

Step 1 is Pass/Fail, Now What?

Can Clinical Clerkship Grades be used as a Reliable Metric to Screen General Surgery Residency Applicants?

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BACKGROUND

- For decades, Step 1 scores have been used to competitively evaluate and compare candidates
- In 2022, Step 1 becomes pass/fail; another quantitative measure will likely gain importance in its stead
- Clerkship performance grades, reported in Medical Student Performance Evaluation (MSPE) letters, are typically determined by

NBME subject exams
Clinical evaluations

METHODS

- This study aims to qualify and describe the national patterns of clerkship grading for general surgery applicants
- MSPE letters from US allopathic medical schools were reviewed for grading tiers, honors criteria, and grade distribution
- Medical Schools were categorized by geographical region assigned by the AAMC and research rank assigned by the 2022 *U.S. News and World Report*
- Number of grading tiers and percentage of students receiving the highest-grade tier in each required clerkship were extracted
- Aggregate data were analyzed using Excel, GraphPad Prism, and Stata

RESULTS

- 141 US Allopathic medical schools' MSPE letters from the 2020-2021 application cycle were reviewed
- 34.7% of schools do not provide an overall rank of the student
- 2% of schools stated they were unable to provide the overall ranking of their students due to COVID-19
- There is a variable number of grading tiers used, with a median of 4 for the Surgery Clerkship (Honors, High Pass, Pass, Fail)

