they will encounter in their medical education and graduate medical education programs and State Board exams; and provide a valid means to adjust cut scores due to cohort performance and item difficulty. A combination cut score method allows schools to accomplish such goals in a manner that is also easy to explain and defend to students and faculty. This presentation will discuss the advantages, process, and outcomes of using a combination cut score method for basic science assessment compared with absolute and relative standard setting methods.

**Approach:** Per Cohen-Schotanus and van der Vleuten's study, we employed a combination cut score method, which uses the best performing students as point of reference. Our class size is 60 students per cohort, and our Phase 1 basic science curriculum is delivered via 14 modules. Faculty co-leaders develop module exams via NBME's Customized Assessment Services. Specifically, for each exam, the cut score is 65% of the 95th percentile student’s score. To date, we have completed 5 module exams with promising psychometric outcomes.

**Results:** Thus far, we have found that our outcomes are comparable to previous years’ while being more manageable and slightly more consistent. Given that we pivoted to administering NBME exams virtually during the pandemic, managing exam/retake creation and online proctoring consumes considerable time and resources. These more predictable and consistent outcomes of the combination method have aided in our ability to manage our pandemic contingency plans effectively. Specifically, our exam outcomes include more consistent exam cut scores and number of student failures. Across the 14 exams last year, the cut scores ranged from 56 to 65. Across the 5 exams administered thus far this year, the range of cut scores is 57 to 65. More significantly, last year’s number of failures ranged from 0 to 5, and this year the number of failures range from 1 to 3. As predicted when the combination cut score method was proposed, the lower ranges of cut scores and increased consistency in the number of student failures are positive outcomes that were expected.

**Discussion:** Thus far, we have learned that the combination cut score method is producing outcomes as expected with fewer surprises. Students report appreciation for the straightforward nature of the cut score method and our transparency in reporting it at the beginning of the course. The use of consistent cut scores has allayed student and faculty concerns regarding exam validity and reliability, and the more consistent number of failures has allowed our assessment team to support the exam retake process more efficiently and with fewer human resources.

**Significance:** As medical schools continue to grapple with exam cut score decisions, a combination cut score method offers several advantages. It supports criterion-referenced exams that measure student attainment of objectives while also considering cohort abilities and test item difficulty. It is simple and inexpensive to employ, transparent and easy to understand, yields consistent and manageable results, and is based upon sound research practices.

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**References**


**The Underrepresented, Low Income, and First Time (UpLIFT) Project: A Comprehensive, Open-Access Guide to Medical School Admissions Aimed to Increase Educational Equity for Underrepresented Premedical Students**

**Objective:** Despite ongoing efforts to recruit minority, first-generation, and low-income (FGLI) students into medicine, these student groups continue to be underrepresented among medical school matriculants. The Underrepresented, Low Income, and First Time (UpLIFT) Project aims to create an open-access, scalable, web-based platform of comprehensive, up-to-date information about successfully applying to and matriculating into medical school.

**Background:** Students from disadvantaged backgrounds being adequately represented among medical school applicants; however, data from the Association of American Medical Colleges Matriculating Student Questionnaire (a survey administered annually to all matriculating medical students in the U.S.) between 2007 and 2017 demonstrated that roughly 50% of matriculating students each year came from the top quintile of household income, with roughly 25% coming from the top 5% of household income. One factor contributing to this disparity is a lack of reliable and affordable advisory resources necessary for successfully navigating the premedical and application process. A barrier analysis conducted in rural Michigan found that 90% of surveyed students reported having concern about academic readiness when considering a career in health care and 60% of students reported feeling concerned about financial barriers. These challenges have likely been exacerbated by the COVID-19 pandemic as many students have reported difficulty navigating COVID-19-related changes to the medical school application process and premedical experience, and the pandemic has likely made adequate access to prehealth guidance counselors more challenging for FGLI students. Open-access advising resources are one possible way to address these issues.

