

Developing a Curriculum to Educate Postgraduate Practitioners on Scholarly Projects



1.5 ANCC
Contact
Hours

Ashley Moore-Gibbs, DNP, RN, AGPCNP-BC, CHFN ○ Lindsay Thompson Munn, PhD, RN

Many hospitals across the country have postgraduate fellowship programs for nurse practitioners and physician assistants. An important aspect of these programs is a scholarly project focused on patient outcomes. However, many fellows lack the experience and skills necessary to complete a scholarly project. This article presents a scholarly project curriculum with relevant information for nurses in professional development as they equip learners with the knowledge, structure, and support necessary to produce high-quality scholarly work.

The U.S. healthcare system is evolving at a rapid pace, and with this comes many challenges in patient care delivery and outcomes. Advanced practice practitioners (APPs), including nurse practitioners and physician assistants, have become an essential part of transforming the delivery of health care. This in turn has led to the establishment of postgraduate APP fellowship programs. These postgraduate fellowships immerse newly graduated APPs in clinical and didactic experiences to prepare them for an effective transition to practice. While gaining clinical expertise is the primary focus of these programs, there is a growing need to develop and utilize other dimensions and skills of APPs, especially those related to implementing evidence-based practice (EBP) and conducting other scholarly work.

The unprecedented need for healthcare reform and quality improvement (QI) was thoroughly addressed in

the Institute of Medicine's Roundtable on Evidence-Based Medicine Report, in its call to transform the way evidence on clinical effectiveness is generated and used to improve health outcomes (Olsen, Goolsby, & McGinnis, 2009). Although research findings demonstrate that the implementation of EBP improves patient outcomes, promotes higher quality of care, decreases healthcare costs, and reduces the geographic variation of health care, APP clinicians do not consistently develop and lead in these scholarly activities (Melnik, Fineout-Overholt, Gallagher-Ford, & Kaplan, 2012). Educational programs throughout the country tend to emphasize the rigorous process of how to conduct research instead of how to translate evidence and clinical data into practice (Melnik et al., 2012). New APPs often lack an understanding of the foundational principles and methodologies of scholarly work and are not well equipped with the skills needed to implement it. There is a great need for professional development and mentorship of new APPs that strengthens their capacity to integrate scholarly work into their day-to-day practice in order to provide high-quality, cost-effective care that positively affects patient outcomes. As a result, nursing professional development professionals may find an increasing demand for education and mentorship that enhances the skill and ability of APPs to conduct scholarly work within the systems where they are employed. This was the impetus for the development of the Scholarly Project Curriculum for an APP Fellowship Program in one of the leading healthcare organizations in the Southeastern United States and one of the largest public, not-for-profit systems in the nation.

THE APP FELLOWSHIP

In 2013, the Center for Advanced Practice (CAP), whose mission is to create a network-wide, comprehensive approach to optimize the role of the APP, created a fellowship program for recently graduated nurse practitioners and physician assistants. The CAP has grown to be the largest postgraduate APP fellowship program in the country that includes programs in Behavioral Health, Cardiology, Cardiovascular Thoracic Surgery, Children's Hospitalist Inpatient Services, Emergency Medicine, Gastroenterology, Geriatric Medicine, Hematology/Oncology, Hepatobiliary Surgery, Hospitalist, Medical Critical Care, Palliative Care,

Ashley Moore-Gibbs, DNP, RN, AGPCNP-BC, CHFN, is the APP Cardiovascular Fellowship Director and Nurse Practitioner in Adult Cardiology, Sanger Heart & Vascular Institute, Atrium Health, Charlotte, North Carolina.

Lindsay Thompson Munn, PhD, RN, is the Director of Interprofessional Research, Atrium Health, Charlotte, North Carolina.

The authors received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors in the work of this article.

The authors have disclosed that they have no significant relationship with, or financial interest in, any commercial companies pertaining to this article.

ADDRESS FOR CORRESPONDENCE: Lindsay Thompson Munn, Carolinas, Atrium Health, 1540 Garden Terrace, Charlotte, NC 28203 (e-mail: Lindsay.Munn@atriumhealth.org).

DOI: 10.1097/JNPd.0000000000000621

Surgical Critical Care, Urgent Care-Adult, Urgent Care-Pediatric, and Urology (Taylor, Broyhill, Burris, & Wilcox, 2017). Postgraduate APPs are immersed in clinical experiences and didactic sessions that prepare them for critical thinking above the level received in their formal education. The fellowship concentrates on common challenges with transition to practice and prepares the APP to perform in a specialty setting while developing foundational specialty-specific skills and knowledge. This in turn provides an exceptionally skilled workforce that can address population health needs affordably (Wilcox, Broyhill, Taylor, & Williamson, 2015).

