THE SHORTEST PATH TO A PROFESSIONAL DOCTORATE
The Journey to the Arrowhead Orthopaedic Surgery Physician Assistant Fellowship Program

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Abstract
Over the last decade, there has been a rise in, and surge in demand for, postprofessional doctorate degree programs (e.g., the doctor of medical science [DMSc] degree), and the potential benefits of such degrees warrant additional investigation. This article chronicles the path that the Arrowhead Orthopaedic Surgery PA Fellowship program took as an early adopter of the doctorate option for PA fellows. In this article, the pros and cons and the potential benefits of doctorate degrees for PAs in orthopaedic surgery postgraduate PA education training programs are discussed.

There are nearly 100 postgraduate PA fellowship or residency programs across the country. Postgraduate PA programs have been around since the 1970s, and offer advanced training in a number of specialties and subspecialties. With the exception of military PA fellowships, which offer clinical doctorates, to my knowledge no data are available on the existence of civilian postgraduate PA programs that offer degree options. However, there is an emerging paradigm shift fueled by the growth of and widespread interest in postprofessional doctorate programs. Research has shown that PA students consider the perceived benefits as a reason to obtain a clinical doctorate1. Additionally, 16.8% of newly certified PAs intend to pursue additional education or clinical training2. However, for directors of PA postgraduate programs, questions remain about the viability and impact of degree programs on clinical fellowship training. This article chronicles the movement toward a professional doctorate by the Arrowhead Orthopaedic Surgery PA Fellowship (OSPAF) program.

Based in southern California, the Arrowhead OHPAF program has provided postgraduate training for PAs since 1995, and was the first orthopaedic surgery PA fellowship program to be accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA). In March 2017, OHPAF signed a memorandum of understanding (MOU) with Lynchburg College in Virginia (soon to be the University of Lynchburg) to offer a doctor of medical science (DMSc) degree for eligible PA fellows. OHPAF is the first civilian clinical fellowship program to offer this opportunity in a partnership, specifically with Lynchburg College. This is a historic milestone for OHPAF. The impetus for the move to a postprofessional doctorate program was in response to the seismic and unprecedented changes in the evolving world of health care. While it is the mission of OHPAF program to produce competent orthopaedic PAs, equally important is the desire to equip them with the conceptual and analytic skills that are required to address a broad spectrum of health-policy issues.

The Road to the Doctorate
The road to the doctorate program started with a conversation with the medical
group’s chief executive officer (CEO) and physician chairman. As program director, I was eager to enhance OSPAF’s reputation and educational offerings. There was a general interest in developing a partnership with an academic institution to create a de novo postprofessional degree specific to postgraduate PA programs. In addition, we examined degree types, including the doctor of physician assistant (DPA) and the doctor of medical science (DMSc). We weighed the pros and cons of PA fellows pursuing both an orthopaedic clinical fellowship and a doctorate degree simultaneously.

The Potential Advantages of Obtaining a Postprofessional Doctorate
There are a number of advantages of obtaining a postprofessional doctorate degree, such as acquiring knowledge about leadership practices and public-health principles, and receiving academic credit for clinical hours that are completed during the fellowship program, thereby shortening the ascent to a postprofessional doctorate. Other advantages include enhancing research and scholarship opportunities through doctoral studies, as well as keeping pace with other professional programs such as physical and occupational therapy, chiropracty, audiology, psychology, and nursing, which have developed discipline-specific doctorates. Additional advantages include increased professional recognition, employment opportunities in teaching or administration, and increased marketability of the orthopaedic fellowship program to applicants and PA faculty. Research has shown that 32.5% of PA faculty encourage student participation in postgraduate clinical education.

The Potential Disadvantages of Obtaining a Postprofessional Doctorate
There are several potential disadvantages of pursuing a doctorate, including employer perception of degree value; specifically, what is the value of a postprofessional doctorate for PAs? Additionally, the benefits to patients of PAs receiving doctorates have not been proven empirically. Other potential disadvantages include increased stress and fatigue levels due to concurrent responsibilities of both the clinical fellowship and the doctorate program. Additionally, extending the length of the postgraduate fellowship program to accommodate those selecting the doctoral option may negatively impact the marketability of the program to applicants. Furthermore, pursuing a postprofessional doctorate will increase education-related debt and may not lead to academic tenure and/or promotion at some institutions. There is also a concern that organized medicine may develop a perception that doctorate-prepared PAs are trying to compete with physicians, which may potentially result in draconian scope-of-practice restrictions.

After careful assessment of the potential advantages and disadvantages of a postprofessional doctorate degree, we decided to move forward with a suitable academic partner that shared our values and vision regarding PA postgraduate education. Moreover, we decided that the DMSc degree was more applicable to our program than the DPA degree, which has received mixed reviews by the PA profession. The DMSc degree has been associated with a successful publication record among young and midcareer physician researchers. Therefore, obtaining a DMSc degree may help to increase PA research capacity in the workplace and beyond. This is particularly important given the current dearth of PA researchers. Lastly, the DMSc degree was endorsed by the 2009 PA Clinical Doctorate Summit.