**Design:** Twenty-six students at the Perelman School of Medicine were recruited to write, design, and illustrate a comprehensive guide on the medical
school application process, including guidance for completing premedical coursework, finding research/shadowing experiences, preparing for the Medical College Admission Test, requesting letters of recommendation, writing applications, interviewing, and navigating financial aid processes. The guide is accessible to all backgrounds and assumes no prior knowledge about medical school or medical careers. It also includes sample essays, email/letter templates, course schedules, and budgets. The guide received review from several faculty members at the Perelman School of Medicine and prehealth advisors at several undergraduate institutions. The guide was disseminated via multiple platforms, including the UpLIFT website (https://uplift.guide), social media, and direct outreach to undergraduate prehealth advisors. Downloads of the guide and website traffic were recorded, and end-user feedback was collected.

**Outcomes:** The UpLIFT Guide was launched online on August 27, 2020. Over the course of 13 weeks, the guide has been viewed 7,223 times by 3,373 unique users, downloaded 303 times, and used by 34 undergraduate institutions. The UpLIFT Guide has been used as an official resource by national near-peer prehealth advising organizations and endorsed by medical school faculty members and undergraduate prehealth advisors at several universities.

**Innovations Strengths and Weaknesses:** The UpLIFT Guide demonstrates how medical students may effectively reduce structural barriers to successful matriculation of underrepresented, low-income, and first-generation students to medical school. The guide effectively uses a “crowd-sourcing” model to compile reliable advice and demonstrates the feasibility of disseminating open-source resources via social media. Lastly, our data suggest that dissemination of such free resources targeting FGLI students is more successful through established and trusted sources of information such as premed advisors. One weakness is that the guide does require internet access which may be a barrier for some potential users. In addition, admissions outcomes among students who used the guide are pending but planned for future analysis.

**Feasibility and Transferability for Adoption:** A recently launched, open-access, comprehensive guide to applying to medical school could mitigate the disparities in access to medical school for underrepresented premedical students and is easily accessible with feasibility for adoption by premedical offices and by interested students.

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**References**


**A Second Chance for Learning and Wellness: Implementation of Second-Chance Quizzes**

**Purpose:** Assessments are not only tools for measuring mastery of medical knowledge but also powerful promoters of learning and retention. However, high-stakes assessments are associated with anxiety and psychological distress in medical students. We describe and present preliminary outcomes for a novel preclinical assessment approach (second-chance quizzing [SCQ]), grounded in principles of assessment for learning and test-enhanced learning, but also designed to promote student well-being.

**Methods:** The University of Michigan Medical School (UMMS) preclinical curriculum is 1 year with pass–fail grading and quizzes approximately every other week. With the matriculating class of 2019, UMMS initiated the SCQ system, wherein students take a mandatory first quiz during a flexible weekend testing window via ExamSoft. The following Monday, all students are offered the optional SCQ, blueprinted similarly to the first quiz. The higher of the 2 quiz scores contributes to the student’s overall cumulative course grade.

The number of students taking the SCQs, student testing behaviors, student performance, and psychometric data were recorded by ExamSoft’s built-in functionalities. End-of-course evaluations contain questions about the SCQ system, including perceived impact on wellness, how students strategized between the 2 available quizzes (2020–2021), and whether these assessments provided additional opportunities for learning and/or to demonstrate mastery of course content.

Descriptive analyses have been conducted to understand students’ usage and impact of SCQs. These initial findings will be further explored in the following ways: predictors of SCQ usage (such as student performance) will be examined via logistic regression and ANCOVA and the student-selected testing window compared with pre-SCQs years and between students who engage with SCQs and those who do not will be analyzed by chi-square testing.

**Results/Outcomes:** Between August 2019 and October 2020, 8 courses offering a combined 24 SCQs were completed in their entirety: 20 pairs of quizzes within 6 courses (2019–2020, [n = 177 students]) and 4 pairs of quizzes within 2 courses (2020–2021 [n = 168 students]).

The majority of students opted to complete the SCQ—ranging from 84 to 145 students (M = 118.54, SD = 18.67). In 2019–2020, 100% of students complete the SCQ—ranging from 84 to 145 students (M = 118.54, SD = 18.67).