Original Series

Integrating Precepting Into Your Daily Practice

Carrie Lagasse, PharmD, BCPS*; Samaneh Wilkinson, MS, PharmD†; Brian Buck, PharmD, FASHP‡;
and Holly Phillips, PharmD§

It's 11:00 a.m. on a Thursday morning. You have just completed rounds and are scrambling to catch up with orders awaiting verification in your queue. Your pager goes off, and the physician on the other end of the line would like you to discuss a phenytoin level and the plan for continued therapy. While you are on the phone, a nurse asks you if insulin and norepinephrine are compatible. A beep from your smartphone alerts you that you are now 5 minutes late for your annual performance review with your boss. You take action on all the critical issues and proceed to your meeting where you are asked to begin taking pharmacy residents on your service. You think to yourself, "How am I ever going to do my job effectively and manage a resident at the same time?"

In 2006, the American College of Clinical Pharmacy (ACCP) published a position statement recommending that all pharmacists with direct patient care practice be required to complete formal postgraduate residency training.¹ Echoing this sentiment, the American Society of Health-System Pharmacists (ASHP) has proposed a resolution that by the year 2020 all graduating pharmacists will complete an ASHP-accredited pharmacy residency prior to undertaking direct patient care practice.²

At this time, there is not program capacity to fulfill these requirements. In 2012, there were 4,204 applicants for postgraduate year one (PGY1) and postgraduate year two (PGY2) pharmacy residencies. Of those applicants, 1,610 went unmatched with a residency program.³ Mandated residency training coupled with residency position shortages will require the creation of new residency programs as well as the expansion of existing residency programs. To keep up with this demand, preceptors must be able to effectively and efficiently care for patients and educate the future practitioners

of our profession. This difficult task can be achieved through incorporation of a few principles into daily practice.

PREPARE FOR SUCCESS

As health care providers, we are familiar with Ben Franklin's quote, "an ounce of prevention is worth a pound of cure." The same is true in preparing for a successful rotation experience. Time management is critical for completion of job responsibilities and resident education. Up-front effort translates into decreased maintenance and intervention further on during the rotation. By planning ahead, you can optimize the rotation before it even begins.

Prior to the start of the rotation, set a time to sit down with the resident and discuss expectations and deliverables. If you are unsure of what to cover or discuss, refer to previous articles in this series for an example of a written syllabus. This meeting should be a 2-way discussion. You should prepare the majority of expectations and information prior to this meeting, but remember to build some flexibility into the rotation for the resident's specific goals. After this meeting, the resident should have a clear idea of what the rotation will look like, what the expectations are, and how the resident-specific goals will be evaluated. In addition, as a preceptor you should have a clear idea of what the resident would like to accomplish. Once expectations are set, you should focus your discussion on the resident and his or her particular needs.

Imagine this scenario. You notice a resident on your rotation is having a difficult time during topic discussions. You have given her all the necessary reading to prepare for the discussion, but she just isn't connecting the dots in a manner that is satisfactory to your expectations. Both you and the resident are frustrated

*Clinical Resource Utilization Specialist, PGY-1 Residency Co-Director, Shands at the University of Florida Academic Health Center, Gainesville, Florida; †Assistant Director – Inpatient Clinical Services, PGY-1 Residency Program Director, The University of Kansas Hospital, Kansas City, Kansas; ‡Clinical Associate Professor, University of Georgia, College of Pharmacy, Athens, Georgia; §Acute Care Pharmacist Manager, PGY1 Residency Program Director, University of Colorado Hospital, Aurora, Colorado. Corresponding author: Samaneh Wilkinson, MS, PharmD, Department of Pharmacy, The University of Kansas Hospital, 3901 Rainbow Boulevard, MS4040, Kansas City, KS 66160; phone: 913-588-2300; fax: 913-588-8840; e-mail: swilkinson2@kumc.edu.

and struggling to make it through the discussions. You finally ask her why she thinks she is having difficulty interpreting the information she is being presented. She proceeds to tell you that she learns most effectively when she can directly apply the information being discussed to an actual patient or patient case. By tailoring your topic discussions to a specific patient example, you can achieve a more productive and fruitful discussion. This valuable information about the resident's learning style would have saved both you and the resident a significant amount of time and made the discussion more applicable to the resident.

Understanding how your resident learns allows you to tailor your precepting style to the resident, which will result in more effective communication. Simple discussions with your resident can sometimes identify these traits; but if the resident lacks self-awareness, these conversations can sometimes be difficult. You can use additional tools for identifying the resident's strengths and learning styles. These include Myers-Briggs Type Indicator or other adult learning questionnaires.^{4,5}

Once the framework for the rotation is established, the day-to-day precepting challenges can be addressed. These teaching opportunities can be conducted quickly utilizing the methods described below.

