

CQICHRONICLE



Commitment to Evidence-based Medical Education

Priyadarshini Dattathreya, M.B.B.S., M.D., M.Med.

The inaugural Medical Education Week at HMSOM was a significant milestone in the school's commitment towards achieving excellence in Medical Education. It was an ideal platform for an aspiring Medical Educator such as myself to showcase my effort towards scholarship of teaching and learning. It was with great pride that I received the Best Research Abstract Award for my work on "Mixed Methods Needs Assessment of Matriculating Medical Students."

My research study was conducted at Ross University School of Medicine (RUSM), where I spent a decade providing academic support to medical students before joining the Student Affairs and Wellbeing (SAW) team at HMSOM. Central to my research was a firm grounding in the principles of continuous quality improvement of a 3-week online Pre Matriculation course (PMX). PMX is offered to all matriculating medical students to support their meaningful transition into RUSM.

My study used a proactive and iterative approach to ensuring that PMX remained dynamic and responsive to the evolving needs of the students. The normative needs were determined using the Association of American Medical Colleges (AAMC) Core Competencies for Entering Medical Students. Online surveys were conducted to gather data from multiple stakeholder groups including students, faculty, and peer tutors. Both qualitative and quantitative data was combined in a systematic manner to identify, quantify and analyze the learning gap. The outcomes provided an insight into the students' learning needs from multiple perspectives. The Association of American Medical Colleges (AAMC) Core Competencies for Entering Medical

Interpersonal Competencies	Intrapersonal Competencies	Thinking and Reasoning Competencies	Science Competencies
Service Orientation Social Skills Cultural Competence Teamwork Oral Communication	Ethical Responsibilities to Self and Others Reliability and Dependability Resilience and Adaptability Capacity for Improvement	Critical Thinking Quantitative Reasoning Scientific Inquiry Written Communication	Living Systems Human Behavior

Research Design Mixed Methods Exploratory Sequential Design

Qualitative Survey	Qualitative Analysis	Quantitative Survey	Survey Administration	Quantitative Analysis	
To faculty, students, tutors	Framework Analysis with AAMC Competencies for Entering Medical Students	29-item survey, each item addressing a 'need'	Competence and Importance of the 'need'	Mean Weighted Discrepancy Score (MWDS)	

The study also uncovered potential areas of improvement in PMX such as an increased emphasis on metacognition study strategies, an intentional inclusion of concepts from disciplines with a larger learning gap such as Immunology, Anatomy, Physiology and Biochemistry and incorporation of strategies to critically evaluate learning resources.

The opportunity to share my research during the inaugural Medical Education Week alongside several other members of the HMSOM Medical Education community was an incredible learning experience. The process and the outcomes of my research has since served as a blueprint to help me utilize a systematic approach to academic support. It has also helped me model effective metacognitive strategies to medical students at HMSOM. The recognition received through the Best Research Abstract Award served as a testament that HMSOM has a strong commitment to an evidence-based approach towards continuous quality improvement in Medical Education.

CQI CHRONICLE

How SAW Enhanced its Peer Tutor Program

Laurie Sullivan PhD., Brian Gorman M.D., Priyadarshini Dattathreya M.B.B.S., M.D., M.Med., & Shania Hemphill B.S.

The Academic Support unit of Student Affairs and Wellbeing (SAW) manages the Peer Tutor program for our medical students. The program recruits high performing 3rd and 4th year HMSOM students who have successfully completed USMLE Step 1 and Step 2. Selected peer tutors facilitate weekly group review sessions for Year 1 students. Following recent improvements and streamlining of efforts, we have successfully enhanced the program. This has resulted in an increased number of tutors, more small group sessions, greater student participation, and better group size. The following article compares the metrics between Molecular and Cellular Principles (MCP) and Homeostasis and Allostasis (HA) courses, and highlights the key improvements to the program.



Improved Tutor Recruitment and Training

During the course of providing small group peer tutoring sessions to the 2022 cohort, we noticed an increased demand to expand the program as evident by student feedback, and an increasing number of students on the waitlist requesting to be added to a small group session. In response to the demand, we implemented a more rigorous tutor recruitment process. By engaging with the Office of Medical Education we identified a larger pool of highly qualified tutors. These individuals were carefully selected based on their medical knowledge, and passion for helping others. This has led to an increase in the number of recruited tutors from 5 to 10.

How SAW Enhanced its Peer Tutor Program (continued)

Additionally, we revamped our tutor training program to provide tutors with comprehensive guidance and resources. Tutors are provided with question sets that can be included in the weekly reviews. They also receive copies of teaching materials from Leo (Learning Management System) to help them align their sessions with relevant content from the week. We introduced weekly meetings with the tutors that focus on identifying difficult concepts to be included in the review session, effective tutoring techniques, sharing resources, discussing challenges, and brainstorming solutions.

Increased Small Group Sessions

Recognizing the benefits of small group interactions, we prioritized increasing the number of small group tutoring sessions. By recruiting more tutors to facilitate these sessions, we aimed to enhance student engagement, promote collaborative learning, and provide more personalized attention. This targeted approach has led to an increase in the number of weekly small group sessions from 5 to 10.

Expanded Student Participation

In addition to increasing the number of small group sessions we increased communication to students regarding these sessions through classroom announcements and emails, to encourage students to take advantage of this resource. This has resulted in an increase in the number of students that signed-up for sessions from 67 to 91.

Optimized Group Size

The increase in both the number of recruited tutors and the number of small group sessions has helped us optimize the size of small group sessions despite the increase in student sign up. These changes have helped us reduce the maximum number of students per session from 15 to 10 providing a favorable learning environment for student participation and discussion.

Monitoring and Evaluation

To measure the impact of our improvements, we have established a system for tracking student attendance in weekly sessions and collecting student feedback at the end of every course using surveys. Moving forward, we will continue to monitor and evaluate the program, making data-driven decisions to ensure sustained improvements.

Please contact Marycarmen Kunicki at <u>marycarmen.kunicki@hmhn.org</u> for additional information on topics included in this newsletter and if you would like to share the findings of any quality improvement projects with us for future publications.