In this research project, we investigated the study approaches and demographics of second-year medical students taking Step 1 of the United States Medical Licensing Examination and, utilizing the data, were able to develop a score predictive model.

**Abstract:** Purpose: The United States Medical Licensing Examination (USMLE) Step 1 is traditionally taken after several weeks of preparation and plays a pivotal role in residency application. While prior literature has investigated which factors influenced performance on the examination, we sought to include performance on a well-used question bank and financial need to develop a predictive model. Methods: After obtaining IRB approval, we surveyed two consecutive second-year medical school classes after completing the examination but prior to receiving results. This data was correlated to students’ Step 1 and National Board of Medical Examiners practice examination (NBME) scores. Statistical analysis was performed using SPSS v. 22 and included ANOVA and multiple linear regression. Results: Eighty-one students completed the survey with an average Step 1 score of 240.5, with an average study time of 39.5 days. There was a statistically significant correlation with the NBME taken immediately preceding the dedicated study period (r=0.711, p<0.001) and Step 1 scores. Scores were also positively correlated with UWorld percentage correct (r=0.622, p<0.001), straight A’s during first-year (r=0.356, p=0.001), and financial need (r=0.318, p =0.009), but were not correlated with age, gender, MCAT, prior medical training, exercise habits, number of days studied, or students’ perception of appropriate time studied. A predictive model, which accounts for 62.3% of the variability, was developed: 140.625+(0.319xNBME)-(3.817xA)+(5.845xN)+(0.452xU), where A=1 if straight A’s and 2 if not, N=1 if receiving need-based scholarship and 2 if not, U=UWorld percent-correct, and NBME=the 3-digit score of the NBME taken prior to the dedicated study period. Discussion/Conclusions: Step 1 scores can be predicted based on academic performance and financial need. Interestingly, the number of days studied did not have a significant correlation to scores, suggesting that increased length of study may not ameliorate poor grades. Future directions may include validating this model at other institutions.

**Level of Audience:** Early-career

**Focus of Presentation:** UME

**References:**

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