

Needs Assessment for an Asynchronous Research Curriculum for Internal Medicine Residents

S. Pettigrew, MD, M. Bocchese, MD, J. Allenbaugh, MD MS

Temple University Hospital, Philadelphia, PA

NEEDS AND OBJECTIVES

- Resident research opportunities allow for the exploration of interests within basic science, clinical research and quality improvement projects.
- Research is widely regarded as an essential component to a competitive fellowship or employment application.
- The current research curriculum at Temple Hospital is designed to teach residents the necessary skills to engage and excel in research.
- Lectures during the 2018-2019 academic year were poorly attended (reported attendance of <25% of residents), with no alternate way to view the material.
- The aims of this study is to evaluate if the creation of a new asynchronous curriculum increase:
 1. number of conferences viewed.
 2. number of abstracts submitted to local, regional, or national conferences.

SETTING AND PARTICIPANTS

Approximately 100 internal medicine residents at a large, urban academic teaching hospital participated in this curriculum and were surveyed.



INNOVATION

- The research curriculum, which includes topics such as creating an abstract, using survey software, and designing a research poster, was previously only available for in-person attendance once every year.
- In order to improve access, an online learning platform, Canvas, was utilized for calendar year 2019-2020, which archived all research curriculum lectures allowing access by residents at any time for an asynchronous learning opportunity.

RESULTS

- 34 residents (37%) responded to our survey.
- Pre-intervention results show that most residents (>80%) think that research is important to their future careers, whether they plan to pursue hospital medicine, primary care, or subspecialties. (Figure 1)
- The most common answer regarding confidence in writing an IRB or performing basic statistical analyses was “not at all confident.” (Figure 2)

Figure 1: “I think research is important to my future career”

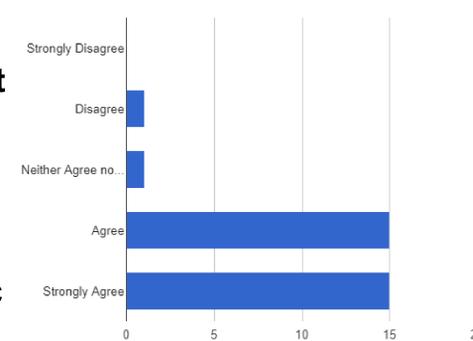
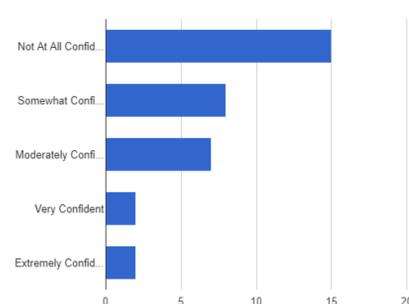
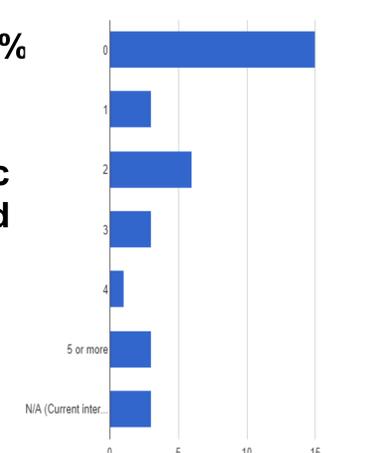


Figure 2: “I feel confident in my ability to write an IRB”



- Approximately 50% of our respondents have neither submitted a scientific abstract nor attended a national conference. (Figure 3)

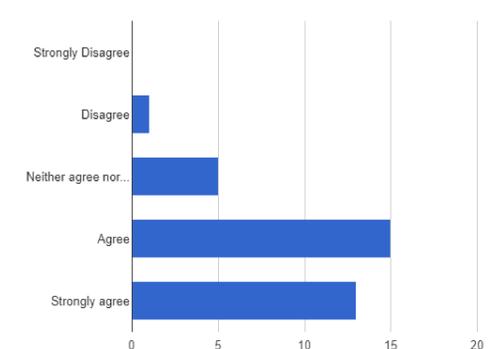
Figure 3: “Number of scientific abstracts submitted”



RESULTS

- Notably, 80% of residents polled had attended 0 or 1 research lectures during the previous academic year.
- At least 80% of polled residents would like the opportunity to access research lectures online. (Figure 4)

Figure 4: “I would like the ability to access research curriculum lectures on Canvas”



FUTURE DIRECTIONS

- An asynchronous research curriculum is clearly strongly desired by our housestaff and has now been implemented (with some delay due to COVID-19).
- We plan to survey residents at the end of this year, to evaluate our objective endpoints.
- Improvement in research outcomes may suggest that continued opportunities for asynchronous learning are necessary, especially for resident education where clinical burden often reduces the ability to attend conferences in person.