

EXECUTIVE SUMMARY DOCTOR OF MEDICAL SCIENCE (DMSc)

The field of healthcare is rapidly changing with recent advances in technology, research, and in the growing scope of practice in healthcare professions. As medical professionals, including Physician Assistants, Nurse Practitioners, Pharmacists, Physical and Occupational Therapists, Behavioral Therapists, and many others, expand upon their roles as clinicians and establish a gradually increasing presence in healthcare leadership and administration, the need for additional education in these areas, as well as in healthcare systems, management, and advocacy, becomes increasingly important.

The Northeastern University Department of Medical Sciences in the Bouvé College of Health Sciences proposes a Doctorate of Medical Science (DMSc) in Healthcare Leadership. This fully online degree addresses the growing need for medical professionals to advance their education and expand their career opportunities in the areas of healthcare leadership, medical education, and community engagement and advocacy.

The DMSc program will comprise a series of core courses centered upon developing facility with healthcare systems and leadership. This will provide learners not only an understanding of the history and theory upon which healthcare systems are based but will also give them practical knowledge on techniques and qualities necessary to be an effective leader and administrator.

Once students have completed these initial core courses, they may progress into one of several concentrations which will hone knowledge and skills specific to their individual interests and career goals. Each one of these concentrations has been developed in cooperation with different programs and colleges, making this a truly interdisciplinary degree. At present there are 7 proposed concentrations, but additional concentration areas can be easily added to the program, giving this program a measure of flexibility and relevance not seen in other, similar degree programs. The concentrations are:

- Health Informatics
- Health Informatics Research
- Health Law
- Business Management
- Public Health
- Pharmacy and Health Systems Science
- Interdisciplinary Healthcare

Finally, each student will be required to complete 3 courses in research methods in preparation for a final problem-based thesis project that will address a healthcare issue and its relationship to their chosen area of concentration.

Market Demand/Value:

The DMSc is designed to appeal to a variety of students with differing career goals but who share an interest in healthcare leadership and administration. As similar programs at other institutions have been designed specifically for physician assistants, a market analysis was conducted using the physician assistant profession as a proxy for potential students.

In July of 2020, Hanover Research assessed the demand for a Doctor of Medical Science degree for Boston University, specifically highlighting demand trends within the New England Region.¹ While the comprehensive student demand assessment was not yet available, as almost all doctorate-level Physician Assistant programs in the United States were too new to have reported any conferrals at that time, the provisional 2019 data was promising. In a provisional 2019 data release, Lynchburg University reported 137 conferrals for a DMSc program, and MCPHS in Boston reported eight conferrals for their newly established DSc program. A similar program at Baylor University reported 21 conferrals. The number of advanced degrees in this area, along with the fact that master's level programs for physician assistants continues to grow robustly nationwide, indicate general continued demand for graduate programming for physician assistants.

The research concluded that benefits to PAs of obtaining a doctorate-level degree are significant. The most obvious benefit is the acquisition of advanced knowledge about their field, including knowledge about leadership and administration. Other benefits include assurance of insurance reimbursement, enhanced research, and employment opportunities, and "keeping pace" with the other health sciences.

The Bureau of Labor Statistics reports that, as of 2018, 17.9 percent of current physician assistants nation-wide hold doctoral degrees. Given the expansion of the role of the advanced practitioner in healthcare over the past several years, the escalation of the terminal PA degree to the doctorate level is viewed by some as inevitable. This transition may be necessary to bring the profession in line with other allied health professions

Approximately 25 percent of job postings for PA-related occupations request or prefer a doctorate degree, and, as stated above, this is anticipated to increase. While this suggests a significant audience for the DMSc degree, the potential reach of this degree potentially becomes much greater as it is designed to appeal to students in multiple healthcare professions.

Establishment of the DMSc degree at Northeastern would not only provide a wider range of concentration and educational options, thereby appealing to a wider audience, but would also allow Northeastern to be the first R1 Institution to host such an opportunity. Given Northeastern's reputation as well as the growing need for expertise in healthcare administration and leadership, the DMSc Program has the potential to offer education to a wide variety of healthcare professionals.

Resources:

In order to meet the educational needs of the DMSc Program, an additional full-time faculty member will be required. In addition, additional resources will be required for creation, launch, and maintenance of this program including development of on-line educational modalities.

¹ Hanover Research, Market Analysis Doctor of Medical Science, Prepared for Northeastern University, July 2020.