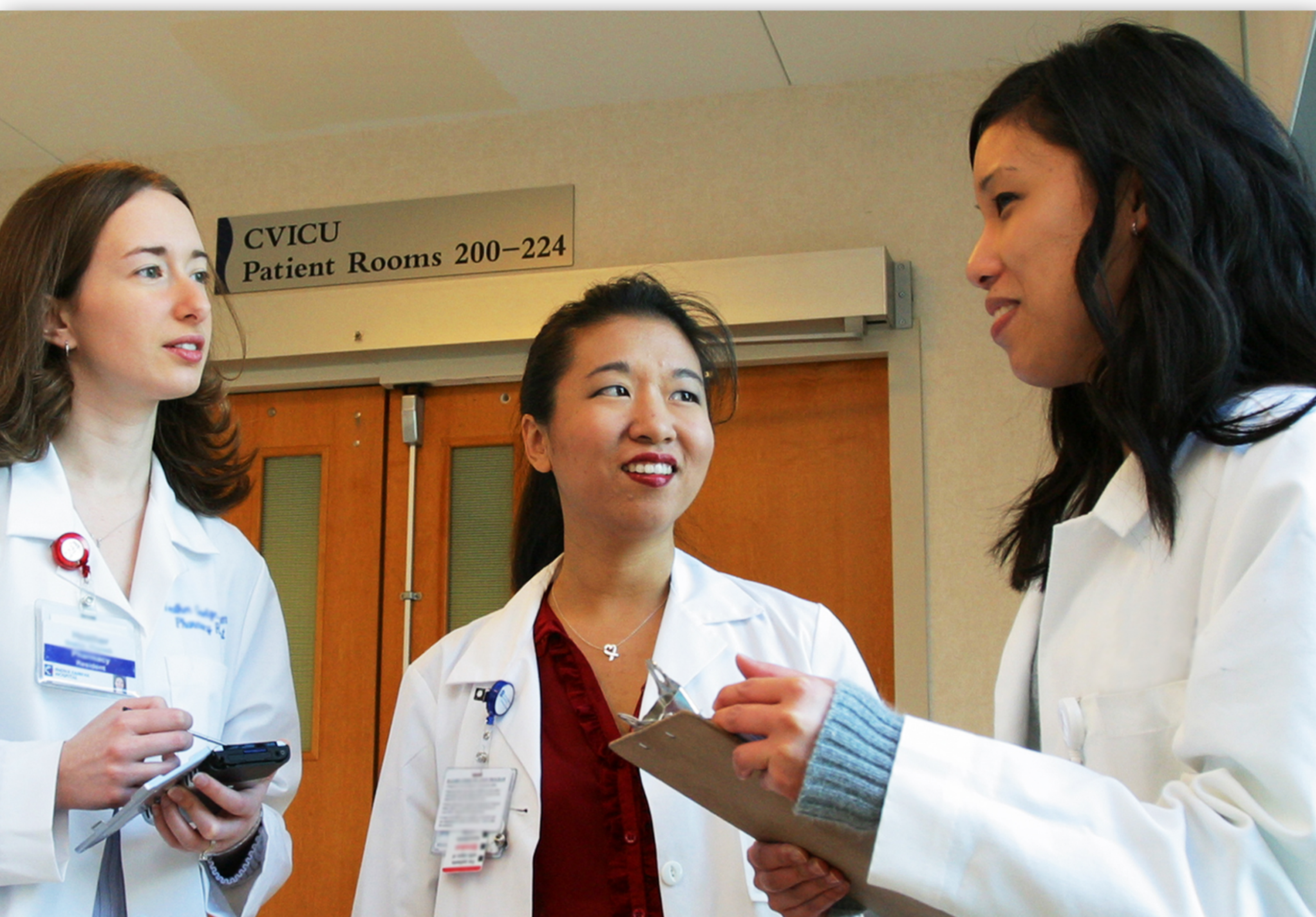
Preceptor's Handbook FOR PHARMACISTS

Third Edition



Lourdes M. Cuéllar *and*
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Preceptor's Handbook FOR PHARMACISTS

Third Edition

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Dedication

We dedicate this edition to those who have the passion to teach and give back to others; those who understand the importance of giving and educating the next generation of pharmacist practitioners.

Paulo Coelho in *The Witch of Portobello* has a great description of a teacher in the following quote: "What is a teacher? I'll tell you: it isn't someone who teaches something, but someone who inspires the student to give of his or her best in order to discover what they already know."

We are especially thankful to those who were our first and most important teachers and have self-lessly given to us throughout our lives: our late parents, Phyllis Ginsburg, and Celso and Matiana Cuéllar. We honor their memories by giving to others.

Contents

FOREWORD vii
PREFACE ix
ACKNOWLEDGMENTS xi
CONTRIBUTORS xiii

CHAPTER 1: Precepting Fundamentals 1
Steven L. Sheaffer, Christina E. DeRemer, and Nancy T. Yam

CHAPTER 2: Necessary Skills for Effective Preceptors 21
Kristina L. Butler, Rochelle M. Roberts, and Holly J. Phillips

CHAPTER 3: Successful Preceptor-Learner Relationships 41
Michael G. Liebl, Alex C. Varkey, and Jenny A. Van Amburgh

CHAPTER 4: Mentors 59
Debra S. Devereaux and David A. Zilz

CHAPTER 5: Goals of Experiential Education 67
Eric C. Kutscher and Dale E. English II

CHAPTER 6: Fundamentals of Experiential Teaching 83
Tammy Cohen, Melanie A. Dodd, Dehuti A. Pandya, and Jason L. Trahan

CHAPTER 7: Administrative Aspects of Practice 119
Stephen F. Eckel and Jason E. Glowczewski

CHAPTER 8: Precepting in New Practice Models 131
Jill True Robke, Kristy L. Brittain, and Samaneh T. Wilkinson

CHAPTER 9: Legal and Ethical Aspects of Practice 151
Robert L. Lamontagne and Diane B. Ginsburg

CHAPTER 10: Sociological Attributes of Pharmacy Practice 171
Lourdes M. Cuéllar, Tanya M. Dougherty, and Marta A. Miyares

CHAPTER 11: Professionalism and Professional Socialization 205
Lea S. Eiland, Nishaminy Kasbekar, and John E. Murphy

CHAPTER 12: Partnerships with Schools 219
David F. Gregory, David D. Allen, Nicole J. Clark, and Bryna Delman Ewachiw

CHAPTER 13: Career Advising 245
Michael D. Sanborn and Scott E. Mambourg

CHAPTER 14: Pharmacy Residencies and Fellowships 267
Tony Huke, Christine L. Hall, and Michelle W. McCarthy

INDEX 279

Foreword

The role preceptors play in mentoring future generations of pharmacists is vital to patient care and to the future of our profession. The positive imprint that an exceptional preceptor, mentor, or teacher can make on students or residents at the point in their career when they are learning to apply the fundamentals of practice and developing their professional self-image is unmistakable.

Those of us who have been in practice for some time can recall that exceptional individual early in our education and training who provided us with ongoing mentoring, sage advice, and feedback. An individual that didn't just have us recite facts but pushed us to broaden our thinking and stretch the limits of our knowledge. This individual shaped our inner beings as professionals and it is his or her voice we still hear in the back of our minds as we seek solutions to complex problems.

Becoming a preceptor, with the ability to create a positive and lifelong impact on a young professional, requires diligence, preparation, and experience. Learning by doing is one part of becoming an exceptional preceptor, but applying contemporary best practices and structured methods derived from the most knowledgeable experts in the field is even more important.

Preceptors also benefit greatly from the knowledge gained from reverse mentoring, or learning from their students and residents. Therefore, the relationship between preceptor and student is clearly two-way and vital to the preceptor's ongoing effectiveness.

In this third edition of the *Preceptor's Handbook for Pharmacists*, Cuéllar and Ginsburg achieve an impressive feat by assembling some of the top leaders and preceptors in the profession of pharmacy and encapsulating their collective knowledge and experience into this concise and insightful text. I am confident that anyone who delves into this excellent resource will undoubtedly walk away with enhanced knowledge that can be immediately applied in his or her role as a preceptor. Most importantly, this handbook has the resources to help preceptors become that unique and memorable individual students will credit with shaping them as professionals and helping them be the best pharmacists they can for the patients they serve.

Paul W. Abramowitz, PharmD, ScD (Hon), FASHP
Chief Executive Officer
ASHP

Preface

If a teacher is indeed wise he does not bid you enter the house of his wisdom, but rather leads you to the threshold of your own mind.

Kahil Gibran

How do you measure the worth of the outstanding preceptors and mentors that have come into our lives? Each one of us demonstrates or exemplifies characteristics or skills that we learned along the path toward becoming the pharmacists we are today.

We have been very fortunate to have significant influences in our lives that have guided our personal and professional development. These individuals contributed toward our development as pharmacist practitioners, educators, preceptors, mentors, and leaders within our profession. They taught us to focus on each of our patients, students, and residents individually; to listen actively and communicate with empathy, compassion, and understanding; and to be active participants of a multidisciplinary team.

Our mentors set the bar high, guided us through the learning process, and always provided positive, constructive feedback. They challenged us to look for innovative ways to change our practice for the betterment of our patients. By setting high standards, they set the example for us.

The need for proficient, energetic preceptors has never been greater. This new edition, like the previous editions, is designed to provide pharmacists with critical information about preceptor programs around the United States and to help preceptors design a dynamic and effective experiential program at their practice site. We have identified topics that we believe are important for preceptors at all levels and practice sites. We have added two new chapters to this edition, on administrative practice and precepting in new practice models. This book is meant to be comprehensive, and topics are organized by common areas of skills or proficiencies.

To be an effective preceptor, a pharmacist should exhibit clinical competency skills, possess excellent written and verbal communication skills, and also demonstrate humanistic skills, such as listening, compassion, empathy, and observation. We invited pharmacists from across the country and from different or unique practice programs to bring their expertise to this edition. The intent is for this book to be reflective on broad practice guidelines.

One of the greatest satisfactions for the pharmacist today is mentoring students, residents, and young practitioners. We are both still in contact with many of our former students and residents we have had the privilege to precept. It is difficult to express the pride and satisfaction one feels as learners you have mentored and precepted develop into outstanding professionals and clinicians.

How do you measure the worth of exemplary preceptors and mentors? You cannot. You thank them for their selfless contributions by practicing and enhancing the skills and training they provided. Most importantly, you pass these gifts on to the next generation of practitioners.

Lourdes M. Cuéllar
Diane B. Ginsburg

2015

Acknowledgments

Passion is defined as "extreme, compelling emotion; intense emotional drive or excitement." When one decides to teach another, it is this emotion, this excitement about seeing others develop, that overcomes and satisfies this passion and encourages us to do more. To teach is to have passion and dedication for others, a selfless giving of your time and commitment. This passion is at the very core of what we do as individuals and professionally as practitioners.

When we began the first edition, we knew there were many who shared our same passion for teaching and developing others. Throughout the first and second editions we were fortunate to work with so many contributors who understood this passion. Anyone who has ever precepted a student knows the importance of giving back to the profession by assisting in the development of its future practitioners. This third edition brings new perspectives, as we welcome new authors to this handbook. We are truly grateful to all who have contributed and thank you for your leadership and commitment to the future of this profession. As with prior editions, we hope this text continues to be a valuable guide for those who are embarking on this aspect of their practice. There are few things more rewarding than knowing you have helped develop another pharmacist and perhaps added to the continuous, evolving practice of our profession.

We want to thank those who have impressed on us the importance of giving back—the many students and residents we have taught and mentored over the years. All of you have imparted many important lessons and are the reason we both actively teach today. All of you have touched our lives in immeasurable ways, and we are committed to those who will be teaching and leading practice in the future.

We want to thank our editors and staff at ASHP for their assistance with the publication of this third edition. We greatly appreciate your support, insight, and understanding of the need for this type of guide for practitioners.

In addition, we want to thank the true inspiration in our lives, our late parents, who instilled in each of us the importance of giving back and helping others. We were fortunate to have had such incredible role models in our lives. We honor their memory by giving to others.

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Chapter 1

Precepting Fundamentals

Steven L. Sheaffer, Christina E. DeRemer, and Nancy T. Yam

Chapter Outline

Origins of Precepting 2
Preceptor: A Job Description 7
Why Being a Preceptor Is an Important Aspect of Pharmacy Practice 8
New Ideas for Seasoned Preceptors 9
Integrating Pharmacy Students into Your Practice 12
Summary 19

Tell me and I forget, teach me and I may remember, involve me and I learn.

Chinese Proverb

Learning Objectives

- Define *precepting* and *mentoring.*
- Integrate competency development and assessment into rotations based on educational standards that impact pharmacy education.
- Create activities that provide students with the opportunity to meet learning objectives while meeting work requirements.
- Define and discuss the main areas of focus for preceptors.
- Identify technical skills and abilities for preceptors.
- Identify core values of preceptors.

Being an effective preceptor is a significant but very rewarding professional responsibility, different from being a competent pharmacist. You must have an understanding of precepting fundamentals, determine learning objectives that align with the program expectations and your practice, and have outlined expectations of your student or resident as well as your related duties and responsibilities. Because precepting involves one-on-one communication, interpersonal and teaching skills are very important. Even a seasoned preceptor must continue to improve his or her skills. This chapter addresses the foundational expectations of being a successful preceptor and provides insights into the basics of successful and rewarding precepting.

Origins of Precepting

The theories of precepting and mentoring have existed for a long time and can be traced back to ancient Greece and Greek mythology. Precepting is a practice of providing a learner the opportunity to develop and apply the art and science of a profession in a practice setting. This practical experience also enables development and shaping of the values and attitudes of the learner.

The earliest reference to precepting can be found in the Hippocratic oath, written about 400 B.C. by the great Greek physician Hippocrates.[1,2] In his famous oath, Hippocrates defined a set of very compelling duties and responsibilities of the physician, which can be applied to preceptors as well. A strong and enduring commitment to patient care was formed as the art of medicine was passed down from father to son and from preceptor to student. Today, the foundational knowledge of pharmacy and practice expectations are taught in colleges and schools of pharmacy, but the art is still passed on from preceptor to student.

Understanding the evolution of the role of precepting in our profession provides insights into how we progressed. Current pharmacy curricula now require more than 30% of a student's education to be in practice settings completing their introductory pharmacy practice experiences (IPPE; 300 hours minimum per the Accreditation Council for Pharmacy Education [ACPE]) concurrent with their didactic training, followed by their entire final year of full-time training in their advanced pharmacy practice experiences (APPE; minimum of 1440 hours per ACPE).[3] The continued evolution and growth of pharmacy practice residencies has further expanded the need and opportunity for pharmacists to serve as preceptors. Postgraduate residency training is viewed as an asset to promote professional development and education.[4]

As chronicled by Henri Manasse in his 1973 article, "Albert B. Prescott's Legacy to Pharmaceutical Education," the education of a pharmacist in the early 1800s was entirely "experiential," based on completing an apprenticeship.[5] Contrast this description by Professor Edward Parish to today's experiential training:

> The apprentice enjoyed a wholesome development of muscle through wielding the ponderous pestle, handling the sieves and working the screw press. He learned how to make pills by wholesale, to prepare great jars of extracts and cerates, to bottle castor oil, Turlington's balsam and opodeldoc by the gross, and what he lacked in the number and variety of articles he dealt in, was made up by the greater extent of his operations and the completeness with which, in a single establishment, all the then-known processes were practiced.[6]

This was how pharmacy education began.

The first colleges of pharmacy required an apprenticeship as a condition of beginning formal pharmacy education. It was not until the 1860s that pharmacy education was required before training as an apprentice. By the middle of the 20th century experiential training was almost entirely mandated as paid internships by, and overseen by, boards of pharmacy. Experiential education has evolved and is primarily overseen by pharmacy schools as the mandated intern training required by most state boards of pharmacy. Many practice settings are now identifying roles for pharmacy students during their experiential rotations and as employed interns where they are depended on to be an extension of the pharmacists and their preceptors in the provision of patient-focused services.

Today, precepting is vital to the professional growth and development of pharmacy students and pharmacists and to the future of the pharmacy profession. We rely on experienced practitioners to become preceptors and to pass down knowledge and experience to their students and residents. Precepting involves a partnership for education, investment of time and energy, negotiation and individualization of learning activities, teamwork, coaching, evaluation of performance, and professional role modelling and guidance. Preceptors ensure that their learners attain competency at the practice of pharmacy much in the same way that the apothecary supervised their apprentices in developing the skills of the trade. Service is exchanged for education and training.

Residency precepting provides opportunities for more in-depth and demanding training as well as greater engagement and contributions to the provision of and advancing pharmacy services. One desired outcome of residency precepting should be for the resident to be a preceptor for future practitioners.

Students as well as residents and new practitioners may benefit from seeking out a pharmacist mentor. Unlike being a preceptor, a mentoring relationship usually involves ongoing engagement with a mentee. These relationships require a much greater investment of time and commitment by both parties but also allow for a greater sense of accomplishment by both individuals. Often, a mentoring relationship evolves during and continues after a rotation with a preceptor but should be formalized through a conversation that results in both parties' commitment to the relationship. Mentoring is a relationship based on trust and respect: education and nurturing; inspiration to advance the practice of pharmacy and improve patient care; opportunities to grow and develop; metamorphosis through engaging in a process of self-reflection, self-assessment, and self-transformation; professional guidance; and nomination for awards when success has been achieved. We depend on preceptors to also become mentors and to help their mentees attain professional excellence and become leaders (see Chapter 4 for more information on mentoring).

Pharmacy preceptors and mentors provide the most critical aspects of professional education and training and can truly make a difference in the lives and careers of their learners and mentees.

Standards Impacting Experiential Education and Preceptors

Expectations of students and preceptors are impacted by a number of organizations that have developed positions and standards specific to pharmacy education, including

experiential training. Preceptors should become familiar with the intent and expectations of preceptors and students as defined by each organization noted below. The focus of pharmacist education today is shaped by the Joint Commission of Pharmacy Practitioners Vision statement (adopted by the 10 pharmacy organization members in 2013), which states: "Patients achieve optimal health and medication outcomes with pharmacists as essential and accountable providers within patient-centered, team-based healthcare."[7]

Accreditation Council for Pharmacy Education

Schools of pharmacy must meet accreditation standards for Doctor of Pharmacy Programs established by the ACPE. They have recently released new standards that will become effective in 2016.[3] Of note is the increased focus on interprofessional education in Standard 11 that states:

> The curriculum prepares all students to provide entry-level, patient-centered care in a variety of practice settings as a contributing member of an interprofessional team. In the aggregate, team exposure includes prescribers as well as other healthcare professionals.[3]

Standard 12 focuses on the "Pre-Advanced Pharmacy Practice Experience (Pre-APPE) Curriculum," where expectations of the IPPEs are defined, including the minimum of 300 hours of experiential training. Standard 13 defines expectations of the APPE Curriculum. For the 1440 required APPE hours, it is required that APPEs occur in four practice settings: (1) community pharmacy, (2) ambulatory patient care, (3) hospital/health-system pharmacy, and (4) inpatient general medicine patient care. Appendix 2 of the APPE curriculum defines specific expectations. Many are using the term *APPE-ready* to express the expectation that core student competencies must be assessed and met prior to students beginning their APPE rotations.

ACPE standards have been developed to integrate expectations defined by or supported by the pharmacy profession. The following documents are valuable references for preceptors.

CAPE Educational Outcomes 2013. In 2013 the AACP Center for the Advancement of Pharmacy Education (CAPE) released the fourth version of the CAPE Educational Outcomes.[8] This initiative resulted in a publication that "was guided by an advisory panel composed of educators and practitioners nominated for participation by practitioner organizations."[8] The document defines expected student competencies in four broad domains. Preceptors are encouraged to review the entire document online, where learning objectives for each competency domain are provided. Rotation objectives and evaluations developed by schools should focus on developing and assessing relevant student competencies by preceptors. Preceptors should define rotation-specific expectations and roles for students to develop and demonstrate competencies consistent with your school's expectations and the CAPE outcomes. The first four ACPE 2016 standards focus on achieving these four domains of educational outcomes (see **Box 1-1**).

Institute of Medicine Report: Health Professions Education: A Bridge to Quality.[9] As part of the Institute of Medicine (IOM) Quality Chasm Series to improve patient safety and patient outcomes, the IOM identified five competencies that all healthcare professionals should attain during their education:

- Provide patient-centered care
- Work in interprofessional teams
- Employ evidence-based practice
- Apply quality improvement
- Utilize informatics

These are also integrated into the ACPE standards.

Revised North American Pharmacist Licensure Examination Competency Statements. A critical outcome of the pharmacy curriculum and student education is preparation for and passage of their state licensure exam. In the new "blueprint AQ" that defines content for the North American Pharmacist Licensure

BOX 1-1. CAPE Outcomes

DOMAIN 1—Foundational Knowledge

Learner—Develop, integrate, and apply knowledge from the foundational sciences (i.e., pharmaceutical, social/behavioral/administrative, and clinical sciences) to evaluate the scientific literature, explain drug action, solve therapeutic problems, and advance population health and patient-centered care.

DOMAIN 2—Essentials for Practice and Care

2.1. Patient-centered care (caregiver)—Provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities).

2.2. Medication-use systems management (manager)—Manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication-use systems.

2.3. Health and wellness (promoter)—Design prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve health and wellness.

2.4. Population-based care (provider)—Describe how population-based care influences patient-centered care, the development of practice guidelines, and evidence-based best practices.

DOMAIN 3—Approach to Practice and Care

3.1. Problem solving (problem solver)—Identify problems; explore and prioritize potential strategies; and design, implement, and evaluate a viable solution.

3.2. Educator—Educate all audiences by determining the most effective and enduring ways to impart information and assess understanding.

3.3. Patient advocacy (advocate)—Assure that patients' best interests are represented.

3.4. Interprofessional collaboration (collaborator)—Actively participate and engage as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs.

3.5. Cultural sensitivity (includer)—Recognize social determinants of health to diminish disparities and inequities in access to quality care.

3.6. Communication (communicator)—Effectively communicate verbally and nonverbally when interacting with an individual, group, or organization.

DOMAIN 4—Personal and Professional Development

4.1. Self-awareness—Examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth.

4.2. Leadership—Demonstrate responsibility for creating and achieving shared goals, regardless of position.

4.3. Innovation and entrepreneurship (innovator)—Engage in innovative activities by using creative thinking to envision better ways of accomplishing professional goals.

4.4. Professionalism (professional)—Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society.

Examination (NAPLEX) exam, there are now two broad areas (see below) being examined.[10] Preceptor familiarity with the specific expectations by accessing the Blueprint online will help prepare both rotation students and employed interns to be successful in passing the NAPLEX exam.

- Area 1—Ensure Safe and Effective Pharmacotherapy and Health Outcomes (approximately 67% of test)
- Area 2—Safe and Accurate Preparation, Compounding, Dispensing, and Administration of Medications and Provision of Health Care Products (approximately 33% of test)

A similar blueprint for the Multistate Pharmacy Jurisprudence Examination can be found on the National Association of Boards of Pharmacy website.

Core Competencies for Interprofessional Collaborative Practice. The increased emphasis by ACPE on interprofessional education, noted previously (Standard 11), stems from recommendations by the IOM and collaboration between organizations representing health professions educators. Schools of pharmacy seek to define competencies and provide opportunities to achieve them within the didactic curriculum and during rotations. Preceptors should plan for increased interprofessional engagement during rotations.

More details about achieving the following competencies can be found in this document endorsed by national associations repre-

senting educators from pharmacy, medicine, nursing, dentistry, and public health.[11]

- Domain 1: Values/Ethics for Interprofessional Practice
- Domain 2: Roles/Responsibilities
- Domain 3: Interprofessional Communication
- Domain 4: Teams and Teamwork

Rotation Structure and Expectations

The remainder of this chapter will address how to effectively engage students during rotations to create a positive experience for both the student and preceptor. These same concepts apply to integrating pharmacy residents into your practice. Consider how you might enhance the experiences of employed interns. Whereas many interns start out performing technician responsibilities, they and you can also benefit by performing many of the same activities afforded to APPE students. We will suggest ways that preceptors can and should define routine expectations of rotation students. Just as pharmacy interns cover for technicians over holidays and vacations, so too can pharmacy interns sustain services normally provided by rotation students, such as medication histories and reconciliation, device training, patient counselling, adherence calls, etc.

PRECEPTOR PEARLS

Enhance the experiences of employed interns by integrating them into patient care activities and projects.

The structure of any rotation should consider four areas: orientation, learning by doing, feedback, and WIFM ("What's In it For Me"). More suggestions on successful rotations are provided later in the chapter.

Orientation. Integration of the learner into the practice setting is essential and includes defining expectations of the student and preceptor(s)/staff, assuring site and school requirements are met, orientation and introduction to the site and staff, with access to resources and a schedule of activities and deadlines.

Learning by doing. Learners should be provided opportunities to engage in the practice to further develop their knowledge, skills, competency, and confidence. These can be routine daily expectations for patient care or team meetings, projects and learning activities such as topic discussions, journal clubs, patient education, or staff presentations. For early learners such as IPPE students, these would include more shadowing and performing technical or nonjudgmental tasks. For APPE students and especially residents, the learner should be afforded progressively challenging responsibilities with as much autonomy as the preceptor is comfortable with and the state legally allows.

Feedback. Just as important as the formal mid-rotation and final evaluation, is ongoing informal feedback from the preceptor. In addition to "on the fly" perspectives on performance and suggestions to improve that the preceptor provides to the learner, self-assessments by the learner, or peer feedback from others will enhance the learning experience. Before providing feedback on how well a patient interview went, consider asking learners how they thought they did and what they would do differently the next time. Reflective writing and journaling of activities provides additional feedback. Also, teach students and residents to provide constructive feedback to the preceptor regarding teaching style, designed activities, and the rotation.

WIFM: What's In it For Me? As noted previously, precepting is itself a rewarding experience but also demanding. Later in this chapter advice is provided on how to integrate students and residents so they can become extensions of yourself, while having a good learning experience. However, think about ways you can personally benefit from the presence of a student or resident. Is there a longitudinal drug utilization evaluation or project students can work on? Do you choose journal club articles that you are familiar with or ones you hope to read in your spare time? Are there presentations on topics that students could research and present that also align with your professional or departmental goals, such as a new role for pharmacists

or technicians or a new drug that a medical colleague enquired about? Preceptors should not hesitate to create learning opportunities for students that also meet their own needs.

Preceptor: A Job Description

Whereas the state boards of pharmacy define the legal responsibilities of preceptors, and the colleges and schools of pharmacy define the educational requirements of the rotation, precepting requires many skills and traits that these formal bodies do not identify. Preceptors are responsible for the education of students while on rotation; ideally, this should build on the knowledge and skills learned in a classroom environment that increasingly includes simulation experiences and other active learning exercises to better prepare students for their rotations. Three of the most important areas of focus for preceptors include teaching students professionalism, effective communication, and applying the knowledge and skills they have gained from formal courses to real, dynamic patient care situations. To achieve this goal, preceptors must possess a set of core values, technical skills, and abilities.

PRECEPTOR PEARLS

Preceptors empower students to function independently and apply their knowledge and skills to real-life clinical and nonclinical situations.

Core Preceptor Values

The core values for a preceptor include the following:

- *Professionalism.* Students mature as professionals by observing practitioners in the experiential setting and by functioning as healthcare providers themselves. The most important person to instill this professionalism in students on rotations or as interns is their preceptor. To do so, the preceptor must exhibit professional behavior and discuss professional responsibilities and expectations of pharmacists with students. The preceptor should also discuss the different professional organizations with students and encourage students to become active members in these organizations.
- *Desire to educate and share knowledge and experiences with students.* Draw on your personal experiences. Help learners understand why something is important and develop the ability to navigate the process or ambiguity while evolving the “soft skills” to achieve success with others.
- *Willingness to advise, mentor, and provide valuable feedback and direction.* The progression of students from the classroom setting to experiential sites and, ultimately, to professional practice requires personal growth of the students. Preceptors must be willing to advise some students, guiding them along their path from student to pharmacist by helping them move from dependent learning to becoming a competent, independent, and committed professional colleague. This transition will prepare students for the lifetime learning model that all pharmacists follow. After rotations end, many preceptors maintain contact with learners evolving into a mentor/mentee relationship.
- *Willingness to commit the time necessary for precepting.* The majority of experiential rotations are supervised by pharmacists who are precepting students while performing their normal duties. Teaching while maintaining a full work schedule requires preceptors to have a true desire to teach and to commit the time necessary to teach. Precepting often requires a time commitment beyond normal working hours. Without the true desire to educate students and the willingness to devote the necessary time, preceptors will not be able to effectively teach their learners.
- *Respect for others.* Being a positive role model in how you engage colleagues, those in other health professions, and especially patients is critical to a student’s development.
- *Willingness to work with a diverse student population.* The student population today is more diverse than it was even 10 years ago. This diversity includes

ethnic and gender diversity, along with cultural and generational diversity. Many students today are entering pharmacy school after having worked for several years in another field, and some students already possess advanced degrees. There is also variability in student work experiences, career plans, and what they may view as important for their future. Although these factors will help strengthen the pharmacy profession in the future, preceptors must recognize and respect these differences. The degree of diversity that exists today also requires preceptors to adapt teaching techniques for maximizing students' learning experiences. When precepting multiple students on the same rotation, diversity factors can present unique and challenging situations.

Although each preceptor will have different areas of strength within these core values, the preceptor must hold each of these values as personally important.

In addition, precepting students on experiential rotations requires excellent skills in the relevant practice area. If a preceptor is not knowledgeable about a particular area, students will not gain the necessary oversight and guidance to meet their learning objectives. A rotation with an unprepared or inexperienced preceptor can also adversely affect the students' view of the profession. Preceptors should never be forced to take students on a rotation if they are not competent in that particular area. Sometimes, in an effort to schedule an experiential rotation for students, the site will try to accommodate both the students' and the college's needs. When this occurs, the site and preceptor almost always fall short, and the result is a negative experience for all involved.

Precepting is an additional duty that you undertake because you want to be involved in our profession's educational process. To be effective at balancing your job requirements with time spent teaching, preceptors must possess a number of abilities. They must have good written and oral communication skills, and good organizational and time management skills. Knowledge of resource utilization requirements of the site is also helpful in achieving the balance between the practice and precepting, potentially allowing preceptors to work within these resource requirements to involve others in the process.

PRECEPTOR PEARLS

A preceptor must have good communication, organizational, and time management skills.

Why Being a Preceptor Is an Important Aspect of Pharmacy Practice

Pharmacy is a proud profession with a rich history and many varied practice settings. The future of pharmacy will be determined by recent and future graduates. These graduates rely heavily on experiential rotations for developing their foundation and values in pharmacy practice today and what it can be in the future.

Each practice setting has unique experiences that can be utilized to teach students how to practice pharmacy in a real world environment. Through experiential rotations, students learn how to apply the knowledge they have acquired in their pharmacy school coursework. Students also learn how to be professionals and how to interact with other healthcare practitioners. Experiential rotations provide students with the opportunity to learn how to provide pharmaceutical care within various practice settings, while under the guidance of a skilled practitioner.

In addition to the value precepting has for the students, precepting rotations also provides value to the practice site. Hosting students on experiential rotations provides the site with an infusion of intelligent practitioners who help to keep the pharmacy knowledge base sharpened. Journal clubs and formal presentations provide pharmacy staff, both professional and technical, with up-to-date pharmacy information. Students who have completed interesting rotations also serve as positive advertising for the pharmacy among their classmates as they begin to seek employment after graduation.

Precepting is professionally rewarding for preceptors. They have the opportunity to

influence future practitioners and, in doing so, can influence the future of the profession for many years to come. Precepting helps sharpen preceptor skills, as they reinforce their own knowledge and expand their own horizons through student interactions. As preceptors answer questions and explain pharmacy practice, they gain an even deeper understanding of their own practice. Routine daily tasks that preceptors frequently do without much thought become fresh again as they explain them to students. Taking time to befriend students creates a unique professional bond that can last beyond the rotation period. It is not uncommon for former students to maintain contact with preceptors who helped to shape their professional perspective.

PRECEPTOR PEARLS

Precepting benefits both the students and the preceptor, who learn from one another.

Overall, when done correctly, precepting experiential rotations is one of the most important aspects of pharmacy practice. When the time and resources are devoted to making the rotation a top-notch experience, the students, the preceptor, and the site all benefit. Ultimately, patient care is improved—the reason we practice pharmacy.

New Ideas for Seasoned Preceptors

Seasoned preceptors often experiment with implementing new ideas and concepts into their training programs. This provides new challenges and excitement for preceptors as well as some new learning opportunities for students. Preceptors can either formulate unique and innovative ideas that are true revolutionary advances in student education, or they can simply add a different spin to the ideas and practices of others. This section of the chapter presents ideas that both new and seasoned preceptors can use to help students to become the best pharmacists they can be.

PRECEPTOR PEARLS

Incorporating unique activities into a rotation ensures that both the student and the preceptor remain engaged and committed.

Creating a Practice Model

Preceptors can create a practice model for students to effectively integrate with defined duties and responsibilities that are important functions and aspects of patient care and pharmacy operations. Often students do not have clearly defined roles at practice sites, and they are not well integrated into the patient care process or the pharmacy operations. Of course, it is hard for preceptors to essentially create an unsalaried job position and a job description for students if they do not have a constant supply of students. However, these barriers can be overcome and provide a dual beneficial experience.

Student intern positions are typically salaried with shared components of both technician duties while focusing and authorizing some clinical and pharmacist level activities. For optimal integration, duties and responsibilities would have to be filled year-round to provide consistency and continuity of services, especially if the students are integrated into a patient care unit and team in a hospital. When expectations of other healthcare professionals have been established and met by students providing them support for patient care services, there cannot be lapses in coverage. The practice site will need to always have a student in that position. This will require a strong partnership with one or more pharmacy schools in order to meet the site's demand for students. Attraction of these students for employment can provide additional benefits supporting the student's individual development through scholarship activities that are more thoroughly denoted later in this section as well as development of mentorship, curriculum vitae review, mock interviews, and other preparatory activities.

The skills learned and practiced as student interns complement those training skills taught and evaluated during rotations. While under the supervision of a pharmacist preceptor, students can be decentralized to a patient care unit or to a team in a hospital and provide a spectrum of pharmacy services (in accordance with individual state laws). Students can be responsible for a number of functions, including taking initial medication histories, conducting daily drug regimen reviews, answering drug information questions, restocking and delivering medications, performing therapeutic drug monitoring services, writing patient care plans and daily progress notes, reviewing discharge medications, counseling patients, and providing in-services to the medical, nursing, and allied health staff. Students also could act as liaisons for the pharmacy department and help nurses on the patient care units and centralized staff pharmacists troubleshoot problems with the medication-use system (prescribing, dispensing, administration, and monitoring). Utilization of learners as extenders is an adopted concept in many settings and even referenced in the ASHP Pharmacy Practice Model Initiative. This includes responsibilities for patient care activities, including documentation in the patient's medical record.[12]

Although the above example is for creating a student practice model in an inpatient setting, student practice models related to patient care services outside the hospital environment or within pharmacy operations and management could be developed in many other pharmacy practice settings and include similar activities as noted above. Whenever possible, preceptors should get senior students involved in more advanced practice activities (as permitted by state law) and involve other professionals (e.g., physicians, nurses, dietitians, respiratory therapists, business managers) in their internships as co-preceptors to provide more diverse education and experiences. Advanced practice activities can include disease screenings, patient assessment (physical examination, laboratory test interpretation, etc.), medication administration, drug therapy and disease management, patient counseling on health promotion/disease prevention and on their specific diseases and medications, and practice and financial management. In addition, students could act as teachers by providing in-services to other healthcare professionals and educating support groups about drug therapy and disease management. Teaching is a very effective way to ensure a full understanding of the material.

Other suggestions on how more seasoned preceptors can engage and further develop students, interns, and residents include the following:

- Evolve a project to the point where you and the learner can present or even publish the results. Students require introduction to scholarship activities and with proper direction and oversight provided can contribute extensively in progression of projects that are mutually beneficial. Medication-use evaluations are a focused and often student level project but can easily be expanded to research, performance improvement, and even policy or procedures documents. Additional opportunities could remain within the institution or work environment serving as an educational or communication tool. Articles written for department newsletters, contributions to website blogs, and co-writing short works for a consumer site are all examples of scholarship that a learner can fulfill. Preceptors can archive these documents so that future learners can review and learn from them as well.
- Teach APPE students to oversee IPPE students and residents to supervise APPE students. As requirements change for IPPEs, innovative methods to expose students to rewarding learning environments need to be explored. One of the most commonly cited interests of students is serving as a future preceptor. This is a skill that can be taught but needs to be practiced, adapted, and continually evaluated. It serves all parties well to provide students with an environment to precept with a supported structure and feedback regarding their designed experience. This is easily incorporated as a resident rotation, when learners are provided an opportunity to design an experience and practice precepting with oversight and timely feedback. This trans-

lates to all practice environments but is underutilized.

- Encourage attendance at professional meetings or serving with you on a committee. Most preceptors are attempting to foster the ambition of future leaders, innovators, and practice changers. Allowing students and residents to participate early on in organizations is a great introduction to the process. Due to the design of some national and local committees, it may not be possible for learners to be an active member of a particular committee. Consider allowing them to listen to a conference call or attend a meeting as an observer, then discuss the topics debated or support their interest to enlist at a student- or resident-level committee. Students are curious about how a pharmacist spends time during the day, so bringing them to departmental, institutional, or small work group meetings will help outline some of the responsibilities that need to be balanced daily. It also teaches them a different perspective of our profession.
- Attend student meetings or workshops on campus where you can share your expertise and experiences with multiple students. It has become commonplace to have question and answer sessions reflecting the various roles of pharmacists. For some, courses have been developed focusing on residency preparation with classes or small group discussions dedicated to successful interviewing, designing a competitive curriculum vitae, or scholarship activity collaborating on publishable projects. Regardless of the role, participation demonstrates your vested interest and opens opportunities to serve as a mentor.
- Develop a library of commonly used references and resources by having students review and update the content during rotations.
- Perform institutional audits or evaluations that may not be publishable but can improve safety and benefit the institution. Examples could be evaluation of PRN (as needed) medications to ensure that enough detail is included to define their use but also to minimize any overlap in coverage with medications such as pain regimens. Another example would be interviewing patients about their understanding of medications that likely would involve scripting and (depending on state laws) may not be conducted at all.
- Encourage students to document activities in the medical record. Depending on state law and institution-specific rules, if students are permitted, they should be encouraged to document. Medical writing for the purpose of communicating medication information via a patient's medication record is a taught skill. Documentation includes activities such as medication history clarifications, full subjective-objective-assessment-plan notes with interventions, simple recommendations focusing on a single disease or medication, pharmacokinetic notes, and (most commonly) documentation of patient/family education.
- Request that students provide feedback regarding the rotation on a weekly basis and honor the suggestions made by implementing change. This helps keep the rotational experience fluid and contemporary while still dedicated to students' needs and style. Adaptation is important, but the core of the rotation and its learners should remain stable.

Portfolios

Some preceptors require students to assemble a portfolio during their rotation that documents their achievements and reflects their competency as demonstrated during the rotation. Schools of pharmacy are increasingly requiring this of their students and it can serve as a wonderful example of work during interviews. This is consistent with the movement in healthcare to better assess the competency of students, residents, and practitioners with the ultimate goal of improving patient safety and outcomes (clinical, economic, and humanistic). Competency is difficult to assess because it is composed of multiple domains, including knowledge, skills, abilities, values, attitudes, beliefs, and behaviors. No single evaluation method (e.g., examinations, assignments, direct observation, etc.) can be

used to accurately and appropriately assess competency in all of these areas. Competency assessment really requires the use of a variety of methods and instruments.

A comprehensive competency portfolio may have some similarity to a diary (e.g., reflective writing on feelings and experiences) and also to a promotion or tenure dossier of a faculty member (e.g., demonstration of activity and achievement in certain areas, including practice, teaching, research, and service). Of course, the first step is to define the desired areas of competency for students. Preceptors should check with their respective academic programs to determine if the programs require identification of the desired areas of competency. The pharmacy schools with which preceptors are affiliated should have already done this. If not, preceptors can take the lead and develop a set of activities that allow students to demonstrate competencies that they expect students to have after completion of their rotation or internship. Students can demonstrate how each competency has been attained through a variety of documents in a competency portfolio as well as by doing self-assessment and reflective writing related to each competency.

Integrating Pharmacy Students into Your Practice

Pharmacy education in most practice settings is characterized in part by balancing educational effectiveness with optimal patient care. As practitioners, we are all juggling multiple tasks and responsibilities while teaching and supervising students and, for some, residents. Time constraints and multiple pressures and deadlines are all factors. The constraints associated with high census, high volume, high patient acuity, clarifying prescriptions or medication orders, dealing with insurance problems, and staffing shortages complicate being an effective preceptor. There are educationally sound methods that incorporate time management, organizational skills, service learning, and effective planning to assist preceptors in integrating pharmacy student education and meeting employment and practice requirements.

Orienting Your Students

Be prepared when students arrive at your facility or practice setting. Students appreciate structure, and it provides them with the opportunity not only to meet all learning objectives but also to be trained and participate in services and activities that are unique to your practice setting. As the preceptor, you will be able to teach in a more productive manner and allow the students to have effective patient encounters with appropriate education, guidance, and supervision.

Begin by developing a detailed syllabus or training manual specific to your facility and experiential rotations. This demonstrates to the learners your commitment to their education and training and provides an outline of expectations. Revisit the syllabus weekly to ensure that timelines and tasks are on target. Part of a syllabus could be to request learners to define their personal goals for the experience. At this point, their personalized goals need to become actionable items evaluated on a weekly basis to ensure that all parties are engaged and productive in achieving the desired outcomes. This should be a formal process and should include encouraging students to provide feedback.

Be sure to orient students to their new temporary environment; this sets the foundation for a successful integration into practice. Remember that students are changing practice areas frequently and accommodating various expectations. This initial orientation and introduction can aid in a more rapid assimilation to the new site. Include not only information about the pharmacy and the experiential rotation but also about your hospital, community pharmacy, ambulatory care site, specialty site, or other practice site or facility. Do not forget to include a map of your facility, especially if it is a large teaching or community hospital. Tell the story of your institution. How did it come to be? Include organizational maps of the hospital or practice site and of your department. Insert a copy of your job description as well as other position descriptions that may be of interest. Students who have never worked in a pharmacy or seen a pharmacist in clinical practice are often surprised at the extent of duties and respon-

sibilities and the creative practice structure of pharmacists in today's health system, community practice, ambulatory care, management, and other professional practice environments.

PRECEPTOR PEARLS

Providing students with a detailed training manual or syllabus on their first day orients them to the site and demonstrates your commitment to their training; obtaining personal goals and objectives personalizes the experience.