Partnering with Lynchburg College
I must acknowledge that I have had a longstanding professional relationship with the chair, Dr. Jeremy Welsh, of the Lynchburg College DMSc program that dates back more than a decade. We share common interests and goals about postprofessional doctorate degrees for PAs. In addition, Lynchburg College made the national news with the development of their DMSc degree program in 2014, which was launched in 2017. The postprofessional doctorate degree program utilized an educational delivery model that aligned with physician training using clinical residency and fellowships. The enrollees complete their didactic obligations online, and there is no on-campus requirement. Students receive 16 academic units upon completion of the clinical fellowship program, which are applied toward the 37-unit doctorate, which can be completed in <1 year. Lynchburg College was extremely flexible and amenable to suggestions about aligning course sequencing to the specific needs and expectations of the OSPAF training program.

Surprisingly, there were no barriers in establishing a partnership with Lynchburg College. There was no opposition from the medical group, the hospital medical staff, or the community regarding the partnership. Once the MOU was developed, we were off and running. It took only 6 months to forge a partnership and begin enrolling students. It is important to share that other clinical fellowship programs at our institution, including emergency medicine and women’s health, were involved in preliminary discussions with Lynchburg College about the professional doctorate program. To date, the Emergency Medicine Fellowship Program has partnered with Lynchburg College to offer the DMSc degree to eligible PA fellows. We expect women’s health and neurosurgery to adopt the DMSc degree option in 2018. There were no general or administrative expenses incurred by the OSPAF program in partnering with Lynchburg College.

The Perception and the Attitude of PA Fellow Enrollees in the DMSc Program
The initial perception and attitude of the PA fellows who are enrolled in the
program have been extremely positive so far. Our first enrollees, who started the program in the summer of 2017, have expressed satisfaction with the DMSc program. They are doing well in managing coursework pressure, balancing study with other commitments, and meeting clinical fellowship expectations. They reported spending an average of 4 to 6 hours per week of study time per class for the DMSc program. OSPAF faculty consistently monitor for any signs of student fatigue and exhaustion, which can lead to burnout and medical errors.

**Advice for Postgraduate PA Fellowship Programs That Are Interested in the Doctorate Option**

Lynchburg College was a good fit for the Arrowhead OSPAF program because of its flexibility to meet our unique needs. Its model appears to align well with market realities for postgraduate PA programs. However, we recognize that not everyone will take this path. There are a number of postprofessional doctorate programs from which to choose. Some postgraduate programs may want to partner with a local degree-conferring institution versus an out-of-state program. It is important to meet with internal and external stakeholders to determine the best course of action for your specific fellowship or residency program. Lastly, we did not have to make any modifications to our fellowship program to accommodate the DMSc degree.

**Benefits of a Doctorate That Are Specific to a Career in Orthopaedics**

Research has demonstrated that the reasons that PAs pursue doctorates are for greater practice independence, increased clinical knowledge and skill, and easier access to academic careers. To my knowledge, no study has examined the value of doctorate degrees for PAs practicing in orthopaedic surgery. In addition, leadership opportunities in orthopaedics outside of the position of the lead or the chief PA remain limited, and there is substantial heterogeneity among PA leadership positions. Whether the DMSc adequately prepares orthopaedic PAs for academic roles requires additional study. It is conceivable that the DMSc degree or other postprofessional doctorate programs may enhance the reputation of PAs in orthopaedic surgery practices. Moreover, some have speculated that doctoral-prepared PAs may have an easier time being credentialed for reimbursement than PAs with a terminal master’s degree. Others claim that having a doctorate helps PAs remain competitive in the marketplace with other health professionals, such as advanced practice nurses.

Interestingly, several states are considering whether to allow primary-care PAs with a DMSc degree to practice independently, similar to full practice authority. However, this would have little to no effect for orthopaedic PAs carrying the same degree in those states. Nevertheless, there has been a rise in, and surge in demand for, postprofessional doctorate degrees such as the DMSc, and the benefits of such degrees warrant additional investigation.

**Areas of Future Research Regarding the DMSc Degree**

The OSPAF faculty intends to measure the effect of the DMSc degree on public policy and perception, employment patterns, workforce issues, and PA salaries.

**Conclusions**

Whether or not PAs should obtain doctorate degrees remains widely debated. Remarkably, there is no universal consensus on this issue by the PA profession or the organizations that represent PAs. However, one thing is clear: some academic institutions have created innovative postdoctorate degree options that appear attractive to postgraduate PA clinical education programs that are looking to enhance the training of their PA fellows and residents.

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**References**

4. Ohlemeyer LS, Muma RD. The perceptions of physician assistants regarding doctorate level PA education. Proceedings of the 4th Annual GRASP Symposium; 2008; Wichita State University, Wichita, KA.