

Work in Progress

‘Exploring the Impact of Early Exposure to Careers in Medicine on High School Students through the Wake Forest Immersion Institute’

Presenter: Sarah McCain, Wake Forest School of Medicine, Medical Student, Class of 2023

Co-authors: Christy Soares, Florida State University College of Medicine; Kayla Felix, Wake Forest School of Medicine; Lindsay Strowd MD, Wake Forest School of Medicine; Roy Strowd MD, Wake Forest School of Medicine

Background: The U.S. healthcare worker shortage continues to worsen and has been exacerbated by the COVID-19 pandemic.^{1, 2} This study examines the impact of early exposure to healthcare on interest and perceptions of medical careers in high school students.

Objectives:

1. Describe the demographics of participants in the Wake Forest Immersion Institute
2. Quantify interest in various medical professions before and after course completion
3. Analyze qualitative reflections on course experience and future interests, including perceptions of social determinants of health in medicine.

Methods: High school students from 22 states, Washington D.C., and three countries attended the Wake Forest Immersion Medicine Institute between April and September 2020. The Medicine Institute is a two-week intensive virtual course where students learn about professions in medicine including physicians, nursing, certified registered nurse anesthetists, physical therapy, occupational therapy, and pharmacy. Students completed a pre/post-course survey quantifying their current exposure and interest in healthcare fields and provided written responses evaluating the impact of the course on their future careers.

Evaluation Plan: 873 pre- and 526 post-course responses were collected. 28.5% (249/873) reported having a family member in healthcare. 72.4% (632/873) reported “extreme interest” in a healthcare career before the course. From the qualitative post-course responses, 4 major themes emerged: career insight, social determinants of health, healthcare system and preventive health. Within the theme ‘career insight’, participants reported deeper understanding of the variety of career options and

motivation to obtain advising for future planning. The 'social determinants of health' theme encompassed responses showing increased understanding of the impact of socioeconomic status, race, education, and geographic location on health. Responses within the 'healthcare system' theme mentioned improved understanding of the complexity of care and potential for system-wide improvement. The 'preventative health' theme included comments expressing a greater appreciation for preventative health and ways to promote health, including social media use. 80.9% (424/526) reported "extreme interest" in healthcare careers following the course.

Conclusions: With the growing need for medical providers, programs like these are crucial to engage students early and establish interest in healthcare fields.³ Early exposure programs may be a part of a multi-faceted solution to the growing healthcare worker shortage.^{1,3}

Works Cited

1. Kirch DG, Petelle K. Addressing the Physician Shortage: The Peril of Ignoring Demography. *JAMA*. May 2017;317(19):1947-1948. doi:10.1001/jama.2017.2714
2. U.S. physician shortage growing. AAMC.org.
3. Zayas LE, McGuigan D. Experiences promoting healthcare career interest among high-school students from underserved communities. *J Natl Med Assoc*. Sep 2006;98(9):1523-31.