Orientation is a well-recognized strategy for creating a positive learning experience and communicating goals, objectives, and minimal competencies for the experiential training rotation.

Orientation should include the following:

- Goals, objectives, and minimal competency requirements of the rotation
- Rotation hours and attendance policy
- Any requirements of the student during off-hours
- Regulatory compliance standards relating to your state board of pharmacy
- Tour of your facility and department
- Review of required readings for the rotation
- Terms and definitions for students completing a rotation in an unfamiliar practice setting
- Issuing an identification badge and computer access codes
- Facility orientation requirements (e.g., infection control, Health Insurance Portability and Accountability Act)
- Introduction to members of the department or practice and a brief explanation of their duties
- Introduction to key members of the medical, nursing, and other health professional staff or store or office manager with whom the student will be working with daily. In a community setting, it is helpful to include a list of the top physician prescribers
- A review of the facility's policies and procedures
- Introduction to your pharmacy information system and insurance adjudication system
- Introduction to your site's drug utilization review process
- Introduction or review of your facility-specific medical record system or patient information system
- A list of your community practice's "fast movers"
- Review of all pertinent medication-use policies (e.g., standard administration times, approved abbreviations, and substitution guidelines), including how errors are handled
- Publications, journals, and other reference materials available to students
- Evaluation instruments, timing and methods, and grading policy

Familiarize Yourself with Your Students' Experiences and Goals

Familiarize yourself with students' prior rotations, experiences, and professional goals. Ask for a copy of their CV and review professional engagement and accomplishments. Review work from previous rotations if the school mandates and makes accessible the student's portfolio. Consider having them complete a quiz on first day so they know what you expect of them and you get a sense of their preparedness. You can repeat a similar quiz on the last day so they can see how much they have progressed. Providing reading assignments prior to and during the rotation helps get them up to speed and to know your expectations.

Assess the students' areas of interest. Determine their short- and long-term goals on the first day of the rotation. Let them know that the schedule is flexible enough to allow for their involvement and input into planning their daily activities. Assess their readiness and motivation to learn and how they learn best. Ascertain if they have previous experience working as a pharmacy intern either in the hospital or community pharmacy setting or possibly in a nontraditional setting such as

home care, managed care, or the pharmaceutical industry. For example, students may have prior experience working as an IV technician in a health-system setting. You may choose to perform a validation of their skills and then take the time normally assigned to that activity and change it to an area of particular interest to the students or on a special project or assignment. A student who has worked as a technician in a community setting may have a comfort level with insurance adjudication and could work on health screenings and intake information projects instead.

You will need to devote a significant amount of time the first week of the rotation to setting requirements, modeling of expectations, and establishing ground rules. By ensuring that students have a full understanding of your expectations, there is less of a chance for misinterpretation or confusion later. This makes for an easier transition to empower students to take on projects and be more independent as they move throughout the remaining weeks of the rotation, with ongoing supervision and follow-up from the preceptor. The concept of students functioning as extenders to practice and not observers needs to be established as an expectation. Many students struggle with their role, and this permission is necessary.

Building the Schedule

When building the schedule for the rotation, include time for preceptor teaching and feedback as well as time for the students to reflect on their patient encounters, experiences, or projects they complete, and unplanned events that enhance an experience. Be sure to include dates for midterm and final evaluations, site-specific and school events, holidays, and assignment due dates (e.g., case presentations, journal club, patient care plans, and a project where the patients or the site are sure to benefit and students experience success). Be sure to communicate your specific expectations to students.

Capitalize on the advantages of your practice site and your strengths as a preceptor when developing student schedules. Assign special projects and presentations that will benefit both the site and students. Include patient education, literature searches, physician case conferences, morbidity and mortality rounds, pharmacy and therapeutics or formulary meetings, grand rounds, and health screenings and immunization opportunities in community and ambulatory settings as part of their experiential training. As you review the schedule with students, be sure to allow them time to ask questions and take time to explain to them how all the activities impact patient care.

Supervise the project with frequent checkpoints or spot validation of data being collected. Use the opportunity to discuss time balance with integration of scholarship works or institution-requested projects with patient care or other daily activities so that students have a full appreciation for the value of the work that they are doing. Ensure that they understand how being an extender differs from busy work, which has little value for the institution or student.

Allow for student individuality and creativity. Make provisions in the schedule to allow for activities that meet specific student needs and desires. Assess their strengths and weaknesses and allow enough flexibility to meet their educational needs and interests. If you develop a project encompassing some of their interests, they will be more motivated to perform those activities that are less interesting as well. Be flexible and try out new concepts or ideas. Most importantly, identify opportunities for student involvement when considering any and all of your planned activities.

Preceptors must keep in mind that more than anything else students want to spend quality time talking with and learning from them. Often because of the hectic nature of many practice environments, preceptors are not able to spare much time during the workday to do this. Do not hesitate to allow students to accompany you to departmental meetings related to their experience. They may help a student learn and appreciate the discussions that happen prior to practice changes or decisions. Meetings also serve as an opportunity for conversation about time management, including balancing and prioritizing daily activities. A practice model needs to be established that extends beyond only observational experience. Students are engaged and

empowered when they are provided tasks that designate them as extenders to practice.

Standardize your time during the workday to meet and discuss related topics.

PRECEPTOR PEARLS

Use their experiences, goals, and interests to help tailor rotations to individual students.

Establish Standards and Set Expectations

Students generally progress through predictable stages of learning development. It is critical to the success of the rotation that preceptors take time on the first days of the rotation to assess each student individually. This exercise should not only determine students' basic pharmacological competency and core clinical and patient encounter skills but also verbal and written communication skills, problem solving skills, ability to perform multiple tasks, and ability to handle complex patients. As a preceptor, you should be able to rapidly identify student strengths and needs relative to meeting all the learning objectives of your rotation. Have a plan, but be flexible in adjusting it to meet student needs and abilities.

The first meeting with your students sets the tone for the entire training encounter. Ensure that students understand and accept that both of you must work together throughout the rotation to ensure quality patient care as well as quality education and training. Identify what your students can do or recommend independently versus when they need you to review, approve their plan of action, or observe their engagement with a patient. Documentation of activities demonstrates to students their influence as a contributor to the medical record, whether documenting a full clinical note, pharmacokinetic note, or educational activity. All will need to be co-signed after full review by the preceptor. This activity may easily increase an individual preceptor's documentation practices through cosigning learners' contributions. As you gain confidence in their abilities, provide them with increased autonomy and responsibility as legally appropriate.

To have a successful experiential rotation, it is essential that the preceptor establish standards. Be specific when you communicate your expectations to students. Offer ideas as you mutually establish specific goals for their rotation. Give them creative challenges; promote their strengths. By linking the students' performance to those standards, the preceptor creates a benchmark for achievement. The ultimate goal is to transition from a teacher/student learner relationship to clinical supervisor/responsible performer (clinician) relationship. Students should be able to demonstrate their problem-solving skills and integrate their didactic knowledge and clinical training to real-life situations. There should be a good balance between education and service learning. Model the desired activity and then have student practice with you. Afterward, shadow them in the actual activity and provide immediate feedback; repeat this until the learner has shown competency in performing the activity independently.

PRECEPTOR PEARLS

Establish standards and communicate them clearly to your students.

A good preceptor should be able to relate to students how all their activities impact patient care. Preceptors should provide guidance, answer questions, explain answers, and assist students in developing self-confidence and self-esteem. An exemplary preceptor demonstrates a positive attitude and is dedicated to helping students achieve their full potential.

Most experiential training sites afford students the opportunity to work and train with a number of other professionals besides the primary preceptor. Choose professionals who are motivated and committed to student education. The pharmacist team of preceptors can teach students a number of critical skills that are not necessarily related to the science of pharmacy but rather the human side of our profession. Students will be able to observe the various healthcare professionals' different approaches. Some of these critical

skills include ethics, teamwork, leadership skills, empathy, compassion, communication, as well as the technical and cognitive abilities of being a pharmacist. Introduce diverse activities that provide students with the opportunity to meet all learning objectives while meeting work requirements.

Be Organized and Manage Time Effectively

To simultaneously provide a successful educational experience and ensure clinical effectiveness, the preceptor must be organized and must identify strategies for providing educational opportunities. Orienting students to patient encounters is an effective strategy for creating a good learning environment and providing effective direct patient care. Learn to present a 1- to 2-minute patient-specific presentation. This will help learners efficiently interpret vital patient information. For example, the preceptor should review the patient's medical background and explain to students which symptoms or conditions they should focus on and how to look for nonverbal forms of communication by the patient. Establish guidelines for interventions, monitoring, or a patient care plan. Another example would be going over with students the importance of calling a physician if they are unclear about a prescription, the steps to take if they come across a drug interaction, or how to negotiate with or talk to an angry patient or physician. During each patient-specific encounter, the preceptor should alert students to any potentially coexisting problems or additional medical conditions in the patient's history.

Time management is a skill that also should be taught to students and protected by preceptors. If students are appropriately oriented, they can expand the reach of the pharmacist through planned activities. Concepts such as the "One-Minute Preceptor" can be used.[13] This involves weekly discussion topics related to patient cases and other learning opportunities. Students who are able to perform medication histories and documentation of these activities can enhance the impact of the department as a whole. Documentation of clinical activities, such as education, pharmacokinetics, and even progress notes is another effective way that students can be integrated into practice, provided it is completed in accordance to individual state laws and co-signed by a licensed preceptor. As pharmacists pursue provider status, objective activities such as documentation of clinical interventions, education, and other topics address necessary skills in time management and improve communication skills.

The patient case presentation or the drug utilization review process offer both the preceptor and students an optimal opportunity for teaching and learning. In addition, teaching with the patient allows the preceptor to observe students' performance and enable them to provide immediate feedback. The preceptor should verbally identify what students did well, and then ascertain opportunities for improvement and suggest steps students might take to correct them, without dictating a solution, even if it seems obvious.

Box 1-2 lists some examples of effective opportunities to teach in a productive manner. Presentations do not need to be limited to preceptors, other pharmacists, or peer students. Students are effective educators with appropriate oversight and learn from educational sessions provided to other multidisciplinary groups such as nursing in-services, provider or physician medication pearls, as well as patient or consumer education.

Remember that students should be active participants. The preceptor must take care not to make any pertinent learning activities a shadowing experience unless he or she is precepting an introductory pharmacy practice experience. Students should know the reason or rationale for all activities or projects.

Promote Learning

Promote self-directed and life-long learning. At the end of the day, ask the student, "What did you learn today?" or "What medical problem or condition would you like to learn more about?" or "What was the most important thing you learned today?" Link self-directed learning to a recently observed patient problem or departmental process or procedure. Self-directed learning can also include research, literature review, or selected

BOX 1-2. Opportunities to Teach in a Productive Manner

- Patient education and counseling
- Health screenings
- Pharmacotherapy, nutrition, renal dosing, and pharmacokinetic consults
- Literature searches
- Physician case conference or grand rounds presentations
- Patient-specific drug utilization review
- Quality improvement activities, such as evaluation of regulatory compliance
- Medication-use evaluation/drug utilization evaluation criteria development, data collection, queries, and compilation of results
- Interprofessional training (e.g., shadowing a nurse, dietician, or respiratory therapist for a set number of hours)
- Technician activities
- Departmental budget preparation and review process
- Employee feedback and evaluation process
- Policies and procedures development or revisions and updates to staff
- Patient case presentation
- Presentation for pharmacy and therapeutics committee
- Journal club
- Drug information questions
- In-services for nurses, pharmacists, medical residents, and other disciplines and community
- Special projects, presentations, or experiences
- Reflective statements

reading about a disease or condition that is prevalent in the patient population you serve. Self-directed learning should apply the students' didactic knowledge to real-life patient encounters or experiences.

Service-based education is a very effective teaching tactic. There are two ways a preceptor can use this teaching strategy. The first is by identifying to students the tasks that are routinely performed by nonlicensed staff in your department or other healthcare providers. The second is by encouraging students to participate in community service-based education.

Nonlicensed staff are an integral part of the daily operation of a pharmacy. To help students comprehend and appreciate how each employee is a valuable member of the pharmacy team, allow students to spend some time with the support staff within the department. During institutional and community rotations, have them perform duties such as triaging patient or nursing phone calls, assisting at the service window, calling insurance companies, retrieving charts, repackaging medications, calling physicians to clarify orders, and assisting in the ordering and inventory process. It is also important for students to learn how these functions are critical to the operations of the department.

The Value of Community Service Education

It is also imperative that students learn the value of community service education as part of their experiential training. Start by inviting them to go with you to one of your local pharmacy organization's continuing education programs. Teach them the value of fellowship and networking with colleagues within your community.

PRECEPTOR PEARLS

Teach students the importance of community service.

If you are actively involved in any volunteer community activities, such as local health fairs, providing healthcare to the homeless, serving food at local shelters, or volunteering at a clinic for indigent families, invite the students to go with you. Alternatively, develop a community service site directory and let students choose where they would like to visit. **Box 1-3** lists examples of good learning environments for students. Give them specific goals, such as learning about topics listed in Box 1-3. Also give them observation questions or assignments. Help them to see the "big picture" of healthcare as well as the specifics of patient care. **Box 1-4** lists some examples of these questions and assignments.

The most useful activity after community service education is reflection. Focus on a teaching point, such as whether the student

BOX 1-3. Examples of Service Learning Environments

- Adult or child protective services
- Nursing home care unit
- City/county clinics or emergency room
- Visiting nurse association
- Hospital social work department
- Hospital chaplaincy
- Child development in a pediatric unit
- Local AIDS clinic
- Local substance abuse program

BOX 1-4. Examples of Topics Taught Through Service Learning

- The role of community agencies, nursing homes, hospices, and public agencies, programs, and clinics
- Professionalism and community spirit and advocacy
- Funding of community health services
- The practice of preventative medicine
- The social, economic, and ethical aspects of healthcare
- The effect of a person's culture, heath beliefs, and literacy on health disparities and outcomes

effectively addressed the patient's concerns. The preceptor should provide meaningful feedback and ask if the expectations were realistic and reasonable for the student. The goal is to help students realize that the contributions they can make go beyond the workplace environment. The professional rewards of the service-oriented teaching are great, and students recognize the value of intrinsic rewards such as personal and professional growth and development (see **Box 1-5**).

Schedule Time for Feedback and Assessment

Find opportunities to ask students questions about their learning experience, such as times when you are both on break. Provide frequent assessment; informal assessment should be ongoing throughout the rotation. In your informal conversations discuss issues such as lifetime learning habits, the role of residency training, balancing career and family goals, applying for a job, and interviewing skills.

BOX 1-5. Examples of Questions and Assignments for Encouraging Observation in Service Learning Experiences

- What services are provided to the patient?
- List the disciplines and their roles within the clinic or facility.
- How do pharmacists interact with this site?
- Name some ways in which literacy is a public health issue.
- Identify common reasons why a physician orders home health or hospice care.
- List physical findings consistent with domestic violence or abuse.
- Describe the role of the hospital chaplain.
- Briefly define the care rendered at a skilled nursing facility and the role of the pharmacist.

Sit down with students at least once a week to provide formal feedback and assessment. Review the progress that they have made and give them the opportunity to come up with ways to improve. Be candid. Provide honest and constructive feedback. Listen carefully to students when you ask them for their self-assessment.

PRECEPTOR PEARLS

Provide frequent, specific, and constructive feedback.

Acknowledge student contributions in front of other members of the healthcare team or during departmental staff meetings. This will go a long way in helping build self-esteem. Help them promote their strengths and teach them to assume broader responsibilities in meeting their educational goals.

Do not forget to bring in some real-life experiences. Tell them about your preceptors and mentors and the influence they had on your life. As much as possible, be accessible and approachable to the students.

Fostering Successful Scholarship Activities

Preceptors should encourage students to present and publish their work on projects

or their opinions on issues. Presenting and publishing (papers, posters, and abstracts) are excellent educational activities, and they also bring recognition. There are numerous opportunities for students to present (e.g., local, state, and national pharmacy society meetings, community organization meetings) or publish (e.g., employer or professional society newsletters, local and national newspapers, state and national pharmacy society journals) their work or opinions. Often, students are required to complete a project (e.g., research, process improvement, community service, etc.) or an assignment (e.g., formulary monograph, therapeutic review, etc.) that they could present or publish in a variety of forums. Also, students sometimes see patients with significant clinical findings that are either unusual or new and not previously reported, which they could write up as a brief case report. They can submit their thoughts on issues as viewpoints, opinions, commentaries, or letters to the editor to many newsletters, newspapers, and journals. Author a review article for a newsletter or journal based on background research they have done while supplying evidence-based pharmaceutical recommendations for patient care problems, the development of policies and procedures, or the conducting of formulary evaluations. Overall, writing articles of any type can reinforce learning, enhance written communication skills, and stimulate students to clarify their beliefs and positions.

Professional Societies and Community Service Organizations

Preceptors are often involved in professional societies and community service organizations, which provide an excellent opportunity to get students involved. Many professional societies utilize conference calls during the workday, and it can be a relatively easy opportunity to have a student sit in and listen and possibly participate in the conversation. This demonstration of how to balance patient care responsibly for conflicting daytime activities while engaging students with the preceptor's passions is an important skill to observe and master. Live conferences provide an excellent networking opportunity to excite student learners. Most people want to feel needed and engaged in the activities that provide positive affirmation of the contributed time and activities; this can be demonstrated to students by involving them in those activities. Community service can be provided in numerous modalities, and students should be exposed as much as possible. Confidence, social interaction, communication, and information sharing can be taught during these activities. Participation in professional societies and community service organizations is critical to becoming a professional and provides one of the best opportunities for leadership development.

Preceptors should not give students compensatory time off during the workweek for attending evening and weekend professional society and community service activities. Preceptors do not get compensatory time off from work for these activities, nor should students. This is part of the students' learning about public service, the advancement of pharmacy practice and patient care, and lifelong learning. Some colleges of pharmacy recognize attendance of outside professional organizational meetings as "special activity hours" and give credit for these during the rotation.

Summary

There are an infinite number of concepts that add value to a student-focused practice model and make the educational process more meaningful to both preceptors and students. It is important for preceptors to keep themselves challenged and energized about precepting students. Experimenting with ways to add new dimensions to student involvement or to completely reinvent internships can be therapeutic for preceptors and can create new and better learning opportunities for students.

Both the preceptor and the students must be committed to patient care and to pharmacy education. The preceptor must consistently demonstrate competency and professionalism and have a passion for education, service, and excellence. Consistency and standardization are essential for effective teaching and integrating pharmacy students into your practice. Effective planning, comprehensive student

orientation, setting clear expectations, introducing diverse learning experiences, and ongoing constructive feedback are integral to the students' successful learning experience.

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Chapter 2

Necessary Skills for Effective Preceptors

Kristina L. Butler, Rochelle M. Roberts, and Holly J. Phillips

Chapter Outline

Generational Differences 22
Communication Skills 25
Interpersonal Skills 30
Assessment Skills 31
Teaching Skills 34
Leadership Skills 35
Summary 38

"I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel."

Maya Angelou

Learning Objectives

- Describe at least two common traits of each work generation.
- Define the elements of the communication process, and identify the preceptor's role in the communication process.
- List three interpersonal aspects of precepting.
- Describe three ways to be an effective clinical teacher.
- Describe how to select appropriate assessment tools for various learning activities.
- List at least three possible activities that will expose rotation learners to leadership.

Sometimes the first step to becoming an effective preceptor is to assess your own skills as a pharmacist, communicator, educator, and mentor. Consider the following questions:

- How do I demonstrate to the learner the importance of cultivating the pharmacist-patient relationship?
- How do I apply knowledge of the unique qualities of the individual, support system, and community to improve outcomes?
- How do I interact with patients, family members, learners, peers, direct reports, and leadership?
- How do I manage time in a busy practice and balance my professional life?
- How do I encourage postgraduate training?
- How do I give back or contribute to the profession?

These skills are rarely taught in pharmacy school, so it is important to understand and develop these areas as part of lifelong learning.

Generational Differences

Before getting into specifics related to precepting skills, it is important to discuss the various generations that are currently in the workplace. With a multigenerational workforce, it can be challenging for both learners and preceptors to communicate effectively and meaningfully. A basic understanding of the different generations and associated characteristics can help improve communication and allow preceptors to tailor learning experiences to best meet the needs of individual learners. **Table 2-1** summarizes generations and their common traits.[1]

For the purposes of this chapter, we will focus on describing the Millennial generation because this group made up 34% of the workforce in 2014 and is projected to make up 46% of the workforce by the year 2020.[2] This generation is also commonly referred to as "Gen Y." They are significantly different than members of past generations, and appreciating these differences can positively affect teaching methods. In general, Millennials are very comfortable with and reliant on technology. They are used to instant gratification and communication, so they can be impatient with more traditional communication methods. Millennials are far less linear in their thinking and approach than previous generations. Although generations such as Generation X and Baby Boomers are respectful of authority and have a hierarchical management style, Millennials are more likely to challenge authority and question processes. This should

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TABLE 2-1. *Generational Traits*

Generation	Work Ethic	Characteristics
Traditionalists Born 1927–1945	Loyalty to company	Not comfortable with technology Hard workers Slow to change work habits Good team players Respect authority/top-down approach Traditional morals and values
Baby Boomers Born 1946–1964	Willing to sacrifice for personal and financial success	Motivated by success and achievement "Workaholics" Goal oriented Independent Competitive Challenge status quo and authority
Generation X Born 1964–1980	Work/life balance	Utilize technology Work-life balance is key Self-reliant Informal communication preferred Wary of authority Seek collaborative leadership
Millennials Born 1980–2000	Seek recognition at work	Driven by technology Confident/assertive Seek meaningful work Desire autonomy and opportunity Prefer real-time communication Achievement oriented

not be considered a flaw; challenging the status quo can bring valuable lessons and change into the workplace. However, employers (and in our case, preceptors) must be open to such challenges and not see them as threatening but rather as constructive opportunities for improvement.

In 2014, the White House issued a paper titled "15 Economic Facts about Millennials," which reported that Millennials now make up one-third of the U.S. population, making them the largest generation.[3] Born into a world that is much different than that of previous generations, Millennials have grown up utilizing technology and having quick, almost instantaneous, access to information. They can effectively multitask, whereas other generations may find this challenging and even counterproductive. Parenting styles were also much different for Millennials, who were heavily supervised and had highly structured activities. With their involvement in many group activities (athletics, camps, clubs, etc.), they have excellent team building abilities, whereas previous generations can be described as much more independent. Interestingly, Millennials may have a different view of their bosses compared with other generations. Past generations have seen bosses as content experts, but Millennials can typically find content in a matter of seconds with the use of the Internet and social media. In the eyes of Millennials, a supervisor serves as more a mentor or coach than a content or process expert.[2] Millennials have a strong sense of community and family, which can change what they value in the workplace. Unlike previous generations, Millennials are less concerned about financial incentives and more concerned with job flexibility and ability to make a difference.

What does all of this mean for preceptors? One expert identifies the following five R's of engaging Millennial Learners[4]:

- *Research-based methods*—Millennials perform better in active learning methods. Use of multimedia and collaboration with peers is important.
- *Relevance*—Millennials do not have difficulty finding information. A preceptor should focus on how the information is applied and utilized.
- *Rationale*—Millennials are less authoritarian than past generations and are more likely to question the "why." Be prepared to explain the "why."
- *Relaxed*—Millennials do well in less formal learning environments. They value informal interactions with preceptors and peers.
- *Rapport*—Millennials have strong relationships with their peers and parents. They seek personal connections, approval, and constant, real-time feedback.

As a preceptor of a Millennial learner, it is important to keep these differences in mind. Although other generations may have a difficult time understanding these traits, Millennials are a product of their upbringing. As with all generations, specific traits can easily be utilized as strengths. A key difference to consider when precepting Millennial learners is that they need more personalized feedback, coaching, and mentoring. Some preceptors may believe this approach is too time-consuming, but keep in mind that in-the-moment feedback doesn't need to be a formal event. In fact, Millennials are much more laid back and casual, so they would typically prefer to have a quick chat after rounds than a formal, sit-down evaluation. Ideally, both types of feedback are needed in order to fully address the learner's needs. As a preceptor, focus on developing a personal connection with the learner. Millennials do well as team members, so be sure to introduce them to your team and explain their role to others. In addition, Millennials tend to have a more casual approach to the work environment. It is critical that the preceptor expresses clear and concrete expectations of the learning experience on the first day. Often, preceptors make the mistake of assuming the learner understands what is obvious to the preceptor. Establish when various modes of communication are acceptable (email, text, face-to-face). Set clear expectations related to breaks, lunch hour, and even "simple" things (to other generations) including use of ear buds, workplace attire, and use of social media. Deadlines should be clearly established and agreed on. Inform learners that they will not be reminded of deadlines going forward; otherwise, they may expect such behavior. Millennials need things to be spelled out in a very clear, step-by-step manner.

With Millennials, preceptors should always reinforce the importance of face-to-face communication with patients and family members. In this age of technology and electronic medical records, it is tempting to use these tools exclusively for teaching and patient communication. Although technology often offers valuable reinforcement of teaching points, personal communication cannot be overemphasized. It allows the care provider to establish a relationship of trust with the patient, and it also allows the provider to visually pick up on nonverbal clues from the patient that may be critical to a successful therapeutic plan.

Millennials thrive with constant positive reinforcement. Remember, this is a generation that is commonly referred to as the "trophy kids" because they grew up being rewarded for simply participating.[5] To some generations, this may feel like coddling, but this generation truly needs consistent, positive feedback. Preceptors need to provide constructive feedback about poor performance, but it will be better received if it is delivered in a supportive and caring nature. Listen to what the learner has to say and then build on that. Millennials want to feel as though they are peers, not subordinates. They were raised to achieve, so they have high motivation to improve their performance. They are also full of bright, innovative ideas, and they can find novel ways to integrate technology into the workplace. Preceptors should be open to hearing those ideas and seeking ways to incorporate them into practice.

PRECEPTOR PEARLS

Express clear and concrete expectations for the learning experience on the first day.

Provide constructive feedback about poor performance in a supportive and caring nature.

Encourage Millennials to have face-to-face communication with patients and family members.

Communication Skills

The ability to communicate well is one of the most important skills for practitioners in any situation. This is especially true for preceptors, as they must be able to communicate effectively with learners to help them develop into successful practitioners themselves. Learners coming out of pharmacy programs today are required to receive training in communication skills, whereas many preceptors did not have this type of course work or practical experiences as part of their curriculum when in training.

Interpersonal Communication

It is important for preceptors to understand how personal communication can affect their relationship with learners. To be an effective communicator (and hopefully an equally effective preceptor), an understanding of the basic communication model is important. The transactional model of communication in **Figure 2-1** is applicable to all situations, not just to pharmacy practice.[6,7]

The transactional model represents the simultaneous and ongoing message exchange between individuals, or an individual and a group. The *communicator* who initiates the communication (*sender*) *encodes* (puts thoughts into words and gestures) the *message* (content) and sends it via a *channel* (medium used to transmit message, such as face-to-face, phone calls, emails, text messages) to the other communicator(s). The receiving communicator (*receiver*) *decodes* (applies meaning to the words and gestures) the message, which leads to an *effect* (cognitive, emotional, or physical result of the interaction). The encoding and decoding of the message is influenced by *context* (cultural, environmental, or situational setting of the communication), whereas *noise* or *barriers* (distractions or interference) can impede the ability to send or receive messages. Noise or barriers can occur in many forms (see **Table 2-2**), and both parties should attempt to identify and remove these to ensure that the message is sent and received accurately, thereby preventing miscommunication.[7,8] The communication path is reversed as the receiver responds, thus becoming the sender. In most exchanges, communicators are both sending and receiving messages at the same time, providing *feedback* as a critical part of the communication process. In conversations involving a complex topic, feedback can be used to determine the level of understanding of the receiver, and when used effectively, the sender can correct any miscommunication.

The message itself is the most common source of miscommunication; specifically, the manner in which the message is sent often changes how others decode and interpret it. Communication is not only *what* we say, but *how* we say it (see **Figure 2-2**). The words we use (verbal communication), although important, are only a small part of how we deliver and receive messages. Our tone, inflections and volume (paraverbal communication); and posture, facial expressions, eye contact, movement, gestures, body language, and appearance (nonverbal communication) account for over 90% of communication.[9] In communication, the receiver is decoding the sender's nonverbal communication along with the spoken message; this nonverbal communication (paraverbal and nonverbal) can either support or contradict the intended message. When interpreting nonverbal communication, it is also important to apply the 3 Cs: context, clusters, and congruence.[10] *Context* includes the environment of the situation, the history between the individuals, and other factors such as each person's role (e.g., boss and employee, preceptor and learner). Assessing nonverbal communication in *clusters* helps avoid using a single gesture or movement to determine a person's attitude or emotion. *Congruence* assesses whether the verbal and nonverbal messages match.

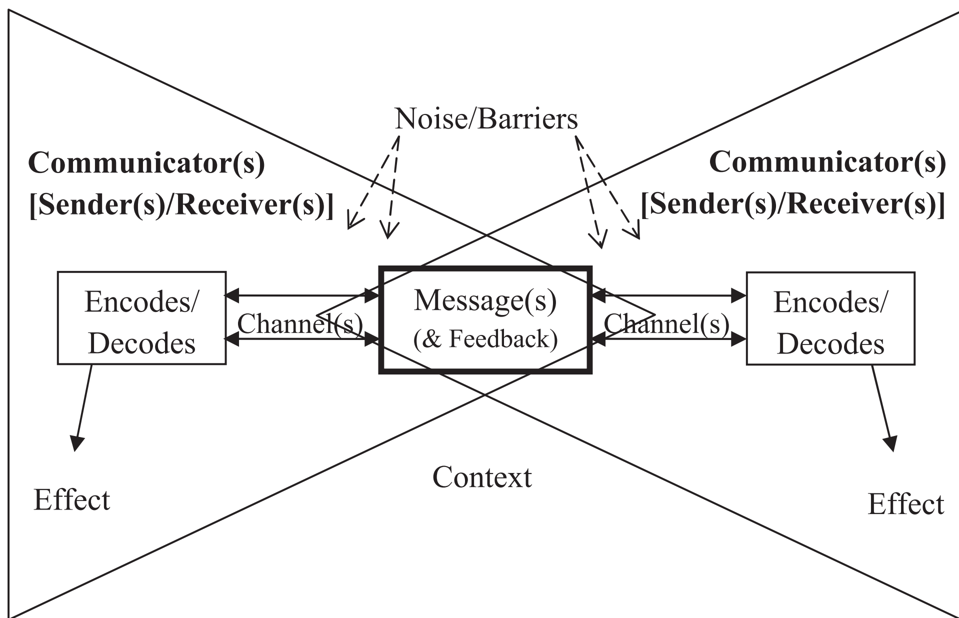

FIGURE 2-1. The transactional model of communication.

PRECEPTOR PEARLS

Remember that how you say something is as important as what you say. Choose your words carefully and be aware of nonverbal communication.

Communication in any setting should be clear, concise, and fair.

Word choice, or *semantics*, is particularly important in written communication when we don't have the other elements of communication to complete the process. Despite not being able to assess voice inflections, body language ,and the like, there is still an appreciable tone in written communication that reflects the writer's attitude or emotion toward the subject and the reader of the message.[11] As with oral communication, the tone can impact the way the reader receives the message. Refer to the section on written communication later in this chapter for more detail.

BOX 2-1. Tips for Appropriate Tone in Professional Writing

- Be appropriately, but not overly, formal (conversational, but not overly casual/familiar)
- Be confident
- Be courteous and sincere
- Use appropriate emphasis and subordination
- Be clear and concise
- Use appropriate language, grammar, punctuation, and capitalization
- Use nondiscriminatory language
- Use active voice
- Be positive; consider the reader's perspective
- Write at an appropriate level of difficulty
- Take the time to reflect on the message and write well
- Adapt tone slightly depending on circumstances (conveying enthusiasm, appreciation, regret, humility, etc.)

TABLE 2-2. *Types of Noise/Barriers to Communication*

Noise/Barrier	Caused by
Environmental	Place Space Time Sounds Smells Visual distractions Climate
Physiological	Vision/hearing limitations Memory impairment Illness Discomfort
Communication method	Choice of medium
Semantic	Varied connotative meanings Different languages Jargon/slang
Cultural	Diversity of cultures
Psychological	Emotions Attitudes/bias Assumptions Relationships/past experiences Confusion
Intellectual	Information overload Underpreparedness Varied levels of understanding, comprehension, detail

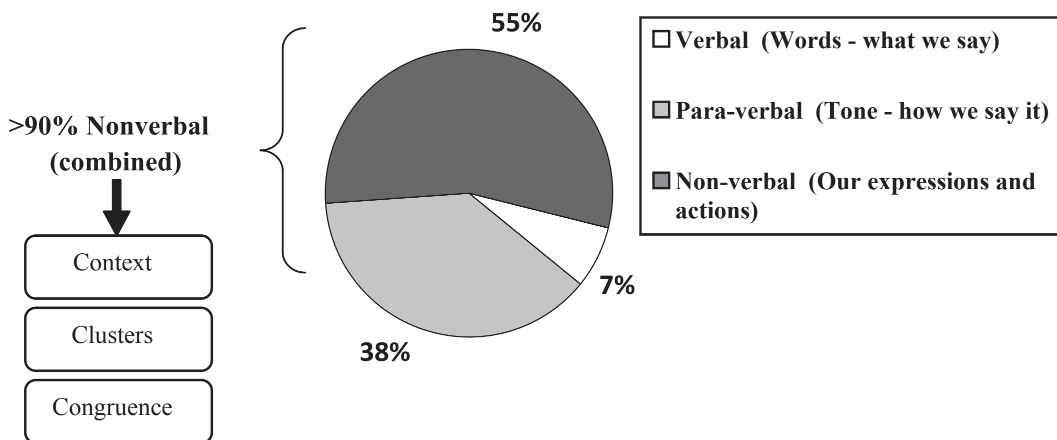

FIGURE 2-2. How we communicate.

Questioning and Listening Skills

Questioning and listening skills go hand-in-hand in effective communication. Preceptors must be conscious of their communication style and the manner in which they ask questions. These skills are covered in current didactic courses through simulations and actual interactions with patients and other healthcare providers. Role-playing with observation and feedback from colleagues are two ways in which questioning skills can be evaluated.

The manner in which a question is asked can dictate the type of response received. For example, a common communication mistake is to ask a closed-ended question while expecting a response to an open-ended question. The receiver may answer the yes/no question with *yes* or *no* instead of with the detailed response the sender expected. Simply changing the beginning of the question (e.g., replacing "Do you know…" with "What is…") will ask the correct question and will, in turn, elicit the expected response. Open-ended questions can be created by beginning the sentence with *who*, *what*, *when*, *where*, *why*, or *how*. All types of questions, including closed-ended, open-ended, leading, and probing questions, need to be incorporated in effective communication. Examples of these questions are shown in **Box 2-2**. When feedback is used effectively, either party—sender or receiver—can indicate a level of understanding and use additional questions to elicit the desired information. Good questioning skills require practice and the willingness and awareness of others to provide input.

BOX 2-2. Types of Questions

Closed-ended	Have you ever prepared a TPN solution?
Open-ended	What are your goals for this rotation?
Leading	How would you counsel this patient?
Probing	What else could be done to minimize the side effect profile of the current regimen?

Listening skills are as important to effective communication as the manner in which a question is asked. As the saying goes, "The reason we have two ears and only one mouth is that we may hear more and speak less." Active listening, or listening with the intent to understand, is both informative- and affective-based.[12] It allows the listener to gain valuable information from and develop rapport with the speaker. Because learners will mirror the behaviors of their preceptors, listening is a very important skill to practice and demonstrate to learners.

Being a good listener is not as easy as it seems, however. It takes focus and desire on the part of the listener because it is easy to be distracted. An active listener looks and sounds sincerely interested. Avoid falling into the habit of "selective listening," where the listener is not fully engaged and appears to be barely listening, nodding his or her head and mumbling, "uh huh," "hmm," or "okay." Most people can see that a person responding in this manner is not truly listening. If a preceptor does this frequently to learners, it is likely that they will stop asking questions or talking to the preceptor because they will feel that the preceptor is not listening or is disinterested. Furthermore, selective listening can cause a practitioner to miss crucial information when talking to patients.

An active listener also considers the speaker's perspective. Avoid interrupting, finishing the speaker's sentences, or rushing the speaker. Keep an open mind and try to see the speaker's point of view, rather than rushing to form—and share—an opinion. As with all communication, pay attention to nonverbal communication. You should use questions to clarify the speaker's thoughts and feelings, and reflective responses (paraphrase or summarize) to check the accuracy of your understanding. Then, as appropriate, you may need to shift to a more direct or persuasive approach to advise, correct, or confront.

PRECEPTOR PEARLS

Active listening—listening with the intent to understand—is an important aspect of communication.

Written Communication

As knowledge-based professionals, pharmacists depend on their ability to transfer information in order to care effectively for patients.

Although that transfer of knowledge most often takes place verbally, written communication skills are also essential. Written skills are not only needed by pharmacy administrators and educators but are increasingly a prerequisite for successful pharmacy practice in all settings.[13,14] Preceptors must be prepared to provide learners with training on effective and efficient writing.

The first step in effectively teaching writing skills as a preceptor is to recognize that learners may not fully realize the importance of being good writers. Preceptors must emphasize the fact that clear, concise, and informative writing can demonstrate professionalism and competence. Likewise, lack of clarity of thought and expression will quickly compromise a pharmacist's credibility in the eyes of patients and other professionals. Like many skills, being able to write well must be learned, practiced, and improved. As a preceptor, you will transfer writing skills passively to your learners as they read your written work and recognize its quality. You must also respond to your learners' written documents and provide constructive feedback on their writing skills.

Pharmacists are expected to write in a wide variety of formats, and preceptors should provide learners with exposure to various types of documents common in their practice area. It is useful to contrast differences in style, tone, and even grammatical form required of various written documents. For example, the form of writing used for progress notes in patients' medical records may not require precise grammar, sentence structure, or even punctuation. In contrast, higher expectations are normally set for new drug monographs written for presentation to pharmacy and therapeutics committees. However, accuracy of information, appropriate use of medical terminology, avoidance of dangerous abbreviations, and correct spelling are important issues regardless of the context.

Institution-specific style manuals should be developed and provided to learners to assist in identifying important writing conventions relevant to particular types of written documents. In the absence of a particular desired format, the *American Medical Association Manual of Style* can serve as a guide for appropriate format, style, and tone of most technical biomedical writing (including issues such as appropriate citation format, technical terminology, and abbreviation standards).[15] Simply requiring learners to read several examples of particular document types will assist them in adopting the appropriate tone and format. One of the most valuable tools for honing writing skills is Strunk and White's *The Elements of Style*.[16] The full text of the most recent edition (published in 1999) can also be accessed free online through numerous sites. It is an indispensable guide to good writing that should be read and reread before undertaking any substantial writing. In addition, preceptors should ensure that learners have access to a standard collegiate dictionary, a medical dictionary, and a thesaurus during clerkship rotations.

PRECEPTOR PEARLS

Strunk and White's *The Elements of Style* is an invaluable resource for improving writing skills.

When learners have completed a written document, the preceptor should edit it using a coaching approach. Rather than simply identifying an error or unclear phrase, sentence, or paragraph and expecting an appropriate change, suggest specific corrections or even offer completely rewritten alternative sentences in the margin. Conversely, don't just change the learner's writing without discussing the changes and why these were needed. Writers improve when better writers edit and provide feedback on their work. After learners receive corrections in this way, they are better prepared to better articulate similar thoughts and information in the future. Therefore, editing serves to improve the writing of the moment and future writing.

Preceptors may also need to assist learners with particular writing challenges, such as overcoming writer's block or improving the writing of learners who are not native English speakers. A variety of writing resources are available at most colleges, and preceptors should familiarize themselves with those resources; however, many writing clinics guide liberal arts and general educa-

tion learners, and their staff is often unfamiliar with the technical conventions used in biomedical writing.

Development of good communication skills is an important component of the learning experience, and effective communication is vital for both the preceptor and the learner. Learners and preceptors should be mindful that communication is not just face-to-face interaction but all facets of communication (e.g., verbal, written, electronic, etc.). Care and nurture of the communication process can aid in facilitating a positive practice experience for all involved.

Interpersonal Skills

As preceptors, learners will look to you to gain from your wisdom and experiences in all aspects of performing your job. Experiential rotations are generally considered an opportunity for learners to begin applying their knowledge of the appropriate uses of medications, and for preceptors to serve as resources to augment and supplement this knowledge base. Although this is true, your daily actions also provide a model of how a pharmacist functions within the overall healthcare environment. Demonstrating warmth, interest, and compassion in your relationships with learners, patients and other healthcare team members will encourage learners to act the same way.

By observing and working alongside practicing pharmacists, learners continue developing their ability to interact with others. Therefore, it is important to promote healthy professional relationships with pharmacy coworkers and members of other healthcare disciplines and to demonstrate and teach the skills involved to learners. However, many learners—and even some preceptors—struggle with finding the balance between being professional and friendly without being overly familiar. It should be recognized that professional relationships may differ depending on many variables; with some people you may be "true friends," inside and outside of work, while with others you may be "work friends" or colleagues—and it may be very appropriate to maintain those distinct relationships.

The following are some common skills that can be utilized when developing professional relationships:

- Make a conscious effort to smile and interact with people.
- Demonstrate a genuine interest in others by asking questions about them, their families, and their hobbies.
- Be willing to share information about yourself in return.
- Participate in workplace conversations.
- Keep inquires, sharing, and conversations appropriate for work (i.e., avoid asking questions or sharing items that are too personal or casual, avoid distracting others and preventing them from getting their work done).

Being friendly will help people feel more comfortable coming to you with their medication-related questions or to ask your assistance on a drug-related topic. A secondary benefit of forming strong relationships with colleagues and peers is the potential for networking, career advancement, and enhanced psychosocial support. [17]

PRECEPTOR PEARLS

Having good interpersonal skills not only demonstrates to learners an appropriate way to act but can also provide you with personal and career benefits.

As a preceptor, it is also beneficial to develop professional relationships with your learners and future colleagues. Learners who are just beginning a new rotation are often nervous or intimidated about being placed in a patient care situation in which they lack confidence and experience. The first few moments of positive interaction between learners and a preceptor can quickly begin to put the learners at ease and will demonstrate that you are genuinely interested in them and their academic and personal needs. Learners may have a variety of challenges in and outside of their professional life; these may manifest in different ways during the learning experience. When you have a good rapport with learners, you will often know the true reason for a particular learner's tardiness or failure to complete an assignment and be able to provide an empathetic and appropriate response. An

engaged preceptor can offer encouragement to learners facing difficult times or can attempt to motivate wayward learners. Regardless of the situation, it is difficult to meet learners' academic needs without first displaying a caring and compassionate attitude toward them as individuals. The proverb is true: "People don't care how much you know until they know how much you care."

