



## INTRODUCTION

- Shadowing in the pre-medical world is when an aspiring student-physician observes a licensed healthcare provider who is caring for patients – whether that be in an inpatient or outpatient care setting. The goal of shadowing according to Association of American Medical College (AAMC) is to offer an introduction into medicine, a glimpse into a specific medical specialty and the daily responsibilities it might include as well as give the provider the opportunity to model professional behavior and exemplary care of patients. These activities allow students to gauge and affirm their interest in medicine as a career.
- Physician clinical shadowing amongst pre-medical students have become a common and important activity especially if their desire is to matriculate into medical school. Physician shadowing, however, is not a new idea in medical education and has been a central component of training physicians. Shadowing has been encouraged by pre-medical advisors to show genuine interest in the medical field, as well as to gain an awareness of the day-to-day duties of a clinician. Although there are many studies which explores shadowing and its various benefits not many studies examine experiential learning of medical care post shadowing on pre-medical students.
- The purpose of this study was to evaluate whether physician shadowing impacts the development of medical care knowledge amongst a group of post-baccalaureate students at a large urban medical institution.

## METHODS

- This study involved administration of a 30-item survey to male and females, aged 24-38 years old.
- The survey questions included: physician responsibility, familiarity of administration of medical care and understanding of physician patient interactions.
- This survey was delivered to Wayne State University School of Medicine Post Baccalaureate students after their physician shadowing events.
- Data coding used IBM-SPSS.
- Statistical analysis included: Pearson correlation, *t*, and Chi-squared tests; with significance at *p* < 0.05.

## RESULTS

- The survey was completed by 9 out of 13 students with a 69% response rate, 78% being female and 22% male.
- Students reported that the most rewarding thing about shadowing is seeing the impact physicians have on their patients.
- 100% of students reported that shadowing increased their clinical knowledge while 87% (Fig 1) reported that their shadowing experience enhanced their pursuit for medicine and desire to attend medical school.
- Out of the 9 participants, 44% had pursued post-Baccalaureate education and obtained a Masters degree (Fig 2).
- Participants average rate of how much they liked their shadowing experience was 7.2 on a scale of 1 (dislike)-> (like very much) 10. 66% of participants, however, rated their experience 8 and above.

Q28-Do you feel the Shadowing Experience Impacted your Clinical Knowledge?

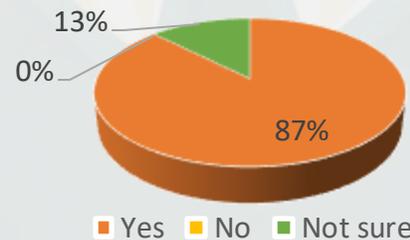


Fig 1

Q6- What is the highest degree or level of education completed?

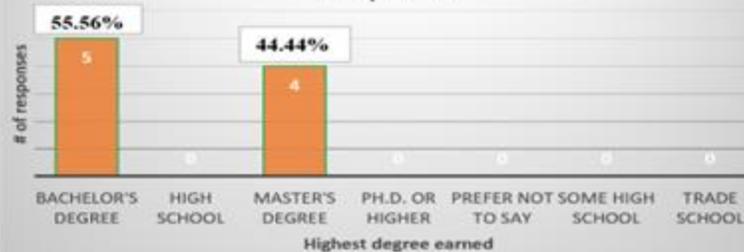


Fig 2

## CONCLUSION

- It was observed from our study that participants who completed the survey showed significant increases in familiarity with physician responsibilities and in understanding physician-patient interactions. Participants reported that their shadowing experiences enhanced their pursuit for medicine and influenced what specialty they would pursue. Our study did not detect any significant changes in student commitment to pursuing medicine.
- Overall, Shadowing remains a common and important tool for students to learn about patient care, medicine and medical specialty careers. Shadowing continues to be providing a helpful experience for those pursuing a career in the field of medicine.

## Next Steps

- Physician shadowing by premedical Postbaccalaureate students appears to promote an understanding of physician roles and challenges in the workplace. Shadowing is valuable, but students often shadow without clearly defined expectations and directions. Reviewing, expanding and increasing promotion of existing guidelines, as well as codes of conduct, for shadowing could serve as a helpful resource for students, academic advisors, and supervising clinicians.
- Additionally, future studies should identify the ideal timing, format, and duration of shadowing to optimize the experience and allow students to make informed decisions about whether to pursue a medical career.

## ACKNOWLEDGMENT

The authors are thankful to all students who participated in this study and provided thoughtful responses to the survey. The authors are also grateful and thankful to all clinicians who took the time to provide invaluable shadowing opportunities to the students.

## REFERENCES

- American Association of Medical Colleges. *Guidlines for clinical shadowing experiences for pre-medical students*. <https://www.aamc.org/download/3563/16/data/shadowingguidelines2013.pdf>. Accessed March 18, 2019. [Ref list]
- Kitsis EA. *Shining a Light on Shadowing*. JAMA. 2011;305:1029. [PubMed][Google Scholar] [Ref list]
- Stoeckle JD, Ronan L, Ehrlich C, Roberts D. *The uses of shadowing the doctor—and patient: on seeing and hearing their work of care*. J Gen Intern Med. 1993;8(10):561-563. [PubMed][Google Scholar][Crossref]
- Allen JG, Weiss ES, Patel ND, et al. *Inspiring medical students to pursue surgical careers: outcomes from our arthroscopic surgery research program*. Ann Thorac Surg. 2009;87(6):1816-1819. [PubMed][Google Scholar][Crossref]