ONE-MINUTE PRECEPTOR

The 1-minute preceptor, also known as the 5-step microskills model, was first described in 1992 as a method of clinical teaching for family practice resident physicians.⁶ Although a staggering amount of literature and presentations have since been published or presented regarding this principle, its core remains the same.⁷⁻⁹ The following 5 steps are tantamount to the success of this principle:

1. Get a commitment
2. Probe for supporting evidence
3. Teach general rules
4. Reinforce what was done right
5. Correct mistakes

To illustrate this method of teaching, consider the following case. You are on patient-care rounds in the medical intensive care unit. A patient is in contact isolation for a newly suspected methicillin-resistant *Staphylococcus aureus* (MRSA) infection. The attending physician would like to limit the number of team members who enter the room for the examination. The attending and the medical resident in charge of the patient enter the room and leave the remainder of the team behind. Recognizing this as an optimal

opportunity for teaching, you decide to utilize the 1-minute preceptor model to discuss the patient's MRSA infection. Knowing the team will likely initiate vancomycin, you ask the pharmacy resident to develop a plan for treatment. You begin by asking the resident open-ended questions to bring them to the first step in the model (commitment): "What medication would you like to initiate for treatment of this infection? What dose and frequency? What monitoring would we need to do?" By allowing the resident to take ownership of the patient's treatment, you ensure a collaborative exchange of ideas rather than a didactic discussion.

Once the resident is committed to the therapeutic plan, you proceed to the next step (probe for supporting evidence). Again, you ask open-ended questions in an attempt to help the resident justify his or her decision-making process: "Why did you choose that medication? What current literature or anecdotal information supports that decision?" Allowing the resident to present his or her ideas rather than passively listening to your understanding of the literature leads to more active and engaged learning. Information learned in this manner is typically retained as opposed to passive learning techniques. Also, this stage allows you observe areas where the resident may have a knowledge deficit, which moves you into the third stage (teach general rules).

In this example, the resident initially recommends linezolid due to a recent study on MRSA pneumonia and the idea of minimum inhibitory concentration (MIC) creep associated with vancomycin failure. You can use this opportunity to direct the resident to the hospital antibiogram, which shows that MICs for vancomycin at your institution are 0.5 mcg/mL and linezolid is likely unnecessary in this patient due to the low potential of resistance. The resident verbalizes an understanding of the principle, and the treatment plan is recommended.

Once you have established the entire therapeutic plan, you proceed to the fourth and fifth stages of this principle (reinforce what was done right and correct mistakes). Feedback should be specific and highlight the actions and knowledge that are correct or incorrect. This is often the part that is left out of teachable moments, but it can be the most valuable. Without an understanding of the positives and negatives of the action, the resident is unlikely to progress as rapidly as he or she could.

Feedback should be verbal, but it may also be documented in *ResiTrak* (McCreadie Group; offered through ASHP) or other evaluation systems. Carrying

out a practice through to the documentation level may provide a model of early preceptor training to the resident. The entire interaction should take less than 5 minutes and allow the resident to feel more incorporated into the health care team. Patient-care rounds is not the only activity in which the resident can be integrated into the medical team and hospital culture. You can present external opportunities for involvement outside of the department to the resident.

INVOLVE YOUR RESIDENT IN HIGHER ACTIVITIES

Many of the activities that can take us away from traditional precepting tasks are often seen as distractions and are overlooked as a source of learning for the pharmacy resident. These additional obligations can be turned into opportunities with a shift in mindset. Three of the 7 ASHP requirements for preceptors include involvement in committees, whether drug policy or clinical, or contribution to the pharmacy literature.¹⁰ By including a resident in these tasks, you can continue to function in a variety of capacities and expose the resident to a different side of pharmacy practice.

Whether you bring a resident to a committee meeting on a one-time basis or encourage his or her participation longitudinally, the experience is invaluable. You provide a modeling method of precepting by allowing the resident to see you function in a multidisciplinary setting. You can enhance the experience for the resident assigning specific tasks. Whether it is taking minutes or preparing a document for discussion, the resident will be actively incorporated into the meeting as opposed to passively observing. This allows the resident to see how policies, standards of practice, and other procedures are developed.

You can also assign projects to the resident during the rotation. There are always things we wish we could accomplish or study, but are unable to due to time constraints. The rotation period is the perfect time to undertake these initiatives. The resident can function as an integral leader of the project and will, in time, see how this work transitions into practice. These “real-world” scenarios often offer the most meaningful experiences of a resident’s short tenure at an institution.

