Finding Success in Scholarship: How Physician Assistant Educators Can Overcome Barriers to Publication

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Abstract Publishing scholarly work offers several benefits for physician assistants (PAs) in faculty roles. It allows them to establish expertise, disseminate knowledge, and advance their careers. However, due to a variety of barriers, PAs are often unable to build a portfolio of scholarly

articles. They frequently lack the time, training, experience, and resources to complete large academic projects and navigate the complex publication process. This article offers 6 key strategies to help PAs in academic settings pursue scholarly work and achieve publication.

INTRODUCTION

The dissemination of ideas through the publication of scholarly works has immense benefit for physician assistants (PAs) and the PA profession. Peer-reviewed publications often guide medical practice, vet and share original research, and present commentary on important professional issues. Publications authored by PAs also promote and advance the profession by demonstrating subject matter expertise and professional accomplishment. Additionally, publishing scholarly work offers substantial benefits for individual PAs, especially those in academic settings. It serves as an important source of intrinsic motivation, provides a platform on which PA educators can establish expertise, and allows educators to reach beyond the walls of their classrooms to impact the learning of a broader audience. Publication, especially peerreviewed publication, can serve as a benchmark to validate the quality of one's work and is used as a metric of success by faculty promotion and tenure committees.

Unfortunately, PA educators publish very little. Due to a variety of intrinsic and extrinsic barriers, PAs often miss opportunities to disseminate their ideas and reap the benefits of scholarship and publication. This article offers strategies that PAs in academic settings can use to pursue scholarly work and navigate the writing and publication process. It leverages the author's research, writing, and editorial experience to help PA educators overcome common barriers and achieve scholarly success.

BACKGROUND

Over the past 20 years, the average number of publications for PA faculty has remained low, buoyed by the publication rate of a relatively small group of prolific outliers. In 2002, the average PA faculty member had produced only 1.6 publications throughout their entire career, while 73% had never published at all. By 2010, those numbers had improved somewhat with the average number of career publications

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rising to 4.2, and the percentage of faculty without any publications dropping to 45%.² However, the next decade saw an explosion of new PA programs and a corresponding rise in the number of PA faculty. By 2017, the average number of peer-reviewed publications per PA faculty had fallen to 2.74, and the median number of publications for PA faculty was zero.³ At that time, a little over 50% of PA faculty had never produced a single publication in their entire career.⁴

Scarcity of PA faculty scholarly publications can have significant consequences. With their voices missing from the academic literature, the PA profession is less visible. Individual PA faculty members lose the benefits of producing and disseminating scholarly works, which at some institutions includes promotion to higher academic rank.⁵ An institutional emphasis on scholarship compounds this problem, with over 45% of faculty reporting pressure to publish as a significant source of stress.⁴ A lack of support for scholarly work and the stress of the academic promotion process have been linked to faculty members' intent to leave their institutions or leave academia altogether.^{3,4}

Several major barriers stand between PA educators and publication. PA faculty are primarily tasked with educating PA students and find the vast majority of their time dedicated to teaching duties, leaving little time for scholarly pursuits. In 2019, the median proportion of PA faculty time allocated for research and scholarship activities was 8%, and less than 50% of PA faculty reported having any time designated for scholarship.6 In addition, PAs often lack the formal education, training, skills, and experience required for success in both research and writing. PAs also rarely receive specific institutional or financial support for scholarship; as of 2019, only 14% of PA faculty reported receiving funding for research or scholarly work.⁶ Perhaps just as important, the cultural inertia from a general lack of publication among PA faculty may create a low intrinsic motivation to publish and could prevent some from even attempting scholarship.

An Evolving Definition of "Scholarship"

Academics have often confined "scholarship" to a traditional framework. Conservative definitions typically restrict scholarship to original research articles published in peer-reviewed outlets such as academic journals. However, many university

promotion and tenure committees recognize an expanded definition of scholarship based on the *Boyer Model of Scholarship*. This includes traditional research as well as a broad range of activities focused on the integration of knowledge from different sources (scholarship of integration), the application of existing knowledge or theory to real-world problems (scholarship of application), and the study of best practices in teaching (scholarship of teaching).

