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Innovation in Education

Poster Title
Pathway to Entrustability Through Simulation

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Objectives:

To evaluate the EPAs using a simulation-based curriculum. To provide formative feedback to students. To track student progress towards entrustment.

Background:

Not all medical school graduates are adequately prepared for residency. To address this, in 2014 the AAMC released a list of Entrustable Professional Activities (EPAs), tasks and responsibilities that medical students are expected to perform unsupervised upon graduation. Since the purpose of the EPAs is to evaluate whether medical students can perform these tasks independently, we can deduce that not all students are competent in all tasks. Since we do not know which tasks students can or cannot perform independently, one of the safest ways to evaluate them is through medical simulation. Of the 13 EPAs, 11 can be evaluated using simulation, and 3 of the EPAs can only be evaluated using simulation. Our medical school is one of the 10 in the nation that will be piloting the incorporation of the EPAs within the curriculum over 5 years. We propose a framework for evaluating the EPAs using simulation throughout the third year of medical school.

Methods:

Our curriculum involves 5 EPA evaluations per student, encompassing all 100 students, over the course of their third year of medical school. The medical student 48 week curriculum is naturally broken up into four 12 week blocks. The first and last week of each block are known as the precede and postcede weeks, respectively. These weeks lend themselves well to EPA assessments. Over the course of their third year, all 100 medical students will undergo 1 simulation-based EPA assessment scenario during each precede/postcede session, for a total of 5 over the year. Each simulation case will take 20 minutes and will incorporate 4 EPAs. Over the course of the year, each of the 4 EPAs will be evaluated 5 times.

Students will sign a confidentiality form stating that they will not share information about the cases to other medical students. EPA performance is graded using a standardized scoring vignette that remains static for each EPA, and is based upon criteria provided by the AAMC in their document, "Core EPAs for Entering Residency." Performance will be graded by a core group of faculty members trained in use of the scoring vignette. Students receive timely feedback on their performance. Formative EPA evaluations are tracked longitudinally. Simulation-based performance measures on individual EPAs will be added to a database of non-simulation based evaluations for that EPA. Student performance will be tracked in their EPA portfolio, which will be reviewed by an EPA coach. EPA coach will discuss the student's performance with them and provide a discussion on how to improve.

Conclusion:

A simulation-based EPA assessment curriculum can be implemented within the third-year medical student curriculum in order to track student progress towards entrustment and provide formative feedback on student performance.

References

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