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TITLE: Implementing Universal Baseline NBME Self-Assessments Improved Final NBME Exam Scores in Pediatrics

NEED FOR INNOVATION/BACKGROUND: The National Board of Medical Examiners Clinical Subject Exam in Pediatrics (NBME exam) remains a highly utilized tool in most pediatric clerkships.¹ The Core Clerkship Collaborative at COMSEP has recently discussed identifying tools to improve student performance on the NBME exam - an often high stakes and high stress assessment. Passing the NBME exam, as a marker of clinical knowledge achieved during the rotation, is commonly a requisite for passing core clerkships. At *Didacted* University (uu) we set minimum passing in line with the Hofstee Compromise Recommended Passing Score from the NBME grading guidelines.²

OBJECTIVES/PURPOSE: To improve first-time passing rates on the NBME exam in pediatrics at didacted University (uu) Secondly, to improve overall performance/class averages of first-time test takers at UU.

INSTRUCTIONAL METHODS/MATERIALS USED: In January 2017, UU pediatric clerkship implemented universal NBME Self-Assessments administered at the start of our 5-week core clerkship. Utilizing the results as a form of an individual learner needs assessment, we targeted students who scored >1 standard deviation below the mean of their respective clerkship group as being most “at risk” of failing the final NBME exam. We implemented paired mentorship, targeted resources, and guided study plans to facilitate high-yield knowledge acquisition. Our curriculum intervention included: the “Emma Holliday” video², MedEd online tutorials³, and Case Files Pediatrics to target high-yield clinical knowledge acquisition.

EDUCATIONAL OUTCOMES: Comparing data from 2013-2016 (pre-implementation) with 2017-2018 (post-implementation), our first-time passing rate improved from 91.4% to 97.9%, respectively (based upon Hofstee Compromise Recommended Passing Score). On average, students flagged as “at risk” improved by 27.2 points from their Self-Assessment score to their final NBME. Pre-implementation to post-implementation, our overall student performance/average score for first-time test takers improved 1.95 points.

DISCUSSION: UU students overall had improved passing rates and higher average scores on the NBME subject exam after having early exposure to similar content through NBME Self-Assessments. Students identified as potentially “at risk” significantly improved their individual scores. The use of the NBME Self-Assessment was one factor associated with a substantial increase in our overall passing rate for first-time test takers. The curriculum tools

utilized are publically available, making our approach generalizable and potentially valuable for all pediatric clerkships.

References:

1. National Board of Medical Examiners End of Year Score Report, NOV 2017.
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2. National Board of Medical Examiners Subject Examination Program: Pediatrics Examination Grading Guidelines, OCT 2016.
<https://nsp.nbme.org/documents/16432/5405726/Pediatrics+Abbreviated+EPC+Grading+Guidelines+Summary/e1140195-e3c5-45d3-a207-e068ad748590?version=1.1>
3. "Emma Holliday Pediatrics" <https://www.youtube.com/watch?v=5mFF-WILuQU>
4. Online MedEd: Clinical Pediatrics: <https://onlinemeded.org/spa/pediatrics>
5. Toy, E. C. (2016). *Case files: Pediatrics* (5th ed.). New York, N.Y: McGraw-Hill Education LLC.