NEWSLETTER OF THE OFFICE OF MEDICAL EDUCATION AT THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER JANUARY 2022

Continuous Quality Improvement at the Content Level

By Wesley Wilson

Wilson

Evidence-based medicine (EBM) is a vital skill that arms physicians with the ability to make well-informed clinical decisions through the review and interpretation of systematic research.

Past USMLE Step 1 data shows our students scored approximately one standard deviation below the national mean in evidence-based medicine, making it our school's weakest area of performance on the exam. In fact, the tail of our EBM performance data did not even appear on the USMLE's graph.

It was apparent that our students did not know or understand the content. Dr. Savannah Duckworth, who leads Introduction to the Medical Profession 1 (IMP 1), which houses the EBM curriculum, recognized the need to reconfigure our pedagogical approach. The primary goal was to prepare physicians who inform clinical decision-making by utilizing EBM principles. The secondary goal was to improve performance on the board and USMLE Step exams.

What and how we were teaching failed to meet students' needs and did not address their growth and development. The faculty recognized they are training physicians to read, analyze, and understand data science as it applies to individual practice. Simply put, the EBM curriculum had to be reorganized.

A task force, including faculty, administrators, and student members, convened to review the EBM curriculum. Over several months, the task force removed overly expansive objectives, simplified content, and reimagined instruction and assessment.

The USMLE's assessment approach is to pose students with questions phrased to force the application of knowledge in a meaningful and clinically-relevant manner, reflecting the purpose and practice of EBM.

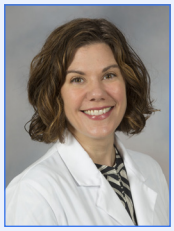
Many faculty began incorporating USMLE-style questions throughout lectures to train students on how the information presented in a lecture is relevant to their future practice. In turn, by reinforcing concepts, students understand their application. Furthermore, faculty continued using USMLE-style questions to assess EBM topics. Ultimately, students became familiar with question styles on the customized board and Step 1 and 2 exams.

Through pedagogical shifts, including simplified lectures, the utilization of the flipped classroom, and a focus on clinical relevance, students saw the importance of EBM, which improved student engagement and interaction.

While it may be more than a year before the school can fully gauge EBM performance improvement on USMLE step exams, student performance on the customized board is promising. In 2018, our students scored fourteen points below the national mean in EBM, five points below the national mean in 2019, and one point below the national mean in 2021. Students did not take the customized board exam in 2020 due to the emergence of the COVID-19 pandemic.

Inspire Health: A Wealth of Resources for Students and Practitioners

By Dr. Caroline Compretta



Compretta

Inspire Health, a nonprofit funded by The Bower Foundation, produces e-learning modules for students and health care professionals. The modules are available for free use in Mississippi colleges and universities and free continuing education credits for Mississippi licensed health care professionals. Inspire Health has created several modules that are widely applicable to UMMC students and practitioners alike, including modules on breastfeeding, medical insurance, and nutrition and chronic disease.

Breastfeeding | Human Medicine provides 3.5 hours of evidence-based interprofessional content. Participants learn why human milk is critical for infant, maternal, and public health, and how professionals can use a multi-disciplinary approach to support breastfeeding in clinical and community settings. Topics include the human milk microbiome, the impact of sociodemographic factors on breastfeeding rates, and the promotion of breastfeeding as best practice in the hospital and workplace. On completion of the course, participants have improved knowledge of the bioscience of breastfeeding and a solid knowledge of how health-related professionals can work together to improve patient outcomes and protect breastfeeding.

Patchwork of Health Insurance Coverage in the U.S. and Its Impact on Mississippians is a one-hour module that examines real world stories of patients that are served at the Jackson Free Clinic and the gaps in health coverage that left these patients uninsured and seeking free care. The course illustrates how the United States developed a complicated system of coverage that is difficult to maneuver. Participants gain a better understanding of the various types of health insurance available, including private employer-based coverage, Medicare, Medicaid, the Health Insurance Marketplace, and the Children's Health Insurance Program. Upon completion of the course, participants are better equipped to understand the nuances of important policy issues that affect their patients at the state and federal level and local and state medical associations.

The Nutrition and Chronic Disease module is currently in production with plans to launch this summer. Students will learn how nutrition can be the problem and solution to chronic diseases, including obesity, cardiovascular disease and diabetes. Topics include disease-specific nutrition considerations, benefits of a team-based approach, best practice and socioeconomic factors that impact nutrition-related health outcomes in chronic disease.

For more information about using these modules or to access them, visit https://inspire-health.org.

School of Medicine Mission Statement

The University of Mississippi School of Medicine is committed to training skilled and compassionate physicians to provide high quality and equitable health care particularly to the state's residents, including diverse and underserved populations. The school prepares learners to provide excellent care through programs of innovative education, state-of-the-art research and comprehensive clinical practice.

