Preceptor Development Series

Methods to Promote Preceptor Scholarship through Resident Collaboration

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Abstract

Preceptor participation in scholarly endeavors is recognized in the American Society of Health-System Pharmacists's (ASHP) residency accreditation standards as a method to demonstrate commitment and contribute to the profession of pharmacy. Although workplace demands and position responsibilities may not allow adequate time for preceptors to pursue scholarly activities, collaboration with pharmacy residents in a structured environment can be mutually beneficial and aid in the professional development of the resident and preceptor. The goal of this article is to provide preceptors with a description of activities suitable for collaboration with residents and with tips to ensure success within the residency year.

Key Words—pharmacy residency program, preceptor development, publication, resident collaboration, scholarship

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The American Society of Health-System Pharmacists's (ASHP) accreditation standards for postgraduate year 1 pharmacy residency programs outline key qualifications of residency program preceptors. In addition to completing an ASHP-accredited residency and/or 3 years of pharmacy practice experience, residency preceptors must demonstrate contributions and commitment to the profession by meeting a minimum of 4 of the following requirements: appointment to interdisciplinary or pharmacy-based committees on behalf of the pharmacy service line, board certification or fellow status, participation in practice improvement initiatives, active involvement in pharmacy organizations, success in experiential teaching, service as a manuscript reviewer, or a sustained record of disseminating knowledge and/or best practice models in publications and/or through presentations at professional meetings.¹ Whereas many workplaces have included some components of these preceptor expectations into performance evaluations

and goals for the clinical department, much of this responsibility falls to the clinical preceptor as the “right thing to do.”

Active preceptor participation in research and scholarly activities is associated with many benefits. Through successful scholarship pursuits, preceptors can gain a sense of accomplishment and often will have a tangible product that may help them in obtaining a promotion or pay raise. Peer-reviewed publications and/or professional meeting presentations also enhance a preceptors' visibility within the profession and formal recognition by their peers.

Despite the recognized benefits of scholarship, today's busy pharmacy practice environment makes it extremely challenging for preceptors to set aside time to identify, develop, submit, and publish articles and presentations when often these activities are not a key metric of daily job performance. Many residency programs and preceptors have developed rotation-specific expectations of the resident learner to participate in

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medication use evaluations, provide drug information to colleagues, and complete clinical prospective or retrospective research in order to model day-to-day activities of the preceptor. The preceptor strives to model appropriate management of these tasks in addition to the normal clinical or administrative obligations required to meet rotation responsibilities. A natural addition to these activities could be the inclusion of the resident learners in the preceptors' "responsibility" to contribute to the body of knowledge through completion of scholarly activities.

The purpose of this article is to identify specific opportunities for preceptors to incorporate scholarly activities and publication efforts into their regularly scheduled collaboration with pharmacy residents.

OPPORTUNITIES FOR RESIDENT COLLABORATION

There are numerous ways to collaborate with pharmacy residents in scholarly endeavors. The most common collaborative projects with pharmacy residents include presenting posters at professional meetings, submitting articles for publication, and refereeing submissions to peer-reviewed journals. Collaboration on these projects can be formal and structured as part of a residency experience or informally introduced to the residents based on their interests and goals. High-quality projects result from good communication and collaboration among all involved individuals and strong leadership and guidance from the preceptor. The next sections describe the collaborative opportunities for scholarship through poster presentations, peer review, peer-reviewed publication, and a formal medical writing rotation.

Poster Presentations

Poster presentations typically originate from research, quality improvement, or administrative projects and deliver more detailed information than a platform presentation and more interaction than a publication. A poster presentation can be an opportunity for a resident and a preceptor to collaborate. Many professional conferences accept research in progress, so residents are strongly encouraged to submit their longitudinal research projects for acceptance if they are planning to attend a professional conference, such as the ASHP Midyear Convention. These conferences are also a good place to present quality improvement projects such as medication use evaluations (MUEs), including resident-led MUEs, innovative clinical services, or process improvement projects that will not be published or presented through other means. The process of composing and

presenting a poster gives the resident professional experience and gives both the resident and the precepting pharmacist an opportunity for additional scholarship.

Peer Review

The peer-review process allows journals to identify and publish high-quality manuscripts, and it gives the peer reviewer an opportunity to contribute to the advancement of scientific knowledge. It is often difficult for a preceptor to find adequate time to devote to peer reviewing due to clinical, professional, or personal responsibilities. By involving and supervising the resident in fulfilling some of the peer-review tasks, the preceptor will have time to contribute to this important task and will provide an opportunity for the resident to learn the basic skills of peer reviewing from a more senior pharmacist. By providing constructive feedback to other authors, residents will gain valuable knowledge about writing for and publishing in scholarly journals.

This learning experience is best practiced with the preceptor agreeing to serve as a peer reviewer while the resident is concurrently completing a rotation with the preceptor. When the preceptor receives the manuscript for review, it should be given to the resident with deadlines for review and discussion. The preceptor and resident should separately review the manuscript and then meet to discuss their individual reviews. After their discussion, the preceptor should then consolidate the comments and submit them to the journal as a singular review, alerting the editor that the resident collaborated on the peer review. This process will enhance the quality of the peer review by the preceptor, who otherwise might not have time for the task, and give the resident an opportunity that would not have been available until the resident became a practicing clinician.

