessing applicability/generalizability of evidence and published studies to specific patients
- Demonstrate curiosity, objectivity, and the use of scientific reasoning in acquisition of knowledge and application to patient care
- Apply the primary findings of one's information search to an individual patient(s)
- Communicate one's findings to the health care team (including the patient/family)
- Close the loop through reflection on the process and the outcome for the patient

Challenges and Barriers - The Librarian Perspective



Challenges Teaching and Assessing EPA 7

- ▶ Not much research out there about EPA 7 and what there is demonstrates challenges.
- ▶ Program Directors do not think that residents can proficiently form or answer clinical questions using the biomedical literature. (Pearlman 2017 and Lindeman 2015)
- ▶ UGME and GME literature does confirm what librarians have long known. This is a hard skill to teach, assess, and promote across learner contexts.
- ▶ Key takeaway: this is a skill being discussed within clinical frameworks outside of our profession.

Areas of Opportunity

- ▶ EPAs can be a powerful tool to increase information literacy activities in the curriculum and lead to more teaching and assessment by librarians.
- ▶ EPAs were designed to be taught and assessed in authentic clinical contexts and librarians can do this work too.
- ▶ Use the EPAs to demonstrate that librarians are a valuable part of the clinical team and teaching Entrustable activities like question formation, appraisal, and critical thinking.
- ▶ What you are doing regarding information literacy training is transferable to EPAs - particularly EPA 7.
- ▶ Use the visibility of EPAs to advocate for your role in clinical competency entrustment, you can save medical faculty time/energy/money by leveraging your existing skill set and becoming more involved.
- ▶ Work with faculty champions to get involved in curricular renewal discussions particularly around CBME

What's next for EPAs?

- ▶ The pilot is going on through 2020
- ▶ There is excitement in the medical education community for these standards. There is a great listserv for Core EPAs that often has lively discussion <https://www.aamc.org/initiatives/coreepas/>
- ▶ LCME not requiring EPAs as part of accreditation (yet!) so we have time to get ready and seize this opportunity for increased librarian integration in clinical teaching utilizing this framework for clinical entrustment.

Map to ACRL Framework



Mapping to ACRL Framework

ACRL Knowledge Practice	EPA # and Function	ACGME Core Competency and Common Requirement
ACRL Frame: Authority is Constructed and Contextual (A)		
<p>A-1 Define different types of authority, such as subject expertise (e.g., scholarship), societal position (e.g., public office or title), or special experience (e.g., participating in a historic event)</p>	<p>7-2 Demonstrate basic awareness and early skills in appraisal of both the sources and content of medical information using accepted criteria.</p> <p>9-1 Identify team members' roles and the responsibilities associated with each role.</p>	n/a
<p>A-2 Use research tools and indicators of authority to determine the credibility of sources, understanding the elements that might temper this credibility.</p>	<p>7-2 Demonstrate basic awareness and early skills in appraisal of both the sources and content of medical information using accepted criteria.</p>	<p>IV.A.5.c Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. (Practice-Based Learning and Improvement)</p>
ACRL Frame: Information Creation as Process (IC)		
<p>IC-1 Articulate the capabilities and constraints of information developed through various creation processes</p>	<p>7-2 Demonstrate basic awareness and early skills in appraisal of both the sources and content of medical information using accepted criteria.</p>	n/a

How you can use the framework

- ▶ Use it to help you understand how the library can help teach in areas related UGME and GME
- ▶ Use it to frame conversations with faculty about how the library is prepared and has expertise in the areas that map to EPAs and ACGME Competencies

AAHSL Task Force Members

- ▶ Kelly Thormodson - Director, Library Resources, University of North Dakota School of Medicine and Health Sciences
- ▶ Nancy Adams - Director of Foundational Medical Sciences, Penn State College of Medicine; Librarian for Education, Penn State University Harrell Health Sciences Library
- ▶ Emily Brennan - Research and Education Informationist, Medical University of South Carolina Library
- ▶ Heather Collins - CME Educational Design Manager, America Academy of Family Physicians
- ▶ Megan von Isenburg - Associate Dean, Duke University Medical Center Library
- ▶ Iris Kovar-Gough - Health Sciences Librarian, Michigan State University Libraries
- ▶ Elizabeth R. Lorbeer - Chair, Department of the Medical Library, Western Michigan University Homer Stryker M. D. School of Medicine Library
- ▶ Joseph Nicholson - Medical Librarian, NYU Health Sciences Library
- ▶ Rikke Ogawa - Director, UCLA Louise M. Darling Biomedical Library and Science and Engineering Library, Sciences Libraries
- ▶ Neil Rambo - (Retired) Director, NYU Health Sciences Libraries, NYU Health Sciences Library
- ▶ Ruth Riley - Assistant Dean for Executive Affairs and Director of Library Services, School of Medicine, University of South Carolina
- ▶ Judy Spak - Assistant Director, Research and Education Services, Yale Cushing/Whitney Medical Library

Thank you and Questions



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Appendix 1: Entrustment Scales

- ▶ The AAMC modified entrustment scales to help figure out how 'Entrustable' a learner is with a given task in a clinical setting.
- ▶ The Ottawa Scale asks: In supervising this student, how much did you participate in the task?

Modified Chen Scale	Modified Ottawa Scale
Watch me do this	"I did it." Student required complete guidance or was unprepared; I had to do most of the work myself.
Let's do this together	"I talked them through it." Student was able to perform some tasks but required repeated directions.
I'll watch you	
"You go ahead, and I'll double-check all of your findings."	"I directed them from time to time." Student demonstrated some independence and only required intermittent prompting.
"You go ahead, and I'll double-check key findings."	"I was available just in case." Student functioned fairly independently and only needed assistance with nuances or complex situations.