Health Care Pathways

The Office of Admissions and the Improving Primary Care for the Rural Community through Medical Education (IMPACT the RACE) Program collaborated to create the Exploring Healthcare Pathways Outreach Program. The program consists of multiple outreach events designed to inspire Mississippi high school students to pursue careers in health related professions. One of the ways we are doing this is by giving the high school juniors and seniors the opportunity to participate in engaging educational activities about various health care programs offered at UMMC.

Multiple one-day enrichment events will be held on college campuses around the state this year on the following dates:

- **Feb. 5 (University of Mississippi)**
- **Feb. 12 (Mississippi State)**
- **Mar. 5 (Jackson State University)**

Students from various high schools local to the participating universities will spend a day with faculty, staff, and students from programs across UMMC's campus. For additional Information, contact Dr. Dan Coleman (jdcoleman@umc.edu) with the Office of Admissions or Porscha Fuller (pfuller@umc.edu) with The Impact the Race Program.

This program is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award. The contents of the program do not necessarily represent the official views, nor an endorsement, by HRSA, HHS, or the U.S. Government.

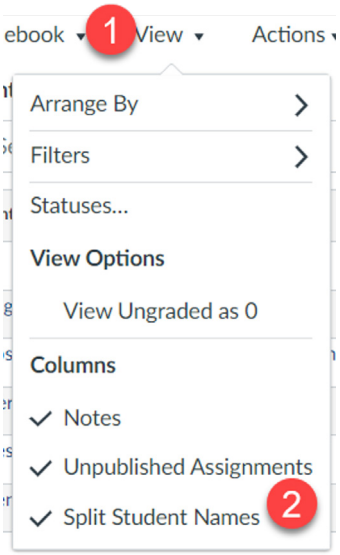
Canvas Gradebook: Split Name Columns Optional

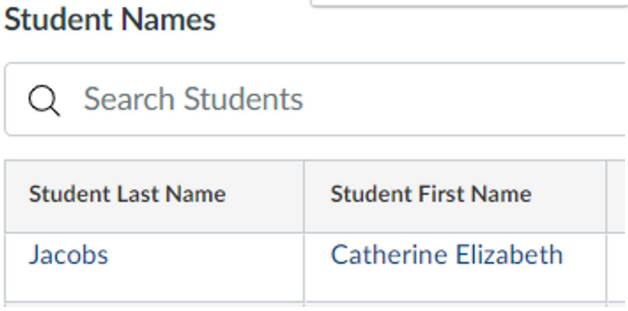
By Elizabeth Jacobs

Jacobs

Canvas Gradebook users have a new viewing option. As part of the functionality released on Jan. 15, users enrolled as teachers now have the ability to split the student's first and last names into separate columns. Simply click on View options (1) in the Gradebook and select Split Student Names (2).

The view is refreshed and shows the last name in the first column and the first name in the second column. Additional names, such as middle names, are included in the second column. When selected, the exported Gradebook includes this view as well. Full details are available here.





Clinical Vignette Writing Circle – New Collaboration with the UAB

The next Clinical Vignette Writing Circle will be on Thursday, Feb. 24, from 1:30 -3:30 p.m. The sessions will be virtual, and a link to the WebEx will be sent via the SOM listserv.

You may email items to Dr. Lecretia A. Buckley ahead of the sessions or have draft items on hand at the sessions to make the most of the time and to ensure you benefit from participation in these educational activities. The sessions will continue until June 23, 2022, and continuing education credit may be obtained.

Here is a flawed item. What's the flaw? How would you edit the item for an exam question? Let's discuss it in the next Clinical Vignette Writing Circle.

A 34-year-old male is brought to the emergency department following a motor vehicle collision. The patient was a restrained driver when his vehicle hit a truck carrying construction equipment from behind. A piece of the equipment broke the windshield, injuring the patient's right arm. At the scene, the patient's shirt was covered in his own blood and bleeding was noted from the brachial artery. Application of pressure slowed the bleeding and the patient was transported to receive further care. When the pressure dressing is removed from examination, a large amount of blood is released and the bleeding resumes.

Which of the following changes are most likely to be found in this patient at this time?

	Blood Pressure	***Heart Rate***	***Hemoglobin***	***Hematocrit***
A.	*Increased*	*Increased*	*Increased*	*Decreased*
B.	*Increased*	*Increased*	*Decreased*	*Increased*
C.	*Decreased*	*Decreased*	*Decreased*	*Increased*
D.	*Decreased*	*Decreased*	*Increased*	*Decreased*
E.	*Increased*	*Increased*	*Decreased*	*Decreased*

Pulmonary examination is benign. Which of the following is the correct diagnostic study to order at this time?

A. Electrocardiogram
B. Troponin I
C. Chest X-ray
D. Complete blood count
E. Electrolytes