

5-29-2024

Closing the Communication Gap: Alignment of Competency Performance Levels Between UME and GME

Anita Wilson, PhD

Thomas Jefferson University, anita.wilson@jefferson.edu

Katherine Berg, MD

Thomas Jefferson University, katherine.berg@jefferson.edu

Aaron Douglas, PhD

Thomas Jefferson University, aaron.douglas@jefferson.edu

John Caruso, MD

Thomas Jefferson University, john.caruso@jefferson.edu

Gretchen Diemer, MD

Thomas Jefferson University, gretchen.diemer@jefferson.edu

Follow this and additional works at: <https://jdc.jefferson.edu/umedeans>



Part of the [Medical Education Commons](#)

See next page for additional authors

[Let us know how access to this document benefits you](#)

Recommended Citation

Wilson, PhD, Anita; Berg, MD, Katherine; Douglas, PhD, Aaron; Caruso, MD, John; Diemer, MD, Gretchen; Day, MS, Kathleen; Frasso, PhD, Rosemary; Herrine, MD, Steven; and Abraham, PhD, David, "Closing the Communication Gap: Alignment of Competency Performance Levels Between UME and GME" (2024).

JeffMD Academic Affairs. Paper 1.

<https://jdc.jefferson.edu/umedeans/1>

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's [Center for Teaching and Learning \(CTL\)](#). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in JeffMD Academic Affairs by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.

Authors

Anita Wilson, PhD; Katherine Berg, MD; Aaron Douglas, PhD; John Caruso, MD; Gretchen Diemer, MD; Kathleen Day, MS; Rosemary Frasso, PhD; Steven Herrine, MD; and David Abraham, PhD

Closing the Communication Gap: Alignment of Competency Performance Levels Between UME and GME

Anita Wilson, PhD, Katherine Berg, MD, Aaron Douglas, PhD, John Caruso, MD, Gretchen Diemer, MD, Kathleen Day, MS, Rosemary Frasso, PhD, Steven Herrine, MD, David Abraham, PhD

Sidney Kimmel Medical College, 2024

Purpose and Background

Graduate medical education (GME) program directors receive a minimal amount of information from the undergraduate medical education (UME) programs regarding an intern's specific level of competence. This project's purpose was to align the local undergraduate competency-based medical education program objectives (MEPOs) and GME outcomes measured during intern year. Previous studies show the gap in communication between UME and GME exists due to a lack of a shared mental model regarding competency performance.^{1, 2}

Methods

During the summer of 2023, the authors used a modification of the Delphi approach to develop consensus among educators regarding the alignment between the UME MEPOs and Accreditation Council for Graduate Medical Education (ACGME) Harmonized Milestones sub-competencies.³ The project participants were 13 of 18 members of a subcommittee of the curriculum committee on programmatic outcomes and competencies at Sidney Kimmel Medical College with expertise in many areas (See Table 1). The number of rounds (3) and consensus (70% agreement) were determined a priori.



Approximately 57% (N = 46) of the alignment decisions showed an association between the local undergraduate medical education program objectives (MEPOs) and Accreditation Council for Graduate Medical Education (ACGME) Harmonized Milestones sub-competencies.

Table 1: Delphi Participant Demographics by Round

Group	Round 1		Round 2		Round 3	
	N	%	N	%	N	%
Expertise						
Assessment	3	23%	3	25%	2	18%
Basic Science	4	31%	4	33%	4	37%
Clinician	4	31%	3	25%	3	27%
Clinical Skills	1	8%	1	8%	1	9%
Educational Technology	1	8%	1	8%	1	9%
Educator						
Both	4	31%	2	17%	2	18%
Graduate	2	15%	3	25%	2	18%
Undergraduate	7	54%	7	58%	7	64%
Title						
Dean	5	38%	4	33%	4	36%
Director	2	15%	2	17%	1	9%
Professor	4	31%	4	33%	4	36%
Provost	1	8%	1	8%	1	9%
Psychometrician	1	8%	1	8%	1	9%
Degree						
MD	4	31%	2	17%	3	27%
MD, MPH	1	8%	1	8%	1	9%
MD, MSPH, FACS	0		1	8%	0	
MD, PhD	2	15%	2	17%	1	9%
MS	1	8%	1	8%	1	9%
PhD	4	31%	4	33%	4	36%
PhD, MEd	1	8%	1	8%	1	9%
Department						
Academic Commons	1	8%	1	8%	1	9%
Biochemistry and Molecular Biology	1	8%	1	8%	1	9%
Center for Research in Medical Education and Healthcare	1	8%	1	8%	0	
General Surgery	0		1	8%	0	
Medical Education	1	8%	1	8%	1	9%
Medicine	4	30%	3	25%	4	36%
Medicine, Medical Education	1	8%	0			
Microbiology and Immunology	1	8%	1	8%	1	9%
Neuroscience	1	8%	1	8%	1	9%
Undergraduate Medical Education	2	15%	2	17%	2	18%