Peer-Reviewed Publication

Because a resident can be so narrowly focused on his or her performance during a learning experience or may not have enough professional experience to identify opportunities for scholarship, it is often up to the preceptor to identify and propose potential projects directly to the resident. Thus, each preceptor should reflect on the individual learning experiences and determine whether an opportunity for such an experience can be implemented into the rotation or as a longitudinal experience if interested residents are identified. A preceptor will most likely be able to incorporate the composition of a review article or case

report manuscript into a learning experience. Opportunities for review articles are typically identified when there is sufficient primary literature on a particular clinical subject but there is a deficiency in tertiary literature on the subject or the tertiary literature no longer reflects the current primary literature. Similarly, a potential case report may be identified during a clinical practice rotation when an interesting patient case presents and similar patient reports are not adequately described in the literature. Although both opportunities for scholarship may be identified during a clinical rotation, the resident and preceptor may choose to embark on these medical writing projects as a longitudinal experience or during an administrative rotation such as drug information. If this longer term option is pursued, it is important to ensure full commitment from the resident prior to the end of the rotation, as this experience will require additional work and communication from both parties after the completion of the rotation. Either way, the preceptor and resident should, from the beginning, establish authorship, roles and effort, and deadline expectations to ensure that they are in agreement from the onset of the collaborative relationship.²

Preceptors may also have an opportunity to publish a peer-reviewed article through their involvement and collaboration in a longitudinal resident research project. According to ASHP, an objective of an accredited residency program is for the resident to design, implement, and present a practice-related project. It is recommended that the resident prepare a final report for this practice-related research project, written in an accepted manuscript style.³ These objectives do not mandate the submission of the written manuscript to a biomedical journal, but with appropriate support and collaboration from the preceptor, the resident has the potential to have an end product that is of publishable quality. Granted that involvement in this process is longitudinal in nature and includes assisting the resident with the development of a research protocol, navigation of the Institutional Review Board process, data collection and analysis, and eventually draft of the manuscript, it is a compelling opportunity for a mutually beneficial relationship that can result in the publication of original research in a peer-reviewed professional journal.

Medical Writing Rotation

To create a more formalized opportunity for scholarship and medical writing, a residency program can design and implement a medical writing rotation. Such a rotation would provide the resident with an

in-depth introduction to medical writing and create structured learning opportunities for scholarship. This may be particularly appealing to residents with academia aspirations, but it will also create a foundation in medical writing skills that all residents can carry forward in any professional track. In addition, the preceptor of the medical writing rotation will have the opportunity to work in collaboration with a resident to create a publishable manuscript, enhancing the professional development of the preceptor and resident.

In a medical writing rotation, it is important that the curriculum focuses on foundational medical writing concepts such as preparation for medical writing, elements of a manuscript, and the submission and publication process. The preceptor should work closely with the resident in development and review of the outline and manuscript, giving the resident direct feedback to improve their performance and maximize learning opportunities. Successful completion of the rotation should also require the preceptor and resident to collaborate on a peer-review of a manuscript submitted to a professional journal as described previously. This will allow the resident the opportunity to critique another manuscript under the mentorship of the preceptor, which will give the resident an additional perspective on and experience in medical writing.

PRECEPTOR PEARLS

1. Each preceptor should reflect on his/her individual practice and determine whether there are opportunities to incorporate residents into research and scholarship activities. If these are not easily identifiable in the residency program, it may be of value to both the preceptor and resident to create learning experiences during a rotation that could lead to scholarship opportunities. Suggested examples include the assignment of a formal drug information question that addresses a gap in knowledge, the research and presentation of a unique patient case, or completion of an innovative medication use evaluation.
2. During the residency program orientation, preceptors should introduce incoming residents to the various avenues of scholarly activity and challenge each resident to prospectively identify opportunities that may occur throughout the residency year. In particular, case reports and/or review articles are practical for residents to complete during the program. When introduced early in the residency year, residents will be more likely to recognize these opportunities during their pharmacy practice

experience. Orientation is also a good time for residents to identify clinical interests so they can be paired with clinicians who are practicing in those areas and may be able to incorporate the residents into scholarship opportunities in their preferred areas of practice.

3. Preceptors should become more involved in the residency program through direct precepting experiences such as the longitudinal research project or medication use evaluation. These experiences cultivate scholarship activities in collaboration with a resident and can lead to opportunities for presenting posters at professional meetings, performing peer-reviews, and publishing peer-reviewed articles.
4. Preceptors should use a structured outline with a specific timeline when collaborating with residents on medical writing experiences. The outline will help the residents organize the structure of the manuscript and identify necessary background research, objectives, methodology, and so on. This process will also help define the roles and responsibilities of each participant. Dividing the manuscript into individual components through an outline may make the project seem less overwhelming or intimidating for individuals who have less medical writing experience. A timeline for the project, including specific deadlines, will keep all participants on a unified schedule and establish expectations for the entirety of the project.

SUMMARY

The demonstration of a sustained contribution to pharmacy practice through publication of scholarly articles, peer-review, or presentations at professional

meetings is vital to preceptor development. Most preceptors find it difficult to balance their responsibilities in meeting their clinical practice and position roles, in precepting residents, and in performing the extracurricular activities necessary to be successful in scholarship endeavors. With resident collaboration, preceptors are able to engage in activities that meet their professional development goals, create a unique learning opportunity for the residents, and help meet the needs of the residency preceptor development program. To ensure success, it is critical that the preceptor establish a structured environment with clear expectations, deadlines, and appropriate oversight. In the end, the preceptors and residents will gain a sense of accomplishment and have a tangible product that increases visibility within the profession and disseminates recent knowledge and best practices.

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