

Advanced Practice Providers – Effectively Bridging the Gap in Interventional Pain Management

Chelsey Hoffmann¹, Michael E Schatman ^{2,3}

¹Department of Medical Education, Mayo Clinic School of Health Sciences, Rochester, MN, USA; ²Department of Anesthesiology, Perioperative Care & Pain Medicine, NYU Grossman School of Medicine, New York, NY, USA; ³Department of Population Health – Division of Medical Ethics, NYU Grossman School of Medicine, New York, NY, USA

Correspondence: Michael E Schatman, Department of Anesthesiology, Perioperative Care, and Pain Medicine, NYU Grossman School of Medicine, 550 1st Ave, New York, NY, 10016, USA, Tel +1 425-647-4880, Email Michael.Schatman@NYULangone.org

A national shortage of up to 122,000 primary care physicians and specialists is projected to exist in the United States by the year 2032.¹ While efforts are being made to address the nature of this problem, the graduate medical education bottleneck, and opportunities for legislative reform,¹ another effective solution is that of optimizing advanced practice provider (APP) utilization.

The Physician Assistant (PA) profession was developed to improve and expand access to healthcare, with the first class of PAs initiated in 1965 by Eugene A. Stead Jr., MD, of Duke University Medical Center.² The first Nurse Practitioner (NP) program was developed by Drs. Loretta Ford and Henry Silver at the University of Colorado in 1965.³ Together, PAs and NPs are collectively identified as APPs, and many institutions utilize PAs and NPs for similar roles.

Many pain management practices currently utilize a comprehensive care team model consisting of either PAs and/or NPs, mental health specialists and physicians.⁴ In two recently published studies, the role of APPs in interventional pain management and their contribution to optimization of patient outcomes are discussed in great detail; The Team Approach to Spinal Cord and Dorsal Root Ganglion Stimulation: A Guide for the Advanced Practice Provider,⁵ and An Advanced Practice Provider Guide to Peripheral Nerve Stimulation.⁴ Additionally, the ability of neuromodulation APPs to free up neurosurgeon and anesthesiologist or physiatrist time by offloading responsibilities such as preparing patients for surgery, examining stimulators, and determining possible problems with stimulation therapy, etc. has been described in a recent British study, A Hybrid SWOT Analysis of the Neuromodulation Process for Chronic Pain.⁶

There is also a formidable body of research on the efficiency and effectiveness of APPs outside of the field of interventional pain management. PAs have been demonstrated to increase the throughput of patients, while containing costs and without adversely affecting outcomes in secondary care.⁷ PAs involvement on a general surgery service resulted in a significant decrease in late discharges and increased unplanned early discharges.⁸ Lastly, APPs have been determined to be valuable contributors to quality patient care management, continuity of care, improved quality and safety metrics and patient and staff satisfaction in acute and critical care settings.⁹

The research supports the notion that APPs can successfully aid in bridging the gap resulting from the shortage of physicians nationwide and across medical subspecialties. When empowered to practice to the highest levels of their scope, APPs can improve practice efficiency and effectiveness, and contribute to improved patient outcomes and satisfaction. There is no better time than the present for physicians to partner with APPs.

As a final note, for the continuing medical education needs of APPs related to the fields of neuromodulation, pain management, and other related specialties, it is highly recommended that APPs attend the annual conferences of related professional societies such as the North American Neuromodulation Society (NANS), the American Society of Pain and Neuroscience (ASPN), the American Society of Regional Anesthesia and Pain Medicine (ASRA), and the American Academy of Pain Medicine (AAPM), many of which have specific conference tracks targeted towards the needs of APPs. These professional learning opportunities allow for APPs to build a supportive network of colleagues, both APPs and physicians, as well as enhancing their knowledge and skills.

Disclosure

Ms Chelsey Hoffmann reports personal fees from SPR Therapeutics and Nalu Medical, outside the submitted work. Dr Michael E Schatman is a research consultant for Modoscript and part of the Scientific Steering Committee of Collegium Pharmaceutical, outside the submitted work. The authors report no other conflicts of interest in this work.

References

1. Ahmed H, Carmody JB. On the looming physician shortage and strategic expansion of graduate medical education. *Cureus*. 2020;12(7):e9216. doi:10.7759/cureus.9216
2. AAPA. History; 2022. Available from: <https://www.aapa.org/about/history/>. Accessed January 18, 2023.
3. American Association of Nurse Practitioners. Historical timeline. Available from: <https://www.aanp.org/about/about-The-american-association-of-nurse-practitioners-aanp/historical-timeline>. Accessed January 18, 2023.
4. Hoffmann CM, D'Souza RS, Hagedorn JM. An advanced practice provider guide to peripheral nerve stimulation. *J Pain Res*. 2022;15:2283–2291. doi:10.2147/JPR.S370037
5. Hagedorn JM, Misericola B, Comer A, et al. The team approach to spinal cord and dorsal root ganglion stimulation: a guide for the advanced practice provider. *Mayo Clin Proc Innov Qual Outcomes*. 2021;5(3):663–669. doi:10.1016/j.mayocpiqo.2021.05.002
6. Puurunen A, Ikäheimo TM, Nissen M, et al. A hybrid SWOT analysis of the neuromodulation process for chronic pain. *Br J Neurosci Nurs*. 2020;16(2):76–85. doi:10.12968/bjnn.2020.16.2.76
7. Halter M, Wheeler C, Pelone F, et al. Contribution of physician assistants/associates to secondary care: a systematic review. *BMJ Open*. 2018;8(6):e019573. doi:10.1136/bmjopen-2017-019573
8. Dies N, Rashid S, Shandling M, Swallow C, Easson AM, Kennedy E. Physician assistants reduce resident workload and improve care in an academic surgical setting. *JAAPA*. 2016;29(2):41–46. doi:10.1097/01.JAA.0000476214.34937.50
9. Kleinpell RM, Grabenkort WR, Kapu AN, Constantine R, Sicoutris C. Nurse practitioners and physician assistants in acute and critical care: a concise review of the literature and data 2008–2018. *Crit Care Med*. 2019;47(10):1442–1449. doi:10.1097/CCM.00000000000003925

Journal of Pain Research

Dovepress

Publish your work in this journal

The Journal of Pain Research is an international, peer reviewed, open access, online journal that welcomes laboratory and clinical findings in the fields of pain research and the prevention and management of pain. Original research, reviews, symposium reports, hypothesis formation and commentaries are all considered for publication. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <https://www.dovepress.com/journal-of-pain-research-journal>

<https://doi.org/10.2147/JPR.S405404>