In addition to this expanded definition, emerging media and a shifting perspective on the value of traditional scholarly outlets has catalyzed the evolution of scholarship. A broader landscape of academic communication has created new outlets for publishing ideas while a growing chorus has criticized traditional peer review, voicing concerns that common review practices may contain considerable bias and lack transparency.^{8,9} As the scholarship paradigm has shifted, even top medical journals now produce blogs, videos, and podcasts to supplement their traditional journal articles and offer nimble dissemination of easily consumed content. These newer forms of media often allow authors to reach a large audience while maintaining a reputable standard of academic rigor. While new media platforms initially struggled to gain recognition within the academy, many institutional promotion and tenure committees now acknowledge their value. Authors limiting themselves to older, more restrictive definitions of scholarship may hamper their own creativity and limit their opportunities to produce and disseminate important work. A definition of scholarship that focuses less on where an idea is published and more on the idea's quality, reach, and impact may have far more value.

STRATEGIES FOR SUCCESS IN SCHOLARSHIP

The following 6 strategies can help PAs in academic settings pursue scholarly work and successfully navigate the writing and publication process (Figure 1).

Start Small

Many PA faculty seeking their first publication opportunity are paralyzed by the magnitude of the task. The intimidation of the blank page is exacerbated by the assumption that a project must be massive or complex to offer value. However, many alternative forms of scholarship are better suited for the first-time author than a randomized controlled trial, large-scale review, or meta-analysis.

Faculty, especially those new to the publication process, may find more success by focusing on smaller, achievable scholarship goals within their area(s) of interest. These might include commentaries, letters to the editor, book chapters or forwards, clinical updates, or blogs (especially those associated with academic journals and reputable publications). For example, one of the authors of this article (HR) regularly wrote a series of blogs for the *New England Journal of Medicine* (NEJM) group as a clinically practicing PA. This provided a large, multidisciplinary platform with the academic repute of a prominent medical journal for a relatively small investment of time and resources.

Smaller projects can build an author's confidence and offer many of the same rewards as larger works. A commentary or perspective article in an academic journal can establish an author's interest and expertise in a particular area before they

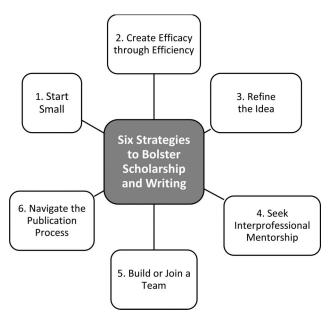


Figure 1. Key strategies to bolster scholarship and writing

pursue grant funding to fully investigate an issue. Multiple smaller projects, especially when distributed through varied publication outlets, have the potential to impact a large audience and establish a body of work easily recognized by colleagues and promotion committees. Examples of various scholarship outlets can be found in Table 1.

Create Efficacy Through Efficiency

Lack of time may be the single largest impediment to publication. PA faculty are typically hired as educators, rather than researchers, and rarely find significant protected time for scholarship and writing. Despite this imbalance in role and resource allocation, PAs, like other faculty, are still expected to produce scholarship to advance their careers and achieve promotion.

To succeed across a spectrum of academic pursuits, PA educators must employ techniques to achieve efficacy and efficiency. One solution is to generate multiple scholarly products from a single project or role. Educators produce innovations and generate data through teaching and other roles within a PA training program, perhaps without even realizing it. Curriculum design, assessment tools, and faculty development programs are ripe for description in a scholarly medium. For instance, an assessment tool created to evaluate a PA program course could be presented as a poster abstract at an academic conference and then submitted as a manuscript to an academic journal. A single idea or product can (and, in most cases, should) be adapted and disseminated through as many outlets and formats as possible. Along the way, ideas should be expanded, improved, and/or refined to ensure that each product is unique and to avoid selfplagiarism.