Speaking of knowledge, it is often difficult to maintain confidence in your own knowledge base when learners seem to know all the latest information on a particular medication or disease. This can be especially challenging for young practitioners or for seasoned practitioners who are new at precepting. However, when interacting with learners it is important to convey confidence in yourself, in the services you provide, and in your real-world experience. It is not necessary for you to be an expert on all subjects to be a successful preceptor. Be a lifelong learner, taking the opportunity to learn new concepts from learners; it will only strengthen the bond when learners realize you are willing to listen and learn.

PRECEPTOR PEARLS

It is not necessary for you to be an expert on all subjects to be a successful preceptor. Be willing to listen to your learners and learn something new.

Leaders who exhibit positive behaviors such as hope, confidence, and optimism obtain better outcomes from others.[18] It is important not only to communicate your expectations but also to convey your confidence in the learner's ability to achieve them. Maintaining confidence in the abilities of yourself and your learner will often cause learners to work even harder to reach goals. Be cognizant of the attitude you project and how this impacts your ability to get the most from your learners.

Building trust takes time, but it is a crucial element for any pharmacist who wants to significantly impact patient care. Once trust is established, others respect your judgment and know they can rely on you for credible information that can be directly applied without the need for excessive questioning. In order to build trust, you must be honest, reliable, and predictable.[19] This means that you act in an honest and ethical manner, show up for work and meetings on time, provide accurate responses, follow up on pending issues, and meet deadlines. As you demonstrate your trustworthiness, other colleagues will begin to place more trust in you, and your credibility will grow. When teaching learners, remind them that trust takes a long time to build, can be destroyed quickly, and is much more difficult to regain a second time around.

In developing integrity, it is important to first have a solid foundation of central beliefs and values by which you conduct your life. Daily decisions can then be made within the context of this value system. Trust and integrity go hand in hand; once integrity of character has been developed it is much easier to gain trust. People will come to rely on you to provide honest and consistent answers, backed up by sound reasoning and data, and to be accountable for your actions.

Assessment Skills

In any educational setting, teachers must determine not only the instructional methods they will use but, perhaps more importantly, they must identify the learning objectives as well as the ways the learning will be assessed. Likewise, preceptors should decide ahead of time the specific knowledge, skills, and abilities in the form of objectives the learners will gain from instruction, and they should also locate the tools needed for learners to practice and demonstrate those objectives. Ideally, the learning objectives and assessment tools would be communicated to the learner at the beginning of the learning experience and would highlight behaviors that are both observable and measurable, which are entirely possible in a clinical setting. Perhaps one of the challenges is to ensure that preceptors can document the assessment of learning in a useful and efficient way for learners to receive the constructive feedback they need to promote confidence and make improvements.

When planning for the assessment of learning and striking a balance between

TABLE 2-3. *Example of a Learning Objective–Assessment Method Planning Table*

Rotation Objectives	Assessment Methods: Activity 1	Activity 2	Journal Club	Reflection	Self-Assessment	Final Evaluation
Objective 1	X		X			X
Objective 2			X			X
Objective 3				X	X	X
Objective 4		X			X	X
Objective 5					X	X

learning objectives and assessment methods, constructing a table like the example in **Table 2-3** can help preceptors decide if the overall assessment plan adequately covers the content areas being taught.[20] This table can also reveal any gaps or redundancies where preceptors can adjust their teaching, objectives, assessments, or all of the above.

Assessment Tools

Depending on where preceptors are located and where learners are completing their programs, some assessment tools may already be developed and even standardized by another entity. These entities, such as a college or school of pharmacy or the state board of pharmacy, may have expectations that preceptors and learners will use these existing tools, so it is a good idea to inquire about program requirements for both experiences available to students and assessments such as evaluation forms for you to complete.

As preceptors consider different assessment tools, the tools should meet four measurement principles to ensure high quality assessments: they should be relevant, reliable, recognizable, and realistic. A *relevant* (or valid) assessment method must be an accurate reflection of the skill or concept being tested, must be derived directly from learning objectives, and may predict performance on other closely related skills. *Reliable* assessments should communicate clear expectations to students and have clear criteria for rating, whether graded a second time by the same person or by a second person. One way to increase reliability would be to use a variety of assessment methods instead of relying on only one to measure a learner's ability. All assessments should be *recognizable* to the learner, meaning they should be aware of how they will be evaluated, and activities should help prepare them for those evaluations. Finally, assessments are only truly useful if they are *realistic* for both the preceptor and the learner. In other words, the amount of information obtained from an assessment would balance the amount of work required. Smaller, more frequent assessments may be a more realistic approach, for example, rather than one large evaluation at the end of the learning experience.

With respect to the four measurement principles described previously, a combination of formative and summative assessments should be used. Some differences between these two types of assessments are presented in **Table 2-4**.

Summative assessments may be most familiar to individuals in higher education. They are conducted at the end of a learning experience, and the only feedback learners usually receive is an overall score. On the other hand, *formative assessments* take place while the learner is still acquiring the expected knowledge and skills. They allow learners to practice without having to take great risks, they provide learners with prompt feedback or coaching about their strengths and weaknesses, and they help the preceptors and learners make ongoing improvements to the learning experience.[21] In fact, to help decrease the learner's anxiety normally associated with tests, learners (and preceptors) can frame assessments as learning activities instead.[20]

Competency-based assessment is appropriate for the training of health professionals in general, where the focus should be on the

TABLE 2-4. *Assessment Types*

Formative Assessment	Summative Assessment
Low stakes	High stakes
Minimal or no impact on final evaluation	High impact on final evaluation
Ongoing feedback	Evaluative feedback
Focus on progress	Focus on outcome

assessment of competencies or performance on an observable and measurable skill that is expected at the end of instruction. Preceptors can evaluate these skills in a number of different situations.[22] Examples are provided in the section, Formal Assessment Methods.

For most assessment methods, preceptors should strongly consider accompanying that method with some kind of *scoring guide* or *rubric* that is already developed, adapted, or created from scratch, in particular for the many subjective types of assessments commonly found in a clinical learning environment. For example, when a preceptor observes a learner performing a skill to be evaluated, evaluating that skill may be done informally, but a rubric clearly communicates expectations for that skill and provides a formal way to document the evaluation of that skill. Rubrics are useful for evaluating many other learning activities, including oral presentations, written critiques, and formal reflections on an experience.

Rubrics can be formatted in any of the following ways[21]:

- *Checklist*—simple list of behaviors that are observed
- *Rating scale*—checklist with a rating scale to note the degree to which the behavior was observed (e.g., Never, Rarely, Sometimes, Often, Always)
- *Descriptive rubrics*—instead of the checkboxes found on a rating scale, brief descriptions used to explain expected performance for each rating
- *Holistic rubrics*—contain a single brief description for each level of performance (e.g., poor to exceptional work) when listing all expected behaviors is unrealistic (e.g., when distinct criteria cannot be identified or when many learners need to be evaluated quickly)

Descriptive rubrics are ideal because they can address reliability and validity issues as well as provide learners with more informative feedback. An example of a descriptive rubric that could be used to evaluate a research paper is given below (see **Figure 2-3**).

Formal Assessment Methods

The following are a few examples of formal assessment methods that could benefit from an associated rubric to help with evaluation:

- *Direct observation*—Although preceptors may observe their learners regularly, there should also be *intentional* observations that are formally documented and allow for feedback on the learners' strengths and weaknesses. Hauer, Holmboe, and Kogan describe 12 tips regarding direct observation for medical trainees, some better addressed by educational programs as a whole, some possibly useful just between preceptor and learner, but all applicable to pharmacy education.[23]
- *Journal article critique; case presentation; subjective, objective, assessment, and plan (SOAP) note*—Whether the learners are completing these or other similar activities in an oral or written format, they should still be evaluated with some kind of rubric.
- *Reflection/portfolios*—When thoughtfully and purposefully assembled, a portfolio can provide evidence of a learner's progress and achievement; however, even if a formal portfolio is not expected, a reflective essay can still reveal a learner's thought process about his or her own skill development. Portfolios for learners can be useful to demonstrate achievement during advanced pharmacy practice experiences.[24]

	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Literature Review	Explanations of published works require larger scope or more analysis; evidence of lack of understanding of key concepts	Analysis of major published works related to area of interest; further development of some ideas recommended	Comprehensive, organized analysis of key relevant peer-reviewed literature with appropriate breadth and depth
Research Design	Incomprehensible or completely inaccurate experimental design	Some missing or flawed descriptions; not consistent with learner knowledge	Research design based on research aims and within the learner's expertise
Methodology	Obvious weaknesses; explanation requires substantial improvements	Adequate explanation of procedures; more details recommended	Fully explained and appropriate procedures
Results	Explanation of results is unclear	Results are missing pertinent information or could be better organized	Effective and organized presentation of data results
Conclusion	Unreasonable or senseless conclusion or interpretations	Rational conclusion; interpretations lack some explanation	Valid, defensible conclusion; use of sound arguments to support interpretations

FIGURE 2-3. Example of a descriptive rubric.

PRECEPTOR PEARLS

Use a variety of assessment types and tools to evaluate and coach learners.

Teaching Skills

Today's learners respond well in an active learning environment. They need to strive to apply or put into practice the information they are learning. For example, a preceptor can explain the important aspects of sterile technique; however, unless the learner actually compounds a sterile parenteral solution, he or she will probably not develop the critical skills necessary to learn this technique. The majority of training learners have had prior to starting their advanced practice pharmacy experiences has been in didactic lectures and simulations. Although learners have been exposed to clinical practice through introductory pharmacy practice experiences, their hands-on participation may be limited depending on the program and rotation experience.

PRECEPTOR PEARLS

Providing learners with opportunities to practice their skills will help them better retain the information.

Many pharmacists who decide to teach learners do so with little formal training in teaching and instructional design. Although some preceptors may have been exposed to or involved in organized teaching during their training (PharmD curriculum or residency), the majority of preceptors do not have a background in teaching methods and learning styles. Most preceptors are very good at communicating clinical information, but the learners they are precepting sometimes have difficulty applying this clinical information because of the manner in which their preceptors present the information. The pharmacist who is a great clinician is not necessarily the best teacher, and vice versa.

What can preceptors do to be better teachers? The following are some helpful hints to being an effective clinical teacher[20]:

- A model of desired performance helps learners. Positive examples of what to do are more effective than what not to do.
- Provide verbal cues that identify key features of the skill.
- Simplified and step-wise instructions are best.
- Permit learners the maximum freedom to experience successful completion of a task. This will facilitate their knowledge and skill development.

- Provide positive and constructive feedback.
- Don't try to correct everything on the first attempt. Sometimes the best way for a learner to learn is by failing.
- High-level skills are developed through much practice.
- As you evaluate work, verbalize the process you are using and the basis for your evaluation.

Reflect on your own experiences and incorporate them into your teaching style. Did you have a great professor or preceptor who you really admired? These are the individuals you want to emulate.

Excellent preceptors possess the following qualities[25]:

- They are supportive of and respectful to their learners, colleagues, and patients.
- They are excellent role models and look for opportunities to demonstrate excellence in practice.
- They exude enthusiasm for their practice, their patients, and for their learners.

There are many ways that preceptors can improve their teaching skills. Having a true desire to teach and to give back to the profession are the most important criteria. Many schools offer or require specific preceptor continuing education and training. Frequently, these types of workshops and programs cover everything from teaching skills to assessment.

Leadership Skills

Teaching leadership skills and identifying potential leaders is critical for the future of pharmacy. In pharmacy workforce surveys, the vast majority (74% to 80%) of current pharmacy leaders (directors and middle managers) responded that they did not anticipate remaining in their current positions within the next 10 years.[26,27] The survey respondents indicated the main reason for this turnover would be attrition through retirement. Although more current practitioners and students indicated their intent to seek leadership positions at some point during their career in the 2011 survey compared with the 2004 survey (from 30% to 45% for practitioners and 62% to 63% for students), work is still needed to avoid a pharmacy leadership crisis in the near future.

In the face of a pharmacy leadership crisis, there is a significant risk that a pharmacy leadership position may be filled by a nonpharmacist, such as a nurse, materials manager, physician, master of health administration, master of business administration, etc. Health-system organizations may have no choice because they need pharmacy leadership and can have a pharmacist act as the board of pharmacy pharmacist in charge without being the director of pharmacy. It is more beneficial to the site for a pharmacist to act as the director, with nonpharmacists performing in some of the middle management roles, such as financial management or human resources, under the guidance of a pharmacist director.

The findings of the aforementioned landmark surveys have dramatically influenced thinking about pharmacy leadership, leading to the development of multiple programs and services and highlighting the need to include leadership—in addition to clinical considerations—to education and policy efforts. The ASHP Statement on Leadership as a Professional Obligation emphasizes that each pharmacist needs to accept the responsibility and accountability of this personal development challenge as a critical part of our professional role.[28] To ensure pharmacist leadership into the future, we need both Big L and Little L pharmacist leaders. The Big L leaders are those with a formal title such as chief pharmacy officer, director, associate director, assistant director, manager, supervisor, clinical coordinator, etc., whereas the Little L leaders include every pharmacist on his or her shift in the practice.

PRECEPTOR PEARLS

Both Big L and Little L leaders are critical to the advancement of the pharmacy profession.

Leadership is crucial because it helps the advancement of the profession in immeasurable ways. Before the 1960s, pharmacists did not typically practice in hospitals, and the rare hospital pharmacy was generally in the basement. Nurses prepared intravenous

admixtures and took the oral doses they needed from stock bottles on their unit, rather than relying on hospital pharmacists. Clinical pharmacy services as we now know them began in the late 1960s, when pharmacists left the basement pharmacies to participate in medical rounds and to better utilize their therapeutic expertise to make prescribing and medication monitoring decisions. Each of these service innovations resulted not just from Big L leaders but also from many Little L leaders taking calculated risks, setting up the services, and performing the day-to-day activities. This evolution of pharmacy services is one example of how important pharmacist leadership is to the profession.

It is paramount that every preceptor incorporate leadership exposure and training into rotations, even the purely clinical rotations. Leadership and clinical practice are integrated skills for every pharmacist as a Little L leader so that practice continues to evolve. The preceptor's goal must be to build every future pharmacist's leadership confidence so he or she will continue to evolve pharmacy and healthcare services. The preceptor is the role model that the learner emulates, so it is important that the preceptor believe in this integration of leadership and clinical practice. Consider the benefits your Little L leadership in practice has created for your patients, practice, and career.

Leadership and management are complimentary but different. To understand leadership, it is helpful to contrast it with management. A *manager* focuses on maintaining the system and ensuring that things are done correctly and relies on checks as controls. Managers maintain the status quo and focus on the short term. Management includes planning, organizing, coordinating, implementing, administering, monitoring, and evaluating. To be a good manager requires leadership skills, and an effective leader will rely on applying his or her own and others' management skills to achieve goals. *Leaders* make people feel significant and develop a sense of commitment that fosters teamwork that, in turn, excites people through their own enthusiasm and passion. Leaders challenge the status quo and try new ways of organizing and processing work; they are innovators. Leaders take calculated risks, making adjustments as they gain experience. They have a bias for action and hold themselves accountable. Leaders are change agents who use their creative dissatisfaction with the status quo to innovate and improve services. Leadership involves identifying the right things to do, inspiring, motivating, focusing, aligning, mobilizing, innovating, and developing. Leadership development can—and should—occur for all pharmacists and learners.

Think of precepting leadership as a continuum beginning with exposure, continuing through identifying potential leaders, and, as time permits, leadership training. Suggestions for each point on the continuum appear in **Box 2-3**.[29] The preceptor needs to provide the suggested messages so the learner puts this leadership involvement in the proper context and realizes its future application to his or her practice. The preceptor must be interested in the learners as individuals and provide time to listen to their experiences. As the preceptor helps the learner develop his or her leadership skills, the teacher-learner relationship develops more into one between colleagues. This evolution provides learners with the expectation that they begin to perform more as a pharmacist than as a learner. Devoting time to leadership activities nurtures the learner's leadership involvement, which, in turn, is making an investment in the future of the profession.

BOX 2-3. The Precepting Leadership Continuum

Leadership Exposure Activities

- Provide messages to learners (repeat frequently; once is not enough):
  - Remind them that every pharmacist is a Little L leader during a shift or in his or her practice.
  - Share your personal experience of how pharmacy services have improved during your career and what future trends might be.
  - Describe what leadership means (both Big L and Little L).
- Encourage learners to attend meetings (committee/staff/faculty) with you; their focus should be on the following:

- Interactions among caregivers (both effective and ineffective)
- Pharmacist input and impact
- How to productively function in a meeting

- Help them arrange to shadow/observe Big L leaders and focus on:
  - What leaders do, who they interact with, what they are trying to achieve
  - How their careers have evolved
  - Their impact (actual and potential)
- Suggest they do small actual projects (e.g., performance improvement, formulary, data analysis) that include making recommendations for changes.
- Recommend professional organizational leadership opportunities:
  - Attend meetings/committees/board meetings, interview elected officers
  - Set them up for learner/new practitioner involvement opportunities/push news/listservs
- Suggest they read Stephen Covey's *The 7 Habits of Highly Effective People* (in the self-development section of any bookstore).

Identify Potential Big L Leaders

- Look for characteristics that enable people to be effective leaders, and have some of the following qualities:
  - Are passionate about what they do and are willing to work hard
  - Are good with people, get along with everyone, have concern for others, and share credit
  - Are reasonably organized and confident
  - Have good verbal communication skills
  - Make decisions, use good judgment, and take responsibility
  - Think broadly, beyond the pharmacy task at hand; are curious; ask questions; and identify service problems and propose solutions
- Frequently convey the following messages to learners:
  - Remind them that they have leadership skills; use specific examples and affirm what they do well because frequently they are unaware of their strengths.
  - Suggest that they take on projects beyond just doing the requirements. By doing so, they will learn to work efficiently and to balance competing priorities, two skills they will need in their practice.
  - Encourage them to consider taking a formal leadership position sometime in their career.
  - Encourage them to think, question the status quo, and propose changes. Reinforce when they do, no matter how small an effort they make.

Leadership Training: Make Additional Opportunities Available

- Messages for learners:
  - Suggest that they find a Big L leader mentor. Have them formally ask someone they are comfortable with to help them with their careers. Spend time asking them for advice.
  - Help them learn by observing other successful people so that they can see what works and what does not work.
  - Stress the importance of learning from your own experiences. Tell them to ask for feedback on ideas and approach.
  - Suggest they investigate Health-System Administration Accredited Residencies through the ASHP website. Even if they are not interested in a residency now, they may be in the future.
  - Suggest they research practitioner leadership training opportunities through the American College of Clinical Pharmacy (ACCP) and ASHP Foundation websites in case they are interested once they move into practice.
- Expand leader shadowing/observations; include different types, if possible, such as residency program directors, school department chairs, or others outside of pharmacy.
- Involve them in actual projects.
- Challenge them with "what if" leadership scenarios that do not have one right answer.
- Attend pharmacy leadership team meetings.
- Report on meetings attended, content, and human dynamics.
- Suggest possible readings:
  - Bush PW, Walesh SG. *Managing & Leading: 44 Lessons Learned for Pharmacists*. Bethesda, MD: American Society of Health-System Pharmacists; 2008.
  - Leadership book summaries, available at http://www.summaries.com
  - Leadership abstracts, available at http://www.getabstract.com
  - Leadership books written by John Maxwell, Ken Blanchard, or Spencer Johnson (all of which can be found in any bookstore in the business section)

Another suggestion for preceptors is to consider utilizing the vast resources available through professional meetings and colleges of pharmacy. Local and national meetings and colleges of pharmacy often offer programming related to preceptor development with topics such as providing feedback, assessment techniques, and dealing with difficult learners. These offerings can help develop or augment precepting skills and hone leadership skills as well. Preceptors should also emphasize to learners the importance of being actively involved in local and national organizations. Preceptors ideally should do this not only through active conversations with their learners but also through modeling the behavior and being active participants themselves. When learners are directly exposed to the value of professional organizations, they will be able to immediately benefit from opportunities that include networking, professional development, leadership roles, and professional activism.

No matter what leadership activity the learners perform, preceptors must set them up for success to help build their confidence. Clearly describe what to expect with the activity, why it is important, and what to look for as learning experiences. Express your confidence in them and set up a time to "debrief" after the activity by having them share their experiences. Ask questions that challenge them on what they learned and how they might apply it in their practice. Then set up another activity and repeat the process as time permits.

PRECEPTOR PEARLS

Leadership activities expose learners to leadership and teach them to become leaders on their own.

Preceptors are critical to providing leadership experience for all future pharmacists and ensuring that pharmacy services will continue to evolve in support of optimum patient care.

Summary

Serving as an effective preceptor to learners requires the pharmacist to possess and demonstrate numerous skills. Many of these are critical for pharmacists in any position, but some are unique to the role of a preceptor. When developing precepting skills, it is important to periodically perform self-assessment and identify areas that could benefit from additional growth through education, experience, and mentoring—the same approach preceptors use to help learners gain skills. Strong communication skills are critical as a preceptor (and pharmacist), and they complement solid interpersonal skills. As a preceptor, assessment skills will be frequently used in both formal and informal ways, as will teaching and leadership skills. Preceptors also need to understand and value generational differences. Today's learners value relationships, flexibility, active learning, and the ability to make a difference. Preceptors who understand the unique characteristics and values of different generations can further develop their skills in all of the core areas to better meet their learners' needs and be the most effective preceptors possible.

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Chapter 3

Successful Preceptor-Learner Relationships

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Chapter Outline

Understanding Effective Preceptor-Learner Relationships.......... 42
Self-Assessment: What Makes an Effective Preceptor?.......... 42
Fostering the Professional Relationship Before the Learner Arrives.......... 46
Onboarding Learners.......... 48
Modeling for the Learner.......... 50
After the Learning Experience.......... 55
Summary.......... 56

By learning you will teach, by teaching you will learn.

Latin proverb

Learning Objectives

- Define and discuss an effective preceptor-learner relationship.
- Define the learners who are entering the experiential practice environment.
- Describe the desired characteristics of a proficient preceptor.
- Describe the desired characteristics of a quality learning environment.
- Identify steps that can be taken to provide an optimal setting to ensure a positive experience for all involved.
- Outline the roles, responsibilities, expectations, and goals of preceptors and learners during practice experiences.
- Utilize preceptor modeling and learner- and self-reflection to coach performance and engage learners in successful experiential rotations.

Understanding Effective Preceptor-Learner Relationships

There are many things that contribute to a successful learner practical experience. One of the most important contributing factors is the development of a positive preceptor-learner relationship. Identifying ways to foster that relationship from preceptor and learner perspectives will help. By structuring a positive learning environment and clearly defining expectations, roles, and responsibilities and identifying goals at the beginning of the rotation, preceptors set the foundation for success. The preceptor can further enhance the likelihood of a great experience by modeling behaviors, coaching learners, and fostering self-reflection. This chapter focuses on the preceptor-learner relationship and creating an environment where that relationship can flourish.

Self-Assessment: What Makes an Effective Preceptor?

Effective Preceptors Know Their Learners

Effective preceptors strive to understand their learners. Although remembering the importance of addressing each student as a unique individual, there are generational issues to keep in mind. Although preceptors may be hailing from the Baby Boomer or GenX generations, our current generation of learners has been referred to as the Millennial Generation. Generation Z (though there is no agreement on the name or exact range of birth dates for that group) will be entering our learning experiences within the next few years.[1–3]

Millennials are hard-working, competitive, productive, and have been successful at much of what they have accomplished. They are more

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connected to their parents, have great expectations, have a need for speed, are collaborative, and have a large social network. Based on their characteristics, they have different expectations and needs in the learning environments. They expect to be treated with respect and are open-minded with respect to different races, religions, sexual orientations, and other issues in the workplace. They consider themselves to be global in perspective and are motivated to improve the human condition, in our country and abroad. Although they like challenges and stimulation and are capable of multitasking and high technology utilization, they strongly focus on maintaining a work/life balance to keep friends and family near and involved. Their perception of feedback—"Whenever I want feedback, it can happen at the push of a button"—is very different from previous generations. The perception of feedback of the Baby Boomers can be expressed as "Once a year, with lots of documentation," whereas the GenX population perceives feedback as "Sorry to interrupt, but how am I doing?" Millennials do like praise. Parents and teachers alike have praised this generation heavily, and they need and expect this recognition.[4–7]

Some preliminary reports indicate Generation Z members are technology savvy and used to having instant access to copious amounts of data. This may explain why they may crave constant and immediate feedback. In addition, these individuals may look for the quick answer versus trying to solve the problem. Having grown up during an economic recession, these individuals have a sense of social justice and philanthropy. Generation Z members seem to have a sense of entitlement because of the significant independence provided by mobile technology along with consistent affirmation from parents. It has been suggested that this generation may expect flexibility, have little interest in a 40-hour workweek, prefer tailoring their work to their expertise and interests, and expect faster career advancement.[8,9]

Continue to be open-minded about all generations of learners. Rather than labeling them, identify ways to bridge the different generations. At the beginning of the learning experience, be transparent with the learner regarding the preceptor style that will be used as well as setting the expectations about how feedback will be shared. Consider sharing with the learner what feedback means to the preceptor versus what it may mean to them.

Effective Preceptors Demonstrate Similar Traits

Effective preceptors have certain characteristics in common that are similar to effective educators. They are enthusiastic, knowledgeable, and show an interest in teaching, self-confident, relate to the learner as an individual, work well under stress, and are willing to learn.[10,11] They enjoy their work, freely share information, and seek to further develop their professional skills. Effective preceptors are willing to spend the time necessary to be prepared for learners' experience, model the skills, coach and observe the learner through their professional development, and provide meaningful feedback.[12] In addition, preceptors must be mindful of their responsibility to serve as professional role models, to inspire learners to develop their professional skills, and to show learners how to establish professional relationships.

Preceptors supervise, mentor, and promote the professional development of learners. The preceptor's role is to facilitate the professional development of a learner throughout the learning experience to allow the learner to build on prior knowledge. The Academic-Practice Partnership Initiative of the American Association of Colleges of Pharmacy (AACP) created a list of criteria for excellence of preceptors. The 2011–2012 AACP Professional Affairs Committee further developed criteria for the AACP Master Preceptor Recognition program that recognize preceptors who have demonstrated sustained commitment to excellence and are not directly employed by the college or school of pharmacy for their professional practice position. The criteria include the following skills and attributes as essential components of being an effective and successful preceptor.

The preceptor should:

- possess leadership/management skills,
- embody his or her practice philosophy,
- be a role-model practitioner,
- be an effective, organized, and enthusiastic teacher,

- encourage self-directed learning of the student with constructive feedback, and
- have well-developed interpersonal and communication skills.[13,14]

Learners expect that preceptors are prepared and eager to teach, with appreciation for different learning styles. The preceptor should assess learners' entry-level knowledge and previous experiences in order to individualize their specific learning topics, goals, and objectives. Performing a gap analysis enables the preceptor to avoid repeating material that learners may have mastered and allows weaknesses in learners' knowledge and skills to be identified. Orientation is the ideal place to perform gap analysis.[15] Incorporating and emphasizing the following can further a learner's knowledge: orientation, role modeling, assessing, providing specific feedback, and evaluation.

The Preceptor's Teaching Style

Anthony Grasha has identified five different teaching styles that can be combined in various ways to achieve effective teaching: expert, formal authority, personal model, facilitator, and delegator.[16] Similarly, Neal Whitman described two learning styles that could be applied to the practice setting: pedagogy (teacher-centered) and andragogy (learner-centered).[17] Because experiential rotations are especially designed for learners to develop hands-on clinical skills, experiential teaching is more learner-centered and requires the preceptor to be a model and a facilitator.

A Chinese proverb says "Tell me and I forget. Show me and I remember. Involve me and I understand." A good preceptor uses the concept in his or her teaching process: tell, show, and include. Guiding learners to apply their knowledge into practice by having open discussions and competency evaluations facilitates more effective learning for learners in the practice setting. Designating specific times weekly for the purpose of reflection can also be helpful. Reflection is a time when the preceptor and learners can discuss their feelings of security or insecurity in learning or ways of coping with mental stress during the experience.

The Preceptor's Interaction with Learners

To establish a dynamic relationship with learners, the preceptor must be willing to invest the time and effort needed to communicate effectively with learners. Effective communication requires that the preceptor be sensitive to learners' educational needs and be able to evaluate learners' strengths and areas for further development without intimidation. Communication is a process, and different communication styles may be needed during the 4- or 6-week experience. ASHP has embraced four major roles of precepting: direct instruction, modeling, coaching, and facilitation. The Society encourages preceptors to be creative and flexible in the application of each these roles.[18] Initially, the preceptor may facilitate learning by giving direct instruction to the learner and by modeling the expectations. Gradually, as learners become more familiar with the practice setting and more confident in their professional skills, the preceptor could assume the role of a coach or facilitator, allowing the learners to become more actively involved in the clinical education. Appropriate feedback to learners about their performance is essential, especially when preceptors discuss the goals and objectives and the performance expectations of the rotation with learner. Preceptors also need to listen to and answer learners' questions. Continual open communication will encourage learners to keep asking questions and will help them solve problems and make decisions.

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Consider the generation of learner and identify ways to bridge the different generations to enhance the learning experience. Be transparent with the learner regarding the preceptor style that will be used and set the expectations to how feedback will be shared. Develop a common understanding about what feedback means to the learner versus what it may mean to the preceptor. Remember, the preceptor's role extends beyond teaching to include facilitation, coaching, role-modeling, and may even include mentoring.

Effective Preceptors Create Environments That Promote Win-Win-Win Situations for Preceptors, Learners, and Practice Sites

Building a positive preceptor-learner relationship relies not only on the traits of the preceptor but also on the practice environment surrounding the preceptor and learner. This section explains how a positive preceptor-learner relationship can be supported by the teaching and learning environment, the physical space afforded to the learner, and the integration of the learner in patient care. It focuses on how preceptors, learners, and sites can mutually benefit in even very complex practice settings that may include practice-based research. Creating an environment that promotes a win-win-win situation for preceptors, learners, and practice sites reinforces the preceptor's efforts, resulting in successful rotations.

Creating a Teaching and Learning Environment

Learners can both benefit from and contribute to a vibrant teaching and learning environment for practice sites. By participating in existing platforms for professional development within the site, learners advance their own education and that of their colleagues. Examples of common teaching activities include journal club discussions, clinical forums, formal presentations, pharmacy work rounds, pharmacy grand rounds, and patient education seminars. As learners increase participation in these activities, they have the opportunity to observe various presentation styles and improve their own presentation skills. Preceptors support quality teaching environments by also supporting learners' attendance at interdisciplinary teaching events. Their presence will reinforce the multidisciplinary team approach of modern patient care. These activities could include medical and nursing grand rounds, nursing shift report, unit-based/patient-centered medical home huddles, medical work rounds, medical journal clubs, and provider-led morning reports.

A quality learning environment requires that preceptors take measures to ensure the intended learning results from attendance at these teaching activities. This does not require, however, that the preceptor co-attend all these teaching events with learner. Rather, learners often enjoy attending such sessions independently and can be challenged to grow. Preceptors can assign learning by self-reflections and report-back activities that create discussion opportunities between the preceptor and learner where gaps in understanding can be addressed. This strategy is applicable to a variety of learner activities and can be utilized with increasing independence across the continuum of learner levels.

Creating a Supportive Physical Environment

Having a supportive physical environment will help both the preceptor and the learner attain better and more efficient workflow. Readily available access to a workspace, computer, the Internet, and electronic medical record has been found to be associated with learners' satisfaction in the VA Learners' Perceptions Survey.[19] Although many experiential sites have limited office space and few workstations, the benefit of designating workspace (even if shared) promotes teamwork between the preceptor and the learner. It also makes it easier for the preceptor or other staff members to locate the learner when necessary. Likewise, having a designated computer or workspace for the learner in the vicinity where the primary duties are satisfied allows the learner to better manage clinical or operational services while mixing in time for project assignments and other nonproduction-related activities.

Creating an Integrative Patient Care Environment

Given the pace of work in most pharmacy practice settings, the preceptor-learner relationship can be undermined if the practice environment and rotation is not structured. One of the critical components in achieving a win-win-win situation is establishing true integration of the learner in the preceptor's practice. This practice will ultimately support the goals of the organization and it should be expected that by investing early in the development of the learner, preceptors and sites are able to attain a return on that investment through increasing productivity. The needs of the clinical practice can be assessed by surveying administrators, office staff, and clinical colleagues for ideas and feedback. Pharmacy administrators may need learners

to help with outcomes assessment projects related to drug utilization, cost-effectiveness analyses, and continuous safety and quality audits and reviews, whereas clinically oriented practice sites can benefit from learner's contributions to medication reconciliation, comprehensive medication management, and patient/provider education, to name a few. Integrating learners into daily clinical practice activities that match the level of their capabilities and training is essential for the win-win-win. By requiring learners to actively participate in patient care, preceptors demonstrate respect for learners' abilities and promote the learner's ownership in their self-development. The preceptor should coach and encourage the learner during initial encounters. Any patient encounter should, of course, be coordinated with colleagues and the clinical staff. In one study, an integrative (or "deep") approach that leads to personal understanding has been found to predict most site and preceptor characteristics valued by 532 medical learners and 2,939 residents.[20]

Creating a Practice-Based Research Environment

Considering learners' professional development needs at the time of the rotation can help the preceptor design a better rotation program for the individual learner. If the learner desires or needs research and scientific writing experience, preceptors can assign the task of developing a research protocol or preparing poster abstracts and manuscripts for publication. Such a focus requires that the preceptor be knowledgeable about research procedures and have scholarly discipline.

One of the constraints to providing support for such activities is the lack of time in order to see a project from inception to completion and write-up for presentation or publication. As discussed later, a planned, ongoing relationship with the learner can support this goal. If, however, there are limitations for extended contribution beyond the confines of a 1- to 2-month rotation, breaking several projects into the constituent components and having the learner participate in or complete a component of the work is valuable. Consider what contributions a learner can make in advancing the development of a study question or project idea. Having the learner perform a comprehensive literature review and report that sets the table for future research steps is not only an asset to the preceptor but also a valuable learning experience. Future learners can design and test data collection forms and perform data analysis under the direction of the preceptor. Finally, the project write-up, whereby a learner can increase written communication skills, can be a meaningful assignment. Practice-based research identifies, studies, and evaluates common problems encountered in clinical practice.[21] Collaboratively engaging in practice-based research projects gives the learner an opportunity to see how research efforts could improve the quality and safety of care; the learner benefits the preceptor and clinical site by helping to collect and analyze data that are used to improve operation, clinical outcomes, patient satisfaction, and staff efficiency. Practice-based research questions arise from the practice; the practice could use study findings to re-engineer the practice operations, increase appropriate medication use, and explore additional ways to further improve medication safety.[21]

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Create a model-learning environment by integrating learners into as much of the daily activities as possible, where they can begin to foster their own self-development. Encourage their presence at multidisciplinary/interprofessional activities to reinforce the team approach of modern patient care.

Fostering the Professional Relationship Before the Learner Arrives

Do good preceptor-learner relationships just happen? Can every preceptor-learner relationship be a good one? If the preceptor invests the time and effort and puts the learner at the center of the experience, every preceptor-learner relationship can be effective and rewarding for both parties. Placing learners' needs at the center of the experience is most important. Many preceptors expect learners to

understand them and what is going on in their lives and careers. However, most learners are in their mid-twenties and, although interested and devoted to their new professional career, are still trying to discover themselves. Recognizing this fact, remembering your own experiences at this age, and putting the learner first will make the preceptor-learner relationship a mutually positive experience.

Learners have enormous expectations of experiential education when entering their rotations. Their expectations are a product of 3 to 5 years of structured didactic learning. Learners thirst for guided learning opportunities from preceptors to correlate textbook with clinical practice knowledge. They anticipate that preceptors will provide opportunities to build on their drug knowledge from didactic coursework and prior learning experiences. The transition to experiential education provokes learner anxiety, as they learn to apply knowledge and validate competency prior to graduation. These expectations and their eagerness to display proficiency may be unrealistic because of a lack of practice setting and clinical experiences, which may cause learners to be disappointed with educational experiences. Ultimately, learners want a contributory role during their experiences, an opportunity to apply and offer evidence-based recommendations, and the chance to mature as competent practitioners. As a result, leaners have significant expectations of their preceptors.

Most preceptors had great pharmacy practice experiences and likely began to forge a strong professional relationship with their mentors and colleagues during those experiences. Some interpersonal relationships happen with very little effort. Two people just "click." At other times, it may appear that there is no chance of a relationship. The preceptor and learner agree to peacefully coexist until their time together is over. Leaving a relationship to chance puts the preceptor, the learner, and the educational experience in danger before it even begins.

A contentious preceptor-learner relationship will almost certainly frustrate both the preceptor and learner, and possibly other individuals (colleagues, other learners, etc.). The learning opportunity may be significantly impacted, even negated, when the relationship is compromised. The learner may feel shortchanged by the educational experience and may not appreciate the preceptor's knowledge, skills, and abilities. The preceptor may have feelings of guilt and wonder what happened. Conversely, a cooperative preceptor-learner relationship will be one where both the preceptor and learner look forward to working together. They will jointly seek out opportunities to advance the learning experience. The preceptor may learn from the learner, who is up to date with the school's pharmacy curriculum. The learner will appreciate the preceptor's practical experience and knowledge. Before either person knows it, they will have formed a bond that may last for years. Those preceptors will be the ones that the learners recall as their professional inspiration.

A supportive preceptor concentrates his or her energy on bringing out the best potential in the learners. The preceptor communicates clearly about learning objectives and goals, designs interactive learning activities, explains and shares professional and personal experiences, demonstrates skills, provides timely feedback, and encourages continual learning despite failures and imperfections. Though training may involve diligent discipline and growing pains, the preceptor guides the learner during the difficult stages of the educational learning process and delights in seeing learners become better practitioners. By having respect for their learners, preceptors can foster meaningful and lasting professional relationships.

Finally, preceptors who involve themselves professionally in learners' lives, and who involve learners in their lives, will have the greatest impact and the most rewarding preceptor-learner relationships. However, preceptors cannot put their career objectives, daily responsibilities, or family life on hold in order to provide this learner-centered experience. The key is to have an open dialogue and model the work/life balance to the best of the preceptor's ability. Communicate personal expectations, goals, outside commitments, and feedback on performance to learners and be sure both the preceptor and learner have clear expectations at the beginning of the learning experience. No one aspect is more important than another. Learners will realize that successful preceptors

are private persons, too. Appreciating learners as whole persons and communicating with them on a peer level demonstrates leadership, commitment, and compassion. Learning will flourish in such a relationship.

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Onboarding Learners

Orientation

A complete orientation at the beginning of the experience is essential for building an effective learning experience and preparing learners for success on the rotation.[22] Providing adequate orientation enables learners to actively participate in patient care while creating a positive learning environment. A checklist of common elements of a quality orientation are provided in **Box 3-1**. Discussing the precise goals and objectives of the experience that are required or expected is necessary. Demonstrating your ability to customize those goals and objectives within the confines of the rotation expectation to learners' needs is important for establishing a strong preceptor-learner relationship from the start. In addition, when preceptors share their training background, current professional responsibilities, contact information, and work schedule, learners better understand how to positively interact with the preceptor. As a practical matter, preceptors should collect a learner's emergency contact information as part of a rotation's intake inventory. Also, more and more learners maintain professional portfolios. These documents can be a wellspring of information for preceptors in preparation for orientation discussions.

Roles, Goals, Responsibilities, and Expectations of Preceptors and Learners

Precepting can be rewarding for practitioners but, as a part of a larger array of professional responsibilities, it can also be very challenging.

BOX 3-1. Rotation Orientation Checklist[23]

- Practice site and departmental orientation (also work with the human resources department).
- Discuss with learners the business hours, the expected learner's hours, lunch, breaks, parking, emergency phone numbers, and emergency codes. Discuss professional interactions and attire.
- Provide a tour of the practice site, highlighting key areas.
- Introduce learners to colleagues and staff.
- Review security standards.
- Review relevant site-specific policies and procedures.
- Review roles, responsibilities, and expectations of learners.
- Review rotation materials.
  - Syllabus
  - Goals and objectives
  - Performance competencies to be assessed
  - Activities checklist (to help learners stay on track with assigned projects and readings)
  - Timeline/schedule, including a rotation calendar of planned rotation activities (preceptor-learner meetings, topic discussion assignments, project deadlines)
  - Monitoring forms and self-assessment tools
  - Feedback instruments the preceptor will incorporate on the rotation
  - Evaluation process review; discuss expectations for learner self-assessment as appropriate and preceptor evaluation inputs (personal observation, feedback from others, objective tests, etc.)
  - Review grading or evaluation criteria (as established by learners' sponsoring entity)

Although some rotation experiences will have one learner at a time, contemporary pharmacy practice will often include several learners from differing levels of experience.[24] In addition, the learner may be assigned to a patient care team constituted of multiple disciplines with varying learner types. In such a setting, establishing learner roles, responsibilities, and expectations are key to a productive, patient-care-centered learning experience that fosters rewarding preceptor-learner relationships and positive patient care. Value is realized across stakeholders from the learner, preceptor, practice site, and patients. Key to achieving this outcome is the purposeful involvement of learners in real-life contributions to departmental and patient care activities commensurate with the expanding level for which their training has prepared them.

Determining Roles

An important first step in establishing an effective teaching-learning relationship is understanding the contribution expectations of the learner. Having assessed the skills and capabilities during orientation, the preceptor can establish expectations for the learner at the beginning of the experience. Expected contributions should range from activities and accountabilities targeted toward novice pharmacy practitioners (e.g., medication history services for a learner on an introductory pharmacy practice experience [IPPE] or first advanced pharmacy practice experience [APPE]) up to highly skilled practitioners having more depth of experiences (e.g., a postgraduate year 2 [PGY2] resident on the final months of the program year). Over time and with experience, even novice learners will exhibit growth in knowledge, skills, and professional maturity. As they do, their roles should advance.

The role of the preceptor is multifaceted. The preceptor is a teacher (instructor), role model, supervisor (facilitator), evaluator, and mentor to the learner but is best described as a coach. He or she must be adaptable to each learner's educational background, previous pharmacy practice experience, professional aspirations, personality, and cultural background. Preceptors are often chosen for the role because, among other factors, they are competent practitioners who act ethically, with compassion, engaging in continuing professional development, and desiring to educate others.[25] Preceptors are often selected to instruct and coach learners because they have been effective producers for their organization. Beyond prolific production, successful preceptors are also effective leaders. Leadership author John C. Maxwell draws distinctions between producers and leaders that can be adapted to pharmacy preceptorship. Leaders concentrate on the team performance and ask, "What can we do?" compared to producers, who rely on task management and ask a more limited question, "What can I do?". Maxwell suggests that producers contribute through addition, whereas leaders achieve through multiplication.[26] Effective delegation and coaching by preceptors can achieve the synergistic outcomes that are one of the signatures of team leadership.