Note: Group percentages may not add up to 100% due to rounding

Table 3: Conceptual Model of Competency Assessment Tool

Undergraduate Medical Education Program Objectives	Fourth Year Performance Levels					Alignment with ACGME Harmonized Milestones
	U1	U2	U3	U4	U5	
PBL1 1: Identify strengths, deficiencies, and limits in one's knowledge and expertise				✓		PBL2: Reflective Practice and Commitment to Personal Growth
PBL2 2: Set learning and improvement goals		✓				PBL2: Reflective Practice and Commitment to Personal Growth
PBL3 3: Identify and perform learning activities that address one's gaps in knowledge, skills, or attitudes				✓		PBL2: Reflective Practice and Commitment to Personal Growth
PBL4 4: Systematically analyze practice using quality-improvement methods and implement changes with the goal of practice improvement					✓	PBL1: Evidence Based and Informed Practice, PBL2: Reflective Practice and Commitment to Personal Growth
PBL5 5: Incorporate regular feedback into practice					✓	PBL2: Reflective Practice and Commitment to Personal Growth
PBL6 6: Locate, appraise, assimilate, and apply evidence from timely scientific studies related to patients' health problems					✓	PBL1: Evidence Based and Informed Practice
PBL7 7: Participate in the education of patients, families, students, peers, and other health professionals					✓	
PBL8 8: Obtain and utilize information about individual patients, populations of patients, or communities from which patients are drawn to improve care					✓	PBL1: Evidence Based and Informed Practice

Note: This is a conceptual model of a competency assessment tool for the practice-based learning and improvement competency. The tool can be used to rate student performance during the 4th year of the UME experience. Student results are then shared with graduate medical educators. The UME performance levels (U1, U2, U3, U4, and U5) match that of the Dreyfus Model of Development.⁴ Specifically, the levels reflect that of a novice, advanced beginner, competent, proficient, and expert.

Results

Table 2. Alignment results between the local UME MEPOs and ACGME Harmonized Milestones sub-competencies.

MEPOs	ACGME Harmonized Milestones		
	PBL1 1: Evidence-Based and Informed Practice	PBL2 2: Reflective Practice and Commitment to Personal Growth	ICS 3: Communication within Healthcare Systems
PBL1 1		✓	
PBL1 2		✓	
PBL1 3		✓	
PBL1 4	✓	✓	
PBL1 5		✓	
PBL1 6			
PBL1 7	NAI	NAI	
PBL1 8	✓		
Aligned MEPOs/ Total MEPOs	3/8	5/8	
	ICS 1: Patient and family-centered communication	ICS 2: Interprofessional and Team Communication	ICS 3: Communication within Healthcare Systems
ICS 1	✓	✓	
ICS 2		✓	✓
ICS 3		CNR	✓
ICS 4	✓		
ICS 5	✓	✓	
Aligned MEPOs/ Total MEPOs	3/5	4/5	2/5
	PROF 1: Professional Behavior and Ethical Principles	PROF 2: Accountability/Conscientiousness	PROF 3: Self-Awareness and Help-Seeking
PROF 1	✓	✓	
PROF 2	✓	✓	
PROF 3	✓	✓	
PROF 4	✓		
PROF 5	✓	✓	
Aligned MEPOs/ Total MEPOs	5/5	4/5	0/5

Note: ✓ = alignment, NAI = No alignment identified, CNR = Consensus not reached, PBL1 = Practice-based Learning and Improvement ICS = Interpersonal Communication Skills, PROF = Professionalism, MEPOs = Medical Education Program Objectives

Conclusions

Establishing effective communication of student performance between UME and GME is critical to ensure a smooth transition. By aligning the UME MEPOs and ACGME-HM sub-competencies, this study presents a way for UME and GME to narrow the gap in knowledge of student performance levels. Given the level of alignment between the MEPOs and the ACGME Harmonized Milestones, the authors propose a conceptual model for a medical education competency assessment tool (MECAT) at the undergraduate level (See Table 3). The purpose of the model is to demonstrate a possible method regarding communication of student level of competence between UME And GME.

References

- Englander R, Frank JR, Carraccio C, et al. Toward a shared language for competency-based medical education. *Med Teach*. 2017; 39(6):582-587. doi: 10.1080/0142159X.2017.1315066
- The Coalition for Physician Accountability's Undergraduate Medical Education-Graduate Medical Education Review Committee (UGRC): Recommendations for Comprehensive Improvement of the UME-GME Transition. Coalition for Physician Accountability (August 2021). Accessed August 28, 2023, from <https://physicianaccountability.org/wp-content/uploads/2021/08/UGRC-Coalition-Report-FINAL.pdf>
- Humphrey-Murto S, Varpio L, Wood TJ, et al. The Use of the Delphi and Other Consensus Group Methods in Medical Education Research: A Review. *Acad Med*. 2017;92(10):1491-1498. doi:10.1097/ACM.0000000000001812
- Dreyfus, SE, Dreyfus HL. A five-stage model of the mental activities involved in directed skill acquisition. *California Univ Berkeley Operations Research Center* 1980.