THE SCHOLARLY PROJECT

As part of the APP fellowship, all fellows not only develop specialty-specific knowledge and skills but are also expected to complete a scholarly project within their clinical area during their 1-year program. The scholarly projects, all of which seek to improve outcomes of care for patients, are most often QI projects but also include EBP projects and research. Although this project, which the authors have come to term “The Scholarly Project,” has been a part of the APP fellowship since its inception, few nurse practitioners or physician assistants have entered the fellowship with the knowledge or understanding to complete scholarly work independently. As a result, past scholarly projects have varied in quality and were largely dependent on the availability of outside mentors to step in and assist the APP. In addition, the scholarly project has at times been a source of frustration for fellows whose time was already occupied with learning a new role in the clinical setting. Recognizing these factors and seeing the value in fellows learning to conduct scholarly projects, the authors—one is a practicing APP who also oversees an APP fellowship program and the other is a nurse scientist and nursing faculty member—created a partnership to develop and implement a curriculum for APP fellows to learn how to conduct scholarly work within a healthcare system. Both authors, individually, have greater than 20 years’ experience mentoring a variety of learners, and both currently serve as faculty in nursing school programs.

THE CURRICULUM

While the published literature addresses aspects of teaching and implementing QI and EBP curriculum within nurse practitioner and physician assistant graduate programs, there is a paucity of information as it relates to APP postgraduate education. To date, we are not aware of a structured curriculum, such as this one, being implemented within an APP postgraduate program. The purpose in developing the Scholarly Project Curriculum was threefold. First, we aimed to educate the fellows, through a series of seminars, on the essential components of completing a scholarly project. The seminars assisted them to move forward with

their work. Second, we provided structure and phasing of their project so that the workload was spread evenly over the course of their fellowship. The Medical and APP Specialty Directors allot time in the APP Fellows’ clinical schedule to participate in the series of lectures within the Scholarly Curriculum, making the completion of the project attainable. Third, we offered support to them throughout the project by helping them identify stakeholders, connecting them with people within the healthcare system who could help them, and assisting them with challenges they encountered. With the support and buy-in of the CAP Academic Director, we implemented the Scholarly Project Curriculum in 2018 with a new cohort of incoming APP fellows. The following student learning outcomes guided the curriculum development, so that by the end of the curriculum, students were able to

1. explain the importance of scholarly work for improving patient outcomes;
2. identify the necessary steps to complete a scholarly project; and
3. create a meaningful and high-quality scholarly project.

The Seminars

A sample of the seminars provided to the fellows is outlined in Table 1, found at the end of this section. The seminars were scheduled every 1–2 months for the duration of their program, allowing them to break down the work into manageable parts. After each seminar, the APP fellows took the information they learned and applied it so that they returned to each subsequent seminar ready to build on their work.

In Months 1 through 3 of the fellowship, we provided foundational knowledge on the importance of conducting scholarly work in clinical practice and how to identify a problem. The fourth month of the curriculum was a unique point in the schedule of seminars because the APP fellows had, by that time, selected a topic of focus for their project, divided into groups of one to three fellows, reviewed the literature, and developed an idea of how they would proceed with the project. At this point, each fellow or group of fellows presented their projects to a diverse panel of scholarly individuals. We titled these sessions “Works in Progress” or WIPs, which were an adaptation from one of the faculty member’s doctoral program. In the WIPs, the fellows took up to 15 minutes to present their project to a rotating panel of subject matter experts with diverse backgrounds such as the head of the institutional review board (IRB); a medical department chair; a nurse scholar; experienced APPs; and various other individuals with experience in QI, EBP, and research. The WIPs not only supported the students in their projects but also demonstrated to them that scholarly work does not occur in silos. Instead, the best scholarly work is created with input and review by multiple people. We were surprised by the ease with which we found interested panelists to attend the WIPs.