Setting Mutual Goals

As a coach, preceptors benefit learners by becoming astute observers of practice patterns and learner habits. These observations help establish baseline performance assessments and contribute to forming mutual rotational goals that are consistent with the sponsoring program's interests in developing the learner. Goals will vary based on the learner type (PharmD student or resident) and by the timing of the rotation throughout the year. These goals should be realistic (is the student a P1 or P4?), measurable via some form of assessment (evaluation form or exam, for example), and mapped against educational outcomes, attainable in the amount of time allotted for the practice experience and commensurate with the particular practice experience and environment, and timely. They can be short- or long-term. Beyond setting goals, objectives, competencies, and outcomes prescribed directly from the sponsoring program, preceptors are encouraged to discuss the self-directed, self-interested goals of the learner. This effort will further customize the experience and advance the buy-in of the learner to the preceptor's future directives and guidance and strengthens the preceptor-learner relationship.

Defining Learner Responsibilities

It is the responsibility of the sponsoring entity to provide preceptors with associated accreditation standards that are to be satisfied through the learning experience. Periodic meetings between the sponsor and preceptors are necessary to discuss changes in expectations from the perspective of the hosting facility or the sponsoring program.

Once onsite, it is critical for preceptors to again define responsibilities in writing with learners. In many cases, the duties of learners and preceptors are spelled out via evaluation forms, course syllabi, and other materials made available by the sponsoring entity, the preceptor, and the facility. A review of these responsibilities contributes to a clearer understanding of expectations for each of the partners in the preceptor-learner relationship.

Describing Expectations

Failure to set reasonable and mutually agreeable expectations can create misunder-

standing, resulting in a disappointing practice experience for all involved. Learners may feel that their rotation or other experience was not educationally rewarding. Preceptors may feel disappointed if their expectations for learner performance are not fully realized. The sponsoring entity may feel the strain of unmet expectations either from the preceptor, the learners, or both. Over time, this can adversely affect relationships critical to the rotational experience.

General expectations, such as responsibilities, should be described in some detail through evaluation forms, course syllabi, and other materials. For learners, these should be defined for professional behavior as well as academic performance by both the educational sponsor and the preceptor. Core knowledge, skills, attitudes, and values should be defined, articulated, and assessed. An orientation immediately prior to practice experience, during which rotation materials are reviewed and learners are prepped for the experience, can help accomplish this goal. Preceptors need to know what the sponsor expects from them in the areas of learner activities, communication, evaluation, and other aspects of the relationship. This can be achieved within the framework of preceptor development activities, site visits, periodic group meetings between preceptors and sponsors, rotation evaluations, and surveys.

Expectations specific to each experience can be individualized between the preceptor and the learner. Ideally, this would occur immediately prior to the beginning of the experience in a meeting between the preceptor and learner, so that both parties are able to make the best use of the time allotted for the experience. The preceptor's expectations of the learner can relate to the following areas:

- Daily schedule and when the learner can expect to meet with the preceptor throughout the week
- Specific responsibilities within the institution and how that translates into opportunities for the learners
- How the learners should interact with other pharmacy and institutional personnel
- Educational and behavioral goals related to the preceptor's practice
- Any specific training or orientation required by the facility prior to the beginning of the rotation

Learners should be able to articulate their expectations in the context of their previous experience, desire for exposure in specific areas of the practice, and career goals.

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There are multiple steps to be considered when onboarding learners, from a welcome orientation to assessing learners' entering skills and capabilities and knowing what contributions are expected.

Modeling for the Learner

Role Modeling

Learners expect that preceptors will adhere to the same standards and performance behaviors set forth for the learners. Positive role modeling via professional socialization is considered most important in improving professionalism among learners.[27] Professional socialization is the process by which learners learn and adopt the values, attitudes, and practice behaviors of a profession. This "hidden curriculum" is largely influenced by the preceptor-learner relationship during experiential rotations. It is essential that the preceptor act according to the American Pharmacists Association Code of Ethics for Pharmacists to influence learners in a positive manner for the benefit of other healthcare professionals, patients, and the practice of pharmacy.[28] Learners admire their preceptors and are eager to find mentors that emulate their career interests. This type of positive relationship builds an attitude that creates success beyond the experiential learning environment. As articulated by leadership developer, Gene Klann, "Leaders live in a fish bowl and are always being watched. They should always be conscious of that fact and take advantage of it." Preceptors will do well to remember this, and they should consider their impact through actions, reactions, attitudes, behaviors, and practices as they go about their daily activities under the observing eyes of the learner. Preceptors are effectively, efficiently,

continually (albeit subconsciously) teaching without having to schedule a meeting or a topic discussion. Model the habit of professional curiosity through reflective questioning of not only the learner but of yourself in the presence of the learner. Doing so will help the learner develop the essential professional trait of life-long learning.

Fostering Self-Reflection in Learners

Aristotle wrote that "the more you know, the more you know you don't know." In a study of physicians and self-assessment, David Davis and colleagues observed that those physicians deemed as least knowledgeable or most confident were found to possess the poorest self-assessment skills. In writing about medical resident learners, Joan Sargeant comments that

> experiential knowledge is gained through different clinical experiences, through trial and error in the clinical area, through observation and, perhaps most importantly, through managing similar situations and learning from those experiences.[29]

Pharmacy learning is no different. It is no surprise that self-reflection is at the center of modern paradigms for high quality self-assessment and continual self-learning. In order to prepare learners for independent practice, preceptors must take steps to promote self-reflection.

Curiosity is a powerful, motivating force for self-reflection. By helping students formulate questions, preceptors create an environment of openness that encourages students' curiosity. This is especially true among students who might withhold their questions for fear of appearing naive. Research has shown that rewarding the formulation of incisive and insightful questions enhances the expression of diagnostic reasoning, thus promoting the acknowledgement of the inherent uncertainty in clinical practice rather than branding it as a sign of inadequacy.[30] When preceptors promote learners to ask questions, they foster not only curiosity but also support the preceptor-learner relationship.

Among the many technical and clinical skills that preceptors must teach, developing habits in learners of asking insightful and challenging questions may be one of the more important to supporting a learner's long-term success. "Asking profound questions," writes John Maxwell, "promotes profound answers, life confidence, wisdom and maturity." These positive attributes can be enhanced as preceptors model such behaviors with learners through self-disclosure, sharing their clinical reasoning during and immediately after encounters, and reflecting on the outcomes observed.[31] Adding reflective questioning into daily discussions has been promoted by Mamede for medical residency learning and has direct application for pharmacy learners.[32]

Some examples of reflective questions are:

- If there were data that you ignored, what might they be?
- What about this situation was surprising or unexplained?
- What are you assuming that may not be true?
- What are important aspects of the present situation that differ from your previous situations?
- How may prior experiences be affecting your response to this situation?
- If presented with a similar situation, what would you do the same and what would you do differently? And why?

Habitually incorporating these self-reflective questions promotes clinical mindfulness, thus avoiding premature closure and availability bias and improving clinical care while avoiding medical errors.

Because learners are more experienced with fact-based questioning, preceptors often need to explain the paradigm shift. Preceptors should establish the expectation that the quantity and quality of learner-originated questions will be assessed similarly to other clinical skills in terms of evaluation. Creating this as an expectation should lower the defenses of learners who do not want to appear that they do not know something and as such may impede the extent and pace of their own growth.

The preceptor can provide learners with the following template to incorporate in their clinical care discussions they report to you.

> "I saw a patient with this condition in school/past rotation, AND this is how we treated him. This patient is SIMILAR in the following ways … and DIFFERENT in these respects … The outcome I observed with the previous patient was "X." I think the outcome from the previous patient is/ is not consistent with other evidence/ recommendations, so I plan to do "Y" for this patient ..."

This quick exchange contains a bundle of information that is valuable to the preceptor for assessing a learner's scope of knowledge and revealing the extent to which the learner is self-reflecting on past experiences for application in future practice. When preceptors followup with the following question, "What could you have done differently to be more effective?" they are coaching self-reflection and promoting professional development. This last question is not limited to commentary about clinical decisions or technical operations activities. The question also prompts reflections on how learners managed relationships and communication among team members and patients.

Self-reflection can also be promoted through simple daily learning logs. Requiring learners to record a minimum of three concepts or facts they learned and applied in practice each day is an effective strategy to promote self-reflection as well as learning retention. We suggest that the learning log be reviewed at the midpoint and final evaluation so preceptors can validate knowledge, re-teach as necessary, and affirm core elements of rotational learning have been satisfied. Learning portfolios, reflective narratives, and written case vignettes that include outcomes observed are more time intensive but have been used with success. All these techniques seek to address the cloud of recall/ memory bias and can ensure accuracy of information learned. Experienced preceptors are sure to recall situations where students presented wrong information as fact. This sincere belief that they are correct when they are not may have its origins in a recall or memory bias that was not corrected when originally learned. Learning logs, portfolios, and case summaries help prevent perpetuation of incorrect understanding and create rewarding preceptor-learner interactions.

PRECEPTOR PEARLS

"A practitioner's reflection can serve as a corrective to over-learning. Through reflection, he can surface and criticize the tacit understandings that have grown up around the repetitive experiences of a specialized practice and can make new sense of the situations of uncertainty or uniqueness that he may allow himself to experience."

Donald A. Schön. *The Reflective Practitioner: How Professionals Think in Action.* (New York: Basic Books Inc., 1983), p. 61.

As the preceptor, consider what impact your actions, reactions, attitudes, behaviors, and practices have to the observing eyes of your learner. Model the habit of professional curiosity through reflective questioning of not only the learner but of yourself in the presence of the learner. Doing so will model for the learner how to develop the essential professional trait of lifelong learning.

Feedback and Evaluation

In most arenas that host professional basketball games, members from the audience have opportunities to participate in contests during time outs. One game in particular features a blindfolded contestant that has to crawl to a prize on the court. The contestant is solely dependent on crowd noise to direct him or her toward the prize before time is up. In some ways, learners are similarly dependent on their preceptors during a learning experience. Although the learners are not blindfolded, a preceptor's feedback is essential to learners' ability to meet the goals of the learning experience within the finite period of time allowed. Feedback on performance in practice is essential for developing competent practitioners. Literature has indicated that feedback is the most important way to affect future learning.[33] Feedback and evaluation are essential for learning, improving performance, reinforcing appropriate behavior, correcting deficiencies, and promoting confidence. As

mentioned earlier, learners from the more recent generations expect feedback to be immediate as well as frequent or continual. In addition, feedback should be constructive and used to assess objective achievement (formative assessment).

In contrast, evaluation or summative assessment is a formal, written assessment based on learner-specific goals used for grading and assessing global performance. This evaluation should encompass learners' daily performance feedback and an assessment of fulfillment of goals for the rotation.

Correlation between feedback and evaluation of the learning experience provides learners with a realistic expectation of their experiential rotation performance. Learners should not be surprised by their final evaluation. Preceptors that place high importance on feedback and evaluation are able to provide an accurate and constructive evaluation of learners' experiential performance.

Precepting requires adequate preparation. Preceptors should design and plan learners' rotation activities carefully in conjunction with their practice interests and goals, in addition to considering the needs of the rotation site and the required outcomes of the learning experience. A learner's capacity to incorporate didactic learning with practice skills depends a great deal on the relationship with the preceptor. Preceptors have an enormous opportunity to develop and shape future pharmacists. This is a valuable service for learner pharmacists, the profession of pharmacy, and for the public's health.

Feedback as a Motivator

Incorporating frequent feedback within a learning experience will help stimulate, challenge, and motivate your learners. Too often, learners demonstrate appropriate behavior and receive positive feedback, negative feedback, or no feedback at all. Because every learner is an individual, different styles of feedback work with different learners, and different styles of feedback meet different needs in working with learners. However, the differences in competency between preceptors and learners may contribute to how feedback is received.

One published theory is that novices respond better to positive feedback because of their tendency to evaluate their commitment to the learning experience, while experts are more concerned with a specific goal and may respond better to constructive feedback in order to fine tune their efforts toward goal achievement.[34] Perhaps it is this unique dynamic between preceptors (experts) and learners (novices) that contribute to differences in opinions about what type of feedback is ultimately beneficial. However, although some educational programs require that preceptors provide criteria-based feedback, it is still possible to provide the right type of feedback to effectively motivate learners. Positive feedback involves pairing a desired behavior or outcome with positive reinforcement and feedback. Responding with positive feedback encourages learners. It is reinforcing and motivates learners for additional achievement.

Negative feedback may yield less predictable results. With negative feedback, you are acting to correct a behavior or deficiency in knowledge that has already occurred. The result may encourage learners to perform better, but it does not always work that way. Learners may feel that they are being punished and may quit trying. Refocusing the direction of the feedback toward the goal(s) of the learning experience can help take a learner's personal feelings related to feedback and redirect the learner toward focusing on how to improve to achieve the goals of the experience. Withholding feedback might be the least effective strategy in building an ideal preceptor-learner relationship. Not offering feedback to positively reinforce good behaviors could lead to the eventual discontinuation of those behaviors and a decline in performance. Withholding feedback related to bad performance can increase the likelihood of those negative characteristics or behaviors throughout the learning experience.

Failure to Fail

One of the most difficult tasks for most preceptors is determining when a learner has failed to achieve the outcomes and goals for a learning experience. In fact, there have probably been instances where pharmacy learners

have officially completed a learning experience without actually demonstrating the appropriate level of practical competence to pass. It is not uncommon to see this phenomenon within other health professions in addition to pharmacy, such as nursing. In 2003, the Nursing and Midwifery Council in the United Kingdom, led by an investigator, Kathleen Duffy, completed a qualitative study on factors that influenced decisions to pass practice experiences without demonstrating clinical competence. Duffy identified that on some occasions, preceptors were "failing to fail" nurse learners, and potentially enabling nurses unfit for practice to enter the nursing profession.[35] To that end, part of a preceptor's obligation is to ensure that the learners actively demonstrate competence in order to fulfill the set outcomes and goals of the learning experience. Failure to do so should ultimately result in failing the rotation.

Getting back to the blindfolded contestant scenario previously discussed, if the contestant was in an empty arena it might not only take longer for the contestant to find the prize but the chances of finding the prize at all are drastically reduced. The preceptor must provide effective feedback in order to give learners the opportunity to fulfill the goals of the learning experience, and only after that has happened can a preceptor determine whether the learner has successfully completed or failed the learning experience. Failing to fail a learner happens due to the following four reasons: lack of documentation, lack of knowledge of what to specifically document, anticipating an appeal process, and lack of remediation options.[36]

To remedy this, appropriate written evaluation tools must be developed for the learning experience. The outcomes or goals of the rotation must be clearly stated in order to provide criteria-based feedback. Ensuring public health should outweigh any concerns or anticipation of an appeal process. So long as appropriate documentation exists in assessing the learner, there should no negative repercussions to the preceptor should an appeal process commence. Finally, remediation options must be developed as a contingency should any learners require additional attention in order to elevate to the level of competence required to pass the learning experience.

Resilience

One author wrote that "failure catches up with everyone; being able to navigate it is a crucial form of resilience."[37] *Resilience* refers to a person's ability to overcome challenges or obstacles and is a key characteristic that can allow learners to take away from failures and lessons learned and ultimately develop and apply knowledge toward improvement. Some of those lessons are straightforward: learning to ask for help when you are struggling, or learning that failure is preferable to cheating. Others are complex, such as figuring out how to rebuild the sense of identity when goals and plans crumble. Preceptors are in position to help learners develop resilience in order to more effectively use feedback and prevent themselves from failing a learning experience. One of the most intriguing studies regarding resilience was a series of interviews with Vietnam conflict prisoners of war (POWs) conducted by a physician in New York. He found that among all the POWs he interviewed that never developed depression or post-traumatic stress disorder, all shared the same 10 personality traits.[38] The traits include:

- Optimism
- Altruism
- Moral compass
- Faith/spirituality
- Humor
- A role model
- Social support
- Facing fear
- Having a mission
- Training

One of the most important traits to understand is the importance of developing one's own personal mission statement.

Your Focal Point Preserves Your Resilience

To better understand the purpose of a personal mission statement as it refers to a learner's (or a preceptor's) ability to develop resilience, think of a figure skater or ballet dancer that

PRECEPTOR PEARLS

Consider the optimal time for feedback with a balance of positive and constructive statements that can assist learners in their professional development. Correlation between feedback and evaluation of the learning experience provides learners with a realistic expectation of their experiential performance. Withholding feedback can produce mixed results, and learners should not be surprised by their final evaluation.

commits to dozens of spins on the ice or stage in a single performance. If any of us were to spin several times in one place, chances are we would become dizzy and even fall over. The reason this does not happen with athletes and performers is because they focus their eyes on a single point on each revolution to prevent becoming disoriented. Pharmacy learners and practitioners are constantly spun around by the professional and personal expectations we have. The best way to maintain balance and prevent from tumbling is to have a focal point: one's own personal mission. To better understand learners, preceptors can discuss their mission statements and, if a learner does not have one, the preceptor can help him or her quickly develop one to gain a greater understanding of motivation and how to effectively provide feedback.

Developing a Mission Statement

Developing a mission statement should not be difficult. It is not the type of statement you want to polish and share with everyone you know. It should encompass what makes someone tick, why someone does the things they do every day. For instance, the preceptor can ask the learner to name the top three reasons why he or she got out of bed this morning that didn't begin with "I had to" but rather "I want to." Why did they want to become a pharmacist? To help others? To be a leader in the community? Whatever the reasons are, place these in the mission statement. When learners develop their mission statement, preceptors should feel free to compare their own with that of the learners and revisit the mission as often as possible. Preceptors should encourage learners to take a look at their statement several times a year and use it as a reminder to themselves about why they chose pharmacy. Most importantly, discuss how acceptable it is for one's mission to change over time. It should be considered a living document, one that will change given one's progression through career and life.

After the Learning Experience

After the final evaluation is provided and discussed, the learner-preceptor relationship is not over. More often than before, learners are pursuing additional education opportunities or advanced, highly competitive positions and preceptors are the primary source for most learners for positive recommendation letters. The highest level of professionalism must be maintained when discussing a request for a letter of recommendation. For learners that a preceptor would positively recommend, the preceptor must have all of the information needed regarding learners' abilities and achievements, the position they are applying to, and related deadlines to ensure that the recommendation is delivered to the appropriate individuals in a timely manner.

For those learners that a preceptor cannot recommend, or would not feel comfortable recommending due to limited interaction, the concerns can be communicated professionally to the learner. For instance, for those learners with which a preceptor has had limited interaction, it is completely appropriate to respond with an accurate account of the preceptor's perspective. A sample response would be: "I am honored to be one of your choices to recommend you for this specific position. However, given our limited interactions overall, I am unable to speak with a high level of authority about your professional abilities. As a matter of strategy in your career search, it may be best if someone with more familiarity with your professional abilities provide a recommendation letter."

For a learner who did not demonstrate competence or enough ability for the preceptor to provide a positive recommendation letter, the preceptor should respond with a professional message conveying that

information. A sample response of this nature would be: "During the time that we worked with one another, I did not observe the highest quality of your work. Therefore, it might be in your best interest to have someone other than me write you a letter of recommendation. Best wishes with your career search efforts."

Summary

Many factors contribute to a successful practice experience for the learner and to a rewarding professional experience for both the learner and the preceptor. Being cognizant of what it takes to be an effective preceptor is vital and both the learner and preceptor perspectives is helpful. Preceptors can increase the likelihood of a successful practice experience with effective planning and by engaging the learner before, during, and even after a learning experience.

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Chapter 4

Mentors

Debra S. Devereaux and David A. Zilz

Chapter Outline

History of Mentoring 60
Differentiation Between Precepting, Coaching, and Mentoring 61
Identification of Mentor Roles 62
Goals and Benefits of Mentoring to the Protégé (Mentee) and the Mentor 64
Pitfalls and Challenges of Mentoring 64
Contemporary Mentoring Methods 65
How to Find a Mentor 65
Summary 65

Life begets life. Energy creates energy. It is by spending oneself that one becomes rich.

Sarah Bernhardt

Learning Objectives

- Differentiate between precepting, coaching, and mentoring.
- Identify the traits that constitute a mentor-protégé pairing.
- Compare the characteristics of a preceptor relationship with those of a mentoring relationship.
- Recognize traits that are important to be an effective mentor.
- Introduce the student to professionalism.
- Identify qualities in the student that are important for a successful mentoring relationship.
- Identify the rewards that mentoring offers.
- List behaviors that detract from a mentor-student relationship.
- Identify the personal and professional challenges of being a mentor.

This chapter presents an organized and logical sequence of activities for preceptors and mentors in advising students and protégés on selecting the best potential path for a successful and satisfying career. It describes the many roles that mentors play in guiding growth and development over the course of a career and highlights the qualities that are important in both the mentor and the protégé. During a lifetime, a person will encounter many individuals that elicit admiration and a desire to emulate. The opportunity to spend time and to perhaps initiate a mentor relationship with these individuals is ordinarily not luck but the result of a conscious determination of both parties. The purpose of this chapter is to provide ongoing support to pharmacists of all phases of practice to continually enhance their potential throughout their career. Although many of the career advising activities and interactions apply, it may be helpful to think of how one's experience can be applied throughout the career. There are three activities that are frequently discussed: precepting, coaching, and mentoring.

It is inevitable that a time will occur when a pharmacist will be discontented or unchallenged in his or her current position or in an environment in which there is a need to consider changing positions, organizations, or career directions. Perhaps one is at a stage of his or her career to consider assuming greater leadership responsibilities in local, state, or national pharmacy or healthcare associations. To sort out this level of significant change, an individual can benefit from a slightly different relationship than the coaching interaction. Generally, the most successful mentor-mentee relationship is longer-term, more intimate, and more committed with a broader view of that person's well being. Often, these connections occur when there is not only trust and respect but also a more deeply committed relationship of sharing from both parties.

History of Mentoring

By the time we are adults, most of us can identify people who have had a significant influence on our learning and development in our professional or personal life. For hundreds of years, mentoring has been used as a method for handing down knowledge, maintaining culture, supporting talent, and securing future leadership.[1] Research indicates the mentoring process is linked to career success, personal growth, and increased organizational productivity.

PRECEPTOR PEARLS

Dr. John Gans, CEO of the APhA and Past President of ASHP, said "It will serve one well throughout a career to have a mentor but also be a mentor to another simultaneously."

"The best way to find yourself is to lose yourself in the service of others." —Mahatma Ghandi

"Every great man is always being helped by everybody; for his gift is to get good out of all things and persons." —John Ruskin

Mentoring has its origin in the story of Odysseus, in which Athena portrays multiple roles in order to guide Telemachus, Odysseus' son, during Odysseus' journey. One of these roles is that of Mentor, in which Athena serves as "advisor, teacher, sponsor, counselor, coach advocate, and role model."[2] It is a journey that enables the student or protégé to develop both professionally and personally.

How mentoring is defined and used depends on the participant's point of view. However, there is much more to mentoring than giving advice. The dictionary definition of *mentor* is "a trusted counselor or guide; tutor; coach." Formal mentoring programs became more prevalent in the 1970s in business and government agencies. In the 1980s, school districts and universities picked up on the idea for their teachers.

Differentiation Between Precepting, Coaching, and Mentoring

The precepting relationship is associated with students' learning experiences. It has a defined beginning and ending. Students may have requested the site and the preceptor voluntarily, or they may have been assigned to that site involuntarily. There are specific learning objectives and tasks that students must achieve during the experiential rotation.

The State of California's Pharmacy Intern Preceptor Manual states "Specific activities are planned that will contribute to the mastery of each task and practice responsibility. These might include daily practice responsibilities, observation of selected tasks, special assignments and projects, reading journal articles or other references, attending meetings and seminars, and discussions with the intern and other pharmacists."[3] For example, a typical 6-week rotation at an ambulatory care clinic might include taking patient medication histories, evaluating laboratory values, monitoring medication levels, titrating patient medications, participating in journal club, physical assessment, and patient counseling. The preceptor formally evaluates the students on their mastery and completion of the rotation objectives. Students evaluate the precepted site and the preceptor based on their experience.

The authors believe coaching is the need for discussion with a trusted individual when a person is attempting to make the correct if not the optimum decision in their current position in the workplace. The analogy of coaching in sports would apply. This means preparing for and doing the very best one can in the game (position or role) in which he or she is currently responsible. There are always questions and situations where an individual with experience can help. Coaching is generally a one-way discussion—advice on what to think, deciding which questions should be asked, and selecting the best approach from a series of alternatives. Respect and trust by the individual being coached is definitely a factor in an optimum interaction with a coach. This relationship can be short-term and focused and results in a plan of action for a specific situation. Often within the workplace the individuals involved may be in a supervisory or administrative structure supporting the short-term success of the employee being coached.

Mentoring is traditionally a more formal program where a mentee or protégé may be assigned a mentor. Formal mentoring models are authoritarian because they are introduced and controlled by a senior manager. This model normally occurs in a work environment where a new employee is assigned to be "shown the ropes" by a senior employee

or an employee with more experience.[4] A formal mentoring relationship usually also has a defined duration. At the end of 6 months or 1 year, the formal reporting requirements and amount of time required to be spent together ends. In this way, a precepted rotation is an example of a formal mentoring program. Some of the objectives can even be the same, such as indoctrination to the organization's culture, department protocol, and the transferring of knowledge. A precepting relationship may evolve into a mentoring relationship when both the preceptor and the student desire to continue their collaboration. There are contemporary groups who receive coaching or precepting from an individual in structured settings and communications.

Identification of Mentor Roles

Mentor as Coach and Advisor

The mentor role may change over time and as the relationship develops. The mentor will act as an advisor and sometimes a coach to a student who is learning about the profession of pharmacy and specific pharmacy roles. As the mentor, your role is to guide the student through his or her learning experience and potential career pathways rather than to directly tell the student what he or she should do. The mentor must have time to devote to the relationship and perhaps spend time outside the student's assigned interactions. Open, two-way communication is essential in order to break down barriers that inevitably exist, because the preceptor-student relationship is traditionally perceived by the student as a hierarchy.

A key strategy is to demonstrate vulnerability by sharing your personal experiences, including challenges you have experienced, mistakes that you have made, and the lessons that you have learned. As a result of this process, you will build trust with the student, and the student will feel comfortable sharing his or her feelings with you. This enables you to begin the mentoring process and help the student discover his or her strengths, weaknesses, talents, skills, likes, and dislikes. Your role is also to encourage the student to confront challenges and take risks by communicating your support and confidence in the student.[1] As a mentor, you play an essential role in helping the student develop confidence and self-esteem.

A career is an ongoing journey, not a single destination. It is rare to be hired into the perfect position, and most jobs have things you love, things you dislike, and things you wish you were able to do.

PRECEPTOR PEARLS

Eleanor Roosevelt stated "You must do the things you think you cannot do."

Mentor as Guide and Host

An important mentor role is serving as a host and guide by introducing the student to individuals within the field of pharmacy and to other healthcare professionals within your own organization or professional associations. This enables the student to see how different aspects of pharmacy come together and the key role that pharmacists play in ensuring the safety of the medication-use process. As a result, the student may meet new potential mentors who can serve as role models both now and in the future. It is important for students to learn what is needed to be considered for their "ideal" job opportunity and how to best work toward it. If you are able to actually attend a professional meeting with the student, you will have the opportunity to show the student how to network with others in the profession. Your role as guide is to enable the student to discover the many possibilities within pharmacy. It has been shown that engaging pharmacy students early in their career with professional associations and a broader view of where pharmacy fits into the healthcare delivery system will create more job satisfaction.[5]

Mentor as Role Model

The mentor also serves as a role model who, besides possessing a strong knowledge base, demonstrates caring, passion, a sense of humor, and integrity. Caring and compassion are important aspects of every human relationship and even more so in creating a bond between yourself and the student. It is important to remember that these qualities may appear to be absent during busy times or when external factors are creating

a stressful situation for you. Communicating to the student that you are preoccupied with something—without necessarily having to share specifics—is important so that the student recognizes something else is going on. This acknowledgment also shows the student, by example, the importance of communication about factors impacting the quality of one's interactions with others. The ideal mentor is passionate about pharmacy and the many opportunities that pharmacists have to demonstrate value by improving management of chronic diseases, preventing medication errors, and serving as a resource to other healthcare professionals and patients. When asked what an important quality of a mentor is, the students will usually list a sense of humor, because it makes them feel more comfortable and contributes to a positive mentor-protégé relationship.

Values are of particular importance in the pharmacy profession because of the key role we play in patient safety. It is important to discuss values with the student, because it is not uncommon for these values to be tested as patient care issues arise. Examples of situations where value issues are involved include an order for a medication where there are insufficient data regarding efficacy and a potential concern about safety; an expensive drug ordered for a patient without insurance coverage; and a mandate to reduce expenses, which would result in staffing reductions and jeopardize patient safety. Having discussions about value conflicts is an important contributor to the student's growth and understanding of how to deal with difficult issues. Finally, mentors play an important role in introducing students to the importance of—and the satisfaction that comes with—being committed to lifelong learning. This is shown by sharing recent articles from the scientific or healthcare literature with the student and taking time to discuss some of the key points that were addressed.

Key Characteristics of the Protégé

Usually, protégés seek people, positions, and projects whose responsibilities are close to their ideal job situation. In order for a relationship to be successful, there are a number of prerequisites for the protégé.[6] The protégé needs to be mentorable, which means possessing qualities such as intellectual curiosity, initiative, motivation, and follow-through. The mentor must be present for the experience to be effective, and the protégé must be ready by showing interest in communicating with you and asking for guidance. In many ways, the protégé's commitment to the relationship is very similar to that of the mentor; the protégé needs to invest the time, share experiences, and engage in open and honest dialogue. The protégé also needs to follow through on tasks or recommendations; otherwise you will feel that the relationship is not reciprocal.[7] However, even more essential is the protégé's readiness to learn. One could argue here that if the mentor is right, the protégé is ready. This is true. However, sometimes, even though the mentor and protégé are seemingly compatible, the protégé has too many other priorities or is not yet at a stage of maturity where he or she is ready to be mentored.

The Mentor-Protégé Relationship

In the traditional mentoring model, the mentor helps the protégé to develop and the relationship is more equal (see **Figure 4-1**).

Mentor (M) ⇒ Protégé (P)

FIGURE 4-1. Traditional mentoring model.

A new mentoring paradigm has been suggested in which the relationship evolves such that what begins with the mentor serving as coach and advisor to the protégé becomes a 360-degree process, as depicted in **Figure 4-2**.[8] In Phase 1, the relationship begins with the mentor serving as counselor to the protégé. In the next phase (Phase 2), the mentor and protégé become equals as the protégé develops into a professional. This is followed by the protégé serving as a counselor to the mentor, and in this phase (Phase 3), it is the former mentor who learns from the protégé. Finally, the protégé becomes the mentor, and the process begins again with a new protégé (Phase 4).

Phase 1 Phase 2 Phase 3 Phase 4

M ⇒ Mp ⇒ MP ⇒ mP ⇒ P

FIGURE 4-2. New mentoring paradigm.

Goals and Benefits of Mentoring to the Protégé (Mentee) and the Mentor

Transformation

In a successful mentoring relationship both you, as the mentor, and the protégé should be changed by your experiences. You may have helped the protégé to uncover an aspect, ability, or talent that had been either dormant or unrecognized. The protégé may be inspired to shift the direction of his or her life in a constructive way. The protégé may have caused you to question long-held beliefs and gain new understanding or a new outlook.

Reciprocity or Mutuality

For your mentoring relationship to be effective, both of you must perceive benefits. The protégé and you need to feel that the time you have spent together has been valuable. Both of you need to feel mutual respect. Communication lines must be open and travel in both directions. Your relationship should be a win-win situation for both parties.

Mentor Regeneration

As a result of the mentoring experience, you should feel a sense of renewal and rejuvenation in being a pharmacist. You may feel both personal and professional satisfaction for making a significant contribution to the profession and your organization.

Protégé Moves Toward Being a Peer

Studies have shown that protégés in successful mentoring relationships have a positive attitude toward their work and perceive less stress than individuals without a mentor. A dynamic mentoring relationship allows the protégé to grow and eventually become an equal of yours and go on to be a mentor to others.

Sharing and Challenging

As a mentor you need to be willing to share your knowledge and experience. You may provide suggestions and advice in the form of "If I was in your position," or "Here's something you might consider," or "Whatever you think will work best, you do." You should utilize tutoring methods, which rely on asking questions and asking for plans. You should encourage your protégé to brainstorm—there are no bad ideas.

PRECEPTOR PEARLS

The amount of time spent listening should be at least four times the amount spent talking.

Pitfalls and Challenges of Mentoring

Protégés need feedback, evaluation, and challenge. You, as a mentor, need to strike a balance between support and stretching beyond the protégé's abilities.

You should get at the thought process that led to the decision rather than pointing out what the protégé did right or wrong. You are interested in the *why* of the protégé's thinking rather than trying to fix it for him or her. The protégé should challenge your thinking. Why did you decide to become a pharmacist? What was it like starting out? How did you deal with challenges in your work or personal life?

You and the protégé should avoid boundary violations: gift giving, finding the protégé a new job or promotion, loaning money, and sexual flirtation are out of bounds in a mentoring relationship.

A mentoring relationship can endure 2 to 5 years or last a lifetime. There are natural ebbs and flows where one or the other person is more invested in the relationship, and there are different mentoring needs as a person progresses through life.

It is essential that privacy, honesty, and integrity be maintained in your mentoring relationship. What is said in the relationship is confidential.

In the most rewarding mentoring relationships, you and the protégé have mutually identified each other. You may see the protégé as a younger version of yourself. The protégé may see you as a role model. However, the key to a successful match is not how similar you and the protégé are. Ideally, you will be able to provide just the right help to the protégé at just the right time. You are holding up

the mirror for the protégé's future pharmacy career.

Contemporary Mentoring Methods

It is anticipated that by 2020, 50 billion devices will be communicating with each other.[9] Devices such as smartphones, tablets, wearables (watches, glasses, headphones) may be surpassed by technology not yet known or imagined. Everyone will be connected as much as 100% of the time. Multiple methods for distance communication already exist (webcams, Skype, etc.), so mentoring relationships across hundreds and thousands of miles and multiple countries is possible and probable. The important tenants of the mentor-protégé relationship will continue to be valid—specifically, *plan to communicate*. Regardless of the method or avenue of communication, the relationship between mentor and protégé cannot be impactful and meaningful to both parties without consistent and quality communication.

How to Find a Mentor

Most of the research on mentor-protégé relationships has been done on pairs who have identified each other in a work or academic environment. One of the benefits of the technology advances of the past 20 years is the ability to connect with others who have the same careers, interests, geography, or history but not the same workplace or current environment. One of the largest professional networking websites is LinkedIn, where with a click of your mouse you can find thousands of others with similar interests and jobs. Networking can be as structured or casual as desired. You might join a group with members in a career field that you aspire to join or individuals who work for an organization that you are interested in finding out more about. Look for ways to stay in touch with contacts even if it's just sending a note of congratulations when they achieve career successes.

In the course of reaching out to others with mutual interests or career goals, you may discover persons you would like to mentor or who you would like to ask to mentor you. The form of the relationship will depend on time and distance, but a structured relationship can be crafted that will be mutually beneficial to both parties.

Mentor-protégé relationships are developed based on shared values and vision. The mentor should not be assigned but, rather, needs to be selected by the student or protégé to ensure that the relationship is successful. The protégé needs to examine the background of potential mentors as part of the selection process. Considerations include the following[7]:

- Is the mentor going to support personal or professional development? Or both?
- Have other students had positive experiences with the mentor?
- Has the mentor served as an advocate for students?
- Are the mentor's areas of interest consistent with those of the student?
- What has the mentor achieved in his or her career?
- Will the mentor have time to devote to the relationship?
- Does the mentor have a professional network that will facilitate development of future relationships for the student?
- Will the mentor challenge the student and also be able to provide nurturing?
- Will the mentor create an environment where the student feels at ease to discuss concerns and fears?

Summary

The mentor-protégé relationship is one in which both the heart and the mind are nurtured.[2] The quality of the interaction is based on mutual respect, openness, and honesty. The mentor guides students by weaving together their strengths, weaknesses, likes, and dislikes and helps students discover themselves. The mentor serves as advisor, counselor, coach, therapist, guide, and companion. The growth experienced in this relationship is mutual, and it is the reciprocity in the relationship that makes it fulfilling for both.

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Chapter 5

Goals of Experiential Education

Eric C. Kutscher and Dale E. English II

Chapter Outline

Definition of Experiential Education 68
Developing Lifelong Educational Habits 69
Learning Strategies for Preceptors and Learners 71
Learner-Centered Education vs. Educator-Centered Education 74
Developing Workplace Skills 77
Summary 80

There are three principal means of acquiring knowledge … observation, reflection, and experimentation. Observation collects facts, reflection combines them, and experimentation verifies the results of that combination.

Dennis Diderot

Focus on improving the person, not just the work he gets done.

John Maxwell

Learning Objectives

- Define experiential education and the Accreditation Council for Pharmacy Education standards.
- Describe the principles of experiential education and engagement of learners in real-life activities and consequences.
- Distinguish the differences between cognitive, behavioral, and affective learning.
- Employ the basics of Bloom's taxonomy when developing learning objectives and assignments.
- Construct a learner-centered approach to education.
- Define and recognize the importance of lifelong education.
- Discuss the utility of continuous professional development (CPD).
- Illustrate the importance of workplace skills in experiential education.
- Construct examples of skill competencies, which provide opportunities for the development of workplace skills.

Definition of Experiential Education

The Association for Experiential Education (AEE) defines *experiential education* as "a philosophy and methodology in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills, clarify values, and develop people's capacity to contribute to their communities."[1] The Accreditation Standards and Guidelines for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree include standards that require that pharmacy schools provide practice experiences throughout the curriculum, including both introductory (IPPEs) and advanced pharmacy practice experiences (APPEs). The advanced pharmacy practice experiences must "integrate, apply, reinforce, and advance the knowledge, skills, attitudes, and values developed in the Pre-APPE curriculum and in co-curricular activities."[2]

These standards embody the definition of experiential education and require that a significant portion of learner education be provided through direct experience in practice settings ensuring the incorporation of foundational science curriculum including biomedical, pharmaceutical, social/administrative/behavioral, and clinical sciences. In addition, the habits of self-directed education and the idea of continuous professional development are key components of all levels of experiential education. As preceptors, we assume a vital and necessary role in this process and should consider ourselves as mentors for the learner. We are the experiential educators that provide and oversee learners in real-life pharmacy settings.

AEE offers 12 principles of experiential education practice (see **Box 5-1**). A review of these principles compels both educator and learner to take on quite different roles from those assumed in the traditional classroom. It also changes how educators and learners view knowledge. Knowledge becomes active, some-

BOX 5-1. Principles of Experiential Education Practice

1. Experiential learning occurs when carefully chosen experiences are supported by reflection, critical analysis, and synthesis.
2. Experiences are structured to require the learner to take initiative, make decisions, and be accountable for results.
3. Throughout the experiential process, the learner is actively engaged in posing questions, investigating, experimenting, being curious, solving problems, assuming responsibility, being creative, and constructing meaning.
4. Learners are engaged intellectually, emotionally, socially, soulfully, or physically. This involvement produces a perception that the learning task is authentic.
5. The results of learning are personal and form the basis for future experience and learning.
6. Relationships are developed and nurtured: learner to self, learner to others, and learner to the world at large.
7. The educator and learner may experience success, failure, adventure, risk-taking, and uncertainty, because the outcomes of the experience cannot totally be predicted.
8. Opportunities are nurtured for learners and educators to explore and examine their own values.
9. The educator's primary roles include setting suitable experiences, posing problems, setting boundaries, supporting learners, ensuring physical and emotional safety, and facilitating the learning process.
10. The educator recognizes and encourages spontaneous opportunities for learning.
11. Educators strive to be aware of their biases, judgments, preconceptions, and how these influence the learner.
12. The design of learning experience includes the possibility of learning from natural consequences, mistakes, and successes.

Source: Association for Experiential Education. http://www.aee.org.

thing that learners experience in real-life situations. Education becomes personal and affects how we react and respond in future situations.

As experiential educators (aka, preceptors), our job is to engage learners in real-life pharmacy activities with real consequences that allow learners to achieve prescribed educational objectives continually preparing for the ultimate goal of independent practice and responsibility for our patients' medication outcomes. Often, we are co-experimenters with our learners, not knowing ahead of time the outcome of the clinical situations in which we involve them. At the end of the day, we must be able to effectively reflect on the educational activities we have designed and respond to learners' reactions to these activities.[3,4]

In an experiential education environment, learners must understand while doing. They must move beyond being knowledge gatherers, instead creating knowledge for themselves based on the real-life experiences and consequences in which they are actively involved. Learners must also understand to respond to and reflect on their experiences and to take accountability for their actions.[3,4]

Experiential education is the requisite step that assists in the transformation of learners armed with basic facts and skills into mature pharmacy practitioners who are able to integrate and apply knowledge to solve problems and manage patient medication therapies. Perhaps more importantly, the model of experiential education that a learner experiences during his or her education will shape how that learner approaches the lifelong education process necessary to continue to be a successful and competent pharmacy practitioner. By serving as the facilitator for experiential education activities within our practice setting, we not only elevate our own knowledge level, but we also ensure the future and vitality of our profession.

Developing Lifelong Educational Habits

Lifelong education includes "all learning activity undertaken throughout life, with the aim of improving knowledge, skills, and competencies within a personal, civic, social, and/or employment-related perspective."[5] Preceptors have the unique opportunity to affect not only the professional development but also the lifelong educational habits of an individual. It is through the observation and discussion of the preceptor's own personal

development, actions, and comments that these young professionals will begin to develop their own thoughts and ideas around lifelong educational habits. Therefore, it is extremely important that preceptors recognize the vigilant observations of the learners they precept. The preceptor should consider himself or herself as the student's mentor.

With the advent of Accreditation Council on Pharmacy Education (ACPE) standards for pharmacy practice experiences, a greater number of learners are spending time earlier in their pharmacy education in a variety of pharmacy practice settings to meet the required hours for IPPEs.[1-3] These experiences provide learners with exposure to a variety of pharmacy practice settings and offer learners the opportunity to begin forming lifelong educational habits. Practice settings expose learners to the professionalism and educational standards by which practicing pharmacists engage in real-life pharmacy jobs.

The role that academicians play in the learners' future is of vital importance. It is through the engagement of academic and clinical preceptors and their fellow colleagues that these learners will begin to form their own opinions and personal practices for the development of lifelong educational habits. Lifelong educational habits must also be a focus of all clinical pharmacy practitioners; this is more than the minimal continuing education requirements currently in place by state boards of pharmacy. Continuing education sessions (live, web-based, recorded, written production, etc.) provide great baseline knowledge but are not the most appropriate means to fully develop lifelong learning and personal/professional improvement that allows for better patient outcomes.

