Review of ABSITE Scores to Modify Didactic Curriculum: A Preliminary Analysis

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Background

General surgery residents at the University of Colorado School of Medicine (CUSOM) attend core curriculum didactic conference to prepare for the American Board of Surgery In-Training Examination (ABSITE), qualifying examination (QE), and post-residency practice. ASBITE scores are one metric residency directors can utilize to assess resident progress and clinical knowledge. These scores have been correlated to QE passage rates. The purpose of this study was to evaluate resident effectiveness in specific subtest and subtopic areas and identify areas in need of improvement in the general surgery residency program.

Methods

A single institution retrospective study was performed utilizing 2020 ABSITE score reports from general surgery residents at CUSOM. Performance metrics for general surgery residents across the five program years were input into RedCAP and statistical analysis for linear trends and variance were conducted for ABSITE standard scores, subtest standard scores, and incorrect subtest topics. Deviation from national average scores were calculated by subtracting the national average score from each subtest score for each student. Data displayed are medians or proportions.

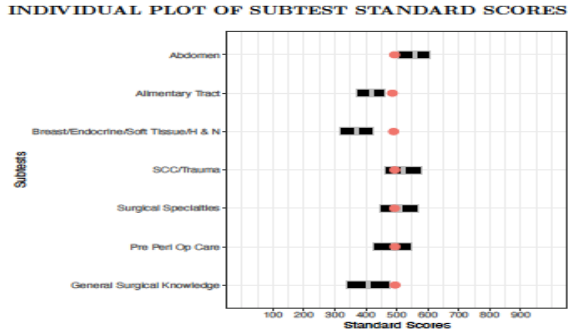


Figure 1. Sample 2020 report of ABSITE Subtest Score with national averages represented by red circle and resident's score with standard deviation represented by vertical gray line and box

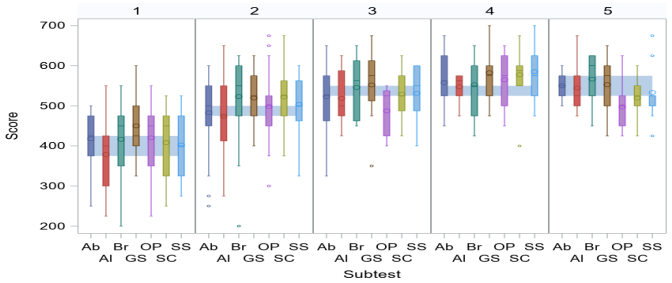


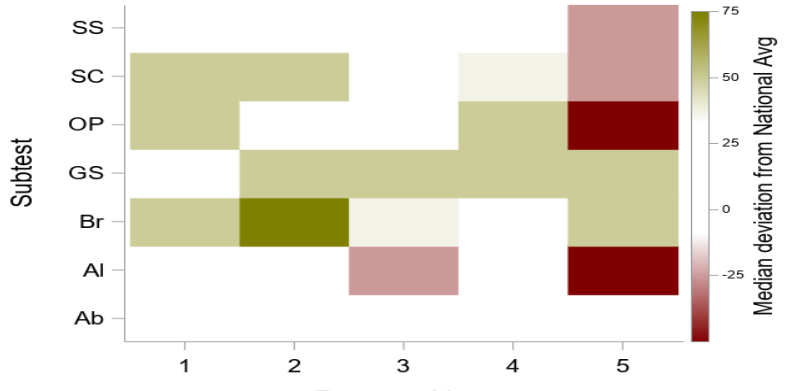
Figure 2. Subtest score averages compared to national average across all five program years

Preliminary analysis of **ABSITE score reports** reveals **knowledge gaps** in a General Surgery residency program.

Study Impact

Specifying areas of weakness allows for targeted modification of the core curriculum didactic conference. This study is unique as it is the first to our knowledge to investigate ABSITE subtest standard performance and prospectively use results to modify curriculum. Our methods have the potential to be replicated by other residency directors at CUSOM, surgical programs at other institutions, and the American Board of Surgery to provide further insights into surgical training.

Figure 3: Heatmap displaying the median of the deviation from national average scores for each subtest by program year



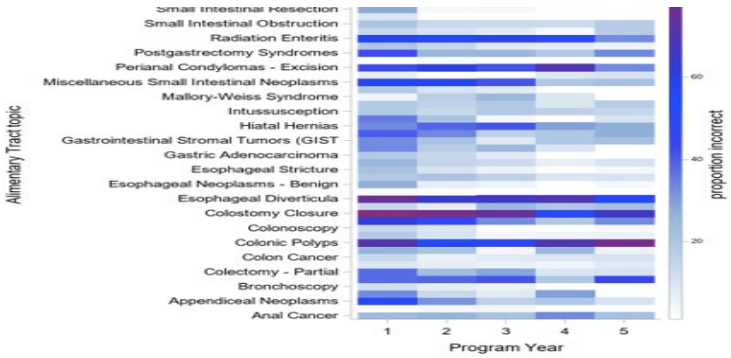


Figure 4. Proportion incorrect responses in alimentary tract topics across CUSOM General Surgery program years 1-5

Results

3rd year residents' median subtest scores were below the national average in Alimentary Tract (Al). 5th year residents' median subtest scores were below the national average in Al, Pre-Peri Op Care (OP), SCC/Trauma, and Surgical Specialties. Program years 1,2, and 4 had all subtest scores at or above the national average. Program year five had two subtests, Al and OP, with a median deviation of -50 compared to the national average. Alimentary tract subtest had three topics, colostomy closure, esophageal diverticula, and colonic polyps, with an incorrect proportion ranging from 40-80% across all five program years.

Discussion

Our study shows that CUSOM general surgery residents scored at or above the national average in program years 1, 2, and 4 while years 3 and 5 had median subtest scores below the national average in 1 and 4 subtests, respectively. Overall trends in deviation of subtest scores from national averages and identification of program weaknesses over time are pending additional analysis of 2017-2020 scores.

Disclosures

The authors have no relevant disclosures to share. This study is COMIRB exempt.

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