Evaluation of University of Washington Medical Laboratory Science Clinical Rotation Length and Student Performance

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ABSTRACT

BACKGROUND: Local changes and needs in blood-bank operations allowed us to increase our medical laboratory science (MLS) blood-bank rotation to 4 weeks by reducing rotation length for clinical chemistry, microbiology, and hematology from 6 weeks to 5 weeks. We evaluated the impact of this change on American Society for Clinical Pathology Board of Certification (BOC) examination performance.

METHODS: We compared BOC scores for 119 MLS graduates with 6-week clinical rotation lengths in chemistry, microbiology, and hematology (2009–2013) and 127 MLS graduates with 5-week rotation lengths in these disciplines (2014–2018). We evaluated first-time pass rates. overall certification scores, specific discipline scores, and student rotation length satisfaction surveys.

RESULTS: Mean ± SD overall BOC scores for 6-week rotations (547 \pm 74) were not significantly different from overall BOC scores for 5-week rotations. Similarly, there was no significant effect on BOC scores for chemistry, microbiology, or hematology. The mean first-time pass rate for 6-week rotations was 97% compared with 96% for 5-week rotations. Student satisfaction surveys received from 282 out of 307 (92%) students during 2014-2018 indicated that the 5-week rotation length was adequate.

CONCLUSION: Reducing rotation length had no detrimental effect on BOC scores or student satisfaction. These findings allowed us to respond to changing patterns in laboratory medicine. Beginning in 2018, students will receive a 1-week rotation in 1 of 6 molecular diagnostic testing laboratories, including hematopathology, virology, microbiology, genetics, and blood-bank. These rotations may be expanded as laboratory testing moves in this direction.

ABBREVIATIONS: MLS - medical laboratory science, BOC - board of certification.

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