Continuous professional development (CPD) is "an ongoing, self-directed, structured, outcomes-focused cycle of learning and personal improvement."[5] Such organizations as ACPE, the Chartered Institute of Personnel and Development, and *Fédération Internationale Pharmaceutique* reference and define CPD. They discuss the theme of self-directed, ongoing, structured education and building of one's knowledge, skills, and attitudes that are necessary to ensure competence in one's given profession. The process of CPD helps provide pharmacists with the resources to provide patients with the best care possible and the ability to continually work at the top of one's licensure.

The concept of CPD involves practitioners reflecting personally on their practice to assess their knowledge and skills, identify deficits or needs, and formulate an individualized learning plan of action. In addition, CPD challenges practitioners to assess the effectiveness of their educational interventions and their plan of action as it pertains to their area of practice. An extremely important piece of CPD is documentation; often in the form of a personal portfolio.[5] Pharmacy experiential educators should require learners to begin this journey of lifelong education by establishing their own portfolio. Simply put, CPD is planning, acting, evaluating, reflecting, and keeping a portfolio of these activities.

PRECEPTOR PEARLS

Creating your own personal mission statement helps you identify your core values, beliefs, and concept of personal and career success. These should be an authentic and honest statement of who you are and what drives your decisions. They should be continually reviewed and evaluated, because adjustments will be necessary as you advance through your career and life.

Although CPD is a means by which many Doctor of Pharmacy programs are preparing lifelong learners, it is ultimately up to the individual to continue to pursue such endeavors. It is important that the learners you precept see that you lead by example. Your own CPD and your discussion of learners' CPD will provide a firm foundation on which learners can and will succeed both professionally and personally. It is through this process that both current and future practitioners will be able to help people make the best use of medicines and, thus, provide them with the best possible outcomes.

Learning Strategies for Preceptors and Learners

The development and study of learning theories, taxonomies, ideologies, and preferences has led to the belief that learners and educators alike should consider how each individual learns in various educational situations before developing the learning strategy.[6] In fact, educators should be as concerned with the way learners learn as they are with the content of a course. The idea that individual learning styles are pivotal to course development is, in part, responsible for the movement over the last 20 years in medical and pharmacy clinical education toward learner-centered activities. Curricula in colleges of pharmacy have continued to adapt to include more problem- or outcomes-based approaches to teaching as a result of overarching educational theories such as constructivism, which suggests that learning must utilize various approaches, including learner reflection, to allow adequate understanding.[6]

Experiential education is a unique learning model based on the theories of Kolb and others.[6] This type of learning is based on the perspective that learning must come from experience, behaviors, perception, and cognition and involve active reflection, observation, and experimentation by the learner.[6] Both problem-based and outcomes-oriented approaches in experiential education are methods for enhancing learning while meeting the goals and objectives set forth by the preceptors. Curricula in colleges of pharmacy, even individual courses that incorporate experiential education, should be designed using multiple types of teaching and learning methods that will allow individual learners to learn in a manner that is comfortable and beneficial for them. Recognizing that learners do not all learn the same way or at the same pace will aid the preceptor in designing activities that meet curriculum objectives at the experiential education site, while helping learners' learn knowledge, skills and clinical applications, and attitude. The following discussion provides a brief overview of Bloom's taxonomy, which is not a learning theory, such as constructivism, or a model, such as experiential education, but a naming structure for categorizing domains or areas of learning based on cognitive level and complexity.

After World War II, Bloom and colleagues, educational psychologists at the University of Chicago, developed what has become the most widely used taxonomy in education. This taxonomy was developed to help educators focus on a holistic approach while assessing the level of individual learning at the same time.[6,7] The taxonomy categorizes learning approaches into three broad psychological domains: cognitive, affective, and behavioral. Although Bloom never intended for these categories of learning to become a theory or philosophy, over time this taxonomy has come to be used as a way to both assess and define objective measures of learning. The overarching idea of Bloom's taxonomy is that the acquisition of knowledge, skills, and attitudes build on learning theories and approaches. This idea may help preceptors devise different strategies for learning the same information for individual learners.[7]

Preceptors should understand and employ the basics of this taxonomy when developing activities and objectives for any educational experience. Bloom's taxonomy is structured as a hierarchy, beginning with lower-order thinking, or knowledge, and then moving up the scale to higher order, or evaluation (see **Figure 5-1**). Learners can actually learn in any order and should be encouraged to do so. Cognitive and affective learning both describe the acquisition of knowledge, skills, or attitudes during the course of an individual experience (see **Table 5-1**). As the discussion continues of cognitive versus affective learning, keep in mind the original intent of the taxonomy was not as a learning theory; thus, some of the comments may appear to be an approach to assessment. But remember that in the context of this chapter, the domains are used as a means of learning.[7] Cognitive learning is the acquisition of knowledge and information. Multiple-choice questions effectively evaluate cognitive learning because they assess what facts learners remember or have memorized for the examination. There is no guarantee that, at the most basic cognitive functioning level, learners can incorporate these facts into anything useful.[7–9] Some

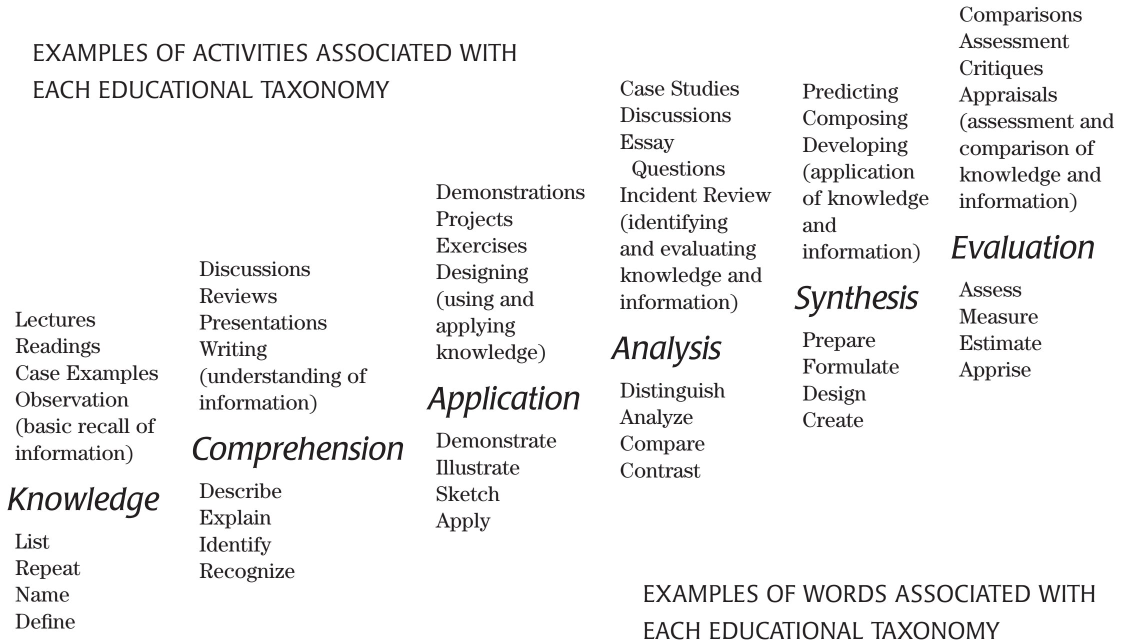

FIGURE 5-1. Hierarchy of educational learning.

Source: For more information, see Reference 6.

learners perform better at the cognitive and affective level, but others need to practice and apply information to learn, leading to the importance of the behavioral domain especially for experiential education.

Affective learning involves the development of attitudes, feelings, and preferences and, often, education is provided in a hierarchical fashion to allow awareness and growth of the learner.[7-9] However, it is difficult for the educator (preceptor/mentor) to assess how the learner is receiving, responding, valuing, organizing, and internalizing (the process of consolidating and then embedding beliefs, attitudes, and values into one's behavior) the information being provided. Thus, utilizing this type of learning often occurs through more complex learning situations such as the development of professional presentations or the learner's ability to organize and relay complex drug information to others. The preceptor can assess the learning through evaluation of these activities and feedback provided by others.

Behavioral learning, previously described as psychomotor learning, is crucial in the setting of experiential education. Behavioral (performance) learning describes the acquisition of skills and development of competence in the performance of procedures, operations,

TABLE 5-1. *Bloom's Cognitive and Affective Taxonomy*

Cognitive Learning	Alternatively	Affective Learning	Alternatively
Knowledge	Has data	Receiving	Accepts
Comprehension	Understands	Responding	Takes action
Application	Treats	Valuing	Respects
Analysis	Investigates	Organizing	Manages
Synthesis	Blends		
Evaluation	Appraises		

Source: References 7–10.

methods, and techniques. In experiential education for pharmacy learners, examples of behavioral learning may include the technical skills of making or dispensing an intravenous admixture or providing patient education on the proper use of an inhaler. Behavioral learning can include simple motor tasks that learners must learn to perform while integrating other learning approaches and knowledge, in order to move toward a higher level of competence as a professional in the performance of various procedures, methods, and techniques. Such learning pushes the individual toward a higher level of professional competence. To achieve success, preceptors may need to develop activities which enable the learner to practice this integration and achieve the desired outcome or objective.[11]

The highest level of behavioral learning is origination (aka, synthesis). The idea of origination directly applies to a pharmacy learner's attainment and then application of the skills required to provide direct patient care. Developing patient therapeutic plans, evaluating patient histories, and providing disease management education are just a few examples of behavioral learning at the most complex level. Such behavioral learning requires educational approaches that depend on the individual learner's abilities.[7-9]

Often IPPE, APPE, and residency training are incorporated into a preceptor's clinical practice. Traditionally, student pharmacists were expected to jump into tasks at a site where they may not have had a previous opportunity to learn the baseline knowledge required to do the job. This issue has led to frustration for both the learner and preceptor. Fortunately, the changes in accreditation standards have minimized this approach by utilizing the layered learner method. This minimization allows educational curricula to build upward so that learners continue to progress up the educational hierarchy in a manner in line with Bloom's educational taxonomy.

PRECEPTOR PEARLS

Let Them Fly with You

Learning to become a pilot is not unlike learning to become a pharmacist. Every student pharmacist looks forward to his or her first opportunity to make a patient-specific clinical recommendation that affects the outcome of a patient's care. However, the cognitive learning provided in the classroom only yields a basic level of comprehension. Similar to learning to fly, preceptors must create educational models to resemble actual on-the-job activities. The following approach, used with pilots progressing toward their first solo flight, can be utilized in pharmacy education:

- First, the preceptor must first master his or her job and understand the purpose and process of job duties before starting to educate others.
- Next, the preceptor does his or her job (demonstrates and explains) while the learner observes.
- Then, the preceptor allows the learner to take the flight controls with the preceptor's assistance. As soon as possible, the preceptor should allow the learner to perform the skill that has been taught while providing oversight, correction, and encouragement.
- Finally, the preceptor allows the learner to take the first solo flight. Once the preceptor has confirmed the learner has become proficient, the preceptor should step back and allow the learner to work independently while remaining in the background for questions. This process allows the learner to move up in the hierarchy, allowing the preceptor to begin teaching new topics to the learner.

When the student pharmacist has learned the process, the preceptor should congratulate the student on the success of the first flight and then provide the permission and tools to continue.

Experiential education does not just fill the learner's brain with facts; it provides the learner with the concepts, application of knowledge, and desire to learn that will allow for advancement to higher levels of learning. Preceptors must continue to recognize that individuals learn differently, at different paces, and that there are different domains of learning even though the educational system is being designed to build on itself. It is up to the individual preceptor to determine the right blend of teachable moments and when it is appropriate to push further toward active learning in order to maximize the educational value being provided.

PRECEPTOR PEARLS

Simulation Training

It was not that many years ago when healthcare providers would review a textbook, watch a lecture, and then show (on paper) that they understood the components of providing advanced cardiac life support (ACLS). In more recent times, training began to introduce more types of simulation, from written scenarios to a mannequin on which to practice basic aspects of cardiopulmonary resuscitation. Today, may institutions have changed their entire approach to ACLS education and training. The individual learners now participate in interprofessional live educational sessions within highly advanced simulation centers; where all learners have to interact with a continually changing clinical situation (simulation environment) and with other healthcare providers to show their competencies in all aspects of ACLS. This approach has moved from the passive approaches of the past to a highly orchestrated active learning model that mimics real-life situations and allows for enhanced patient care outcomes.

Learner-Centered Education vs. Educator-Centered Education

Teaching and learning often occur separately, despite an educator's best efforts and teaching methods. Learning can occur during reading, writing, or reflection; either with or without an educator; in groups or individually; and on purpose or by accident. It is often education that gets in the way of learning; for example, by making an assumption that the educator's instructional format fits all learners' educational needs, or that every learner understands what he or she needs in a group setting. Learner- and educator-centered educational methods dictate that learning revolves either around the learners or around what the educator believes learners should understand.

As instructional methods continue to evolve and become less of a passive, or educator-centered, model of education, we need to ensure that all educators are familiar with these other more active learning instructional models such as team-based learning.

In the passive educator-centered approach to education, the educator stands in the front of the classroom and presents information to a room of blank slate learners. When this occurs, learners have little time to retain the information in a format that can be easily retrieved for later use. Learners may hear every word the educator says, and may even manage to write everything down on paper. However, neither of these actions requires that learners process the information, and learners are passive learners (if they learn at all). A learner-centered approach, or active learning model, to education may be far more successful.

The educational reform that shifted the focus to the learner began in 1997 with the American Psychological Association.[11] In an active learning approach, the educator does not necessarily stand up in front of a class, decide exactly which information to teach learners, nor formulate how to teach the material. Rather, the approach requires active involvement of learners. When they are engaged, they are more likely to learn (see **Table 5-2**).[7,10,12,13] Under ideal conditions, learners will gain the greatest benefits if they are actively involved and if what they are learning affects their inner selves. Learners have to find the information

personally important. In the classroom or on experiential education courses learners often do not understand what a faculty member thinks they should learn because they do not sense the importance.[7]

TABLE 5-2. *Comparison of Instructional Styles*

Educator-Centered Activities	Learner-Centered Activities
Passive	**Active**
Rewards learners who can memorize well but may not demonstrate application of knowledge	Rewards researchers, questioners, and problem solvers
Primary responsibility is to relay data	Small group discussions
One-way communication (i.e., lecture)	Group projects
Questioning	Reflective activities
Demonstration	Peer teaching
	Role playing

Source: References 12 and 15.

To promote education, preceptors must be authentic and accepting of learners as individuals who bring value to the activities at the site. Many schools of pharmacy require that learners send a résumé or curriculum vitae before attendance at a site. These documents help preceptors understand learner accomplishments and level of prior education. A preceptor should review these documents prior to meeting with the learner for the first time. Through curriculum vitae review, a preceptor may help learners find a new perspective or insight into the information they have already acquired and gather thoughts about what they need to continue to learn in order to practice at the top of their license as a pharmacist. Remember, faculty and preceptors must be able to relate to learners on some level in order to have an impact on their education.[14]

These ideal conditions may seem too difficult to achieve in a setting in which the primary responsibility of preceptors is to do their job as pharmacists as opposed to teaching learners. There are ways to accomplish both tasks effectively and perhaps improve performance. A good educator will learn from his or her learners. It is not enough to just engage learners in activities and expect them to learn. Learners need support, guidance, and a chance to reflect on what they know and what they need to know. With that said, it is not always the responsibility of the preceptor to provide this for learners.

Learners often do well when involved in groups with their peers. Group learning experiences allow for the chance to brainstorm, present ideas, and evaluate the group's ideas. Small groups increase the commitment of each learner. Learning takes place in groups because learners have the opportunity to brainstorm; to present ideas; and to have ideas evaluated, rejected or remodeled, and improved. Small groups increase the commitment of each learner. Learners have changes in attitudes and behaviors when they work in small groups. In some cases, small groups may not affect cognitive learning, but they do impact affective learning.[14] Assigning learners to groups and creating educational communities among learners also relieves the preceptor from always providing the opportunities for teaching, reflecting, and learning.

This learner-centered approach may initially cause challenges to preceptors. If learners have never been exposed to this method, they will not immediately know how to act, may appear not to be learning, and may be defensive in their new role. There are several activities that a preceptor can use to get learners accustomed to active learning by starting with individual activities and moving on to group activities. Writing is a common and effective method for learning. When learners engage in writing by answering directed questions or in free-flow discussion of a topic, they write what they know and identify what they do not know. Learners often rebel against free-flow discussion and writing, initially, but many will learn that reflection helps them.

The EXPLORE (examine, pair, listen, organize, research, and evaluate) process is another method to encourage learning. Instructors first present learners with a controversial statement and ask them to commit themselves to a position relating to the issue. The instructors then pair two learners who are on opposing sides of the controversy. Each person listens to the other's view in order to summarize it accurately. After hearing each other's arguments, the learners construct a compare-and-contrast table. Then,

they research the issue to find supporting literature about both sides. Finally, the pair compares the findings and agrees on research-based statements.[16] Employing either of these techniques will help learners become actively engaged in their education.

One quality measure that a preceptor may use to evaluate individual and group learning is to get feedback from those involved. Pierce has suggested that if learners do not view an assignment as appropriate, instructors should allow them to identify and create an alternative assignment that will meet the same outcomes.[16] This will likely require patience and direction by the preceptor. At the end of the experiential education course, learners should reflect on assignments and the value of the education from each activity. If the assignment was not helpful in one's education, learners should say so and support their feedback with examples or suggestions.[16] This activity provides the faculty or preceptor with feedback on activities and provides suggestions for replacements that may provide improved benefit to learners.

Choosing learner-centered education over educator-centered teaching can provide a conundrum for preceptors and faculty with busy schedules, lack of experience, and too many things on the to-do list. Preceptors and faculty rely heavily on the educator-centered method of teaching simply because it may not pose as many difficulties, or obstacles, as the learner-centered approach. Educators who lecture and are only concerned with knowledge may not be put on the spot with questions. They are able to control the direction of lectures. When using the learner-centered approach, educators can encourage learners to ask questions, which may change the direction of the lecture.

Preceptors using the learner-centered approach must be able to adapt and move with the education, even if it feels as if they have lost all control of the topic to the learners.[17] Many learners make it to their experiential education courses and have not yet learned how to learn. It is these learners who may pose the most difficulty for preceptors when employing learner-centered education. These few tricky situations may cause a bit of uneasiness at first, not only for preceptors but also for the learners as they learn how to learn. Moving in the direction of adding more learner-centered educational activities may be a delightful, if unexpected, adventure in education for both the preceptor and the learner.[17]

Learners report more enjoyable educational experiences and changes in attitudes with the learner-centered approach.[12] **Table 5-3** matches Bloom's domains with methods or models of instruction that help learners achieve and learn. It is important for both full-time faculty and the many adjunct professors and preceptors to recognize Bloom's taxonomy when evaluating what learners have learned and to develop a method of teaching that recognizes that not all learners are alike when it comes to education. If learners seek to think like pharmacists, to be problem-solvers, and to become lifelong learners they must learn to reflect, evaluate, validate, and verify their actions. These skills are not inherent—learners must learn how to learn, and educators and preceptors can help them.

TABLE 5-3. *Matching Domain, Level, and Education Method from Bloom's Taxonomy*

Domain and Level	Method
Cognitive	
Knowledge	Lecture, programmed instruction, drill, practice
Comprehension	Lecture, programmed instruction
Application	Discussion, simulation and games, field experience, laboratory
Analysis	Discussion, projects, simulations, field experience, role playing, laboratory
Synthesis	Projects, field experience, role playing, laboratory
Evaluation	Projects, field experience, role playing, laboratory
Affective	
Receiving	Lecture, discussion, field experience
Responding	Discussion, simulations, role playing, field experience
Valuing	Discussion, projects, simulations, role playing, field experience

One experiential education approach used by our medicine colleagues and suggested for adoption by pharmacy experiential education and residency programs by Allen and Smith in 2010 is the layered-learner model. Using this approach with multiple levels of learners being incorporated into the educational training model from attending pharmacists, residents, and fellows to training APPE and IPPE learners has been suggested to benefit both learners and educators/preceptors.[18]

Developing Workplace Skills

Over the last 20 years, higher education has continued to evolve from a general academic (classroom) knowledge focus toward developing skills within educational training to allow learners to be successful employees after graduation. Workplace skills are just as important to learners as their academic knowledge and are the nonacademic characteristics that develop professionalism, self-awareness, interprofessional collaboration, and leadership skills, which lead to job success.

Providing direct patient care experiences during all clinical education experiences is very important to success for student pharmacists as they enter the real world. However, providing just this is not enough; strategically planning what areas can be adequately taught and evaluated must be considered while developing learning activities. Ensuring that adequate resources and structure are available is often overlooked.[19] The goal is to provide the real-world education to allow the learners to fully understand various operational processes and the resources available to them so that they can then enter the workforce at the highest competency level. Preceptors should think of themselves as mentors who are developing the future of the profession and provide every opportunity for a clear learning path while reducing obstacles. *A few examples of problems to avoid as a preceptor follow:*

- Not providing clear direction related to expectations. Often, the preceptor starts off showing students their role and then expects them to move forward without adequate understanding or continual support.
- Allowing politics and bureaucracy to interfere with learning. Although these factors cannot be completely removed, it is the preceptor's responsibility to put them aside.
- Isolating the student away from the preceptor and others on the educational team. Learning is a team sport and takes a community of individuals to foster the highest level of learning needed.
- Assigning busy-work to the student. Any work with no perceived or understood value demotivates and demoralizes people.
- Poor or dishonest communication. Everyone needs a clear and easily understood agenda, and learners require much more of this. Any confusion or dishonest communication quickly degrades learning.

Pharmacy education and accreditation standards are continually evolving as evident in the most recent ASHP Postgraduate Year 1 Residency Standards and ACPE 2016 Accreditation Standards.[1,20] The standards focus on developing highly educated and clinically competent pharmacists by requiring increased workplace skill training in the educational process. These skills are not just related to discussions and demonstrations in the educational environment but actual real-world experience. The optimal place for learners to develop these workplace skills are outside of the confines of the classroom and in the real-world setting provided by direct hands-on pharmacy experiences under a preceptor's guidance.[18,21]

In 1991, the U.S. Department of Labor presented a report of the Secretary's Commission on Achieving Necessary Skills (SCANS report), in which a minimum set of workplace skills were noted.[19,21] The report identified five SCAN competencies considered critical in today's workforce: (1) resources, (2) interpersonal skills, (3) information, (4) systems, and (5) technology.[19,21]

To help learners develop their competencies, preceptors must provide and allow student pharmacists the opportunity (resources) to actively participate in their daily clinical activities:

- Allow learners to create a schedule for the activities of the day including workflow, meetings, etc. Then allow for the emergencies (fire drills, critical patient needs, etc.) to slip in. This will allow learners the opportunity to prioritize and also realize that sometimes the work is not finished in an 8-hour day.
- Present all projects required to the learners at the onset of the experience, then allow learners to set the due dates for the project, but do not allow for adjustments to the timetables. This will also give learners a broader understanding of the importance of deadlines and managing projects and resources through to deadlines in situations where there is competition for time.
- Allow learners to work with a portion of the pharmacy budget. Provide them with an understanding of the various budget constraints with regard to purchasing. Have them work with the pharmacy buyer to determine ways to stay within the budget. Provide them with case scenarios in which a specific patient can cause a budget crisis, and teach them how to manage purchasing.
- Allow learners to work with your department scheduler to make an upcoming staff schedule. Provide them with opportunities to make recommendations on how to appropriately staff vacations, holidays, or shortages. Ask learners to prioritize the different roles in the pharmacy department to validate their knowledge of the impact of the differences in various roles.
- Discuss with learners the importance of skills assessment or competency validation. Ask the learners to participate in the creation and validation of a specific competency.

The interpersonal competency deals with learners' ability to function as part of a team.[19] However, this competency also involves serving as a leader of a team, negotiating for results or conflict resolution, and working with diversity.

To develop and help learners understand and grow in the areas of cooperation and teamwork, various approaches must be used that provide real-life experiences:

- Work as a member of a particular team (examples include the pharmacy team, a medication safety team, a medical rounding team, etc.).
- Lead teams to find a solution to a common problem (prepare an agenda for and lead a meeting, complete a root cause analysis, etc.).
- Work with an interprofessional team composed of different types of healthcare providers (care coordination meetings, family and community education and advocacy, interdisciplinary rounding services, etc.).
- Work in a small, controlled group, and assume different roles in the group such as the leader or devil's advocate (hospital policy review team, patient grievance review, safety reporting and review team, etc.).

Help learners frame and understand the audience they are working with and always have a discussion (debriefing) about all aspects of the experience. For example: (1) What role did the learner play in the meeting? (2) What was the intended outcome of the meeting? (3) What was the actual outcome of the meeting? (4) What could have been done better? and (5) Did anyone bring issues ("baggage") from outside of the meeting that influenced the meeting, and how could that have been avoided? Conversations such as these with learners not only provide them with the ability to analyze and understand teams but also teach them to do some basic environmental (situation) scanning (assessment and evaluation). Finally, in proactively reviewing this with learners you are teaching vital assessment strategies they can use for future meetings. This is a very important workplace skill they can take with them and apply to other situations.

The information competency is often considered one of the most challenging and is also the easiest to address. This competency relates to the ability to acquire and evaluate information.[19] We are living in the social age, where the availability of knowledge and information is continually and rapidly being presented to the learner, emphasizing the importance of preceptor and learner commu-

PRECEPTOR PEARLS

Workplace Politics

Everyone at some time in his or her life will have to deal with various personalities, practices, and opinions. In addition, many of these are dispersed throughout the workplace and can lead to significant frustration and misunderstanding that will adversely affect the learning environment.

Educators (mentors) who provide (dedicate) time with learners to proactively discuss (navigate) various (real and hypothetical) situations and discuss the complexity of dealing with others can significantly enhance learners' success. Allowing the learners to understand the importance of self-reflection, how to not take things personally, and how to process situations to the root cause will enhance their education and build their confidence for the future.

nication and interaction. However, easy access to an abundance of information can lead to various challenges for the learner.

One challenge is assessing the validity and reliability of the information. The preceptor can work with learners to help them validate reliability and identify inappropriate sources of information. Another challenge is interpreting and using the information. *Preceptors should work with learners to determine how to best organize, interpret, and process information. Examples include:*

- Journal article review and comparison to nonprimary literature or discussions related to the publication on various social sites
- Medication evaluation of an herbal product where there is limited primary literature but an abundance of information on social media sites and Internet searches
- Comparing the reliability of medication histories from the patient or a family member with information from the patient's pharmacy

The fourth competency focuses on systems, specifically the understanding of complex relationships within systems.[19] Preceptors must work with learners to help them understand how various organizational, social, and technological systems work together in the pharmacy and healthcare world. After exposing a learner to the interworking of these complex systems, preceptors should guide learners to monitor, evaluate, and make recommendations for improvements to the system. Similar to all learning approaches, this assessment and feedback loop should be a continuous process. This skill will become highly beneficial in the workplace.

Examples of how preceptors can help learners understand the various types of relationships within systems may include the following:

- Have learners follow a patient through the entire healthcare process (from the clinic, to admission, through the hospital course, and then past discharge) and have them document and discuss all the interrelationships (individual interactions the patient had with healthcare providers) they observed. This provides them an opportunity to understand areas of complexity within the medical systems where improvements may be made. This should include discussions related to outcomes, financial needs, social needs, and opportunities to improve patient care and how pharmacists can play an important role.
- Allow learners to map out the medication-use process in your facility or practice site. Have them identify the key stakeholders in the medication-use process. Allow them to discuss what would happen if any of these stakeholders were not able to perform.

The final competency refers to technology and the ability of learners to utilize a wide variety of technologies.[19] Learners should be able to appropriately select the type of technology needed to accomplish a task, demonstrate use of the technology to accomplish

desired outcomes, and troubleshoot malfunctions. Similar to the enhanced availability of information in the social age, pharmacy is continually evolving because of technological advances. Pharmacy systems are full of new technologies, including procurement systems, order-entry software, automation, and robotics. Early and frequent exposure to these different types of technology allows learners to gain a better understanding of the types of technology available, the current breath of technology, the variations between products, the impact of technological systems on patient care, and the future opportunities for technology. Allowing learners to have controlled exposure to the types of technology and how they interact will be a foundation for competency in using technology, which will enhance their workplace skills in the future. *Examples of this technology include:*

- Pharmacy automation systems, such as robotic medication selection equipment, etc.
- Computerized pharmacy order-entry and patient record systems
- Clinical pharmacy information systems, databases, and patient monitoring systems
- The latest glucometers or other point-of-service devices
- Laboratory technology, including technology that calculates and records laboratory values such as cultures and sensitivities

Competencies in (1) resources, (2) interpersonal skills, (3) information, (4) systems, and (5) technology are critical workplace skills.[19-21] However, the ability to develop and adapt these skills is not something that can be easily taught from a book or in the classroom. Hands-on pharmacy experiences allow preceptors the opportunity to provide the foundations of these competencies. Adequate planning and reflection, along with taking advantage of the various opportunities to maximize exposure to these competencies, are critical for development of workplace skills within future pharmacists.

Summary

Experiential education is the core teaching process necessary for the development of pharmacy professionals. It is through various approaches, including IPPEs and APPEs, that learners are molded into entry-level pharmacy professionals. These experiences serve as the framework that allows the student pharmacist to begin putting all the pieces together and applying their skills in the real world. It is important for both preceptors and learners to find the most productive educational approach for these experiences. Development of workplace skills and establishing roots for lifelong educational habits is a crucial component of the continuous professional development of any pharmacy practitioner and is vital to the experiential teaching process. It is key for all preceptors to understand their role as a professional mentor to all learners they may come into contact with, both inside and outside of pharmacy. Understanding these key aspects of experiential teaching will assist both the preceptor and learner in making the most of their experiential teachings. The influence of these essential educational experiences and of the preceptor (mentor) will mold future careers and the profession of pharmacy itself.

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Chapter 6

Fundamentals of Experiential Teaching

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Chapter Outline

Introductory Practice Experiences 85
Intermediate Practice Experiences 87
Advanced Experiential Education 88
Effective Methods, Styles, and Strategies of Teaching and Learning 95
Learner Evaluation 99
Potential Precepting Challenges 103
How to Develop, Implement, Coordinate, and Monitor an Introductory or Advanced Experiential Program 106
Essential Components of a Continuous Quality Improvement Process for Your Experiential Training Program 111
Summary 117

Example is the school of mankind, and they will learn at no other.

Kurt Herbert Alder

Learning Objectives

- Describe introductory pharmacy practice experiences and discuss appropriate learning opportunities for introductory practice experience students.
- Express important considerations when preparing for and precepting an introductory experience learner.
- Provide examples of the usefulness and importance of intermediate experiences.
- Review common principles that guide advanced experiential education.
- Describe professional, patient care, and interpersonal skills relating to the practice of pharmacy in an inter-professional environment.
- Identify the different types of learners and become familiar with what teaching techniques are effective for each type.
- Explain the logic-based method of teaching.
- Explain the importance of providing ongoing feedback to learners in pharmacy practice experiences.
- Describe the use of the summative evaluation methods to evaluate students in pharmacy practice experiences.
- Identify factors in the practice setting that may contribute to learner difficulty.
- Identify strategies for dealing with a difficult learner or situation.
- Outline an approach for designing a program curriculum and constructing a program manual.
- Provide ideas for creating a learner pharmacist practice model and involving others in experiential training.
- Discuss methods for evaluating the effectiveness and success of a program.
- Describe key components of continuous quality improvement in an experiential education program.

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Experiential teaching has its rewards and its frustrations. Overall, being a preceptor is well worth the time and energy to teach and develop the next generation of pharmacists. This chapter is designed to help you become an effective experiential teacher. The chapter begins with a review of the practice experiences to be completed by the learners. The chapter continues with a discussion of the necessary techniques for reaching different types of students and how to handle precepting challenges. Finally, the chapter provides a guide for developing and implementing an experiential learning program and how to continually assess and improve the quality of your program.

Introductory Practice Experiences

Historically, pharmacy education occurred in three parts: didactic, classroom instruction, and site-based experiential rotations. The typical pharmacy curriculum started with the first 3 years devoted to classroom instruction and labs, and the fourth year was dedicated to experiential rotations. Some students gained site-based experience during their first 3 years of school through summer internships or other pharmacy work experience, but other students step into a pharmacy for the first time in their fourth year of school. The absence of integrated classroom teaching and experiential training during the first 3 years of pharmacy school resulted in many students struggling through their transition from the classroom to the required fourth-year experiential rotations, now known as advanced pharmacy practice experiences (APPEs). Some fourth-year pharmacy students stepping into a pharmacy for the first time found that pharmacy practice was not what they expected or wanted.

Recognizing this educational gap, the Accreditation Council for Pharmacy Education (ACPE) adopted curricular standards for the Doctor of Pharmacy (PharmD) program.[1] These standards went into effect July 2007 and were updated February 2011. An important part of the 2007 standards is the requirement of introductory pharmacy practice experiences (IPPEs). These introductory experiences are hands-on opportunities for pharmacy students to gain experience in a variety of practice settings early in their education. The purpose of the introductory experiences are to enable students to apply some of the knowledge they are acquiring in their didactic courses and to prepare pharmacy students for their advanced practice experiences that they will complete during their final year of pharmacy school. In addition, it exposes pharmacy students to diverse pharmacy practice sites. The introductory practice experiences are scheduled during the first 3 professional years of the pharmacy curriculum and are designed to complement material taught in the students' pharmacy courses. The updated standards from 2011 defined 11 core domains that introductory students are to achieve before beginning APPEs.

The ACPE standards state that IPPEs should make up 5% of the total pharmacy curriculum.[1] This equals approximately 300 hours of practice experience that are to be distributed over the first 3 years of students' education. To ensure that students meet their learning objectives, these experiences are distinct from pharmacy summer internships or other shadowing experiences students may have pursued on their own. IPPEs are applied toward course credit, along with graduation and professional licensure requirements, so students may not receive remuneration for their time.

Schools may offer introductory practice experiences in many areas of pharmacy practice, but at minimum students are required to complete experiences in community and hospital pharmacy settings. Many schools have students engage in shadowing or service learning exercises during their early years, but the schools will only recognize these activities as introductory practice experiences if they afford students the opportunity to develop specific patient care skills. Experiences that only focus on the development of students' professionalism or leadership abilities are not considered introductory practice experiences.

Students will have many learning opportunities during their community and hospital introductory practice experiences. In both settings students should learn the following fundamental skills[1]:

- Accurate medication dispensing
- Basic patient assessment
- Knowledge of commonly used medications

- Identification and assessment of drug-related problems
- Accurate medication calculations
- Ethical, professional, and legal behavior
- General communication
- Patient counseling
- Drug information
- Application of health and wellness principles
- Knowledge of prescription drug coverage options

In states that allow formal collaborative practice agreements, students may also have the opportunity to observe preceptors performing disease management activities. In the community setting, students may assist patients with over-the-counter medication selections, identify noncompliance or medication affordability concerns, and participate in the development of medication therapy management services or community outreach events. In the hospital, students may assist with medication safety initiatives, medical and nursing education, bedside and discharge patient education, medical patient care rounds, medication reconciliation services, other ongoing medication management or drug monitoring programs, and the development of new clinical programs.

A number of strategies have been successfully used to teach patient care skills and engage students in a meaningful way during their experiential rotations. Partnering fourth-year advanced practice students with students completing introductory experiences is one method.[2] This partnership improved introductory students' self-perceived patient care ability and resulted in a smaller time commitment by faculty preceptors.[2] The partnership teaching method was studied and found to be effective across multiple practice sites, including hospital and outpatient environments; therefore, preceptors from varying backgrounds could consider this approach in the training they provide pharmacist interns. This partnership method of teaching could be further enhanced by including pharmacist residents in the learning experience. Utilizing preceptors from other professional backgrounds (i.e., physicians and nurse practitioners) has also been effective.[3] This approach fosters the development of collaborative relationships and an opportunity for students to better understand both the pharmacist role and the role of other healthcare workers in providing patient care. Focusing on the development of specific patient care skills has also been an effective student engagement strategy. For example, some students have had the opportunity to provide immunizations during their introductory experiences.[4] In states that allow this, administering immunizations provides pharmacist interns unique opportunities to gain confidence in both administration technique and communication with patients. By offering unique introductory experiences, preceptors can help students build confidence in their patient care skills while benefiting from the students' contributions to the preceptor's practice.

It is important that preceptors recognize that students completing an introductory experience are just beginning their education, so their pharmacy knowledge base is substantially limited. This does not mean that you should have lower expectations of introductory students than advanced students but that they must be different. The expectations must be in line with how far students have progressed within the professional sequence. Also, because introductory students have less classroom education, they may require more direction and supervision than fourth-year students. This potential burden can be minimized by using the multiple techniques discussed above. On the positive side, introductory experiences are commonly pharmacy students' first look into actual pharmacy practice. These early experiences are an exciting time for pharmacy students, and it can be fun for preceptors to be a part of the experiences, guiding students, and helping them gain an understanding of pharmacy practice. Students are very impressionable at this stage, so preceptors play a key role in shaping student views of pharmacy practice in the numerous settings. Considering this, take care to ensure introductory students have a positive experience. Introductory students tend to be excited about on-site training; they are typically motivated and eager to learn.

PRECEPTOR PEARLS

Preceptors must recognize that introductory students are just beginning their didactic education and must provide experiences on which the students can build.

Preceptors can prepare for introductory practice experiences in a number of ways. Prior to a student's scheduled learning experience, work with the course coordinator or experiential program director to ensure that you receive course learning objectives, a description of the methods used for student assessment, and a summary of concurrent didactic material taught in the pharmacy curriculum. In addition, you may request guidance on appropriate methods for providing feedback to learners. You may also inquire about the student you will be precepting in order to learn the professional level (e.g., second year, spring semester) and specific student strengths and areas of deficiency that the experience can address. This information may assist you in starting out on the same page as the students.

IPPEs are an important new addition to the pharmacy curriculum and will serve to enhance classroom learning and prepare students for APPEs. Preceptors have the opportunity to model essential patient care skills and significantly contribute to the professional development of introductory practice experience students.

Intermediate Practice Experiences

The profession of pharmacy is built on lifelong learning, which starts early in one's career. The primary beginnings of this learning are through pharmacy practice experiences. The ACPE categorizes practice experiences into two sections: all experiences up until the final year of school are introductory experiences, and all rotation experiences during the last year of school are categorized as advanced experiences.[1] This chapter is designed to show that learning experiences are a continuum. This section proposes a middle step, intermediate experiences, between introductory and advanced experiences.

Back in pharmacy school, our family and friends inevitably called for medical advice, but early in our pharmacy education those questions were likely difficult to answer. However, as our careers have progressed, those calls seem to get easier to handle. The professional experiences we've had influence the difference between our ability to aptly handle the calls we received during school and our ability to handle the calls we receive later in our careers. These professional experiences are invaluable, and the more experiences pharmacy students have, the stronger their foundation becomes and the greater the chance they have to grow and build on what they have learned.

ACPE does not define intermediate experiences, but they are the logical progression from the initial practice experiences to the advanced experiences. For example, a student may learn the structure and format of a patient chart during an initial experience, participate in data collection during an intermediate experience, and then work with the preceptor to analyze the data and come up with recommendations during an advanced experience. Exposing the student to various aspects of pharmacy over time allows him or her to assimilate the practicality of information, and it firmly engages them in pharmacy practice. Considering the learner's previous experiences is critical in determining what tasks and responsibilities you should afford the student.

Preceptors would likely agree that students who have a broad practical knowledge of pharmacy are more successful on rotations. One common complaint among specialized clinical practice preceptors is that students enter their rotations without basic practical clinical knowledge. For example, a student who only has experience in the retail setting would lack a foundation of hospital or general medicine experience. Without this experience, if the student is assigned to an intensive care unit (ICU) rotation on the first day of rotations, the ICU rotation will ultimately become a general hospital rotation or an internal medicine rotation despite the efforts of both the student and the preceptor. However, it is impractical for all students to be assigned first to a general hospital rotation. This example highlights the importance of having students complete intermediate rotations in

various settings so they can both gain experience and determine which type of fourth-year rotations they would like to pursue.

PRECEPTOR PEARLS

Encourage students to acquire intermediate experiences to continue to build on.

Intermediate experiences can include experiences outside of school oversight as well. Work internships are probably the best examples of this practice. They provide two key opportunities: exposure and marketability. Work internships allow students to try out pharmacy practice in various settings without an extensive time commitment. For example, students who have worked in a retail setting can take an internship at a hospital for the summer to gain exposure to the different practice settings, and vice versa. Work internship commitments typically occur during the summer, so they give students insight into what practice would be like in the chosen settings without committing students to that work setting long term. Students who complete a work internship can use that intermediate experience to guide their fourth-year rotation decisions, furthering them on their career path. For example, a student who completes a work internship in a hospital may find that he or she wants to pursue pharmacotherapy related to psychiatry. The student could use that information to choose multiple inpatient neurology or psychiatry-related rotations (as the program allows).

Besides exposure/experience, work internships offer marketability. Students who complete work internships have broader experience than those who do not complete them, and the work internship may help students choose their desired area of practice based on their experiences. Potential employers, including employers who hire pharmacy residents, are excited about students who have had work internship experience.

Intermediate experiences are a means for today's pharmacy students to deepen their practical knowledge and to prepare themselves for practicing on their own. They provide an important step in the experiential training pathway, spanning and supplementing the gap between early introductory rotations and advanced experiences. Students commonly feel excitement, relief, and fear after passing the boards and realizing they can officially practice alone. The recognition that they are now the final check, the last one to approve a medication, and the last individual to catch an error can make that transition period a difficult time. However, a solid didactic education combined with all of the hands-on knowledge acquired can give confidence to a novice practitioner.

PRECEPTOR PEARLS

Familiarize yourself with your student's intermediate experiences.

Advanced Experiential Education

APPEs build on a solid foundation of IPPEs and extend into more focused areas of expertise (see **Box 6-1**). There are many different career paths and areas in which pharmacists can become experts (see **Box 6-2**); however, rather than discussing each area, this section aims to review common underlying principles that guide APPEs.

