

Post-Doctoral Training in Pain Medicine: Too Little, Yet Not Too Late?

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As leaders in pain medicine, we stand at a crucial juncture in the evolution of our field. The challenges we face in 2024 underscore the urgency of reassessing the current structure of pain medicine fellowships. Our commitment to shaping the future of pain physicians, and, thus, the field generally, compels us to address the constraints that hinder the comprehensive training essential for the next generation.

Over the past decade, pain medicine has witnessed significant changes that have profoundly affected the training of fellows. The shift away from opioid management paired with the emergence of numerous innovative therapies has added complexity to fellowship training, creating a dynamic landscape with competing educational priorities. Balancing the emphasis on conservative care and procedures has become more challenging for academic leaders due to a conflict of static educational time and significantly increased educational need. In fact, fellows must supplement their training through industry- and pain society-based education to achieve a more comprehensive understanding of both conservative treatments (such as pharmaceutical approaches, restorative therapies and psychosocial interventions) and training in the dramatically and rapidly evolving field of interventional pain medicine.¹ This holistic, balanced and multidisciplinary approach is consistent with the 2019 US Department of Health and Human Services guidance on best practices in pain management,² as well as with the Accreditation Council for Graduate Medical Education (ACGME) requirements.³

Additionally, the COVID-19 pandemic produced challenges associated with patient volume and treatment paradigms due to decreased ancillary staffing (eg, physical and occupational therapy, psychiatry), highlighting the need for these services and adding commensurate value for increased awareness for our trainees. Amidst these changes, the landscape of procedural interventions in pain medicine has expanded considerably over recent years. Advances in neurostimulation, ablative techniques, percutaneous surgical technologies, and ultrasound application have broadened the procedural toolbox. With these interventional therapies becoming more common, training a pain fellow within the standard timeframe of one year has become notably more challenging. We opine that the current fellowship structure can provide only “introductory exposure”, with the expectation that fellows will develop into competent pain physicians post-fellowship. Although the growth of our field is exciting and necessitates a demand for even more broadly skilled practitioners, new information and technical skill set demand is outpacing our ability to teach it. Furthermore, the landscape of pain medicine fellowship has undergone significant transformation in recent years, marked by a notable shift in recruitment strategies and a broadening of the candidate pool to include diverse specialties such as anesthesia, physical medicine and rehabilitation (PM&R), neurology, emergency medicine (EM), radiology, psychiatry, and more. This inclusivity has brought forth a wealth of unique strengths and backgrounds, enhancing the multidisciplinary nature of pain medicine teams. However, this shift also introduces a challenge, as the starting points and interventional backgrounds of fellows from different specialties can vary significantly. The 2023 National Resident Matching Program (NMRP) match reflects this evolution, yielding historically low numbers of anesthesia applicants. This

trend underscores the evolving dynamics within our specialty, prompting fellowship programs to adapt and welcome candidates from a broader array of medical backgrounds. As the landscape transforms, the emphasis on embracing diversity in specialty backgrounds will likely reshape the future of pain medicine fellowship training.

The current 1-year ACGME construct for pain fellowship has been unchanged for over 25 years and, during its inception, was designed for learners to improve medical management and needle guiding skillsets from that learned in residency. However, we are now teaching fellows new interventions, foreign to most, if not all, residents who apply to pain medicine fellowships. Most pain medicine fellowship programs are approximately 45 weeks, factoring in vacation time, meetings, and holidays. When we break down these 45 weeks into training days, we are left with approximately 225 days. If evenly distributed between clinic and procedure time, this equates to approximately 112 days for each aspect—an 8-hour clinic day results in approximately 900 hours of clinic training. Simultaneously, assuming that hands-on practice time during a procedure day is approximately 6 hours (subtracting time for setup, consents, and turnover), this amounts to roughly 670 hours. Furthermore, assuming that advanced procedures constitute 20% of the total procedure volume, we are left with slightly over 130 hours of training for advanced procedures. Although these calculations provide an estimate of the actual training hours that fellows typically receive, we also acknowledge that there is a degree of inter-program variance in what is taught in each program, as well as the volume of procedures.

The challenges that we face are multifaceted. The time constraints in the current fellowship structure limit our ability to provide in-depth training across clinical and procedural domains. As key opinion leaders and program directors, we must acknowledge the pressing need to adapt our training programs to ensure that our fellows are proficient and excel in the face of the growing complexities in pain medicine.

In response to these challenges, we advocate for a thoughtful extension of the pain medicine fellowship duration. The extension of fellowship time will depend upon the establishment of new competencies and program director guidance from the ACGME. We posit that a minimum addition of one year is necessary, as a multi-year training program also allows for a tiered educational system, effectively creating a system whereby the seniors become mentors and teachers; we submit that this is a very important component of professional and educational maturation, helping to engrain learned information. Furthermore, an extension will improve fellow preparation for the diverse array of patients and advanced procedures that they will encounter throughout their careers.

The investment in an extended fellowship duration is an investment in the future of our field. By affording our fellows more time for broad clinical training, procedural experience, and specialization in advanced techniques, we will empower them to navigate the complexities of patient care with increased confidence and expertise.

We understand that our proposal will not be unanimously embraced by all training faculty and many fellows and residents planning to apply to fellowships. We anticipate that this will be the first of many commentaries on this topic that we will publish. Irrespective, our hope is that this brief analysis will result in increased discussion in the pain medicine community regarding the changes occurring in the field and the imperative to adapt our training paradigms accordingly.

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