

Office of Research and Sponsored Programs (ORSP)

2023 Summer Research Fellowship Program

Project Description

Project Title:

Investigating specialty choice and practice outcomes: A retrospective evaluation of NEOMED College of Medicine alumni from 2000-2009.

Principal Investigator Name:

Mike Appleman, MA Ed

Director, Primary Care Education

Instructor, Department of Family and Community Medicine

Abstract:

Primary care physician (PCP) workforce shortages plague the nation and Ohio. The Association of American Medical Colleges (AAMC) predict a shortfall of between 20,000 and 50,000 PCPs by 2033. The PCP workforce shortage contributes to social and economic problems, such as higher health care utilization rates, higher health care spending, and lower quality of care. In Ohio, the PCP shortage is as low as 15,000 people to 1 physician. The shortage is exacerbated by geography, as metropolitan areas boast 38.9 physicians per 10,000 population and nonmetropolitan areas report a modest 11.7 physicians per 10,000 population. This study aims to evaluate NEOMED's contribution to PCP workforce issues, through a retroactive evaluation of alumni specialty choice and eventual practice location. These data will illustrate how many alumni eventually practice general primary care, and the rate which they practice in medically underserved areas (MUAs).

Significance of the Overall Research:

The quantification of NEOMED's true primary care physician (PCP) output and placement will provide necessary data to direct future efforts to meet the College of Medicine's mission to "improve the health and quality of life of the communities of Ohio and beyond, including those both diverse and underserved". Currently, many academic programs and grant projects exist to address the PCP shortage, and NEOMED has been (and will continue to be) well situated to attain extramural funding, both in grants and philanthropy, while working to address pervasive health and health care disparities the US. The COVID-19 pandemic has only magnified these challenges, as our health care system was unprepared to weather such vast transmission of an airborne virus. Therefore, the significance of this study is to specify and articulate NEOMED's capacity to graduate physicians who will meet these challenges.

Goals and Objectives:

1. Determine the NEOMED College of Medicine's (COM's) true primary care output
2. Investigate medical school curricula and educational methods to increase medical student primary care specialty choice
3. Research question: What is the NEOMED COM's true primary care output?

Research Methods:

1. Conduct a comprehensive literature review on the primary care physician workforce shortage and efforts to address the shortage.
2. Collect National Provider Index (NPI) data on COM primary care alumni.
3. Collect data on alumni initial and current practice locations post-residency
4. Analyze and report data by specialty and geography, in comparison to initial specialty match data

Methods of Data Analysis:

- Literature review
- Comparative analysis

How anticipated findings will contribute to the success of the overall research:

1. A document that summarizes NEOMED's COM primary care output
2. Recommendations for the improvement of COM academic programming and reporting
3. A poster or presentation at a regional or national meeting

Student Fellow Training/Mentoring Plan

1. The student will meet with Mr. Appleman on a weekly basis.
2. All students working in the Department of Family and Community Medicine will be eligible to participate in supplemental research training, including:
 - a. establishing a research question
 - b. conducting a gap analysis/literature review
 - c. protection of human subjects
 - d. posters and presentations
3. Students will be encouraged to submit poster presentation proposals to regional and national primary care conferences.

Resources Available: The student will be provided space in the Department of Family and Community Medicine, although virtual work is acceptable. The student will also be provided research and statistical support as needed.

Site Where Research Will Be Conducted: The research will be conducted in the Department of Family and Community Medicine or independently/virtually.