BOX 6-1. Advanced Experiential Education Goals

- Develop skills and competency in the advanced pharmacy practice areas of primary, acute, chronic, and preventive patient care in community pharmacy, ambulatory care, hospitals or health-systems, and other specialty areas
- Provide experiences that emphasize continuity of care and allow for interprofessional team care
- Provide a program to enhance student proficiency in higher levels of pharmacist-delivered patient care developed from required, selective, and elective rotations
- Refine the teaching skills of preceptors in both didactic and experiential training
- Provide a foundation for further training in a pharmacy practice (postgraduate year 1 [PGY-1]) residency, specialized (postgraduate year 2 PGY-2]) residency, or fellowship

BOX 6-2. Examples of Advanced Experiential Rotations

Academic pharmacy
Cardiology
Critical care
Clinical research
Clinical toxicology
Community pharmaceutical care
Consultant pharmacy
Drug information/investigational drug services
Emergency medicine
General/trauma surgery
Geriatrics
Home infusion/home care
Hospice or palliative care
Infectious disease
Internal medicine
Long-term care
Managed care
Medication safety
Medication therapy management
Nephrology
Neurosurgery or neurology
Nutrition support
Obstetrics/maternal/child
Oncology
Pediatrics
Pharmacoeconomics
Pharmacy informatics
Primary/ambulatory care
Psychiatry
Pulmonology
Transitions of care
Transplantation
Women's health

Two main categories of skills are fundamental to the practice of clinical pharmacy: professional and interpersonal.

Professional Skills

Advanced practice experiences provide opportunities to develop and enhance the learner's professional and patient care skills. Most advanced practice experiences focus on direct patient care activities. As you consider how to involve students in your practice environment, consider the entry-level skills that a pharmacist will need to be independent at your site or to be ready as a new resident or fellow. Also, consider how learners may be able to enhance the patient care that you are providing. In addition to direct patient care activities, other elements will enhance a student's professional skills and round out his or her experience. **Box 6-3** lists examples of direct patient care and general activities that can refine those patient care and professional skills. **Box 6-4** provides examples of unique experiences that are available to students beyond the more traditional sites. Activities associated with specific skills appear below.

BOX 6-3. Examples of Student Activities on Advanced Experiential Rotations*

- Formal patient case presentations
- Journal club presentations, including reviews of pertinent articles for pharmacists
- Formal written drug information responses
- Pharmacy and therapeutics drug monographs
- Medication-use evaluations
- MedWatch adverse event reports
- Formal in-service presentations regarding new therapeutic approaches
- Topic discussions
- Formal research or writing projects
- Patient-specific monitoring and evaluation
- Patient-specific interviews, physical examinations, assessment, and recommendations
- Medication reconciliation
- Individual or group patient education (i.e., diabetes or other chronic disease group education classes)
- Participation in interprofessional patient rounds (i.e., inpatient rounds, hospice outpatient interprofessional rounds)
- Administer vaccines as permitted by state law and regulations
- Health promotion/disease prevention fairs
- Grand round presentations and/or attendance (medical, pharmacy, or interprofessional)

*Students must be appropriately supervised as required by state and federal laws and regulations when working in patient care environments.

BOX 6-4. Unique Experiential Experiences

- *Pediatric Camps: Diabetic, Hematology/Oncology, Hemophilia, Dialysis*

Allow students to work in an interprofessional environment, advising and managing pediatric patients with chronic disease over a 1- or 6-week period

- *American Association of Colleges of Pharmacy*

National organization that represents the interests of pharmacy education and educators; Alexandria, VA

- *American Pharmacists Association (APhA)*

Provides experience in national association activities and operations, pharmacy practice issues, educational programming, state services, scientific affairs, student affairs, public relations, and project management; Washington, DC

- *American Society of Consultant Pharmacists*

Provides experience and training in federal and state legislative and regulatory processes; focuses on pharmacy, long-term care, and other current healthcare issues being considered by federal and state legislative and regulatory bodies; Alexandria, VA

- *ASHP*

Provides experience in association activities and operations, publications and drug information systems, membership and organizational affairs, governmental affairs, professional and public affairs, student affairs, marketing, and product development; Bethesda, MD

- *International Pharmacy Student Federation*

Promotes interaction among pharmacists internationally in order to improve public health; many international experiential opportunities

- *United States Pharmacopeia*

Develops standards for quality of medicines and publishes *USP DI*; Rockville, MD

- *U.S. Public Health Service*

Offers a variety of experiences related to the provision of public healthcare; optional U.S. Public Health Service sites include the Bureau of Prisons (Washington, DC), the Food and Drug Administration (Rockville, MD), Indian Health Services (numerous locations), and the National Institutes of Health (Bethesda, MD)

Teach Students to Provide Pharmaceutical Care/Disease Management

During introductory practice experiences, preceptors teach pharmacy students the fundamentals of pharmacy practice. In advanced experiential rotations, preceptors continue to educate student pharmacists in providing patient-centered and evidence-based pharmaceutical care, which involves the following:

- Evaluating and recommending optimal medication regimens for individual patients (e.g., therapeutic selections)
- Assessing adverse reactions or drug interactions
- Identifying and evaluating clinical signs and symptoms (e.g., interview patients for history of present illness, review relevant organ systems, perform pertinent physical examinations)
- Ordering and interpreting laboratory tests in relation to medication therapy and disease management
- Assessing medication adherence for disease management and adhering to evidence-based clinical guidelines
- Establishing and evaluating patient-specific therapeutic goals and outcomes (e.g., achievement of a specified blood pressure, resolution of an infection)
- Selection, initiation, modification, or discontinuation of medications to achieve therapeutic goals following site-specific policies
- Discussing the cost of medications and other potential barriers to care with other healthcare professionals and the patient prior to selection of therapy
- Monitoring medication therapy (e.g., drug concentration and organ function tests) for assessment of efficacy and toxicity
- Determining the impact of medication therapy on the patient's quality of life
- Documenting the clinical encounter (e.g., subjective, objective, assessment, and plan [SOAP] note or consultation chart note)
- Billing for pharmacist-delivered care services

APPEs are based on direct patient interaction and focused on further development of critical thinking and problem solving skills. At the start of a rotation, it may be helpful to give students a pretest that includes patient case studies with medication-specific prob-

lems. The students' answers can help you assess their knowledge base and therapeutic understanding and allow you to design educational activities accordingly. During the rotation, you can have student discussions by assigning readings pertinent to the specialty area of practice with questions for the student to address regarding medication-specific problems. You may also ask students to draft chart notes based on additional patient case studies and to bill for appropriate current procedural terminology codes. Some electronic health records along with institutional policies will allow student notes to be included for teaching purposes only. It is important to understand the policies of your facility on patient-specific documentation by students. If you are billing for your services, you will need to understand Medicare or other third-party payer rules and regulations for the involvement of the student in direct patient care and documentation. Other student activities might include asking them to analyze their own medication prescribing recommendations and to perform quality improvement using a systematic method for their own continuing professional development. Toward the end of the rotation, you could give the students a post-test to measure the progress they have made.

PRECEPTOR PEARLS

Pretests and post-tests can assess your students' knowledge, skills, and progress as well as guide topic discussions.

Encourage Students to Become Independent Practitioners

The preceptor's aim during an advanced experiential rotation is to teach students how to develop independent clinical judgment while working as members of the interprofessional healthcare team. In order to become independent, it is important for students to observe you providing patient care. When they have observed you initially, it is essential for them to have the opportunity to provide patient care themselves with appropriate supervision. In order for the student to improve, providing frequent constructive feedback is essential. This can be accomplished by directly observing a student's interventions or interactions or through gathering feedback about student performance from other healthcare team members. The ideal preceptor-student training scenario is to have direct preceptor observation of the student. This enables you to have a clear perspective of the student's clinical performance, and allows you to provide specific feedback immediately to the student. It is this type of quality, timely supervision and feedback from preceptors—not the number of patients seen by a student—that improves student clinical competence.[5]

The preceptor can assist the student in applying a didactic concept to an actual patient (e.g., see one, do one, teach one) by allowing the student the freedom to exercise his or her judgment. For example, students should have the opportunity to solve difficult problems on their own (e.g., how to renally adjust tobramycin therapy), and then they should discuss with you the best approach and solution to the problem. Students who lack self-confidence and always rely on others to find therapeutic answers will need guidance especially. Assign them tasks with increasing difficulty and give them positive feedback. Conversely, students who are overly confident and ignore supervision may need a reminder to check in with, and report back to, the preceptor and other team members. At the beginning of the experience it is critical to delineate the student's role and how he or she should be interacting with the preceptor and the team, especially as it relates to making recommendations or providing direct patient care. This can help avoid the overly confident student from making a bad recommendation to the team or patient.

It is also important to involve students in evaluating their own learning in order to develop critical self-reflection for continued professional development and lifelong learning.[6] At the beginning of the experience ask students what they perceive as their strengths and weaknesses and what their specific learning goals are. Throughout the experience, ask students to self-reflect on their performance (e.g., after interacting with a patient or after providing an in-service presentation). In addition, you may want to request previous APPE evaluations or previous preceptor-identified areas for student

improvement from the experiential coordinators at the colleges or schools of pharmacy. This may help to provide continuity and reinforcement of learning.

Teach Students to Organize Daily Activities and Manage Time Wisely

As students move from didactic to experiential learning and from introductory to advanced experiential rotations, they need to learn to manage their time wisely in order to accomplish an increasing number of tasks. During advanced rotations, they will need to review more charts, check more prescriptions, evaluate more patients, and document more chart notes—all without compromising the quality of their pharmacy skills. Make suggestions to students for maintaining quality job performance based on your own experience, and help them by setting both quantitative and qualitative goals as the rotation progresses. Whatever pharmacy position a student may choose, he or she needs to understand that efficient organization of daily activities and wise time management are essential to success.

Influence Students to Develop a Healthy Professional Attitude

Preceptors can influence learners to develop a healthy professional attitude by being enthusiastic about their work and by demonstrating a strong work ethic. As students are expected to perform a greater number of tasks during their advanced experiential training, they may face greater challenges and stress. As they attempt to further develop their professional skills and stretch their capabilities, students may become increasingly frustrated or overwhelmed. When this happens, do not lower the educational standards of the clinical training simply to alleviate student anxiety, but rather explain to students the ways in which you personally cope with stress and frustration. Healthcare professionals and model preceptors often use humor as a release for their stress and frustration.

Another point that may help relieve the frustration of struggling students is to inform them that the most common reasons for disciplinary action from medical boards after graduation are irresponsibility, diminished capacity for self-improvement (including a poor attitude), and poor initiative as manifested by a lack of motivation or enthusiasm.[7] If students are responsible and motivated to help patients, they should feel somewhat reassured about their future practice. However, it is also important to be able to recognize students that may need professional medical care to address their anxiety or other health-related issues. Become aware of the resources for student healthcare needs of your site or school.

Empathy for patients is a professional attribute that pharmacy students can further cultivate through advanced experiential education. As students have more direct interactions with patients and their family members they may feel more emotionally connected. Preceptors can help students develop professional attitudes that include empathy and to establish healthy professional relationships and appropriate boundaries with patients without becoming too emotionally involved.

Share with Students the Satisfaction of Professional Growth and Scholarly Development

Specialty education, a form of advanced experiential rotations, focuses on particular areas of expertise, allowing for concentration in both clinical learning and scholarly development. Give students opportunities to help you with a research project, whether it is a health outcomes study, a quality control study, a translational research project, a pharmacokinetics study, or a controlled clinical trial. With instruction, students will learn the necessary steps in conducting a research study (e.g., development of research protocols, tools, and instruments; methods of data collection; choice of statistical analyses) or submitting a manuscript for publication in a peer-reviewed journal. Students can also be especially helpful in completing the background literature search, data retrieval, and analysis of the information to formulate a research hypothesis. They will also benefit from learning about the obstacles that had to be overcome in a research study and will gain satisfaction in knowing that research results can improve patient care. Another motivating factor for students is to be able to assist in the presentation of a research project at a

local, state, or national pharmacy or medical meeting. These events are great opportunities for personal and professional growth. When students observe the enthusiasm that preceptors have for developing scholarly activities and gain some hands-on experience in research projects and presentations, they will be inspired to develop their own scholarly agenda.

Teach Students to Teach Others

Teaching students how to teach others is an important component of advanced experiential education. Initially, you should ascertain if the student has had prior teaching opportunities and encourage him or her to reflect on what went well and what needed improvement. Then, you can use several methods to hone the teaching skills of your students. First, allow students to watch you teach. Second, explain the teaching techniques you use and describe how you prepare to teach a class or educate a patient. Third, give students opportunities to teach through in-service presentations, patient education encounters, and introductory rotations with other students. Students should interact with students from other colleges of pharmacy and other health professional programs to teach each other through patient care rounds, topic discussions, and patient presentations. Giving students feedback after their presentations will also help them improve their teaching and presentation styles. Finally, embrace the opportunities for students to teach you, the preceptor. Students should be encouraged to share newly learned information from the primary literature or other resources. They might share this information through their journal club presentations, drug information responses, or patient care plans. Learning should always be a mutual exchange of information between the learner and the preceptor, the patient, and the entire healthcare team.

Interpersonal Skills

How a pharmacist interacts with other professionals in a multidisciplinary healthcare setting can affect his or her professional future. Teamwork is essential in such a setting, and preceptors should help students develop the personable working style that makes teamwork possible. Preceptors should be a positive role model, using effective listening and nonverbal, questioning, and narrative skills to communicate with patients, families, and other healthcare professionals about medication and disease management. Preceptors should also demonstrate sensitivity by recognizing the influence of a patient's culture, age, gender, disability, and financial status on his or her health beliefs as they relate to pharmacotherapy. How well preceptors interact with others in these situations can have far-reaching effects on the future professional performance of their students. For this reason, always role-model appropriate interpersonal skills. During experiential rotations, observe and provide feedback to students regarding their interpersonal interactions with other pharmacy staff, other healthcare professionals, and patients.

PRECEPTOR PEARLS

Helping students develop their interpersonal skills involves role modeling, observation, and feedback.

Unfortunately, preceptors and students may struggle to work effectively with others or even with each other, especially if personalities clash. If this occurs, you must have the personal confidence, emotional vulnerability, and integrity to be honest and human with yourself and to explore the possibility that you may have contributed to the problem. Having the ability to overcome these challenges is important to the professional development of both students and preceptors.

Pharmacy Residents as Preceptors

PGY1 and PGY2 pharmacy residency programs are designed to further develop pharmacists into skilled clinicians in general and specialty practice environments. In order to be a skilled clinician, it is essential that you have problem solving and critical thinking skills and that you can communicate and disseminate this knowledge. As such, you need to be able to teach a variety of learners, including patients, students, and the entire healthcare team. After completing a pharmacy residency program, many residents will pursue a career in academic pharmacy or may become a

preceptor. In order to prepare pharmacy residents for these future roles as clinicians, faculty, and preceptors, accredited residency programs will include instruction in the area of teaching. ASHP accreditation standards for PGY1 pharmacy residency programs require inclusion of developing competency in the area of teaching, education, and the dissemination of knowledge in the program's design.[8]

Guidelines have been developed for residency teaching experiences.[11] These guidelines outline basic teaching experience guidelines and guidelines for formalized teaching certificate programs. Included within these guidelines are some recommendations for PGY1 and PGY2 co-precepting experiences in APPE or IPPE environments. A PGY1 resident can work jointly with the preceptor prior to the experience to develop the learning experience for the APPE or IPPE students, including developing learning goals and objectives, activities, and schedules. Jointly with the preceptor, the PGY1 resident can facilitate all activities and conduct assessments. Initially, you will want to assess the resident's teaching skills and introduce him or her to co-precepting. Early in the residency experience, especially if your experience is a new clinical area for the resident, he or she may be a student-resident partner, with opportunities to provide feedback and teach, but not as a formal co-preceptor. As his or her skills improve, you can increase precepting responsibilities. Feedback on the resident's precepting skills in addition to clinical skills should be provided during the learning experience.

The PGY2 resident can conduct more activities independently. In longitudinal experiences, the PGY1 resident may also perform co-precepting roles more independently as the year progresses. The roles may include conducting orientation, evaluating student assignments, and facilitating all activities with support from the preceptor as needed. Providing opportunities for residents to co-precept not only develops their teaching skills but also enhances their clinical skills and knowledge. If your program has an academic affiliation, you may want to consider developing a formalized teaching certificate that further develops the teaching skills of the resident beyond the role of the preceptor. Overall, if your program includes pharmacy residents as learners, consider including them as co-preceptors.

Advanced Experiential Sites

The selection of advanced experiential sites should emphasize and reflect the philosophy of the pharmacy school program. This creates consistent pharmacy ideals for students as they transfer from their didactic teaching to their APPE training. This strategy can help students develop their skills in advanced practice areas, empowering students to contribute effectively in a dynamic healthcare system. Through these experiential rotations, students should progress from student pharmacists to professional pharmacists with the associated responsibility of accountability.

PRECEPTOR PEARLS

Advanced experiential rotations provide the opportunity for students to develop from student to professional pharmacists.

Most colleges and schools of pharmacy have specific requirements for the number and types of rotations a student has to complete during the final year of training. The main difference among practice experiences is usually whether there is a direct patient care component to the rotation (see Box 6-2 for the list of examples of advanced experiential rotations). Rotations that require the student to provide distributive services (dispensing prescriptions, performing prospective drug use reviews, compounding sterile parenterals, etc.) are required rotations for most programs. Students will have typically learned the basic distributive services in an earlier required introductory experience and will now be ready for learning advanced skills. Many boards of pharmacy require the intern to be under the direct supervision of the preceptor when performing these duties. Most traditional community and institutional pharmacy rotations fall under this category.

Today's pharmacy curricula require the student to complete several clinical rotations in both the acute care/inpatient and ambulatory care environment. These will typically

be four to six weeks in length, depending on the college/school requirements. Some experiences may also be longitudinal in design (e.g., 4 hours per week for 9 months). The student will usually complete some form of an internal medicine rotation that will involve exposure to several common diseases (e.g., hypertension, hyperlipidemia, diabetes, asthma, coronary artery disease, etc.). The student may need to complete this type of rotation in an inpatient and ambulatory area, depending on the program requirements. In addition, other clinical specialties routinely qualify as clinical rotation experiences including, but not limited to, the following: pediatrics, psychiatry, oncology, infectious diseases, critical care, and nutrition support.

Elective rotations may or may not have a direct patient care component. Some programs allow rotations that would count as a required rotation to also qualify as an elective rotation. A student may request to have a direct patient care component for all rotations depending on his or her career goals. Other students may have interest in other aspects of pharmacy practice. An elective rotation allows a student to pursue his or her interests while meeting the requirements of the degree program. State boards of pharmacy may not count these types of rotations as earned intern hours, even though the academic program may require this type of rotation. Examples of elective rotations include pharmaceutical sales and education, association management, legislative and regulatory practice, academic teaching, basic science research, and drug and poison information. Some programs consider the last type of rotation to be a direct patient care if the information provided by the student will be used to make a clinical decision for a patient in the institution.

There are several types of competitive rotation experiences that students may complete as part of their experiential training. Refer to Box 6-4 for some examples. Many pharmaceutical companies offer competitive internships that provide degree credits and experience for students with an interest in the pharmaceutical industry, including research. Many of the national and state pharmaceutical organizations offer internships in association management or elective rotations. ASHP, APhA, and the National Association of Chain Drug Stores currently offer student rotations as well as executive residencies. The federal government and armed services have competitive rotations for students with the U.S. Food and Drug Administration, the Veteran's Administration, and the Indian Health Service.

Effective Methods, Styles, and Strategies of Teaching and Learning

Teaching can be rewarding, especially if you feel that you are able to pass on substantive skills and knowledge to learners. Effective teaching inspires the curiosity and helps improve problem solving skills—useful in all healthcare settings. The most important goal of a preceptor is to inspire learners to consistently grow by questioning their environments and assessing their personal approach to patient care.

Types of Learners

There are three types of learners: visual, auditory, and kinesthetic. Knowing the learning style of the person you are precepting will help facilitate your teaching and enhance his or her learning process. Most individuals learn from a mixture of styles but tend to process information with predominantly one style. Adjusting your teaching methods to the topic you are discussing and encompassing multiple teaching formats including reading, writing, charts, diagrams, and interactive discussions will help create the ideal learning environment (see **Table 6-1**).

Visual learners tend to learn from written words, graphs, charts, textbooks, and spatial arrangements. You should teach to this type of learner by giving reading assignments and having the student use visual aids such as graphs, pictures, and written responses to questions.

Auditory learners acquire new information from listening. Teaching exercises that work well for this type of learner include having discussions on topics and having them repeat back what they have learned. Use presentations like journal club and case presentations as major learning activities.

TABLE 6-1. *How to Present Information to Different Types of Learners*

Type of Learner	Ways to Present Information
Visual: Write It	• Provide written materials and exercises • Write key words on board or flip chart • Ask learner to write a response • Use visuals or graphics • Ask learner to record the discussion in a group • Involve learner through visual/spatial sense
Auditory: Say It	• State the information • Ask learner to describe specific inforation • Provide discussion periods • Encourage questions • Foster small group participation • Use video clips and other audio methods
Kinesthetic: Demonstrate It	• Demonstrate how a principle works • Ask learner to practice the technique • Encourage underlining and highlighting of key words • Provide real-life simulations • Offer hands-on activities • Involve learner physically

Source: Adapted with permission from Karen Hamilton. Presenting to different types of learners. http://webhome.idirect.com/~kehamilt/spklearn. Accessed March 27, 2015.

Kinesthetic learners process information by doing activities instead of just listening or reading. They prefer a hands-on approach and do well when they participate in rounds, communicating with physicians and other healthcare providers. One of the activities they might benefit from is shadowing professionals in other disciplines (dietary, nursing, respiratory) that encourage them to do more hands-on patient care activities. They also do well with interactive discussions from which they can then apply the knowledge learned to a patient situation.

PRECEPTOR PEARLS

To facilitate teaching and the learning process, the preceptor should immediately assess the learning style of the pupil.

Logic-Based Method to Teaching

One of the most effective methods of teaching is a logic-based system. This method is especially conducive for the practice of medicine in which statistics and evidence-based medicine are integral. There are three components to this problem solving technique: identifying the problem, identifying why the problem occurred, and identifying solutions to the problem.

The first step in building problem solving skills in students is to help them identify problems that impact the care of the patient (see **Box 6-5**). Prepare activities and exercises that help the learner detect issues they need to address. Using real patient scenarios to find active problems will make the experience more meaningful. An example of a problem solving activity with a student in a retail/community setting is to have the student who is filling prescriptions go over the patient's other medications for drug interactions, duplications, and to make sure that the patient is on appropriate medications for his or her diseases. For example, if the patient has metformin and insulin on the medication profile but not aspirin, the student can talk with the patient, ask appropriate questions, and initiate an intervention if appropriate.

BOX 6-5. Sample Activities to Help Identify Problems in Common Practice Settings

1. Review medication profile
2. Manage diseases
3. Assess patient compliance
4. Assess patient comprehension

The second step in problem solving is developing a method that helps the learner assess underlying causes for the problem that will help in understanding the full scope. Each health-related problem has many compounding aspects, and exposing learners to these aspects gives them a comprehensive and in-depth view of the patient's condition. A tool that looks at the whole patient and the interconnecting play between medications, patient medical and social history, physical examination, and laboratories is the Problem Solving Triad (see **Figure 6-1**), which can apply to any setting for dissecting a medical problem.

Understanding each of the three aspects of the Problem Solving Triad allows us to approach the patient and his or her management from a whole perspective. Fully assessing labs and vital signs is important to determine the impact of the therapeutic regimen on the patient's underlying health condition. An exercise demonstrating the Problem Solving Triad in each practice setting is provided below using the patient complaint of diarrhea.

The patient complaint of diarrhea can be further examined with the Problem Solving Triad. The health complications of the diarrhea can be used to help us elucidate the possible cause. The loss of fluids from the diarrhea has affected the patient's blood pressure and heart rate. The patient has not increased her food or water intake to compensate for the losses, resulting in dehydration, which is reflected in the lab values (increased BUN/SCr, decreased potassium and magnesium). By looking at the medications, students can ascertain potential causes of the diarrhea (e.g., antibiotics or metformin). By examining the history, students can rule out potential causes such as gastroenteritis or manifestations of Crohn disease or diverticulitis.

When the intern or resident has a list of potential causes of diarrhea, he or she can decide the most likely etiology based on the patient's subjective and objective information. Even in a community setting, where only limited physical exam and lab information are available, the student can learn to solve complex health problems using the right tools and strategies. The Problem Solving Triad is useful in incorporating medications with all other health parameters. It allows pharmacy interns and residents to go beyond just examining the patient medication list, assessing each patient health issue from a comprehensive perspective. This will allow them to effec-

CASE SCENARIO

I. Community Pharmacy Setting (Problem: Diarrhea)

History/physical exam: Patient reports loose bowel movements for 5 days; decreased blood pressure and increased heart rate when checked at counter; no change in PO intake.

Labs: No current labs available, but patient reports that last week she had an elevated white blood count. She states that she is currently being treated for a urinary tract infection.

Medications: From the patient's filled prescription record, she is on sulfamethoxazole/trimethoprim double strength, metformin, lisinopril, atorvastatin, aspirin, and metoprolol.

II. Clinic/Hospital Setting (Problem: Diarrhea)

History/physical exam: Past medical history of diabetes, hypertension, coronary artery disease, and current urinary tract infection; loose bowel movement for 5 days; decreased blood pressure and increased heart rate since yesterday; fluid intake is 1.5 L/day.

Labs: Hypomagnesaemia; hypokalemia; increased blood urea nitrogen (BUN)/serum creatinine ratio (SCr) >20; leukocytosis but trending down.

Medications: Sulfamethoxazole/trimethoprim double strength, metformin, lisinopril, atorvastatin, aspirin, and metoprolol.

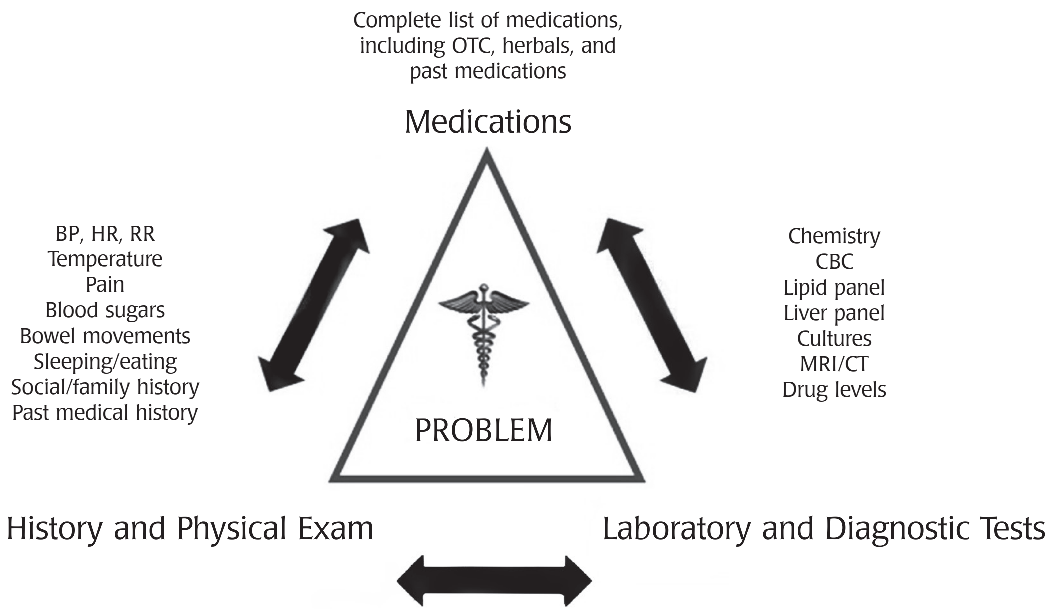

FIGURE 6-1. The problem solving triad.

BP, blood pressure; CBC, complete blood count; CT, computed tomography; HR, heart rate; MRI, magnetic resonance imaging; OTC, over the counter; RR, respiratory rate.

Source: Figure courtesy of Dehuti Pandya, PharmD, TIRR Memorial Hermann Hospital.

tively solve patient problems and, thus, make a significant impact on patient care.

PRECEPTOR PEARLS

Use the Problem Solving Triad as a systematic method for problem solving that can be applied to many different settings.

The last step in problem solving is developing solutions that are feasible for the patient and healthcare provider. It is important to remember that many patient problems are complex; having only one solution to the problem may leave other more viable and appropriate solutions undiscovered. Prepare activities for trainees that involve coming up with multiple solutions to a problem. This prompts them to think about confounders such as drug allergies, disease contraindications, drug interactions, cost prohibitions, insurance formulary restrictions, and compliance issues. Challenging the interns and residents to identify at least three solutions to most problems allows them to move past the most easily identifiable solution and to learn how to come up with novel potential solutions.

In the case of the patient with diarrhea, suppose the cause is the antibiotics. Three possible solutions are (1) because there are only a few days left to complete treatment, consider staying on sulfamethoxazole/trimethoprim double strength but increase hydration and add antidiarrheal; (2) contact physician and consider change of antibiotics; or (3) keep same antibiotic, add lactobacillus treatment, increase hydration and PRN antidiarrheal. Depending on the patient's severity of diarrhea and the patient's economic and social conditions, any number of these interventions may be appropriate. Students should assess each intervention in the context of the patient's entire clinical and social picture, and then work with the patient and the physician to determine the best intervention.

Tools for Teaching and Learning

New Technologies

It is vital to familiarize our students with new technologies and computer-based processes because they are now an integral part of healthcare practice. Students must learn how to incorporate technologies such as smart phone applications and Internet resources,

which are frequently used by healthcare professionals for learning and gathering data. In many ways, these technologies offer a more efficient means of obtaining drug and medical information because healthcare professionals can obtain information rapidly, and the resources are more portable then print resources such as the *Drug Information Handbook*. Even though the expanding influence of the Internet and smart phone applications on healthcare practice is inevitable, preceptors must teach students not only how to use such information but how to discern medical information obtained from them. Many medical websites are not peer reviewed and often represent viewpoints of just a few individuals. Using information from such websites to make patient care decisions is strongly discouraged. In addition, preceptors need to assess the skills of learners on how well they use traditional information resources, because many pharmacy practice sites do not have access to all desired information electronically.

Use of Nonpharmacy Personnel

One of the biggest lessons for interns and residents to learn is the importance of their contributions to the care of the patient. Understanding where pharmacy fits in the whole spectrum of care will make them not only appreciate their role but also enhance their perception of other ways pharmacists can contribute to healthcare. Trainees who have exposure to or have shadowed nonpharmacy personnel such as physicians, respiratory technicians, nurses, case managers, speech and physical therapists, and dietitians find themselves feeling more like part of the patient care team. Pharmacists impact other disciplines in many ways. Some examples include the schedules we set for dose administration by nursing and respiratory technicians and the types of medications we choose that can aid or hinder the care provided by therapists or dietitians. Teaching interns and residents about other healthcare professionals' roles will help them communicate better with the team and will advance their ability to optimize pharmacotherapy regimens for both the patient and for other healthcare professionals providing care.

The greatest reward for preceptors is to know that their teaching style and methods have provided the learner with a positive experience and have inspired him or her to excel in the future.

Learner Evaluation

Figure 6-2 displays suggestions for offering both praise and reprimand to learners.[10] Initiate praise when you catch the learner performing a desired behavior. Praise his or her behavior as soon as possible, being very specific about what was done right. Emphasize how the behavior positively impacts patient care or others in the practice setting. Follow with a short pause to let the student savor the moment. Then, encourage him or her to continue this positive behavior.

It is also a preceptor's responsibility to identify the learner's weaknesses or areas to strengthen so that he or she can correct them. You should initiate the reprimand as soon as possible after identifying the behavior. However, wait until you are calm, and seek a private place to talk. Be very specific; it is important to let the learner know how his or her behavior impacts patient care or others in the practice site. Although it may be uncomfortable, pause to let the learner know that how you feel is important. After this pause, assure him or her that you are there only to help. You may wish to point out that it is the learner's behavior that is the focus of the reprimand, not the individual personally. Finally, do not dwell on the reprimand. When it is over, it is over.

Formative Evaluation

Formative assessment monitors the learner in order to provide ongoing feedback. This helps the learner identify strengths and weaknesses and target areas that need work. Formative evaluations also help preceptors recognize where the learner is struggling and plan instruction to better meet those needs. Knowing the type of learner you are precepting from the beginning of the rotation is an example of an initial formative assessment, which should occur daily as topics and tasks are being discussed and completed. Preceptors should

FIGURE 6-2. Praise and reprimand.

assess learners constantly for knowledge of terms and facts, rules and principles of the task, processes and procedures necessary for completion of task, and the ability to translate or apply the information.[11] This information in turn should help the preceptor change the approach to the topic or task on hand so that the learner can grasp it better. Utilizing the types of teaching strategies for different types of learners should help. Further examples of formative assessments include asking the learner to turn in a rough draft before the final is due (for early feedback), asking the student to identify (in one to two sentences) the main points after each topic discussion, asking the learner to draw a concept map/algorithm to represent their understanding of a topic, and asking the learner to apply the concept learned to another disease or issue.

Summative Evaluation

A summative evaluation assesses learning at the end of an instructional unit for competency. It is often the primary determination of whether the learner successfully completed a given practice experience. For this reason, preceptors must be as objective as possible and perform these evaluations with great care and concern. Never take lightly your responsibility to assess learner competency. Although it is unpleasant to fail a learner, you must if he or she does not achieve the competencies. Your obligation to patients, the profession, and the learner demand it.

PRECEPTOR PEARLS

Although a summative evaluation may determine the final decision of whether to fail a student or not, feedback throughout the rotation should ensure that no one is surprised by the outcome.

Timing of Summative Evaluation

Timing of summative evaluation is important and depends on the nature and length of the practice experience as well as the method of evaluation used. In all cases, summative evaluation should be based on specific objectives or competencies established for the practice experience. Discuss these objectives with learners at the beginning of the practice experience. Then, tell them when and how you will evaluate them on these competencies. You should conduct at least some method of summative evaluation at the midpoint of the rotation. Learners need to know how they are progressing. Make a plan to correct weaknesses you identify. Do not wait until the end of a practice experience to let students know they are doing poorly. Surprises at the end of the practice experience are never productive for learners or preceptors.

Conduct a final summative evaluation at the end of the practice experience. This evaluation should reflect the learner's achievement of the competencies established for the

rotation. Resist the temptation to reward or grade learners based simply on improvement. Remember, you are evaluating their ability to demonstrate competency in performing specific behaviors, not their ability to show improvement or display effort.

Methods of Summative Evaluation

Summative evaluation may follow a number of different methods. The method you choose will depend on the nature of the practice experience and the frequency of evaluation. Often, a combination of methods may be used to provide a broader and more accurate assessment of the learner's abilities.

Examination (Written, Oral, and Practical). In the classroom, students are tested primarily through written examination. This method may also be used in the clinical setting. Individual preceptors may prepare and administer written exams or, in many cases, the college of pharmacy may do so. Use written exams to test knowledge of pharmaceutical calculations, pharmacy laws and regulations, and drug-specific information. Written exams may also test students' ability to use reference materials to answer specific questions or to provide drug information. Written exams are often part of the final summative evaluation process used to determine a student's grade for the practice experience.

Oral examinations may be a more useful method of summative evaluation in the clinical setting. Use oral examinations to test not only specific drug knowledge but also learners' decision-making and problem solving abilities. Ask probing questions to ensure they have a thorough understanding of the situation discussed. Alter scenarios or add information to test their ability to reformulate decisions. An oral examination may be part of the final summative evaluation process, but you can also use it more formatively throughout the practice experience to assess and guide student learning.

Practical examinations allow learners to demonstrate their ability in performing very specific, physical behaviors. Use this method to test skills such as sterile and nonsterile compounding, patient counseling, and professional interactions with other healthcare providers. Establish specific criteria for each behavior or skill and grade according to these criteria. Similar to oral examinations, this method can be part of the final summative evaluation process or occur throughout the practice experience to assess and guide student learning.

Evaluation Instruments. An evaluation instrument is perhaps the most common method of summative evaluation for assessment of student competency in the pharmacy practice setting. The college of pharmacy usually provides such instruments, which use a numeric, alphabetic, or Likert scale. The school may ask preceptors to evaluate students' application of knowledge, technical skills, and attitudes and personal attributes. By nature, this type of instrument is prone to subjectivity and bias. In addition, the school may ask you to evaluate behaviors that occurred several weeks prior to the time of evaluation. You must do all you can to make the evaluation process objective and reflective of student behaviors as they actually occurred. *A five-step approach to completing student evaluations has been suggested*[12]:

1. **Observe the students.** Observe students performing the behaviors to be evaluated at least several times over the evaluation period. Ask others who interact with the students to observe student behavior. Do they observe the same things you do?
2. **Record observations.** Make a record of the behaviors you observe. Do this soon after you observe the behavior. Use index cards or electronic devises to make recording of behaviors easy. Abbreviate and use codes, but remember to be specific. Ask others who interact with the students to record student behaviors. At this point, do not evaluate behaviors, just record them.
3. **Retrieve recorded observations.** Collect the records of your observations and the observations of others. Sort and organize them as they relate to the competencies to be evaluated. Do this weekly to identify behaviors that you have not yet observed or need more observation. Use what you learn to guide student learning experiences over the remainder of the rotation.
4. **Analyze retrieved observations.** Look for patterns of performance. Do students

consistently perform or fail to perform a specific behavior as required? Do students perform the behavior on their own or do they need assistance and prompting from preceptors or others? Do the recorded behaviors reflect students' typical performance?

5. **Evaluate the students.** Use what you learn from Step 4 to complete the evaluation instrument. Develop a strategy that works for the type of scale you used. For example, if you used a numeric scale, start with the highest ranking and consider whether students have obtained this level of competence. If not, move to the next lower ranking. Continue until you have selected the ranking that best reflects student behavior. If space is provided for comment, describe specific behaviors that support your rating.

No matter what type of rating scale you use, evaluation instruments are subject to error and bias. Familiarity with the types of errors that can occur will help you to avoid them when you evaluate students.

PRECEPTOR PEARLS

Ensure you evaluate the learner objectively, avoiding error and bias.

After you have completed the evaluation instrument, you should share it with the student. Find a quiet, private place to talk with the learner. Review your ratings and comments with him or her. Be specific. Provide examples from the observations you recorded that support your ratings. Point out behaviors the learner does well in addition to behaviors that need to improve. Involve the learner in formulating a plan to improve areas of weakness. If necessary, re-evaluate areas of weakness on a weekly basis to ensure improvement as planned.

The principles of *resident evaluation* are very similar to student evaluations. There are few adjustments that have to be considered when doing formative and summative evaluation for residents. Formative assessment should be done at the beginning of the rotation to gauge their knowledge base. Students are often starting out the rotation with minimal clinical background, but residents should be starting out with a better knowledge base and skills. Unfortunately, that is not always the case, and it is important to do a formative assessment of residents in the first few days of the rotation to identify weakness in knowledge, problem solving, drug information, and communication. Weaknesses in a resident may not be discovered until late in the rotation because of the preceptor's assumption that a resident has advanced skills. Previous summative assessments can be used formatively to guide efforts and activities for residents, which are often not available to preceptors for students coming in on their rotations.

PRECEPTOR PEARLS

Having detailed activities listed for each objective criteria will help residents work toward building those particular skills and help facilitate evaluations for preceptors when those activities are not accomplished. Summative evaluation of residents is very outcomes-, goal-, and objective-driven, with designated activities planned during the rotation to meet the goals of the rotation. Having detailed activities that support the rotation goals helps residents and preceptors work toward those goals and makes it easier to evaluate residents if those goals are not met.

Secrets of Success

Providing learner feedback and evaluation does not have to be a frustrating and overwhelming task. Provide students with ongoing feedback in a quick and effective manner. At the beginning of the practice experience, let the learner know what summative evaluation methods you will use and how you will determine their grade. Remember that the process of summative evaluation does not begin at the midpoint or end of the practice experience. Observe and record student behaviors throughout the entire practice experience. Retrieve and analyze these behaviors in order to complete the evaluation instrument. When appropriate, use written, oral, and practical examinations to aid in the evaluation. An

organized, behavior-focused approach to evaluations encourages open preceptor-learner communication and ensures a less frustrating and fearful experience for both.

Potential Precepting Challenges

When you decide to take a student on an experiential rotation, you expect that the student will work very hard and have an excellent learning experience. Unfortunately, sometimes this does not occur. When faced with a difficult student, many times you may be unsure what to do. In addition, it is not uncommon to blame the learner or yourself for the problems. The dangers associated with this type of scenario are that the learner may have a negative experience and fail the rotation, and you may decide to stop teaching.

There are many reasons why a learner may have difficulty during a rotation. When there are problems, the origin of the difficulty usually falls into one or more of the following areas:

- Attitude and motivation
- Attention to the academic program
- Comprehension

Attitude and Motivation

A learner who begins a rotation with a poor attitude will present many challenges for the preceptor. For some learners, a bad attitude may not have caused problems during the didactic portion of their training. Performing below expectations and being informed that his or her attitude is poor may come as a surprise to some of them. The learner with this type of attitude frequently disregards instructions from the preceptor (arrives late, does the minimal amount of work, appears lazy) and may become defensive when confronted about his or her behavior. This learner has survived for years with this type of attitude and may feel personally attacked by the preceptor. Lack of motivation is evident in everything he or she does (or does not do).The preceptor may have to be repetitive regarding instructions and usually ends up very frustrated. Helping the learner understand, according to Zig Ziglar, means that “Your attitude, not your aptitude, will determine your altitude.”[13]

Even though this type of learner may deserve to fail based on attitude, unfortunately his or her performance may not meet the criteria for failure as outlined by the training program. The learner who does the least amount of work possible may still meet the minimal requirements of the rotation and be eligible for a passing grade. This presents a difficult ethical issue for the preceptor and program.

Assessment of behavior and conduct are routine criteria for most programs. The examples listed in the above case (reporting late, not completing assignments, etc.) could be classified as “unprofessional conduct” and be grounds for failure of a rotation. Failing a learner is always difficult because you want to see the individual succeed. You may feel that you have done something wrong. It is essential to review professional expectations with the learner prior to starting rotations (hopefully these are emphasized from the moment learners start the pharmacy program). Penalties for unprofessional conduct should be specified in the course or rotation syllabus. This information should be shared with students and their preceptors.

Figure 6-3 is an example of this information; it is included in the course syllabus for all rotations at the University of Texas at Austin College of Pharmacy.

It is critical to document specific instances of unprofessional behavior and communicate this information with the college/school administration. Preceptors should never feel as if they are punished when these situations occur. Failing a rotation is an academic decision and the responsibility rests with the college or school.

Attention to the Academic Program

Today’s student is very different from students 20 years ago. Many students have already been through the academic process, having completed bachelor’s and master’s degrees prior to entering the pharmacy program. Some learners have already spent a significant amount of time in the workforce and are back in college to facilitate a career change. This learner may not be as concerned with earning the highest grades in the class as he or she has other external pressures outside of studies.