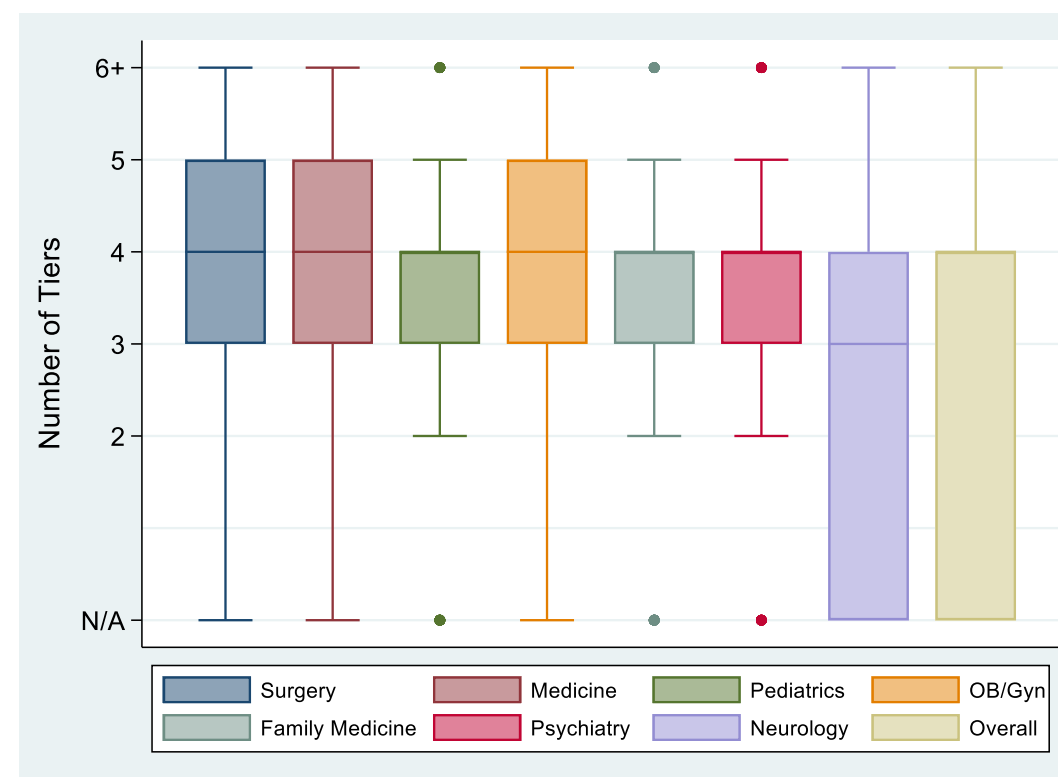


Figure 1. Median grading tiers by clerkship

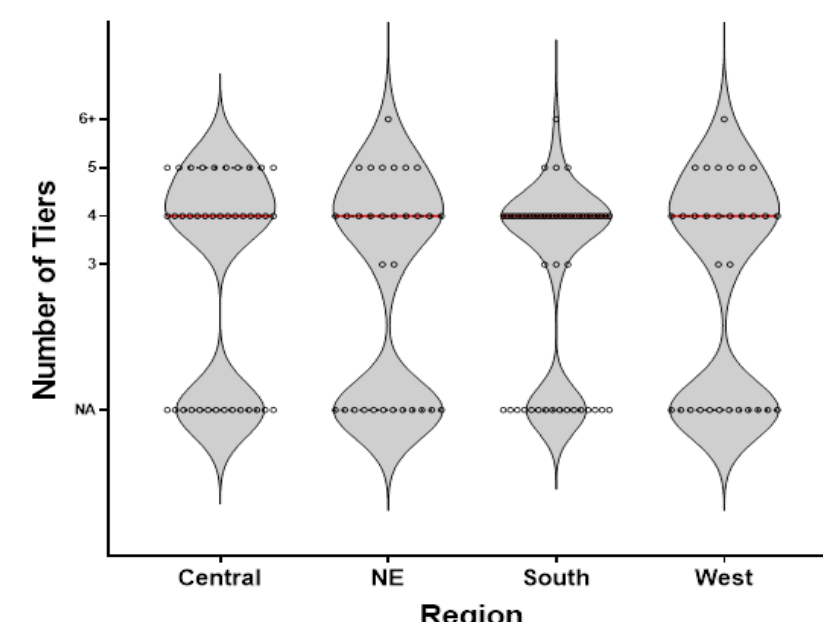


Figure 2. Violin plot demonstrating median grading tiers by region

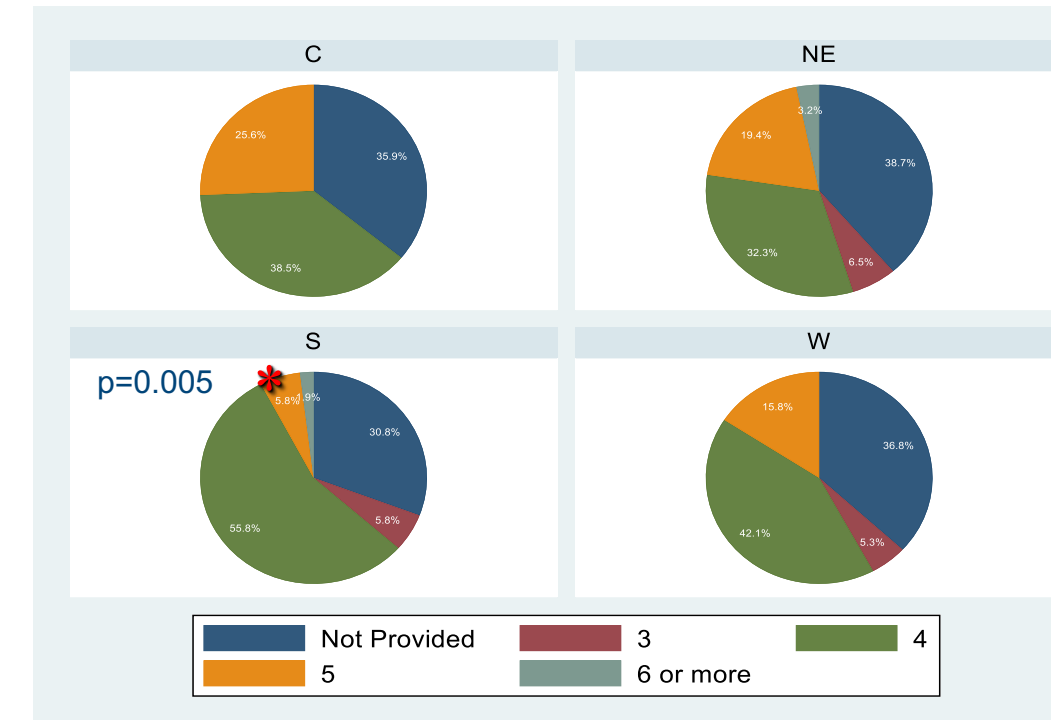


Figure 3. Pie charts by region demonstrating number of ranking tiers

- Schools are often not providing an overall rank of students or grouping them into a performance tier. This is most common in the Northeast and West, and reaches significance between the Central and Southern region ($p=0.005$)
- Variable percentages of students achieve Honors
- More students achieve the highest honors in their Psychiatry Clerkship. An average of 35% of students achieve highest honors in Surgery