Opportunities to seize "low-hanging fruit" are not limited to original research or teaching methodologies. A clinical education lecture aimed at PA students could be adapted into a conference presentation or clinical article for practicing PAs. The same material could be used to teach trainees from other

Dissemination Type	Examples	Length	Description
Letter to the editor	 Journal of Physician Assistant Education (JPAE) Letters to the Editor 	300-500 words	 Short letter written in response to an article published in the journal, often expressing a contrary view or counterpoint
Commentary or perspective articles	 Journal of Graduate Medical Education Perspectives JPAE Commentary 	800-2000 words	 Provides opinion on issues of broad interest to journal readers, usually supported by expertise or evidence
Short scholarly article, graphic, or "new idea"	• Academic Medicine Last Page	1- to 2-page article	• Visual display of a concept, idea, or process
	 Medical Education Really Good Stuff 		• Lessons learned from innovative education projects
Blog	Doximity Op-MedKevinMD.com	Usually 500-1500 words	 Short, online-only entries, usually with an informative or persuasive purpose; may or may not be affiliated with larger publications
Podcast	Airwaves and EducatorsClinical Conversations from NEJM Journal Watch	~15-30 minutes (audio)	 Audio-only programming typically published digitally as regular episodes. Content ranges from clinical practice information to opinion and commentary.
Humanities and narrative medicine	Bellevue Literary Review Intima JAAPA's The Art of Medicine	800-3000 words	 Personal essays exploring the human experience in medicine and healthcare. Often involves a narrative structure exploring a universal theme.
Abstracts and brief reports	Journal of Physician Assistant Education	Up to 2000 words	 Reports on research progress or abstracts of current working projects, as well as reports on completed smaller scale research, such as single cohort studies
Research synthesis	JAAPA's The Science of Healthcare Delivery NEJM's Journal Watch	300-1300 words	 Summary and analysis of new and important research, often focusing on clinical practice or healthcare workforce topics
Clinical review article	JAMA Review JAAPA CME article	Up to 3500 words	Comprehensive articles outlining the presentation and management of clinical conditions

professional disciplines, creating valuable interprofessional scholarship. By adopting this "count it twice" mentality, busy PA educators can position their regular faculty duties for a scholarly payoff.

Refine the Idea

Faculty with a desire to write for publication are often perplexed about what to write. Cultivating an idea for publication can be challenging and requires more than a vague interest in a particular topic. An academic journal may receive thousands of submissions each year; to stand out in this flood of manuscripts and warrant publication, an article must achieve a certain level of quality and originality. While this might seem impossible to accomplish without original research, any manuscript can meet this threshold if it is focused and refined. The key to a manuscript's novelty and utility often resides at the intersection of multiple factors: the focus of the topic, the author's perspective and expertise, and the target audience.

Topic Focus

While it is tempting to create an all-encompassing masterpiece, the value of scholarly work often increases when the subject matter is refined to a laser focus. For example, a sprawling article providing an overview of atrial fibrillation would be a time-consuming project that is unlikely to offer additional value to the existing literature. A more focused topic in the same area, such as a summary of the most recent research on specific oral anticoagulants in patients with atrial fibrillation, would be a smaller task that is potentially more valuable to journal editors and readers.

Author Expertise and Perspective

Authors often underestimate the individual attributes they bring to a scholarly project. "Expertise" can include any characteristic that makes an author's voice unique: education, training, clinical and nonclinical work experience, life experience, and personal identity. PAs should not be afraid to leave visible fingerprints on the work they produce and will often find value and novelty by embracing any number of factors that make their perspective unique. For instance, an author who has worked in foreign healthcare systems may incorporate that experience to offer a unique commentary on PA practice policies in the United States.