TABLE 1 Curriculum for Postgraduate Practitioners		
Date	Seminar Topics	Homework
Month 1 2-hour session	Scholarly Work in a Healthcare System: In this session, we discuss the purpose of scholarly work and ways to identify a problem of focus. We also identify key individuals to consult with who can help you in this step.	For the next meeting: Fellows identify and present the topic of their scholarly project to the group.
Month 2 2-hour session	Searching the Literature: Discuss the basics of identifying reputable sources for the scholarly project, searching the literature, and library resources available to fellows. *The first hour will be spent going around the room and discussing the identified topics for your project.	For the next meeting: Write 1–2 paragraphs on the background of the problem and the purpose of the scholarly project. This document helps to build the case for significance and should come from the literature. Keep it narrow!
Month 3 2-hour session	Specific Aim and Methodology: Discuss the importance of a clear specific aim of your scholarly project and choosing a methodology to ensure that the aim is met.	For the next meeting: Prepare a presentation for the Work in Progress (WIP).
Month 4 Multiple 2-hour sessions*	WIP: Fellows will present their “Work in Progress” to the group and outside reviewers. The purpose is to gain insight from those with experience producing scholarly work. The peer review process will help answer questions and assist fellows as they move forward with the scholarly project. *Up to 4 WIPs can be conducted in 2 hours. The number of sessions will depend on the number of fellows presenting.	For the next meeting: Work with mentor to establish a timeline for the scholarly project.
Month 5 2-hour session	IRB, Statistical Help, & Timelines: We will discuss how to complete IRB applications and CITI modules (if needed), statistical help for the scholarly project, and a reasonable timeline to ensure that fellows complete the project with a high degree of quality.	For the next meeting: Fellows give a 5-minute summary of progress on the project and any roadblocks encountered.
Month 7 2-hour session	1st Project Check-In: Fellows will provide a brief report on their project, summarize what has been done, identify what is left to do, and ask for input if needed.	For the next meeting: Give a summary of the project, how things are progressing, and any roadblocks encountered.
Month 9 2-hour session	2nd Project Check-In: Fellows will provide a brief report on their project, summarize what has been done, identify what is left to do, and ask for input if needed.	For the next meeting: Give a summary of the project, how things are progressing, and any roadblocks encountered.
Month 10 2-hour session	Final Project Check-In & Abstracts: Fellows will provide a brief report out on their project and identify any remaining work. In the remainder of the session, we will discuss what an abstract is, how to structure it, and what information to include.	For the next meeting: First draft of abstract for review.
Month 11 2-hour session	Dissemination of Findings: Discuss how to effectively disseminate findings locally, regionally, and nationally. Included in the discussion will be how to create a poster presentation, how to select a journal for publication, and how best to communicate project findings/outcomes to a broad audience.	For the next meeting: The final meeting is a presentation of the scholarly project.
Month 12	Poster/Podium Presentations of Projects Completion of Fellowship	
<i>Note.</i> IRB = institutional review board; CITI = Collaborative Institutional Training Initiative.		

Our experience was that scholarship begets scholarship; individuals already involved in scholarly work within the system were excited to lend their expertise and help to the APP fellows in shaping their own scholarly projects.

After completing the WIPs, we met with the fellows in Month 5 to discuss the importance of creating a project timeline to ensure they stayed on track. We also provided them with information on the IRB and how to complete the necessary paperwork. For the APP fellows who intended to conduct research, we facilitated access and completion of the Collaborative Institutional Training Initiative modules. The Collaborative Institutional Training Initiative modules provide important education on research ethics, compliance, and the protection of human subjects, and completion certificates from the modules must be submitted to the IRB before approval to conduct research is granted. Finally, we queried the group to determine the statistical support fellows might need depending on the nature of their projects. In Month 7 and Month 9 of the fellowship, we had “check-in” seminars with them. These seminars provided the fellows with an opportunity to update faculty and peers on their project and the extent to which they were within their timeline. These seminars also allowed an opportunity for fellows to ask for guidance and input on any issues they had encountered.

In Month 10 of the fellowship, the fellows neared the end of their scholarly projects. We had them present the status of their project to the group one final time. We then took the remaining time in the seminar to discuss how to write an abstract, which fellows would then submit by the next meeting. In our final seminar, we met with the fellows to talk about the importance of disseminating findings and how to create a poster presentation from their scholarly project.

The culmination of the scholarly project has always centered on the Research and Innovation Showcase, which highlights the accomplishments of the fellows and their scholarly project. Each of the individual or groups of fellows give a poster presentation of their scholarly work to a panel of individuals who anonymously score each project. The top three scholarly projects are given the honor of orally presenting at graduation. Another panel of experts anonymously scores these oral presentations, and an award is given to the top scholarly project for each cohort.