> ***Student-intern professional conduct.*** Student-interns must also abide by all laws and regulations pertaining to a pharmacist-intern as defined by the Texas Pharmacy Act and Rules. Violation of these laws and regulations may jeopardize the intern's privilege to become a registered pharmacist in Texas and may also result in failure of the course and dismissal from the College and/or the University.
>
> ***Special Note:*** Students will be removed from a rotation for conduct deemed unprofessional by the preceptor and/or Student Affairs Office, OR if the student's actions endanger patient health or welfare. Removal from a rotation for either of these two reasons will result in possible failure of the rotation.

FIGURE 6-3. Inclusion of penalties for unprofessional conduct in the rotation syllabus of the University of Texas at Austin College of Pharmacy.[12]

Today's student is often married with children or other dependents to support. This learner may be more concerned with passing courses and rotations than with trying to excel. In essence, this learner excels in simply making it through the program because of the number of responsibilities that he or she has to juggle. It is easy to see how the attention of this type of learner can be pulled in multiple directions and away from the academic program.

Comprehension

A surprising and troubling issue for preceptors is encountering the learner who performs poorly in the final year of the program. There are generally two types of students who fit into this category: the 4.0 learner and the 2.0 learner. The 4.0 learner may have done well in didactic courses yet cannot apply that knowledge in a real patient care situation. These learners may be book smart—knowing lots of information but lacking practical application skills. Learners who fall into this category may have been able to memorize large amounts of information and to regurgitate these facts on exams. Integrating this information and applying it to patients who do not present as textbook cases can bewilder the student. This learner is stunned to learn that his or her performance is lacking and he or she may be in danger of failing the rotation.

The 2.0 learner may have worked very hard during the didactic courses yet never performed well on exams. His or her comprehension of information may be limited; however, he or she has been able to score well enough to progress through the program. This type of learner may be exposed during the experiential rotations. For some, failure to perform satisfactorily on rotations does not come as a surprise and actually may be a relief. For others, they will need to take on the impossible task of learning 4 years of pharmacy curricula in a 4- to 6-week rotation. This learner will end up facing one failure after another and, depending on the circumstances and requirements of the program, may be subject to dismissal in the final year of training.

Practice Setting

For any of the learners described above, a busy practice environment can be a prescription for failure. All of these learners may be immediately overwhelmed with the pace and expectations of their preceptor and the rotation. Intervention by the preceptor or program can cause the learner to become frustrated and disengaged. These situations may be compounded if the learner is on a rotation with any classmates. Even the best preceptor can fall into the trap of comparing learners that are from the same program, which only makes the situation more difficult for the learner who is consistently performing below expectations. In addition, the learner who is performing poorly may be intimidated by how well his or her peers are doing and reluctant to ask for assistance from anyone.

Strategies for Dealing with Difficult Learners and Situations

The first consideration when facing difficult learners or situations is to determine what may be causing the learner to perform poorly. When you identify the underlying etiology, you can decide what type of intervention is necessary. In all cases, you should immediately notify the program's coordinator at the academic institution that the learner is having

problems. The program coordinator is in the best position to advise you on how to handle the situation. In addition, the academic institutional coordinator will have better insight if the learner's situation is a new occurrence or a reoccurring issue. In most cases, you will need to document the areas in which the student is not performing satisfactorily in the learner's assessment or evaluation form. A comprehensive review and understanding of what the academic program requires and its assessment tool is critical.

Consider the following when dealing with difficult learners:

- Did I clearly outline the objectives and expectations for the rotation?
- Does the learner have direct patient care responsibilities and can the student continue with the rotation without compromising patient care?
- Is this the first exposure the student has had to this type of practice environment?
- Where is the learner in the sequence of rotations (i.e., first versus last rotation)?
- Have I reviewed the learner's performance on prior rotations or detected any prior problems or issues?
- Have I been available to provide feedback as the learner encounters new and unfamiliar situations?
- Have I been approachable or does the learner appear to be afraid to ask questions?
- Do I frequently provide feedback and make time to meet with the learner to review his or her progress?
- Have other members of the pharmacy staff been supportive and helpful to the learner?

When you have identified the problem, you can institute necessary measures to deal with the issue. As previously discussed, the learner may not be aware of his or her failure to meet performance expectations. In many cases, the learner will need to deal with this emotional issue before making any progress toward resolving the difficulty and hopefully moving forward with the training. If appropriate, schedule a meeting with the learner to discuss the issues in a nonthreatening environment. Do this as early as feasible to address learner difficulties and, when possible, provide time for improvement. This meeting should occur in private unless the problem warrants having a witness or a member of the academic training program present. Confronting a difficult learner or one who is failing is not easy for any preceptor. Delaying the discussion with the learner will only feed the problem and not solve it. In addition, it is unfair to the learner to expect improvement on an issue that he or she may not be aware is occurring.

PRECEPTOR PEARLS

Use the meeting as a learning opportunity to help reinforce problem solving skills. Consider using the logic-based teaching system: identify the problem, identify why the problem occurred, and identify solutions to the problem.

Consider the following when meeting with difficult learners:

- Agree on a time with the student to conduct a private meeting. Let the learner know that the meeting is to discuss a specific issue and not a routine meeting to assess progress.
- Let the learner know your perception of the problem at the beginning of the meeting. Try to be clear about the problem and provide examples. It is important to be specific (see **Box 6-6**).

BOX 6-6. Contrasting General and Specific Feedback

General	*Specific*
"You have a poor attitude."	"When you receive feedback, you interrupt frequently and have inappropriate nonverbal cues, such as eye rolling."
"You seem to lack attention to the academic program."	"You did not seem prepared for the case topic discussion; you were unable to address treatment alternatives."

- Let the learner know at the beginning the seriousness of the problem. Is the issue something that may cause harm to a patient, the department, and other staff? What are the implications for the learner (e.g., failure of the rotation)?
- Give the learner an opportunity to digest the news and present his or her perception of the issue. Is there a factor of which the preceptor is unaware that is preventing the learner from performing in a satisfactory manner?
- Do not interrupt or get defensive when the learner is talking. This may be the first time the learner is hearing that there is a problem and will need time to digest this information. It is natural for the learner to become defensive and very emotional. Allow the emotions to surface and give the learner the opportunity to express them and then calm down. The learner will not hear you while in a highly emotional state.
- Document your discussion and take notes, if appropriate, as the learner presents his or her side of the story. This will help you focus on the problem and provide concrete information for resolution of the issue.
- Actively engage the student in problem solving. Get the learner's input regarding how to address the problem, and reinforce that the responsibility for resolving the issue resides with the student. Develop a plan of what the learner needs to do in order to successfully complete the rotation.
- Document the plan and get the learner to sign it. This is essential if further action may be required (e.g., assignment of a failing grade, dismissal from the site, etc.). In addition, having the learner sign the plan will help convey the seriousness of the issue.
- Schedule a time frame for improvement and times to meet to monitor progress.
- Thank the learner for his or her time and remind him or her that you are there to provide assistance.

The Failing Learner

Sometimes learners fail no matter how hard a preceptor tries to help. When confronted with a learner who is having significant difficulty with a rotation, remember that preceptors do not assign failing grades; learners earn them. Learners fail because they are not meeting the requirements of the rotation. Having to give a learner a failing grade is very difficult for a preceptor. Even if the learner has shown some improvement, there are times when the learner should not receive a passing grade and may need to repeat the rotation. The most important factor for the preceptor to consider is whether you want this learner to provide patient care with the type of performance you have observed. If the answer is "no," you should not give a passing grade, and the learner should not progress in the program. Preceptors have an essential role in the educational process. The preceptor is the one who has the final say regarding whether a learner is ready to graduate and enter the profession. This is a serious responsibility and one that you should not take lightly. As much as a preceptor has a responsibility to educate future practitioners, the preceptor's role in preventing nonqualified individuals from entering practice is as important, if not more important.

PRECEPTOR PEARLS

Remember that preceptors do not assign failing grades; learners earn them.

How to Develop, Implement, Coordinate, and Monitor an Introductory or Advanced Experiential Program

Developing, implementing, coordinating, and monitoring an IPPE or APPE program at your practice site can be an exciting, challenging, and fulfilling experience. For preceptors who have never done this before, the director of experiential education at the pharmacy school and materials developed by the faculty can be great resources. Colleges or schools of pharmacy frequently will have template course

syllabi that will include their expectations and example activities for the student experiences. Inviting the director of experiential education to your practice site to see it and discuss the possibilities and school requirements can be a good way to begin planning your practice site. The colleges or schools of pharmacy may also hold regular preceptor development workshops. Also, networking with more seasoned preceptors is a great way to benefit from the successes and mistakes of others, get useful tips, and avoid potential pitfalls. In addition, preceptors with a similar experience to the one you are designing may be willing to share some of the materials that they have previously developed (e.g., orientation checklist, evaluation forms, program manual).

Designing the Program Curriculum

Designing the program curriculum begins with reviewing the materials from the pharmacy school with which your practice site is affiliated. For required introductory or advanced practice experiences, the pharmacy school should have a course description and a syllabus that outlines the course goals and objectives, activities, assignments, textbooks or other reading materials, terminal competencies, written or oral exams, grading procedures, and relevant course and school policies (e.g., attendance, tardiness, absences, makeup work, dress code, conduct, confidentiality). This information may be packaged into a program manual provided by the school that also contains assignment and presentation guidelines; assessment instruments for the various activities and assignments; weekly hours and activity sheets; site and preceptor evaluation forms; a summative student evaluation form; important dates; and contact information for the course coordinator and the director of the experiential education program.

For elective APPEs, especially advanced specialty practice rotations, the school may or may not have developed a program manual. The pharmacy school may provide only the relevant policies related to all experiential programs and the required forms that must be completed for any experiential course (e.g., weekly hours and activity sheets, site and preceptor evaluation forms, summative student evaluation form). In that case, the preceptor will need to define and develop the course goals and objectives, activities, assignments, reading materials, terminal competencies, written or oral exams, and grading procedures.

Pharmacy schools strive for standardization and consistency in the way preceptors at various practice sites deliver the required pharmacy practice experiences. Preceptors adhering to the requirements in the program manual ensure that all students have a similar core experience. However, schools also realize that all preceptors and practice sites are different and have the opportunity to offer unique experiences to students. Preceptors can have students participate in more activities and complete other assignments that the preceptor thinks are important learning experiences. The key is that these unique experiences must be in addition to the activities and assignments the school requires and not a replacement of them. You must maintain the core curriculum of the pharmacy practice experience but may create supplements as desired.

PRECEPTOR PEARLS

Use the information the school of pharmacy provides to you to create your program, but be creative in supplementing activities. You have the opportunity to make your experience unique and invaluable to both you and your student.

Pharmacy schools are usually not as concerned about the standardization and consistency of elective advanced specialty practice experiences preceptors deliver at various sites. This is mainly because these experiences are elective and are offered by relatively few preceptors and practice sites. Preceptors are free to build these rotations around their personal strengths and the uniqueness of their practice sites and to tailor them to the needs and desires of the interns. However, they still need a course curriculum that is defined prior to the start of the experience so that the expectations are clear (e.g.,

course goals and objectives, activities, assignments, reading materials, terminal competencies, written or oral exams, grading procedures). In addition, preceptors may be able to improve their elective advanced specialty practice experience by working together with preceptors of similar elective rotations and sharing and combining the ideas and materials developed by each other.

Constructing the Program Manual

Many preceptors use the program manual provided to them by the pharmacy school, which is perfectly appropriate. Some preceptors take the school's program manual and incorporate it into a more comprehensive program manual that they have customized for their rotation and practice site (a real "survival manual"). **Box 6-7** lists sample components that could be included in a program manual. By developing a program manual, you can use their creativity and express yourself in a way that might facilitate building a good preceptor-student relationship and decrease the initial anxiety of the student. This also is an opportunity to reveal your artistic side and your sense of humor as well as demonstrate your commitment, enthusiasm, and forethought toward the student and the learning experience.

Conducting an Effective Orientation Process

The orientation process is critical because it becomes part of the student's first impression of the preceptor and the practice site, and it can set the tone for the rest of the internship. The orientation process may begin before the student arrives at the practice site on the first day. You should have a brief conversation with your student prior to the rotation either in person, via phone, or via e-mail. Essential information to communicate to the student includes directions to the healthcare organization, parking information, arrival time, meeting place, and contact information for the preceptor in case of mishap (e.g., student is lost, has an accident, or gets sick). Any site-specific training or forms that must be completed prior to the experience should be communicated at this time. Communication prior to the experience is also a chance for you to ask a few questions and allay any

BOX 6-7. Sample Components for a Program Manual

- Welcome letter
- Mission, vision, and history of organization
- Diagram and directory of the healthcare organization
- Map and guide for the area
- Orientation checklist
- Forms that must be completed (e.g., self-assessment, hours sheet, practice site evaluation, preceptor evaluation, student evaluation, background checks)
- Site-specific training that must be completed prior to or during the experience (e.g., Health Insurance Portability and Accountability Act, sterile compounding)
- Copy of state regulations related to intern duties
- Brief biographical statements about the preceptors
- List of the names of all pharmacy employees and their positions
- Brief description of the pharmacy department and the healthcare organization
- Copies of the Pledge of Professionalism, Oath of a Pharmacist, and Code of Ethics for Pharmacists
- Goals and objectives of the experience
- Competencies that must be demonstrated
- Required activities, assignments, and exams
- Copies of articles or presentations to read and discuss
- Sample assignment write-ups (e.g., research papers, formulary monographs, case studies, clinical intervention reports), problem sets, and exam questions
- Example formats for organizing oral presentations (e.g., patient cases, journal articles, in-services) and patient care notes (e.g., medication and allergy histories, progress notes, consultations)
- Detailed schedule showing all the important activities and deadlines for assignments
- Cartoons and jokes
- Inspirational stories
- Art and history relevant to pharmacy
- Anything else that you want to share with the student to show your personality, to make learning fun, and to enhance the student's transition and experience at your practice site

fears or misconceptions the student has. The orientation process should resume as early as possible on the first day of the experience. A checklist can guide the orientation process and make sure nothing is left out.

Box 6-8 lists sample items that could be included in an orientation checklist. If the orientation process cannot occur immediately after the student's arrival because you become unexpectedly busy, the student can shadow you until there is another opportunity to continue the orientation. Having students come back later that day or the next day sends a negative message about your level of commitment. Conducting an effective orientation process can begin the development of a good preceptor-student relationship and start off the experience on a positive note.

BOX 6-8. Sample Items for an Orientation Checklist

- Verify that intern's license/registration is current.
- Discuss background, pharmacy experience, and career goals and plans of the student and preceptor.
- Discuss expectations of the student and preceptor (e.g., conduct, ethics, and confidentiality).
- Tour the pharmacy and point out important areas (e.g., work space, break room, phone, bathroom, references, and emergency information).
- Meet the preceptors and other pharmacy staff.
- Tour the rest of the practice site and meet other key people.
- Obtain name badge and clearance codes (e.g., pharmacy, library, and computer access) and complete any other processing requirements of the healthcare organization (e.g., review immunization records).
- Review pertinent policy and procedure of the pharmacy department and the healthcare organization (dress code, phone use, universal precautions).
- Review the pharmacy practice experience program manual.
- Discuss goals and objectives for the pharmacy practice experience.
- Clarify the pharmacy duties and responsibilities for which the student will be held accountable.
- Discuss the required activities and assignments and their completion dates.
- Clarify the schedules of the student and preceptors.
- Discuss the feedback and evaluation process.
- Provide contact information for the preceptors (e.g., work phone, pager, e-mail, cell phone).

Creating a Student Pharmacist Practice Model and Assigning Duties and Responsibilities

Students know when they are doing busywork that is not important to the operational mission of the pharmacy and that keeps them out of the way of the preceptors. Being sent off to work on these exercises of futility (e.g., constructing forms or pamphlets that will never be used by the pharmacy) can be very frustrating to them. Students like to be engaged in meaningful work that allows them to contribute to the pharmacy, learn new things, and grow and develop as pharmacists.

One way to ensure that students are engaged in meaningful work is to create a student pharmacist practice model with designated duties and responsibilities that they will be held accountable for completing. Depending on the type of pharmacy practice experience and practice site, these duties and responsibilities may be related to drug distribution services, clinical pharmacy services, a blend of both, or other types of services. Assigned tasks may be constant over the course of a pharmacy practice experience, progress in levels of duties and responsibilities, or they may change as students are rotated to different areas. In every case, it is important to explain to them why each task is important and what knowledge, skills, and terminal competencies you expect them to gain from completing it.

Potential duties and responsibilities that could be included in a student pharmacist practice model are listed in **Box 6-9**. When constructing a list of duties and responsibilities for an APPE, think about what you would want an entry-level pharmacist who was just employed by your healthcare organization to be able to do. Also, think about activities that would be good learning experiences for students and at the same time would expand or improve the services offered by your pharmacy.

BOX 6-9. Potential Duties and Responsibilities for a Student Pharmacist Practice Model*

- Ordering drugs and stocking them on the shelves
- Taking new prescriptions and transferring prescriptions over the phone
- Preparing, labeling, and dispensing prescriptions
- Obtaining medication and allergy histories from patients and other healthcare professionals
- Providing medication therapy management with appropriate supervision
- Triaging patients and assisting them with the selection of over-the-counter products
- Performing patient counseling related to medications and devices and documenting it in the medical record
- Conducting drug regimen reviews for all patients on the assigned patient care units
- Seeing patients every day on the assigned patient care units or ambulatory clinics and assessing their subjective and objective responses to medication therapy, including performing therapeutic drug monitoring and physical assessment as needed
- Making recommendations to physicians related to drug therapy and working with them on developing the pharmacotherapy portion of the patient care plan
- Researching and responding to drug information requests from the interprofessional team
- Writing progress notes or consultation notes as appropriate
- Serving as a liaison for the pharmacy department on the assigned patient care unit
- Providing in-services to the pharmacy and nursing staff on requested or targeted topics
- Collecting data for medication use evaluations

* Be familiar with institutional, state, and federal policies, rules, and regulations that define the scope of practice for a student pharmacist.

Involving Pharmacy Staff and Other Healthcare Professionals and Patients in Experiential Training

Many people can be involved in various aspects in the training of student pharmacists. Inclusion of people other than the primary preceptor usually depends on the type of rotation, the kind of practice site, and the desire of others to teach. Pharmacy technicians, staff pharmacists, clinical pharmacists, pharmacy managers, nurses, nurse practitioners, physician assistants, respiratory therapists, dietitians, and physicians are among those who frequently participate in pharmacy experiential training. Student pharmacists can spend some time with different healthcare professionals for exposure to certain areas or to focus on learning specific skills. For example, students can learn firsthand about issues related to medication administration techniques and devices (e.g., infusion pumps) by working with nurses. Students can enhance their patient assessment and physical examination skills through working with physicians, nurse practitioners, and physician assistants. Students can sharpen their patient counseling skills related to use of a nebulizer, inhaler, and peak flow meter by working with a respiratory therapist, or related to nutrition by working with a dietitian. At the same time the students are given the opportunity to practice their communication skills with other healthcare professionals. These other healthcare professionals can provide feedback to the primary preceptor about students' performance and, thus, contribute to the evaluation process. Be sure to communicate with these other healthcare providers as to what your expectations are for their roles as preceptors and supervisors of your students.

PRECEPTOR PEARLS

Thinking of other healthcare professionals involved in your students' training as preceptors will provide the students with a well-rounded experience.

Patients can also be involved in the training of students, particularly in the evaluation process. Although patients may not be able to assess a student pharmacist pharmacy knowledge base or technical skills, they can evaluate a student's professionalism, communication and listening ability, and interpersonal skills. You can have patients fill out a very short and simple student assessment form after their interaction with a student. The form should

contain no more than a handful of items to evaluate and fit on one piece of paper or an oversized index card. Patients may be very happy to play a small role in the education and training of future pharmacists. Patients also can be involved in more complex competency assessment methods, such as practical exams (objective structured clinical exams), and patients can be trained to give verbal feedback directly to the students.

Evaluating the Effectiveness and Success of the Program

Pharmacy schools should be able to provide preceptors with evaluation summaries of their program and their practice site on a periodic basis (e.g., annually). How often this occurs may be dependent on how frequently students complete an experience with the preceptor at a given practice site. Schools are always concerned about maintaining student anonymity, which can be important in getting valid evaluations. Also, most schools have hundreds of preceptors and practice sites but few personnel devoted to experiential education that can compile and send out evaluation summaries. Unfortunately, you cannot improve yourself, your student pharmacy practice experience, or your practice site without valuable and timely feedback.

If you are not receiving evaluation summaries from the pharmacy school on a regular basis, you can develop your own preceptor, student, and practice site evaluation forms. You can distribute, complete, and turn in these forms during the last day of the rotation after the students have received their final grade. Also, you can conduct exit interviews with the students at the end of their last day, discuss the evaluations with them, and seek additional verbal feedback. Students usually are very willing to do this if they have been told that it is solely for continuous quality improvement purposes to improve the preceptor, the experience, and the practice site.

Besides reviewing evaluation summaries and setting goals in terms of the scores, there may be some other metrics you can track to evaluate the effectiveness and success of the pharmacy practice program. These metrics will depend on the goals you and your supervisor have for the program. Often, the primary goal of the program is to improve the recruitment of pharmacy residents or pharmacists. You can track over time the number of positions filled by graduates from the affiliated pharmacy school. A secondary goal may be to improve the job satisfaction and retention of pharmacists by making their work more intrinsically rewarding, which can be evaluated through repeated surveys. Other indirect measures of success that could be tracked include the number of requests made per year by students to complete a required or elective pharmacy practice experience at the practice site; the number of pharmacy schools forming partnerships with the practice site; and the total number of students trained per year. Of course, receiving invitations to speak at school-sponsored preceptor conferences and being presented with preceptor awards would be signs of success for those desiring to become master preceptors.

In summary, developing a pharmacy practice experience requires significant preparation and planning. To be successful, you should design an appropriate curriculum, conduct an effective orientation, assign the student to interesting and relevant responsibilities, and continually evaluate and seek to improve the rotation. While developing, delivering, maintaining, and improving a practice site requires serious preceptor effort, the sacrifice is well worth the satisfaction you receive when your student pharmacist finishes the rotation inspired to positively impact the profession.

Essential Components of a Continuous Quality Improvement Process for Your Experiential Training Program

Continuous quality improvement (CQI) should apply to almost any education program. There are many definitions of CQI. Here are definitions from the American Society for Quality and The Delaware Healthcare Association:

1. "Philosophy and attitude for analyzing capabilities and processes and improving them repeatedly to achieve the objective of customer satisfaction."[14]

2. "Process to continuously make everything better each day. The initiative is customer focused and requires that processes be analyzed, measured, improved, and evaluated on an ongoing basis."[15]

The key point that every definition contains is that the process is continuous in developing ways to improve a program. New standards from the ACPE require a continuous quality program for experiential education. ACPE Guideline 14.7 states:

> A quality assurance procedure for all pharmacy practice experiences should be established and implemented to facilitate achievement of stated competencies, provide for feedback, and support standardization, consistency, and inter-rater reliability in assessment of student performance. All practice sites and preceptors should be selected in accordance with quality criteria established and reviewed periodically for quality improvement. The assessment process should incorporate the perspectives of key constituents, such as students, practitioners, prospective employers, and board of pharmacy members.[1]

The ACPE 2016 Standard 10.15 Experiential Quality Assurance states:

> A quality assurance procedure for all pharmacy practice experiences must be established and implemented to: (1) facilitate achievement of stated course expectations, (2) standardize key components of experiences across all sites offering the same experiential course, and (3) promote consistent assessment of student performance.

The ACPE Board of Directors and staff act as judges of the quality of a pharmacy school curriculum. They also expect that each school will have its own standards and ways of assessing curricula and faculty to ensure that minimum educational and program standards are met, such as those described in Guideline 14.7.

PRECEPTOR PEARLS

The American Society for Quality provides resources for continuous improvement strategies.

To meet this guideline, pharmacy school experiential education faculty will approach preceptors and pharmacy or institution leadership to develop and implement educational programs that provide opportunities for students to learn and practice the profession. The expectation will be, in addition to the school requirements for the course, that there will be requirements of the program at the site. The following discussion is meant to spur ideas for development of CQIs and staff involvement that can increase opportunities for improving quality.

Many colleges of pharmacy have one or more committees to evaluate and assess the curricula and the programs offered. The committee or task force that most likely will affect preceptors is one that functions in the department of pharmacy practice or the office of experiential education. The administration and faculty in the practice department are most concerned with student education at the practice sites and availability of opportunities for students to apply their knowledge. The committee may be called the CQI committee, or the Experiential Education Programs Assessment committee, or a variety of other names. The responsibilities of this committee are to evaluate and assess practice sites, preceptors, and the program at a site. Members will be looking at technology, the number of people involved in the program, the education of the individuals involved in the program, and opportunities available for student education (see **Box 6-10**).

BOX 6-10. Continuous Quality Improvement—What a School Requires

Site

- Meets accrediting body standards
- Is accessible to students and faculty
- Maintains and advances technology in pharmacy practice
- Maintains and provides technology to students in order to meet the demands of the course (computer, etc.)
- Provides administrative support for student training programs

Preceptor

- Is licensed and meets appropriate state board standards for providing education to students
- Has a plan for education program to meet needs of students and school
- Has technology available to meet the needs of the college or school of pharmacy
- Has appropriate education or experience to provide the opportunities to meet goals and objectives of course maintained by college or school
- Has a contingency plan in place to cover primary preceptor absences
- Is internally motivated to provide educational opportunities
- Is responsive to representative from college or school
- Is involved in professional organizations, community, or public health activities, advancing the pharmacy profession

Site Program

- Provides students with multiple opportunities to meet course goals and objectives
- Involves multiple disciplines or the community in educational program
- Promotes and incorporates the use of technology for student learning
- Encourages group discussions and peer interaction, which are common among all students
- Provides reflection opportunities for students and preceptors
- Provides access to institution amenities as applicable

These committees take into account assessments from learners, assessments from peers, personal interactions with the preceptors at the site, and involvement of preceptors in college or school educational programs. Most schools and colleges have learners complete an evaluation form that includes information about the site, the preceptor, or the program. The schools then share the information contained in these forms directly with preceptors in a way that provides anonymous feedback. One way a school or faculty member may evaluate the quality of a site is by the interaction of the preceptors with the school as this may be a reflection of how the preceptors also treat the learners. Schools do not perceive as quality sites for placement those sites and those where preceptors continuously back out of commitments to learners. Consider all of the criteria listed in Box 6-10 when developing your educational program.

The organization involved in educating may already have a CQI definition in place, which is appropriate to use. If there is not one in place there are several tools from the American Society of Quality that can be used to develop a quality improvement plan. These include the Plan-Do-Check-Act (PDCA), the Six Sigma, and Total Quality Management.

The PDCA model, also called the Deming Cycle, is a workable model for pharmacy education.[16] Implementing the PDCA method of quality assurance is one way to create ongoing quality assessment. The PDCA model can be used at the start of a project or when redefining projects such as educational programs. If your institution has a longstanding educational program in place, initiating the PDCA method could provide important information about the program. This model fits well when PLANning for change. The DO component of this tool is to run a test of the change model, or a pilot study. Then CHECK the results of the piloted change. Finally, ACT on the information that has been collected to PLAN the implementation. This cycle will become your ongoing quality improvement model.

Whether you as a preceptor or a team from the pharmacy department decide to develop a quality assurance or continuous improvement program, you should include four elements: peers, learners, other healthcare professionals, and the pharmacy school (see **Box 6-11**). Peer assessment comes in

the form of those around you who may also work with learners or who view your interactions with learners. Developing a form similar to one used by human resources departments may provide an indication to you of how others view your performance with students. You should also complete a preceptor self-evaluation each year to see how you think you are doing. Other healthcare providers will be able to provide feedback to you because they have had interactions with learners and may have watched your interactions. The feedback they provide may help improve the program logistically or programmatically. Getting feedback from other health professionals may help to draw them into the program either as a preceptor or as an individual who helps you educate learners. Feedback from the college about the educational program is central, but may be provided in various ways.

BOX 6-11. Sources of Assessment and Evaluations of the Site, Preceptor, and Program

- *Peer assessment:* Provides you with information that you cannot see yourself about the training program and about your actions. Develop an evaluation form such as those used for performance evaluation.
- *Student feedback:* May provide you with both constructive feedback and comments that may cause you to think twice about taking students, but in the end may help improve the performance of the site and those interacting with students. Tip: After reviewing the final grade for the rotation with each student, ask for candid feedback related to the best experiences during the rotation and those that have opportunities for improvement.
- *School feedback:* May come from student evaluations or from interactions with the school. The feedback may be valuable in helping change the logistics of the rotation at the site, or in changing students' perception of the rotation and the site.
- *Feedback from other health professionals:* Can provide feedback about student performance as well as logistical assessment of the program provided by your site.
- *Patients (if applicable):* May discuss a student's performance or how a student was introduced to them. Gather patient evaluations of students, logistics, and what a patient would like to see in a program, whenever possible.

PRECEPTOR PEARLS

Developing an ongoing quality program for your practice improves outcomes for patients, students, and the institution.

Pharmacy school assessment is not always limited to—but may only be provided in—the form of student evaluations. School assessment committees may also provide an annual or periodic review by sending a faculty member to the site to look around and inquire about the program. This assessment by the college or school may just be a phone call to get your input. There are over 100 colleges and schools of pharmacy in the United States, and each will operate differently. When seeking to participate with the college program, ask how the school will evaluate you and what quality assurance measures the college has set forth.

Finally, although not all rotations involve direct patient care, those that do could include patients in their quality assurance or improvement measures. Patients can provide much helpful feedback regarding student performance, including how they, as a patient, were treated. Many patients are eager to participate in a program, especially an educational program, in which they feel they are getting one-on-one attention. Some patients may be hesitant to participate, but even those who are not interested can provide feedback on why they do not wish to participate. Consider developing a CQI program as an extension of your practice.

Involving All Pharmacy Staff Members, Other Healthcare Professionals, and Patients

It is important to involve all members of the pharmacy department, not just one individual pharmacist, in learner education. Familiarize staff members with learners' goals and objectives as well as the roles that everyone will play. Staff involvement can help reduce the workload and stress that often result from the introduction of learners into a pharmacy. This is one of the most important aspects in starting or continuing an experiential training program.

PRECEPTOR PEARLS

Remember that all members of the pharmacy department are involved in learner education. You can spread out the workload and lower your stress level by involving other staff.

Anyone who is going to be involved in learner education (see **Table 6-2**) is a preceptor in some capacity, and everyone should recognize this fact. It may come in the form of recognition from the college, the pharmacy, or a larger institution. It increases the commitment to the program, and students become more accepting when that recognition exists. Who can be a preceptor is an age-old question, and is defined by the ACPE and many state boards of pharmacy. In most instances, a pharmacist should be considered the preceptor of record. However, many other licensed health professionals are considered the preceptor for various types of experiences where pharmacists are not involved full time. Learners are going to be in contact with many people who will provide them with various amounts of knowledge, practice of skills, and opportunities for learning. At the very least, the school should recognize pharmacists and technicians in the pharmacy as participating in the program.

PRECEPTOR PEARLS

Involving other pharmacy staff and other healthcare professionals in the educational programs improves the quality.

Pharmacy technicians often spend much time with students teaching them the technical skills they need to be pharmacists. This is especially true of the IPPEs. Often, learners do not view the technician's role as valuable to them; in this case, the primary preceptor should point out the important role the pharmacy technician plays in his or her education. Technicians need to know what their own roles and duties are in student education. The technical staff can educate students in the day-to-day operational skills required in the pharmacy, including filling carts, delivering medications, the IV room function, and the daily ordering processes. For learners who have never been in a pharmacy before, assigning them duties with the head technician for a period of time is not unreasonable. When learners have been exposed to the technical duties required, they can move on to the duties of a pharmacist.

All pharmacists and other staff who are going to be involved with learners need to understand their own roles in the training as well as the goals and objectives of the students (see **Box 6-12**). It is a good idea to set up an organizational meeting and an annual meeting for those taking responsibility for learners. Announce which schools will be sending learners. This meeting should address the kind of learners who will be assigned to the site. All schools of pharmacy have implemented introductory practice experience courses; consequently, not all students who attend a site for practice skills are in their last year.

BOX 6-12. Guidelines for Involving Others in the Experiential Education Program for Pharmacy Interns

DO:

- Involve as many people as possible in the program
- Explain roles and authority to the person you are enlisting to help
- Explain that the learners are taking a course
- Discuss the goals and objectives of the course
- Explain the learner responsibilities to the site
- Include involved individuals in the orientation program for learners
- Schedule their time with learners
- Provide a copy of the manual and evaluation tool used by the college
- Get feedback from involved individuals on learner performance
- Provide those involved with feedback from learners about their performance

DO NOT:

- Leave learners in the office or work area of anyone who is not involved
- Ask someone to help without providing the list of dos

TABLE 6-2. *Responsibilities of Those Involved in Learner Education*

Role	Topics to Teach
Preceptor	• Course logistics • Rounding • Journal clubs • Projects • Feedback and assessment • General practice skills: patient care or nondirect patient care • Presentations • Acclimation to the profession, site, and other healthcare professionals • Integration of knowledge and skills in practice
Other pharmacists	• General practice skills: patient care or nondirect patient care • Journal clubs • Presentations • Acclimation to the profession, site, and other healthcare professionals • Integration of knowledge and skills in practice
Technicians	• General practice techniques and skills • Acclimation to the site • Introductions • Rules and regulations
Management/ administrative staff	• General business and operational/management skills • Business rules and regulations • Acclimation to the site
Physicians	• Precepting • Diagnosis of disease • Procedures • Physical assessment • Communication and professional interaction • Integration of knowledge and skills in practice • Collaboration
Nursing	• Logistics • Orienting to contents and location of charts • Specific patient care • Physical assessment, medication administration, and management logistics • Collaboration
Laboratory staff	• Exposure to the laboratory procedures • Lab panels at the site • Normal and abnormal results • Drugs that interfere with testing
Patients	• Development and improvement of communication skills • Understanding of disease outcomes • Medications • Drug interactions • Adherence

Plan a course with the pharmacists, technicians, and any other healthcare providers who will be involved in the educational program; involve the college of pharmacy experiential education leadership, if necessary. In the end, you should develop a schedule that includes the days and activities as well as who will be providing or overseeing those activities.

In a community setting, it is mostly the pharmacists and technicians involved in the educational programs, but they do not have to be the only contacts for learners. Ask physicians who work closely with the pharmacy if students can spend some time in their offices. If the community setting is a chain store, include the district manager in the educational functions. Many of the district managers already precept student rotations, and they enjoy the opportunity to mentor students.

There are many other settings where learners are educated as well: pharmaceutical industry mail order companies, veterinary practice settings, home infusion services, and nursing homes. Various professionals and technical staff at each of these sites can become involved with learner education.

Involving many people in education programs (especially people who often come into contact with students) is good practice, even if for logistical purposes only. The more that people know about pharmacy education, the better they will accept the learners, and the greater the likelihood is of having a quality educational program that will enable learner success.

PRECEPTOR PEARLS

Experiential education is an opportunity not just for preceptors but also for an entire pharmacy staff to improve practice and advance the profession.

CQI should not be a scary process. It requires planning, integration of assessment, and a team effort. When putting together an experiential education program, ask peers, staff, and other health professionals to become involved. Discern how they would like be involved before you start planning, and integrate them into the plan. Have a plan in place for educational opportunities and continuous improvement weeks before learners arrive. Make sure that information on the program is both outgoing and incoming. Gather assessment often and from multiple sources. Learn from the information gathered and improve and build your program with each learner you precept.

Summary

Experiential teaching is the foundation for learners as they start the practical learning process. Initially, the preceptors should assess the learner's preferred learning style and recognize that introductory students are early in their didactic education, so they should provide experiences to build on as they move into the intermediate and advanced experiential experiences. The problem solving triad, which is a systematic method for problem solving, is a foundational skill that can be applied to many different settings. Learners should receive feedback on both the learning experience and interpersonal skills through the learning experience. Experiential education is not just an opportunity for preceptors but for an entire pharmacy staff, in addition to other healthcare professionals, to improve practice, advance the profession, and provide the learner with a well-rounded experience.

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Chapter 7

Administrative Aspects of Practice

Stephen F. Eckel and Jason E. Glowczewski

Chapter Outline

Rationale for Providing a Learning Experience in Pharmacy Administration ... 120
Principles to Teach About Pharmacy Administration ... 121
Activities for Learners to Accomplish During an Administrative/Management Rotation ... 127
Benefits for Precepting a Learner in the Administrative Aspects of Pharmacy Practice ... 128
Summary ... 129

Leadership and learning are indispensable to each other.

John F. Kennedy

The mediocre teacher tells. The good teacher explains. The superior teacher demonstrates. The great teacher inspires.

William Arthur Ward

Learning Objectives

- Provide a rationale for offering rotations within your organization for learning about the administrative aspects of practice.
- Identify common principles that can be taught during an administrative experience or to include during other rotations.
- Implement activities that will help learners integrate the lessons and principles taught during their experiential experience.
- Describe how working with learners within an administrative setting can be mutually beneficial.

Rationale for Providing a Learning Experience in Pharmacy Administration

Pharmacy administration is an exciting area of professional practice. Individuals who work in these areas continuously balance management and leadership principles throughout their work areas. Through demonstrating leadership to the medication-use process, pharmacy administrators have the opportunity to teach learners about the healthcare organizational components of strategic planning, human resources, informatics, project management, operations, supply chain, clinical management, and legal and regulatory compliance related to their job responsibilities. In addition, learners will obtain working knowledge in project management. Exposing learners to this environment not only gives them an appreciation of the importance of these responsibilities to the overall functioning of the department but can also introduce individuals to this exciting sector of pharmacy.

This chapter will describe the rationale for precepting student and resident learning in this environment and provide examples of what areas one can expose to learners and activities they can complete during this rotation.

Students

The Accreditation Council for Pharmacy Education (ACPE) requires each accredited school of pharmacy to provide introductory and advanced hospital or health-system pharmacy rotations for all student pharmacists.[1] The introductory experience needs to be completed within the first 3 years of their educational training, and the advanced hospital rotation needs to be scheduled in the last academic year. Certain administration-focused competencies need to be met during those rotations, including managing human, physical, medical, informational, and technological resources and managing medication-use systems. Although anyone can precept these learning experiences, it is not uncommon for pharmacy administrators to lead these rotations, since the functions that are used to provide these exposures are activities all managers are responsible for leading. When this teaching experience is assumed by pharmacy leadership, these rotations take on a focus or flavor of pharmacy administration due to the preceptor's interests and daily activities.

In addition to these specific competencies, there are activities that ACPE mentions for student participation, including:

- Preparing and compounding extemporaneous preparations and sterile products
- Working with the technology used in pharmacy practices
- Interacting with pharmacy technicians in the delivery of pharmacy services

These can only be accomplished through the learner spending time in the operations of the pharmacy department, a critical function and daily responsibility of many pharmacy administrators.

Besides these introductory and advanced hospital rotations, many institutions also offer electives in pharmacy administration. These are usually precepted by the director of pharmacy or other members of the senior leadership team. As opposed to the advanced hospital rotation, which is completed by all students, this elective experience is usually chosen by a student who is focused on health-system pharmacy administration as a career. Many directors of pharmacy offer and precept these rotations, because they are able to find student pharmacists who have a passion for leadership and management responsibilities. In addition, it could lead to future employment or a residency position for the learner.

Residents

ASHP postgraduate year 1 (PGY1) residency standard requires activities that expose residents to administration during their training.[2] In the new accreditation standard, one competency area is leadership and management. Some of the educational goals under the objective of Demonstrate Management Skills (R3.2) include:

- Explain factors that influence departmental planning
- Explain the elements of the pharmacy enterprise and their relationship to the healthcare system
- Contribute to departmental management

Each organization that has an ASHP-accredited PGY1 pharmacy residency will need to identify learning experiences in order to teach residents and have them demonstrate competency in these goals. Although there could be various methods used to accomplish this standard, the predominant one is to integrate a pharmacy administration learning experience into the residency. These rotations are traditionally led by the director of pharmacy or members of their leadership team, with a balance of discussion topics, observations, and projects.

Due to the requirement for pharmacy administrators to precept and lead administrative learning experiences, they will need to develop competent precepting skills in order to provide an excellent learning experience. This includes developing a rotation that integrates teaching on certain topics and providing observational experiences within a pharmacy department. This should be done while demonstrating the connection of all functions to the patient and delivery of care services and communicating the excitement of working at a broader level to advance the medication-use system.

Principles to Teach About Pharmacy Administration

Administrative-, leadership-, or management-focused rotations are excellent learning situations for developing the ability to view pharmacy from a high level, learn operations, and build the skills necessary to become a practice leader. Yet these skills can be cultivated from any practice experience in any setting. Many pharmacy clinicians already possess a strong administrative skill set that has established them as informal leaders and will further enable them to become formal leaders within the organization later in their careers. Integration of administrative concepts in many rotations often occurs organically, and exposure to this variety of topics can aid the learner in developing a bigger picture view of pharmacy practice.

Leadership

Leadership is a universal skill that preceptors model, often without realizing it, on a daily basis. In John Maxwell's book, *The 21 Irrefutable Laws of Leadership*, he states, "You can find smart, talented people who are able to go only so far because of the limitations of their leadership."[3] This is why it is important for us

to model leadership skills in everything we do. The opportunity to teach leadership skills in all types of experiential rotations exists in all learning experiences, not just administrative rotations. Furthermore, as preceptors incorporate leadership into their formal or informal syllabi, this teaching enhances their own leadership ability. If all of our rotations can be successful in doing this, patient care will be improved and our profession will advance.

Many resources exist for developing and learning leadership. Leadership is taught through didactic learning and group discussions, and then integrated through practice-based experience with leadership situations and opportunities that can be designed and created. For the didactic component, preceptors can use the wide array of books, published articles, and online references to cover the didactic component or even assign the learner to research leadership and present back to the preceptor or a group. For learners with a significant understanding of leadership, placing them in situations where they practice this skill may be most appropriate. Opportunities to facilitate leadership include assigning the learner to facilitate change by implementing a project, leading a staff meeting, leading a topic discussion, facilitating a daily huddle within a department and through teaching the skills to others. The layered learning practice model, where experienced clinicians teach postgraduate year 2 (PGY2) residents who teach PGY1 residents that teach a variety of students, not only promotes delegation of responsibility and teaching to others but is also an excellent opportunity to refine leadership skills. Consider applying this model in any practice setting from administration to clinical experiences.

PRECEPTOR PEARLS

Consider applying a layered learning practice model in any setting to increase understanding of the topic in the learner and develop teaching and leadership skills.