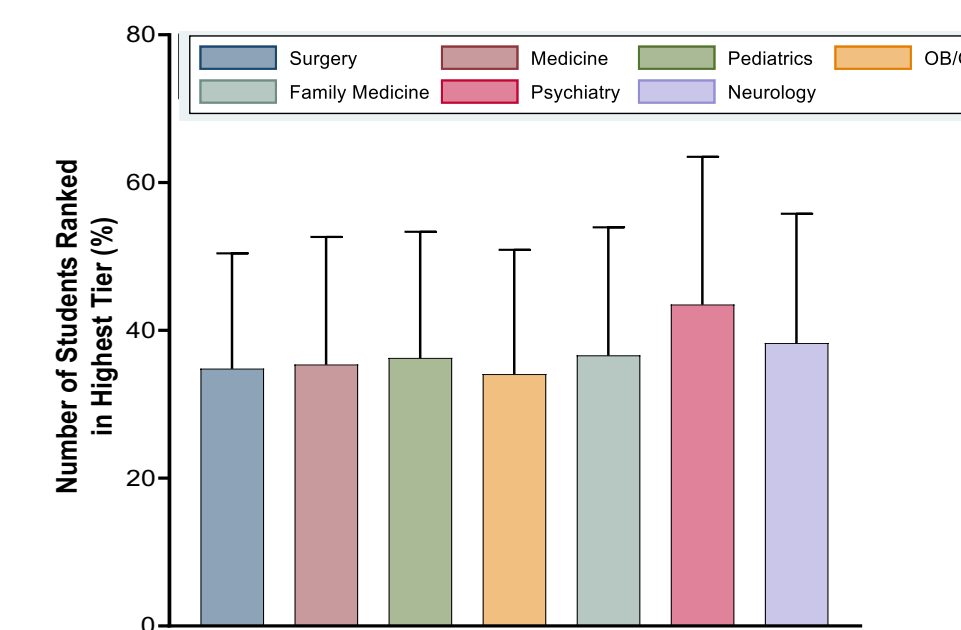
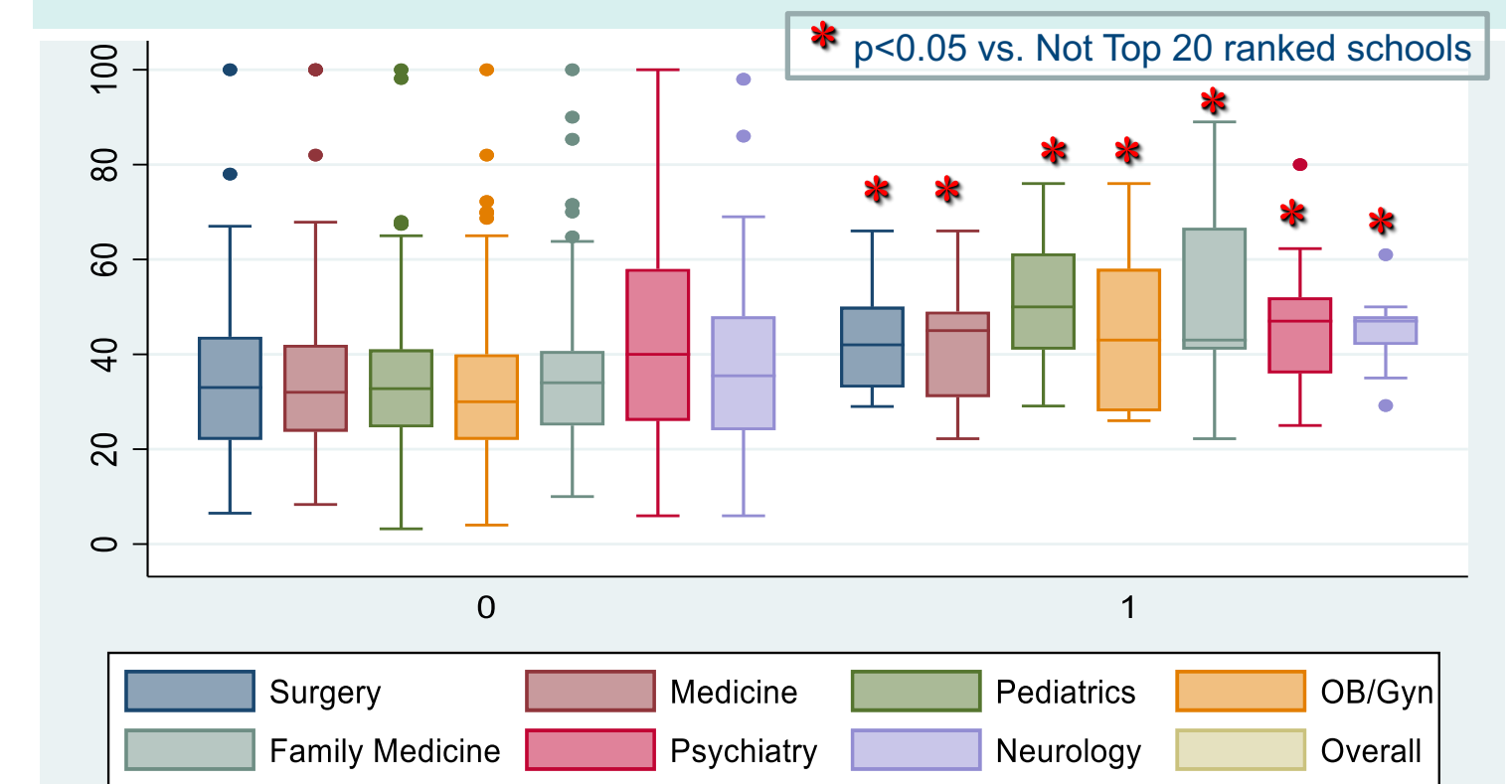


Figure 4. Percent of students achieving highest honors by Clerkship

RESULTS



- More students at Top 20 Schools achieve highest honors compared with schools not in the Top 20

SUMMARY

- The wide range in grading tiers, honors criteria, and variable subjective and objective contributors to Clerkship grades make it difficult to extract meaning from MSPE letters
- These findings highlight the growing challenge of residency programs' ability to stratify desirable applicants
- Further transparency and standardization may be required in the future to fairly compare students
- Additional analysis is needed to characterize grade reliability
- Questions? Contact quinnkr@musc.edu