The Structure

The seminars are scheduled every 1–2 months for the duration of the fellowship and through the completion of the scholarly project. In the early months of the fellowship, the seminars are focused on practical steps with homework so that, with each meeting, the fellows move forward with their project. The WIP is designed to be the apex of the project, after which the seminars focus on executing the project and sharing the results. The structure helps to

break down the project into small, actionable steps, which provides support to the fellows and aids in elevating the quality of their work.

The Support

Equally important, if not more important than equipping fellows with the knowledge of how to conduct scholarly work and the structure to accomplish the project, is providing them the support necessary to complete this work. The almost monthly seminars dedicated to the scholarly project allow the fellows an opportunity to ask questions and gain support from faculty mentors. From the beginning of the seminars, we worked to build psychological safety among the fellows, so they felt free to ask questions of faculty and peers. We did this by ensuring that the seminars were informal, expecting participation by everyone in the room, asking questions to direct their projects, and always encouraging them.

Resources

The CAP provided a large conference room with teleconference capability for the Scholarly Curriculum seminar didactics. This venue also served as the site for the WIP sessions. Library staff support is free to all health system providers, and other activities such as statistical support are included in the research activities that APP Fellows’ service lines are conducting. There are no associated costs to the APP Fellows to participate in the curriculum. The lecturers, including a nursing scientist who works as nursing faculty at the health systems’ school of nursing and the APP Fellowship director, volunteered their time to teach the APP Fellows. This level of engagement was supported and encouraged by their administrative leaders. In the long-term, support for teaching the APP fellows will also come from the Doctor of Nursing Practice (DNP) Council, which is composed of doctorally prepared nurses in the healthcare system, both DNPs and PhDs, and whose mission is to mentor scholarly work within the healthcare system.

Lessons Learned

Moving forward, future APP Fellows participating in the curriculum will benefit from the structure the curriculum provides as well as the WIP sessions. The WIPs have been an invaluable tool in teaching and supporting the fellows. The WIPs gave the fellows access to a panel of experts, with diverse experiences, who were unified by the desire to help the fellows complete high-quality projects. An added benefit of the WIPs is that many of the panel members also connected the fellows with subject matter experts within our system that could serve as additional resources and support to them. Feedback and responses received from scholarly experts who have participated in the judging of fellows’ projects have noted that there

has been an elevation in the work that has been completed. We are in the process of gathering data to evaluate fellows' perceptions of the scholarly project as well as the quality of the projects both pre- and postimplementation of the curriculum. The results of our data collection and analyses will be discussed in a subsequent publication.

CONCLUSION

Scholarly projects that are high quality are an excellent learning opportunity for APPs in a fellowship program. In addition, these projects have the potential to positively impact the practice environment and patient outcomes. Nurse practitioners and physician assistants in postgraduate fellowships are consumed with learning their new advanced practice role with little time to independently dedicate to completing a scholarly project. A scholarly project curriculum is a means to provide APP fellows with the knowledge, structure, and support needed to engage in scholarly work. By providing the foundation needed to produce scholarly work, nursing professional development practitioners can assist new APPs to enter the

workforce with not only strong clinical expertise but also with the beginning skill set to conduct high-quality projects that improve the safety and quality of care delivered to patients.

References

- Melnyk, B. M., Fineout-Overholt, E., Gallagher-Ford, L., & Kaplan, L. (2012). The state of evidence-based practice in US nurses: Critical implications for nurse leaders and educators. *The Journal of Nursing Administration*, 42(9), 410–417. doi:10.1097/NNA.0b013e3182664e0a
- Olsen, L., Goolsby, A., & McGinnis, J. M. (2009). *Leadership commitments to improve value in health care: Finding common ground: Workshop summary*. Washington, DC: The National Academics Press. Institute of Medicine: Roundtable on evidence-based medicine.
- Taylor, D. A., Broyhill, B. S., Burris, A. M., & Wilcox, M. A. (2017). A strategic approach for developing an advanced practice workforce: From postgraduate transition-to-practice fellowship programs and beyond. *Nursing Administration Quarterly*, 41(1), 11–19. doi:10.1097/NAQ.0000000000000198
- Wilcox, M. A., Broyhill, B. H., Taylor, D. A., & Williamson, S. B. (2015). The life cycle of the advanced clinical practitioner. *Nurse Leader*, 13, 27–30. doi:10.1016/j.mnl.2015.01.015

For more than 22 additional continuing education articles related to professional development, go to www.NursingCenter.com.