Audience

To further refine a topic, authors must consider the specific audience they wish to address. The target audience will not only determine the publication outlet, but will also affect the subject matter, knowledge depth, tone, and format of the work. Authors should tailor material based on the expertise, education/training, professional discipline/specialty, and setting of the preferred reader. For example, an audience of

healthcare workers could be further refined to target specific professions, students or other trainees, generalists or specialists, inpatient or outpatient settings, hospital administrators, or medical educators. It is also wise to engage a member of your target audience to prereview your idea or project before starting a draft or submitting it to a publication outlet. By utilizing these 3 factors to refine an idea, authors will create a writing task that is more manageable and a product that is more appealing to editors and readers.

Seek Interprofessional Mentorship

Mentorship can help PA faculty strengthen their deficiencies in knowledge, expertise, and experience. Strong, well-balanced mentorship might require multiple mentors, each with a particular strength, who can help a mentee in a particular area. For instance, a PA educator who lacks writing experience could find a writing mentor to help with the technical aspects of writing and navigation of the publication process. A different mentor with a strong research background might advise the mentee on the development of a research study, while a third mentor might help develop teaching skills and assessment tools. Universities might provide mentorship "matchmaking services" that pair mentors and mentees from different departments, disciplines, or professions to find complementary skills and experiences. Professional organizations also often run mentoring programs. For example, the American Academy of PAs (AAPA) and the Physician Assistant Education Association (PAEA) have offered mentorship matching programs. Mentorship programs also take place during national and regional conferences and annual meetings. Junior PA faculty should consider using these programs to expand their professional networks and increase the opportunities to collaborate with more senior scholars.

Mentorship across professions also creates the opportunity for the "cross-pollination" of ideas. A thoroughly explored concept in one profession might be completely untapped in a different discipline. The PA profession, in particular, is well-positioned to benefit from research and innovation originally aimed at other healthcare professions working in similar or adjacent clinical roles or settings. A mentor from a different profession and with a different perspective might be able to shed light on concepts that would otherwise go unappreciated.

Build or Join a Team

PA faculty can enhance their scholarly productivity by engaging with a team of motivated peers. Building a community of scholars can be one of the most effective ways to overcome the 3 primary barriers to publication: lack of time, money, and expertise. 10 Projects can be divided into manageable tasks and distributed among the team, making them less overwhelming or timeconsuming for individual members. A team can also share or pool resources, including funds to kick-start ideas or collect pilot data. And finally, teams can collect a diversity of expertise and provide built-in mentorship and peer review. The relationships and professional networks created by the construction of teams can persist far beyond the conclusion of a single project and can bolster the productivity of members throughout their careers. Academic teams can take many forms, from institution or department-based writing groups to regional or national groups formed around topics of interest within a professional organization. For instance, the AAPA Task Force on Burnout is a collection of PA scholars and leaders who collaborate and focus on a single topic—in this case, burnout among PAs—for the purposes of research and knowledge dissemination. The group initially created a white paper addressing PA burnout and has since built an entire online educational platform; its members have produced additional scholarly products like fact sheets, blogs, webinars, letters, and commentaries.¹¹

Regardless of the configuration, effective teams require leadership. A good team leader establishes group rules, keeps the group on task, runs efficient meetings, and inspires and encourages the group to meet its goals. Teams should also consider writing a statement of purpose that defines the group's goals, as well as member's roles and responsibilities, to ensure a clear understanding of expectations.

Navigate the Publication Process

The landscape of academic publications can be rough terrain for authors, especially those new to publication. By familiarizing themselves with the publication process and surveying this territory early in the writing process, authors can save themselves time and heartache. Before writing the first word, authors should consider a manuscript's potential destination. It is helpful to create a list of potential outlets that would find the article's content within their scope of interest; falling outside of a journal's scope of interest can be one of the shortest paths to rejection. Authors who want to take a creative risk—but are unsure if their submission would fit a particular publication—can send a professional email to the editorial team to gauge interest in the idea. After identifying an appropriate publication outlet, authors should read any guidelines or instructions provided by the editors. These will often set boundaries on the work, including technical specifications (eg, the number of tables or figures allowed, reference citation formats, word-count limitations). Some publications may automatically reject submissions not meeting their guidelines; meeting these specifications helps authors avoid an early publishing pitfall.

