UpToDate Use as a Predictor of Medical Student Success (A Work in Progress)

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RATIONALE

- Speed and ease of use are prioritized over most other criteria in choosing how to look up clinical information, leading to popularity of electronic clinical resources.[1]

- UpToDate (UTD) is one of, if not the most, frequently referenced clinical knowledge resources, and its adoption in a hospital system correlates with better performance.[2]

- Prior work has shown a correlation between Internal Medicine resident UpToDate use & In-Training Exam score.[3]

- Given its proven popularity, the usefulness of UTD as a teaching tool must now be assessed against commonly agreed upon measures of medical student clinical competency.

- Research question – what is the relationship between UTD use and common outcome measures in medical education?

BACKGROUND

- Commonly used criteria for assessing clinical competency in year 3 students include the following:

  1. NBME Subject Examination Scores (% correct)

  2. RIME Scores (Reporter, Interpreter, Manager, or Educator in the clinical setting of each clerkship)

  3. Step 2 Clinical Knowledge Scores (1-300 point scale)

  4. Step 2 Clinical Skills Scores (Pass/Fail)

- Every student at WSUSOM is provided UTD access, and usage is tracked as both time spent and mouse clicks.

- Students entering year 3 are assessed for biological knowledge using USMLE Step 1 exam (1-300 point scale).

METHODS

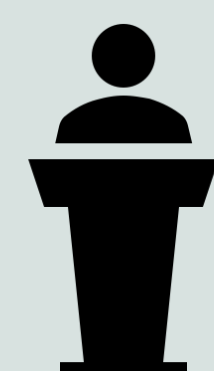**N = 900 students
(Classes of 2020-2022)**

Gather UTD usage data for each student across year 3

Stratify by Step 1 quartile to control for pre-existing knowledge and test-taking skills

NBME Subject Exams

RIME Scores

Step 2 CK Scores

Step 2 CS Scores

Relationship with UTD usage?

Relationship with UTD usage?

Relationship with UTD usage?

Relationship with UTD usage?

PRELIMINARY RESULTS AND CONCLUSIONS

- Assessing the utility of UpToDate as a teaching tool to reach validated endpoints of clinical skill will assist in curriculum design and instruction in medical schools.

- The current moment presents a unique opportunity to undertake this investigation given shifts taking place to make the multiple-choice exams more closely mirror the scenarios that students encounter on the wards and in their curriculum.[4-5]

- In addition, the USMLE Step 1 examination that marks the endpoint of pre-clinical education will soon become pass/fail, increasing the relative importance of the clinical scores and USMLE Step 2 in the process of acquiring a residency.

- This project and resulting investigations have the potential to lead to a better prepared future physician workforce – a benefit to both medical educators and society more broadly.

ACKNOWLEDGMENTS

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3. McDonald, F. S., Zeger, S. L., & Kolars, J. C. (2007). Factors associated with medical knowledge acquisition during internal medicine residency. *Journal of general internal medicine*, 22(7), 962-968.
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5. Personal correspondence with Dr. Carol Morrison, Principle Psychometrician at the National Board of Medical Examiners, December, 2019.