When utilizing these additional opportunities for resident education, it is imperative to provide feedback to the resident. This will reinforce the activity as a learning experience as opposed to “extra” work. By functioning as an integral part of committees, projects, or student education, residents will gain a sense of ownership that will promote higher efforts. In addition, they will obtain much-needed training in scenarios they may encounter as they transition to a pharmacist position.

PRECEPTOR PEARLS

Precepting residents is a challenging and rewarding experience. Adding resident education to your workflow is best achieved with thorough consideration of possible activities on a daily basis. Here are a few pearls that can assist you in the planning and execution of a successful residency experience:

1. Take some time to think about what projects you, as a preceptor, would like to accomplish in the upcoming year. How can you include a resident in the project? Is it a longitudinal project or one that can be completed over the course of a rotation? Divide the project into the components that a resident can easily accomplish while on rotation. This creates an easy document to pull projects from the next time you have a resident on rotation.
2. What committees are you currently involved in? What activities or services do you perform for the committee? How would you incorporate a resident into these activities? Is there a monthly report the resident can be tasked with completing? If you outline the responsibilities up front, the resident is more apt to be engaged in the meeting as opposed to passively listening.
3. Take a few minutes to schedule your day as a preceptor. Are there hidden opportunities for resident education? For example, can the resident be in charge of the pharmacokinetics for your service? Can the resident carry the pager and answer nursing questions? What responsibilities are you able to allow the resident to own?
4. What kind of learner are you? Utilize resources to identify the type of learning that is best suited to you. One learning schematic is Kolb’s Learning Style Inventory (concrete experience, reflective observation, abstract conceptualization, or active experimentation).¹¹ Another resource is H-PILS (Health Professionals’ Inventory of Learning Styles – Assimilators, Divergers, Accommodators, or Convergents).¹² By understanding how you learn, you will gain insight into how you teach. Once you discover how both you and the resident learn best, you can tailor your precepting style if necessary.

CONCLUSION

Professional pharmacy organizations have resolved to include residency training for all direct care practitioners by the year 2020. Preceptors are fundamental to the training of pharmacy practice residents, but they must be able to incorporate precepting into their daily

job responsibilities to ensure optimal patient care as well as job satisfaction. Creativity is often required to tailor experiences to fit the needs of both preceptor and resident. Establishing the framework up front, taking advantage of teaching points in brief encounters, and involving the resident in committee work and projects are all successful ways of incorporating precepting into daily practice. Precepting is an opportunity, not an obligation. The precepting experience can bring rewards to both the preceptor and the residents, who are our soon-to-be health care colleagues.

REFERENCES

1. Murphy JE, Nappi JM, Boss JA, et al. American College of Clinical Pharmacy's vision of the future: postgraduate pharmacy residency training as a prerequisite for direct patient care practice. *Pharmacotherapy*. 2006;26(5):722-733.
2. ASHP position statement on education and training. Initiative 0701. Approved June 2007. Reviewed 2011. <http://www.ashp.org/DocLibrary/BestPractices/EducationPositions.aspx>. Accessed December 18, 2012.
3. Summary results of the ASHP resident matching program for positions beginning in 2012. www.natmatch.com/ashprmp/aboutstats.html. Accessed on December 17, 2012.
4. Myers Briggs Type Indicator Instrument. www.myersbriggs.org. Accessed on December 17, 2012.
5. Knowles MS. *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development*. Kidlington, Oxford, UK: Butterworth-Heinemann; 2011.
6. Neher JO, Gordon KC, Meyer B, Stevens N. A five-step microskills model of clinical teaching. *J Am Board Fam Pract*. 1992;5:419-424.
7. Biagioli FE, Chapelle KG. How to be an efficient and effective preceptor. *Fam Pract Manag*. 2010;17(3):18.
8. Weitzel KW, Walters EA, Taylor J. Teaching clinical problem solving: a preceptor's guide. *Am J Health Syst Pharm*. 2012;69:1588-1599.
9. Barrett NF, Gopal B. Using the five microskills with different learning preferences. *Fam Med*. 2008;40(8):543-545.
10. ASHP accreditation standard for postgraduate year one (PGY1) pharmacy residency programs. Approved by ASHP Commission of Credentialing March 2012. www.ashp.org/menu/Accreditation/ResidencyAccreditation.aspx. Accessed December 17, 2012.
11. Kolb DA. *Learning Style Inventory version 3*. Boston, MA: Hay/McBer Training Resources Group; 1999.
12. The Health Professionals' Inventory of Learning Styles (H-PILS). <https://www.acpe-accredit.org/pdf/H-PILS.pdf>. Accessed December 31, 2012. ■