

Project Title: Early identification and intervention for at-risk students in the Residency Match

Name and Institution: Maria Sheakley PhD, Western Michigan University Homer Stryker M.D. School of Medicine (WMed)

Collaborators and Mentors: Biren Shah MD, Kevin Kavanaugh MD

Background/Significance of Project: Students at WMed experience undue stress and anxiety regarding the residency application process, in part due to the lack of a formal process to identify at-risk students in a timely manner for focused advising and intervention.

Purpose/Objective: Implementation of a risk assessment strategy for early identification of at-risk students in the Match, to provide timely intervention and reduce the number of students participating in the Supplemental Offer and Acceptance Program (SOAP) to maintain our excellent match record.

Methods/Approach/Evaluation Strategy: A process to collect and track metrics to identify at-risk students in the Match was implemented in September 2022. Step scores were pulled from student records; students with Step 1 score below 220, and/or a Pass/Fail score on Step 1 this cycle (in which most students had a numeric score), were marked at-risk. Other metrics such as specialty selection, couples match, parallel planning, number of residency applications, number of residency interviews offered, and number of residency interviews accepted were collected via career advising meetings or optional student surveys. All metrics were collated and reviewed to identify at-risk students.

Outcomes/Results: The tracked metrics successfully predicted 100% of students (5/5) required to participate in SOAP in the 2023 ERAS cycle. However, there were an additional nineteen students who were flagged as at-risk who did not have to participate in SOAP, so the risk assessment plan was sensitive, but not specific.

Discussion: In the 2023 residency application cycle, four of five students in SOAP applied to competitive specialties (orthopedic surgery, urology, ophthalmology, neurosurgery) without a strong parallel plan, and only one of those was flagged for an additional risk factor (nine or less interviews). All four matched into a specialty outside of their preferred specialty during SOAP. This underscores the importance of appropriate advising for all competitive specialties to adequately convey the importance of a strong parallel plan despite the strength of the candidate's application. The fifth student had a Step 1 score below 220 and applied too narrowly, but ultimately matched into their preferred specialty. Advising about applying more broadly might have prevented this student from participating in SOAP. The tracking metrics used were sensitive enough to capture all five students who participated in SOAP; however, they were not specific enough as an additional nineteen students, who successfully matched without SOAP, were also identified as at-risk. Metrics for having a Pass/Fail Step 1 score and having less than nine interviews were not predictive in this cycle. Data from past and future Match cycles will be analyzed to improve the specificity of the metrics.

Conclusion/Statement of Impact: Students applying to highly competitive specialties such as Dermatology, Plastic Surgery, Orthopedic Surgery, Urology, Ophthalmology, and Neurosurgery must be advised about the inherent risks of these specialties, strongly encouraged to have a reasonable parallel plan in place and provided appropriate data to make informed decisions.