

Goal-Based Curriculum Changes Result in Improved ITE Scores

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Introduction

Plagued with low In-Training Exam scores despite dedicated faculty and residents, the University of Miami Department of Anesthesiology was faced with meeting the new ACGME Outcomes based assessment. We changed our curriculum (lectures based on faculty preference presented to all CA levels simultaneously) to a goals-based one where each Clinical Anesthesia year group received didactics and skills training based on American Board of Anesthesiology objectives. By focusing on precise concepts and skills required at each level we improved ITE scores, resident participation in didactics, and satisfaction for both residents and faculty.

Methods

In July 2002 we split didactic sessions into afternoon groups as follows: Tuesday CA 1, Wednesday CA 2, and Thursday CA 3. Our learning template encompassed what each CA year group should be proficient in over one year. Faculty taught concepts based on the learning template, using texts on the reading list. CA 1 residents were responsible for basic anesthesia knowledge and skills. CA 2 residents were exposed to subspecialty training and skills, and anesthetic interactions with patient comorbidities. Lastly, the CA 3 group regimen was designed to encourage perioperative management, judgment, resource utilization, and improved communication skills. Daily intraoperative teaching for all residents was also goal-directed.

Results

In 2001 The ITE scores were as follows: (See figures on next page) Average scaled score for the CA 3 group was 31; same in 2002. After one year of the new curriculum, the average scaled score rose to 35. For the CA 2 group, average scaled score in 2001 was 25; in 2002 was 28 and 2003 after one year of curriculum was 30. The CA 1 group in 2001 had an average scaled score of 22, in 2002 it was 23 but in 2003 it rose to 27. Most remarkable for us was the CA 3 ITE pass rate for the written boards with only 7 passing in 2001 and 6 passing in 2002. After one year of the new curriculum, 20 residents passed the written board on the first try.

The changes were not blinded or randomized, however using historical controls with the same faculty and resident-selection system; we feel our results are significant. Improved applicant pool arguably could result in better scores, however in a program of 110 residents even with optimal recruitment conditions, those selected would tend to produce a normal curve in terms of ability. The curriculum changes were universal for all residents and were designed by a board-certified teacher with curriculum development training (J.Steadman, MD).

Discussion

Residency curricula are often based on tradition, faculty preference, and have vague goals. In a very large residency such as ours with anesthesia sites in six different hospitals, meeting more often than once a week for lecture, or retraining faculty would be impractical if not impossible. By instituting changes that would not absent too many residents from anesthetizing locations at one time, and making the didactic sessions precise, we improved the learning environment of our residents without adding extra education time.

References

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