Once a manuscript has been submitted, the waiting begins. Response times are highly variable. While an online-only blog may quickly review and publish submissions, most academic journals employ a lengthy review process that involves multiple external reviewers. Biomedical journals average about 100 days from the time of submission to acceptance; in health professions education journals, that timeline can be as long as 180 days. ¹² Authors might then have to wait additional months after acceptance to see their work published in monthly journals, while quarterly journals and books can take even longer.

Receiving an "accept" decision after an initial submission is rare. A decision of "revise and resubmit" is more common, and authors should be prepared for a series of correspondence involving feedback and resubmission. Because editors can ask for multiple revised versions before accepting a manuscript, successful publication is often a matter of sheer perseverance.

CONCLUSION

Academia is full of opportunities for PA faculty to produce their next—or first—scholarly contribution. The barriers to publication are numerous but not insurmountable. PAs can generate internal motivation and momentum by starting with

small projects, finding efficacy and efficiency through multiple scholarly payoffs, and refining their ideas before they begin writing. They can also create a hospitable environment for scholarship by seeking out mentorship, building an academic team, and engaging the publication process early and often. The benefits of scholarship for individual PAs—and the profession at large—are certainly worth the dedicated effort, especially when savvy academics chart a smooth path to publication.

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REFERENCES

- Hegmann TE. Benchmarking scholarship activities of physician assistant faculty. J Physician Assist Educ. 2008;19(3):13-17.
- Hegmann TE, Axelson RD. Benchmarking the scholarly productivity of physician assistant educators: an update. J Physician Assist Educ. 2012;23(2):16-23.

- 3. Beltyukova S, Graham K. Predictors of physician assistant faculty intent to leave academia: a Rasch regression analysis. *J Physician Assist Educ.* 2017;28(1):10-17.
- Hegmann TE. Scholarly productivity and occupational stress among physician assistant educators. J Physician Assist Educ. 2020;31(2):63-70.
- George Washington University School of Medicine and Health Sciences. Faculty Guide for Appointments, Promotions, and Tenure. https://smhs.gwu.edu/sites/default/files/apt-handbook-feb-2021.pdf. Updated February 2021. Accessed August 11, 2021.
- Physician Assistant Education Association. By the Numbers: Faculty Report 3: Data from the 2019 Faculty & Directors Survey. Washington, DC: PAEA; 2020.
- Boyer EL. Scholarship Reconsidered: Priorities of the Professoriate. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching; 1990.
- Perfecting peer review? Nat Med. 2011;17(1):1-2. doi: 10.1038/ nm0111-1. PMID: 21217648.
- 9. Smith R. Peer review: a flawed process at the heart of science and journals. J R Soc Med. 2006;99(4):178-182.
- Yarris LM, Juve AM, Artino AR, et al. Expertise, time, money, mentoring, and reward: systemic barriers that limit education researcher productivity. Proceedings from the AAMC GEA workshop. J Grad Med Educ. 2014;6(3):430-436.
- 11. Tetzlaff ED, Coplan B, Bernard K, Sierra T, Dominguez D. Addressing PA burnout. *JAAPA*. 2020;33(7):10-11.
- Maggio LA, Bynum WE, Schreiber-Gregory DN, Durning SJ, Artino AR. When will I get my paper back? A replication study of publication timelines for health professions education research. *Perspect Med Educ.* 2020;9(3):139-146.
- Sullivan GM, Simpson D, Yarris LM, Artino AR. Revise and resubmit: writing author response letters that get editors to "yes." J Grad Med Educ. 2019;11(2):119-123.