Management

The study of management can broadly begin with managing one's self and managing one's time. Managing self before managing others can be a useful concept for all learners, as can discussions about success through personal productivity. Books such as Stephen Covey's *Seven Habits of Highly Effective People* and David Allen's *Getting Things Done* are among the most popular in an already popular category of self-improvement books available.[4,5]

Contrasting leadership and management is a useful tool in differentiating these important skills as well as describing why they are both important. With roots in the industrial revolution, management techniques and philosophies have evolved considerably over time. Focusing discussions and experiences around management competencies is one approach to teaching and building this skill set within learners. There are many unique management competencies, but organizations often filter and prioritize based on the values and culture of an organization or even department. Management competencies that may be useful in the pharmacy setting include but are not limited to:

- Accurate self-insight
- Achieving results
- Building business relationships
- Building and developing talent and trust
- Coaching
- Continuous learning
- Customer focus
- Delegating to others
- Driving for results
- Establishing strategic direction
- Executive presence
- Facilitating change
- Innovating
- Managing conflict
- Quality management
- Process improvement

The above examples for management competencies can be a foundation for management discussions, facilitated learning, assessing the strength of the department and management team, and evaluating the strengths and weaknesses of the learner. The experience gained though projects and management-related activities are one way to develop management competencies. Projects and activities are covered in the final section of this chapter.

Areas of Focus in a Department of Pharmacy

It is difficult to lead or manage if one does not understand. Understanding the day-to-day operations, workflow, procedures, and major challenges encountered in the variety of areas of a pharmacy is fundamental to the learner's ability to make any assessment or decision about the area. When general knowledge of the practice area has been gained, the learner can process the business model and greater impact of the service to the organization and to patient care.

Inpatient

For learners with minimal to no experience in an inpatient hospital setting, learning workflow, procedures, technology used, staffing patterns, delivery practices, communication methods, and more can form an important foundation before beginning administrative activities. Embedding the learner in the inpatient setting with an experienced pharmacist or technician is a commonly used approach to bridge this information gap.

Sterile Products

Sterile compounding is an important area of inpatient pharmacy practice that deserves special attention. Learners with short rotations might not always compound medications for patient use, but for learners with longer experiences or rotations with a focus on inpatient pharmacy or sterile compounding, it may be a great experience. In an institutional setting, for compliance with U.S. Pharmacopeial Convention (USP) <797> guidelines, it is critical that learners go through the pre-established facility-mandated training and competency procedures before compounding a medication for patient use. Learners also provide valuable feedback for process improvement by asking why certain procedures are required or by sharing best practices observed at other sites.

Clinical Programs

Learners will benefit not only from the experience and knowledge they gain on clinical rotations but also from discussion and awareness of why clinical programs exist and how they are periodically justified. The challenges of healthcare reform and constant pressure to reduce the cost to deliver high quality healthcare will require practicing clinicians and leaders alike to justify programs through the collection of data. Programs that reduce cost, increase quality, and improve patient satisfaction may not only survive but thrive. Discussion of the calculation of productivity for clinical team members, successes in improving quality, patient satisfaction, reducing readmissions, and decreasing length of stay through the work of pharmacists or pharmacy technicians will add big picture perspective to the learner's viewpoint.

Other important discussions include pharmacy practice models and their benefits and drawbacks, scope of services, prioritization of clinical activities, use of pharmacy technicians and student pharmacists to advance patient care, and benefits associated with board certification and PGY2 residencies.

Delegation of traditional clinical programs, such as conversion of intravenous to oral dosage forms, renal dosing, pharmacokinetic dosing, and others are common to clinical experiences. With more pharmacist clinicians documenting interventions in the permanent medical record, teaching these same skills to the learner, as well as expectations for co-signature and population health management and quality monitoring, should become part of the learner's orientation. The administrative challenge is to ensure the quality, integrity, and consistency of the clinical notes and increase the quantity of the documentation by the clinicians.

PRECEPTOR PEARLS

Make clinical documentation a competition to incentivize learners to complete required clinical documentation and increase documented events, notes, or other important activities.

Remember to discuss the financial model behind acute and ambulatory care clinical services.

Ambulatory

Ambulatory care pharmacy practice (i.e., clinic-based) is a growing segment of health-system pharmacy and a well-established area outside of the hospital setting. Similar

to administrative-focused acute care clinical objectives, understanding the role that ambulatory pharmacy fills in an organization beyond traditional retail pharmacy is vital. For the purposes of this discussion, ambulatory pharmacy can be broken down into outpatient dispensing, medication therapy management, clinic-based services, and specialty pharmacy.

The significance of any of these settings may expand well beyond financial contribution (drug revenue and billing for clinical services) into patient satisfaction, readmission reduction, improving access to quality improvement initiatives, or assisting patients with financial barriers. Reviewing the financial model of each ambulatory program as well as current threats to its success is an important part of learning. Students on ambulatory rotations or administrative-focused rotations can assist with program marketing through the development of new marketing techniques, materials, websites, and physician or nurse education to increase referrals. Learners can generate and analyze reports to discover top referring physicians, patients who need assistance with compliance, or even medications that are not profitable.

Specialty pharmacy is a rapidly advancing and growing area driven by many new high-cost drug therapies that require more intensive monitoring and have controlled distribution. Learners with exposure to this unique area of pharmacy practice will benefit from understanding the process required to gain access to these pharmaceuticals, analysis of outcomes data from patients, reimbursement models and challenges, quality assurance programs, patient monitoring techniques involving telepharmacy, and more. Opportunities for learners in this area range from becoming trained to work in an established specialty pharmacy to building a business plan to implement the new service.

Purchasing/Supply Chain

Pharmacy purchasing and supply chain maintenance are becoming their own specialty area for pharmacists and pharmacy technicians alike. Learners on administrative or general pharmacy practice rotations must understand the complexity of ordering and managing drug shortages. In many facilities, drug ordering and inventory control no longer focuses on looking at shelves but more on managing complex information systems and setting reordering thresholds. Although learners may not have the time or ability to perform this task, exposure to computer-assisted ordering will broaden their understanding of operations. Similarly, the management of drug shortages and ordering from a multitude of drug companies directly rather than just the wholesaler is yet another opportunity for the learner to gain experience. Learners can jump in and assist with shortages by calling manufacturers, wholesalers, or other facilities in an attempt to procure critical medications.

The preceptor should stress proactive management as well as clear communication about stock levels and contingency plans with therapeutic substitutions. Learners can draft appropriate communications to pharmacy staff, physicians, or other departments. Discussion opportunities include topics about grey market vendors, preventing and detecting counterfeit drugs, and management of vendor access and relationships. Other topics include understanding of wholesalers, buying groups, and the various models used to purchase medications and structure contracts.

Formulary Management

Formulary management presents an opportunity for discussion and application of a health-system formulary to be a good steward of financial resources. In many hospitals, the drug budget represents 60 to 80 percent of the total department budget; thus, formulary savings justifies existing and occasionally additional staff. Preceptors must ensure that learners have knowledge of what the formulary is as well as a mechanism for tracking interventions that yield cost savings. From a broader formulary standpoint, assign medication class reviews on drug information or management rotations to evaluate opportunities to reduce costs while maintaining high quality patient care. Institutions that are more aggressive are evaluating some topical, oral, or intravenous medications that lack documented clinical benefit in the short term and are removing them from formulary or restricting their access for a defined time period. Learners are at the forefront of analyzing and presenting these efforts. Learners can also attend pharmacy & therapeutics committee

meetings and understand what goes into preparing an agenda and leading the meeting.

Budget Preparation

Learners may find themselves on administrative rotations during a season of budget preparation, though any month can provide an opportunity to review department performance to expected budget. Assisting with variance analysis, contingency planning, or defending a variance are all opportunities to involve learners. Discussion of a departmental budget also presents the opportunity to discuss personal financial planning with the learners. Budgeting or related topics may be completely new to learners, especially those who had limited lectures in pharmacy school. Opportunities for discussion about budgeting and a wide array of financial topics that benefit learners include:

- Capital expenses versus operating expenses
- Researching a budget variance
- Explaining the budget variance versus revenue
- Inpatient medication billing and diagnosis-related group billing
- Outpatient billing and Medicare J codes
- Bundled payments
- Uncompensated and charity care
- Contractual service adjustments for insurance companies
- Full time equivalents and their calculation
- How productivity is measured and calculated

Strategic Planning

Similar to budgets, there is often a predefined time of year reserved for strategic planning, but the process and the current plan can be discussed at any time of the year. This will present an opportunity to review department performance to this plan or assign new projects to learners to achieve strategic planning objectives. In preparation for strategic planning, assign learners to access ASHP's *Pharmacy Forecast*, which is a valuable tool to assess trends over the next several years.[6] They might also reach out to other hospitals to benchmark an area of interest against what others are doing. Strategic planning also offers an opportunity to discuss the broader healthcare market and trends in technology, consumer preference, and new reimbursement models with learners.

Value-Based Purchasing and Patient Satisfaction

The Centers for Medicare & Medicaid Services (CMS) program, value-based purchasing, is a CMS initiative to increase quality and patient satisfaction while driving down healthcare costs. Patient satisfaction, patient outcomes, processes of care, and efficiency are all metrics that comprise the reimbursement program and each dimension represents a unique opportunity for the department of pharmacy to improve these outcomes. Alignment of pharmacy strategy with these initiatives is an opportunity for learners to either directly participate in improving scores or observe the strategy involved in using clinical pharmacy to improve hospital quality and revenue. The value-based purchasing program offers a unique paradigm shift from quantity of care (fee for service) to quality of care (fee for value) and ASHP's *Pharmacy Forecast* consistently outlines this as a key opportunity for pharmacy involvement.[6]

Patient satisfaction opportunities for learner involvement are growing. Pharmacy team members and learners can improve patient satisfaction with medication education (what the medication is for and side effects), pain management, and understanding the purpose of each medication prior to leaving the hospital. Learners can directly educate patients and recommend more appropriate pain therapies. Using learners to educate nurses about medication adverse effects, relative potency of narcotic analgesics, and the importance of these patient satisfaction metrics are another team-based approach where they can offer significant contribution.

Process of care measures such as heart failure discharge instructions or appropriate venous thromboembolism prophylaxis 24 hours before and after surgery are measures that learners can directly impact through patient care rounds. Other areas include education of health professionals or reviewing and updating standard order sets. Learners can only affect processes of care when they know the measures, goals, and documentation

standards. Outcomes measures, such as 30-day mortality of acute myocardial infarction or heart failure patients, can initially seem difficult to impact, but learners who recommend evidence-based therapy have an opportunity to affect this challenging measure.[7] For the final dimension of value-based purchasing, align and orient learners to efficiency measures such as Medicare spending per beneficiary. Learners can influence this measure through formulary interventions, antimicrobial stewardship, and intervening on pharmacotherapy to improve quality and reduce length of stay for the patients.

PRECEPTOR PEARLS

Use learners to engage with the patient as a great learning opportunity and to improve patient satisfaction scores and other key quality metrics to assist your facility with achieving value-based purchasing outcomes.

Integrating value-based purchasing goals into learner orientation can help to achieve alignment and emphasize the importance of pharmacy involvement with this relatively new frontier.

340B Program

The Health Resources and Services Administration's 340B drug-pricing program is a widely used program to save on the cost of medications for eligible healthcare facilities. Learners at a facility with this program in place have the ability to learn about program structure, financial value to the organization and its patients, as well as the complex nature of compliance with this evolving program. Facilitated discussions may cover topics such as the impact on ordering consistency to meet national drug code match requirements, third-party resources and advisors for 340B, and enforcement of this standard by the pharmaceutical industry. Although a discussion about 340B is a starting point, learners can become actively involved through program audits or assisting with managing a data accumulator for virtual inventories.

Data Analytics and Revenue Cycle

In administrative rotations in particular, discuss the pharmacy revenue cycle and its impact on pharmacy operations. Learners may become actively involved in this process through billing, auditing, and even Lean transformation activities to decrease billing cycle time. The ability to analyze data is a complementary skill often covered on administrative rotations and usually involves basic instruction on commonly used spreadsheet or database software. Learners can assist pharmacy administration in the identification of billing issues. The learner may detect insufficiently reimbursed or erroneously unbilled medications.

Pharmacy Information Systems

Information systems are playing a greater role in pharmacy practice by facilitating therapeutic interchanges, allowing pharmacists to document in the patient's medical record, and detecting or preventing common drug-drug interactions, drug-allergy issues, and more. Due to the importance of electronic systems, unplanned downtime often becomes a crisis. Other important topics include consistency of naming medications within the various information systems, difficulty and importance of having all databases matching each other, and the linkage of billing to drug set-up. Learners typically use information systems or observe them on general hospital or other clinical rotations. Pharmacy information system experiences offer learners a more in-depth opportunity to use, design, and improve the system.

Pharmacy Practice Advancement and Pharmacy Organizations

Pharmacy and health-system administrators are frequently involved at many levels with local, state, and national organizations. These organizations are increasingly welcoming learners onto committees to build engagement for future involvement as a pharmacist. Discussion opportunities include:

- Limitations on pharmacy practice imposed by boards of pharmacy and partnering with the board to revise rules or with pharmacy organizations to advocate for legislative change

- Building a peer network as a factor for future success
- Basics of networking at pharmacy meetings and events
- How to give back to the profession by volunteering for pharmacy organizations, reviewing papers, publishing, etc.

Involve learners in pharmacy organization meeting attendance, committees, project work, and other activities that promote pharmacy practice advancement. Involvement with organizations not only sets the stage for future interactions but also allows the learner to build a larger network for learning best practices or even for career opportunities in the future.

PRECEPTOR PEARLS

Involve learners in pharmacy organization meetings, committees, projects, and other activities to support pharmacy practice advancement.

Activities for Learners to Accomplish During an Administrative/Management Rotation

It is important to ensure that the learning experience is more than observational. There are various activities that reinforce pharmacy administration during the rotation. Not only will that improve the experience for the learner but will also provide useful material that can be helpful to the preceptor and pharmacy department.

Business Plans

Involve learners on administrative rotations and other rotations with development of business plans, as this can be a great tool for learning about administration and very useful to the department. There remains variation between colleges of pharmacy requirements for involving student pharmacists with business plans, yet business plans will allow pharmacists to expand practice, create jobs, and advance patient care. Ideally, assign learners to real business plan projects that at least have a chance of viability.

Learners will generally need a template for the business plan, which is often organization specific in its format. After presenting the template, a discussion of the basics of business planning, such as revenue generation; quantifying all expenses; performing a strengths, weaknesses, opportunities, and threats (SWOT) analysis; return on investment; selling the plan to senior administration; and having an exit strategy can be covered. Learners can also present the business plan to a group of pharmacy leaders for feedback on content as well as presentation style. Learners, especially residents, with a long-term presence at the facility may then have the opportunity to implement the plan and lead the effort.

Competencies

Pharmacist and pharmacy technician competencies can be completed by learners to validate understanding in an area but can also be used for staff development. Through researching and designing a competency, learners can further hone skills in a particular subject area, and the learner can gain leadership and communication skills and confidence by leading the effort and reviewing the competencies with staff. Align competencies with business plans so that if a learner implements a business plan to offer a new service, they can further be responsible for developing the applicable competencies. In larger health systems, competencies may be a system-wide effort that offers learners the opportunity for large-scale impact. Multihospital competencies challenge learners by considering every hospital's unique perspective and may even require travel to different facilities to validate practices, observe workflow, or perform the education about the competency.

Policies and Procedures

Policies and procedures offer yet another complementary project to business plans or competency development but they are often stand-alone tasks. Learners come to a facility with a fresh perspective and can either find weaknesses or areas to strengthen with a process from an operational or accreditation

standpoint. Regardless of the need for the new policy, writing a policy or procedure is not a task that learners are initially well prepared to undertake, and repetition will improve ability. A situation, background, assessment, and recommendation (SBAR) approach to creating or revising a new policy offers a structured format for the discussion. Learners are often unaware of the reason or situation requiring the policy, so providing the situation and background should allow the learner to review pertinent literature and form an assessment and recommendation for the new or revised policy.

Audits

Although audits are not usually an activity that learners want to do, they can be made exciting by preceptors by driving for results and uncovering the unexpected. Audits are opportunities for learners to develop a deeper understanding of processes and process failure. Although learners often provide the bulk of the labor to collect and analyze data for the audit, involve the learner in the design of the audit as well as presenting results. Audits can become an unexpected opportunity for poster or platform presentations for learners at state or national pharmacy conferences. Different types of audits suited to learners include:

- Potential narcotic theft or diversion
- Charge reconciliation between a financial and clinical system
- Performance between two groups with medication reconciliation accuracy
- Completeness of medication histories
- Intervention documentation of pharmacy team members
- Compliance to a specific policy or procedure
- USP <797> or <795> documentation compliance

Audits further offer the opportunity for a learner to develop business plans, competencies, or policies and procedures to address deficiencies with compliance and facilitate change.

Quality Improvement and Lean Methodology

Exposure to quality improvement and Lean-projects will benefit learners as the national focus on quality and affordable healthcare continues. Organizations looking to reduce costs and improve efficiencies are frequently turning to methods such as Lean and Six Sigma. Involve learners in new or ongoing quality improvement projects or assign them a mini-improvement project after brief introduction to Lean or Six Sigma tools.

Benefits for Precepting a Learner in the Administrative Aspects of Pharmacy Practice

In addition to fulfilling the accreditation requirements of ACPE and ASHP and completing various projects, there are additional benefits when precepting an experience in pharmacy administration.

Organization

Many health-system pharmacies are scrambling to increase the number of learners they educate because they become important extensions of the clinicians for increasing the quantity of care provided at a reasonable cost to the organization. Administrative learners offer the opportunity to progress more rapidly on strategic projects and use low- or no-cost labor to conduct quality and performance improvement projects. Learners in this arena further offer a potential candidate pool for open clinical and distribution-based positions, as well as residencies. The organization benefits by bringing in learners who are from the area, as it demonstrates a commitment to the school of pharmacy and the community, and the learner may become a long-term employee.

Preceptor

Administrative preceptors often have to put in significant effort at the beginning of the rotation to teach the learner about the organization, processes, and fundamental leadership and management topics. In return, the

preceptor receives a highly skilled learner who functions as an assistant in implementing strategies to achieve the organizational goals. Preceptors who bring learners to high-level meetings often face a slight risk that the learner could say or do something inappropriate, yet the preceptor may be viewed in a new and elevated light for being an administrator or leader that is proficient enough to teach and mentor others.

Learner

Benefits to learners should not be overlooked, though some might find it hard to quantify if they are interested in other facets of pharmacy. Learners on administrative rotations gain access to high-level decision makers who can either directly employ the learner in the future or recommend the learner to peers. Students on advanced pharmacy practice experiences in administrative areas gain visibility with individuals that either currently offer administrative residencies or know peers who do. In many ways, all pharmacists are leaders and may go on to supervise others in some capacity during their careers. The experiences gained on administrative rotations are some that are not easy to teach, such as dealing with conflict, holding others accountable, and facilitating change. Learners who carefully observe and become involved in the administrative rotation may learn skills they never expected—ones that last throughout their career.

Careers in Administration

Pharmacy students should be educated on pathways for careers in administration. Unfortunately, this is often not done during pharmacy school, either because faculty are unaware or because students do not know the level of their own interest until they are on an administrative rotation. Similar to clinical residencies, there are 2-year ASHP-accredited residencies in health-system pharmacy administration. These can be combined with a master's degree or just offered as a residency. It is important for students to recognize that even if they choose not to pursue a pharmacy administration residency they can still be successful pharmacy leaders and managers of an organization. Identifying people who have the passion, talent, and leadership skills and with encouragement from preceptors, and communicating these recognized talents to the learner, is very important.

Summary

This chapter provides an overview of the rationale for precepting learners in pharmacy administration and provides suggestions on how to make it an optimal experience. However, nothing can replace organization, communication, and excitement when developing and delivering a learning experience. Pharmacy administration is a dynamic and exciting position to work in, with multiple areas in which to specialize. Being able to demonstrate this to learners will assist in increasing the number of individuals who might find this the goal of their future professional practice.

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Chapter 8

Precepting in New Practice Models

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Chapter Outline

Definitions and Prevalence of Various Pharmacy Practice Models 132
Making Residents and Students "Work" at Work 132
Residents and Students as Indispensable Pharmacist-Extenders 134
Performance Management Strategies for Preceptors and Learners 141
Summary 142

Knowledge is of no value unless you put it into practice.

Anton Chekov

Learning Objectives

- Define the three most prevalent pharmacy practice models.
- Identify strategies and incentives for expanding the patient care responsibilities of learners.
- Review tactics for successful and efficient integration of students and residents into your practice model.
- Describe expanded patient care activities successfully performed by students and residents.
- Identify potential patient care activities of students and residents in emerging practice settings.
- Discuss proper tools necessary for ongoing student and resident feedback.
- Explain best practices related to the management of students and residents in various practice settings.

Definitions and Prevalence of Various Pharmacy Practice Models

A pharmacy practice model reflects how people, processes, technology, and products are deployed to ensure the ideal use of medications and optimal patient outcomes. The goal of the 2010 Pharmacy Practice Model Initiative (PPMI) was to improve patient health by developing and disseminating pharmacy practice models that maximize the use of pharmacists as direct patient care providers.[1] The Summit recommended that all patients deserve the services of a pharmacist and every pharmacy department should develop a plan to divert pharmacist resources away from activities that can be done by well-trained pharmacy technicians and toward medication management services. Furthermore, the Summit's proceedings stated that in optimal practice models, pharmacists will accept responsibility for both clinical and distributive activities.

Definitions describing the attributes of different pharmacy practice models were proposed prior to the PPMI Summit (see **Table 8-1**).[2,3] The 2009 ASHP survey of pharmacy practice on monitoring and patient education established a benchmark for how commonly these models were employed in practice. The most common was the patient-centered-integrated model (64.7%) followed by drug-distribution-centered (24.4%) and clinical-specialist-centered model (10.9%).[2] The *patient-centered-integrated model* is defined as a clinical generalist model with duties including oversight for both clinical and distributive activities. There are many aspects that must be considered when designing a practice model, and most will not fit squarely under one definition but rather will be a hybrid of the three. Whatever practice model is employed, it is essential that the experiential training program mirror the site's practice model.

Making Residents and Students "Work" at Work

Health systems are under increasing pressure to improve quality of care while simultaneously reducing costs. Pharmacy departments are being asked to do more to show value without increasing resources. Students and residents can be an important source of

TABLE 8-1. *Definitions of Pharmacy Practice Model Attributes*

Pharmacy Practice Model	Definition
Drug-distribution–centered model	Mostly distributive pharmacy with limited clinical services, little proactive involvement with the patient care team
Patient-centered-integrated model	Clinical generalist model with limited differentiation of roles; nearly all pharmacists have distributive and clinical responsibilities, proactive engagement with interdisciplinary team, exhibit a high degree of ownership of the medication-use process
Clinical-specialist–centered model	Separate distributive and clinical specialist roles, focus on clinical activities, little responsibility for medication-use process or delivery systems

Source: See References 2 and 3.

manpower in these challenging times, helping complete projects that support health-system and department goals that simultaneously meet educational objectives. A barrier to accomplishing this work may be their mindset or that of their preceptors. Preceptors may need to rethink their teaching methods and, likewise, students may need to develop self-directed learning skills. Experiential learning should be an active rather than a passive activity. Pharmacy departments can ill afford to offer unproductive shadowing experiences or have preceptor time taken away from patient care activities. Ensuring optimal medication outcomes for patients is the primary goal for pharmacists and their students and residents. Discussions and learning activities should be centered around actual patients rather than a list of esoteric topics on a rotation description. Projects should support department and health-system goals. The test for assessing the value of student projects is asking the question "If I didn't have a student to complete this project, would it still need to be done by a pharmacist?"

PRECEPTOR PEARLS

Pharmacy departments that treat students and residents as important customers can enhance their motivation.

The value of the work produced by learners engaged in direct patient care cannot be understated. Pushing learners out of their comfort zones offers incentives well beyond the knowledge gained. Projects may be presented as posters, clinical pearls, or platform presentations at meetings contributing to the profession's body of knowledge. High-quality projects allow preceptors to provide references for students that speak to their involvement in patient care activities. Mentoring relationships are established that continue beyond the experiential training period.

Organizations that provide pharmacists the opportunity to precept students and residents may provide their staff benefits well beyond the personal satisfaction of giving back to the profession. The presence of an experiential training program may be an important factor in recruiting and retaining talented pharmacists. The patient care activities performed by students and residents may provide preceptors valuable time to work on projects that improve patient care. The preceptor's clinical expertise and penchant for teaching and mentoring may lead to preferential practice site assignments and scheduling. In organizations with career development plans, work done with students may help pharmacists build their portfolios for advancement. Finally, stipends paid by schools of pharmacy to departments hosting pharmacy students may be used preferentially to support registration and travel to professional meetings, board certification, or other professional development activities for preceptors.

Well-trained and oriented pharmacy students can provide healthcare organizations a wide range of routine, but very important, patient care services. These may include but are not limited to: medication reconciliation, patient education, new drug evalu-

ations, medication-use evaluations, anticoagulation management,[4] intravenous (IV)-to-oral (PO) conversion,[5] and drug dosing based on kidney function. Relying on students and residents to provide these services on a consistent basis necessitates a constant supply of highly motivated learners. That motivation can be enhanced by pharmacy departments that honor and treat students as important customers. Offering an exceptional learning environment is an excellent first step toward attracting this type of talented student. These students should be considered potential recruits for the organization's residency program, if one exists. Your residents should be seen as individuals auditioning for roles as future colleagues. Most schools of pharmacy provide practice sites, some feedback about the site, and/or preceptor performance. However, some organizations may elect to conduct customer satisfaction surveys of students independent of their schools so as to ensure the needs of learners are met (see **Appendix 8-1**).

Finally, marketing the unique opportunities afforded students in your practice model can also help attract highly motivated students and differentiate your practice site from other organizations. Many schools of pharmacy now offer preceptor showcases that allow students the chance to learn more about experiential learning sites. Create marketing tools (brochures, flyers, a website, etc.) with information about your health system, practice model, teaching philosophy, rotation offerings, and preceptor credentials. If a showcase is not offered, look for other opportunities to interact with students face-to-face at state or local pharmacy meetings or residency showcases/clubs. Shadowing experiences over the summer or holiday break may be another alternative. Any opportunity to interact with students should be viewed as an opportunity to generate interest and demand for your practice site.

Residents and Students as Indispensable Pharmacist-Extenders

The rapid expansion of pharmacy schools over the last decade has caused great angst about how to meet the additional demand for experiential training sites especially in hospitals and health systems. In his 2011 Harvey A. K. Whitney lecture, Ashby highlighted the approach taken by Wayne State University College of Pharmacy "to make pharmacy students indispensable to the training site."[6] He highlighted common elements of successful programs (see **Box 8-1**). Unfortunately, seeing students as indispensable may remain a novel idea. Pharmacy departments may be reluctant to expand the number of rotations offered because their pharmacists are too busy with larger, more complex patient loads to be burdened with the additional responsibility of teaching and evaluating students and residents. The belief that students and residents must learn to take care of patients through time-consuming topic discussions, readings, and extensive modeling persists. In contrast, the view that the act of taking care of patients effectively stimulates learning, exposes knowledge deficits, and potentiates the desire to learn is growing. This is not to say that topic discussions have no place in experiential learning; however, the primary goal of each day should be to accomplish all necessary patient care activities. Finally, concerns about taking time away from patient care activities to complete student orientation and training may increase reluctance to taking on more students.

BOX 8-1. Common Elements of Successful Experiential Training Programs

- Strong commitment from the program to match the students' interest with the scheduled experiential experience
- Support for students to make career decisions earlier in the educational process
- Availability of educational tracks for experiential training that match the students' desired career path
- Availability of a traditional track for students who have not yet identified a career path and desire a variety of experiences to support their career goals and objectives
- Extended rotational experiences within the desired career track for students at a single site

Source: Excerpts used with permission from Ashby DM. Permission granted. Harvey A.K. Whitney lecture. *Am J Health-Syst Pharm*. 2011;68:1497–1504.

Making students an integral part of your practice model makes excellent orientation and training essential. This on-boarding process will almost certainly require more resources than traditionally received when students move nomadically from site to site each month. In an effort to decrease administrative burden, many healthcare organizations are now scheduling students for two or more rotations. This is referred to as *block scheduling* and *longitudinal* or *sequential experiential training*.[7-10] Core elements of traditional orientation, such as obtaining computer access, name badges, completing necessary competency assessments, safety and privacy training, collecting intern licenses and immunization records, and guided tours of the hospital and department remain a given. Because of students' extended engagement, particular attention must be devoted to providing them the direct patient care skills for which they will be responsible. Making sure student pharmacists know the organization's drug use policies and procedures (therapeutic interchange, collaborative drug therapy management, IV-to-PO, etc.) and patient monitoring processes, and that they receive institutional review board (IRB) training and are introduced to key staff members can quickly make them an effective part of the department and patient care team. The goal should be to assimilate student pharmacists into the fabric of the department just as you would a newly hired pharmacist.

PRECEPTOR PEARLS

Teams of learners will act symbiotically in caring for more patients, expand care, and effectively decrease practitioner-to-patient ratios.

Incorporating students and residents into a site's practice model has been recognized as an ASHP best practice.[11] *Layered learning* is the term used to describe an educational approach where a supervising or attending pharmacist oversees a patient care team composed of resident practitioners and student pharmacists also known as pharmacist-extenders. *Extenders* are defined as individuals whose work is delegated and overseen by a pharmacist, which allows the pharmacist to accomplish work that otherwise would not be possible.[10] Many health systems believe that teams of learners will act symbiotically in caring for more patients, expand care, and effectively decrease practitioner-to-patient ratios. For these teams to work efficiently, it is necessary to clearly define the roles and delegate tasks in a way that is congruent with each level of learners' abilities.

Cleveland Clinic Florida (CCF), a 155-bed academic medical center with 36 pharmacy staff members, including two PGY1 residents, implemented a layered learning model with the goal of providing comprehensive pharmacy services to all patients in a cost-neutral manner.[12] Over a 3-year period, CCF more than doubled the number of advanced pharmacy practice experience (APPE) students from 98 to 226 by increasing the number of affiliation agreements they had with pharmacy schools from two to five. A primary focus was on obtaining medication histories and providing discharge counseling to all patients. After a 1-day orientation, students were assigned a set number of patient beds daily. The supervising pharmacist modeled the patient care activities and then facilitated and coached each student in the behaviors. After proficiency was demonstrated, students were then allowed to work on their own with intermittent preceptor evaluation. Assessments included direct observation or patient interviews to appraise medication understanding after counseling. The preceptor or attending pharmacist reviewed and cosigned all students' notes and interventions. CCF noted improvements in their Hospital Consumer Assessment of Healthcare Providers and Systems score in the "communication of medication" domain that correlated with implementation of the practice model change. Patient care loads decreased from 30:1 to 7:1 and pharmacist interventions increased 58% using students as pharmacist-extenders.

The pharmacy department of the Cleveland Clinic has offered sequential APPE experiences (SAEs) since 2008 of 4- or 5-month duration in addition to traditional month-long rotations.[8] Advantages of this approach reported by preceptors included less time spent orienting students (up to 16 hours less

per month) and attracting more motivated and residency-bound students. Students also reported less training and orientation time, which represented approximately an additional 1 to 2 weeks of rotation time gained over a 4- or 5-month SAE. Other benefits noted by students included more time spent with pharmacy residents, the ability to work on more in-depth projects, and forming relationships with preceptors and other patient care team members.

Saint Luke's Health System of Kansas City (SLHS) has established a patient-centered integrated pharmacy practice model. Preceptors include clinical generalists and specialists who provide patient care on days, evenings, and weekends. Saint Luke's hosts 4–6 APPE students per month from four schools of pharmacy. Four blocks of 2- or 3-month rotations are offered (see **Table 8-2**). Orientation for all pharmacy students in SLHS is centralized at the main campus (Saint Luke's Hospital) on the first day of the rotation block; however, student rotations may occur at one of the community hospitals. Originally, APPE students worked Monday through Friday day shifts. Common student complaints were that they did not have enough time with their preceptor because the preceptor worked an evening shift or was off after a weekend shift. The APPE student schedule was altered to reflect the integrated practice model and included 12-hour shifts and one weekend shift per 4-week rotation. Students received 1 day off for every two 12-hour shifts worked and 1 day for each weekend shift. Compensatory days off were subject to approval by their primary preceptor. This approach not only allowed preceptors' and learners' schedules to be in sync but also expanded the capacity to provide patient care services such as medication teaching and medication reconciliation into the evening and weekend hours.

Additional benefits of block scheduling and sharing students among campuses were the ability to perform medication-use evaluations across the health system and standardizing pharmacy practices and protocols. Expanding the experiential training program reinforced the pharmacy department culture of working as a pharmacy system rather than individual entities.

The practice model at The University of Kansas Hospital (TUKH) is an integrated, team-based, patient-centered model.[1] Pharmacists are divided into clinical divisions and pharmacy teams consisting of attending pharmacists, pharmacy residents, and pharmacy students on clerkship rotations. Pharmacy teams are responsible for providing daily comprehensive medication reviews; therapy interventions based on identified drug-related problems; pharmacy-to-dose protocols and medication reconciliation and discharge education as needed.

Residents and students are a key component to the success of the practice model at TUKH, as the organization supports over 120 clerkship students and 17 residents annually. To successfully integrate learners into the practice model, a proactive focus on training and competence has been implemented. Clerkship rotation students begin the training process in the spring prior to the start of the rotation calendar year. Training begins with an orientation to rotations at the medical center. The orientation includes an overview of rotation expectations, students' role in patient care, chain of command, logistics (door codes, printer locations, contact numbers, etc.) and, finally, required rotation activities. In addition, training also includes online modules for the electronic health record (EHR). An online examination over training material is required. Although rotation preceptors provide a quick overview of any rotation required activities and expectations, the training has occurred prior to the first day of the rotation and is applicable to all rotations at the medical center. Finally, failure to review online modules or failure to attend the orientation by the assigned due date will result in cancellation of medical center rotations.

This model of proactive group training for clerkship students is beneficial for a number of reasons. First and foremost, it holds the learner accountable and responsible for preparation prior to rotation arrival. Second, it ensures that all learners are receiving the same information and understand the expectations related to patient care. Students are expected to 'hit the ground running' on the first day of the rotation. Finally, it relieves preceptor orientation burn out. Students should be able

TABLE 8-2. *Saint Luke's Hospital Department of Pharmacy*

Student Master Schedule

	Name (School)	UMKC APPE	UMKC IPPE 2 wk	KU APPE	KU IPPE 4 wk	Creighton APPE	Drake APPE	Other	Total
	May		2		2				4
BLOCK 1	June Orientation	2		2			1		5
	July	2		2			1		5
	August	2		2			1		5
BLOCK 2	September Orientation	2		2		1			5
	October	2		2		1			5
	November	2		2		1			5
BLOCK 3	January Orientation	2		2			1		5
	February	2		2			1		5
BLOCK 4	March Orientation	2		2		1			5
	April	2		2		1			5
Total		20	2	20	2	5	5		54

APPE, advanced pharmacy practice experience; IPPE, introductory pharmacy practice experience.

Maximum = 5 APPE students per month (2 KU, 2 UMKC, 1 Creighton, Drake, or other). Students will be assigned in blocks; blocks 1 and 2 = 3 months, blocks 3 and 4 = 2 months. Orientation will occur on the first business day of the starting month for each block of rotations. Rotations may occur at Saint Luke's Hospital on the Plaza or Saint Luke's Northland Hospital.

Source: Courtesy of Saint Luke's Hospital of Kansas City, Department of Pharmacy, Kansas City, Missouri.

to navigate rotations within the health system easily as the role of students does not differ from rotation to rotation.

As hospital employees, residents begin the training and orientation process in June as opposed to traditional 12-month residency year. This extended 13-month employment allows residents more time to acclimate to the organization, obtain licensure in a timely fashion (no later than July 1), and prepares residents for the challenging year ahead. The three additional weeks are spent in a vigorous training program intended to prepare any resident, regardless of their previous experience, for success at an academic medical center (**Appendix 8-2**).

Resident training includes a group orientation process that covers a wide variety of topics and tools. These topics include orientation to the organization and department, robust EHR training, pharmacy distribution and practice model, antibiotics, medication safety, customer service training, and transitions of care. Two additional unique training tools utilized during the orientation process include review of standards of practice and a critical thinking/clinical skills workshop.

This orientation process prepares residents to be a functioning member of the interdisciplinary and pharmacy team. Residents are responsible for acting as a pharmacy representative while rotating through a series of patient populations. Residents are also expected to adequately staff both clinical and distributive shifts and may be asked to take on additional staffing shifts depending

on department need. A robust, consistent, proactive training plan encourages and allows learners the opportunity to be a contributing member of the patient care team. It increases engagement and provides accountability for expectations.

Community and outpatient pharmacies provide unique learning environments for learners in both the pharmacy curriculum and community pharmacy residency programs. As practices in this area have evolved, so have the experiences of learners. As learners leave the learning environment, they will be entering a practice environment that combines traditional dispensing with enhanced patient care services. It is optimal to provide learners with quality experiences that can increase their exposure to establishing and maintaining patient care services. Learners should be challenged to learn the essential skills for practice and how to function as a pharmacist. One example activity used in an outpatient pharmacy setting involves the student completing a final check on filled prescriptions under the direct supervision and additional check of the precepting pharmacist. Few students indicated an opportunity to practice this essential step before becoming a licensed, practicing pharmacist. This skill allows the learner to fully assess the patient and prescription. It also provides the student with a skill that will be used in practice.

PRECEPTOR PEARLS

Learners can provide a meaningful impact on patient care through the creation of new or enhanced services.

Evidence exists that learners, particularly student pharmacists, can provide a meaningful impact on patient care in community and outpatient pharmacy settings through creation of new or enhanced services and transitional care services.[13-17] As mentioned previously, when learners are exposed to a new practice site, quality learning time can be consumed with orientation to the site and rotation.

Studies have shown that the usefulness of learners at a site is dependent on their knowledge of and comfort level with the pharmacy's workflow and technology. Students should be oriented to the pharmacy's process related to prescription processing, evaluation, dispensing, and counseling.[14] This process can take a significant amount of time for both the preceptor and learner and, therefore, a streamlined process should be considered to utilize time more efficiently. At the Medical University of South Carolina (MUSC), preceptors within the academic medical center's network of outpatient pharmacies collaborate on student scheduling, training, orientation, tours, and other shared responsibilities. MUSC serves as a practice site for numerous introductory pharmacy practice experience (IPPE) students, APPE students, and resident learners throughout the academic year. As the demand has increased for quality IPPE and APPE rotations, the student assignment rate has significantly increased. Students assigned to the MUSC outpatient pharmacies are centrally managed through a coordinating preceptor who handles scheduling of all precepting pharmacists for the academic year. The coordinating preceptor also schedules learners to cover the various services and activities of the medical center, including but not limited to general medication distribution, pharmacy inventory and drug management, pharmacy management, pediatric medication discharge program, adult medication discharge program, clinic-based medication service, medication therapy management service, and immunization program. Orientation is conducted simultaneously for all learners at the beginning of each rotation block. Presentation sessions are held twice throughout the rotation experience. Learners are required to present on a variety of topics to the group. Presentation sessions provide an opportunity for frequently encountered issues or drug-related inquiries to be examined in-depth by the learner and then presented to the group. Preparation for the presentation sessions require the learners to reflect on issues or questions that arise during the rotation. The sessions are designed to allow the sharing of new information to both the learners and the preceptors. Although the session is a learning opportunity for all involved, it especially provides education for the preceptors who may encounter issues and questions but lack the time to thoroughly research the question.

Keeping consistent with accreditation standards, IPPEs should provide the student with a dispensing-focused experience, while APPEs should move the student to a patient-centered model of practice.[16] To achieve this in the community and outpatient pharmacy practice sites, expose the learner not only to specific medications but to a comprehensive overview of the whole patient. Many services offered either within community pharmacies or outpatient pharmacies affiliated with medical centers can provide learners with a patient-centered experience. These services could include medication therapy management, discharge, or medication reconciliation processes. However, preceptors may require creativity and thinking outside the box of how a learner can integrate into patient care services. It is important to provide flexibility in the role of the learner, particularly related to students. Students will come to APPE rotation with a variety of experiences and most may come with work experience in the area of community practice already. IPPEs and APPEs can be tailored to the specific student depending on their work experience or interests.

Similar to block scheduling of learners as discussed earlier, learners may benefit from longer pharmacy practice experiences, particularly in a community or outpatient setting where services are being implemented. Kassam and colleagues[14] identified that a longer (8 weeks versus 4 weeks) structured enhanced community APPE within a grocery store pharmacy setting at the same site (versus multiple sites within the same chain) showed a significant increase in the number of interventions learners identified, including a significant increase in the number of drug-related problems identified, the amount of follow-up care provided, and an increase in the resolution or prevention of drug-related problems. In addition, preceptors participating in the enhanced APPE saw greater benefit to both their patients and the overall pharmacy's progress in offering patient care services. Preceptors also documented improved satisfaction of participating in the APPE.[14]

At The Ohio State University, the Partner for Promotion (PFP) program was started to create active learning experiences for APPE students to enhance their knowledge and skills in developing and implementing patient care services within community pharmacies. The intent of the PFP was also to increase the quality of community APPE sites for The Ohio State University College of Pharmacy. The PFP coupled community pharmacy faculty with community pharmacy preceptors and provided a formalized training program to expose students to the creation of a patient care service. The program had an impact not only on the student participants but on the pharmacy preceptors through training and mentoring. The program's long-term goals are to further develop the implemented patient care services and provide community pharmacy experiences for students rich in patient-care activities.[17]

In keeping with the PPMI discussed earlier, it is crucial for pharmacists to not only work interprofessionally but also intraprofessionally. Academic medical centers that provide both inpatient and outpatient learning environments are excellent models for integration of inpatient and outpatient services through the use of pharmacists and other pharmacy staff. This model is an excellent example for learners to see the importance of communication across transitions of care. Many examples exist within medical centers. At MUSC, learners can experience patient care from the inpatient perspective and also the outpatient perspective. Many of the outpatient services, particularly those related to discharge and transitions of care, provide the learner with the full scope of patient care as the patient transitions from inpatient to outpatient. Programs that provide such an opportunity include solid-organ transplant, pediatric discharge, and adult discharge. Each of these programs incorporates clinical pharmacists from both the inpatient and outpatient settings, clinical pharmacy specialists covering a particular service as well as other healthcare professionals providing care to patients (nurses, physicians, physician assistants, nurse practitioners, social workers, and case managers). Learners involved in processes related to these programs are provided a rich environment to see firsthand interprofessional collaboration. In addition, learners are afforded the opportunity to learn specifics related to the particular program. The learners can share information among the

inpatient and outpatient services and improve the overall process of the service or program within the medical center.

Walker and colleagues[15] from the University of Michigan College of Pharmacy utilized an APPE in transitional care to improve the productivity of a transitional care planning program at University Hospital. University Hospital of the University of Michigan is a 550-bed tertiary care academic teaching hospital where four general medicine services participated in transitional care planning and involved the participation of a clinical pharmacist preceptor and students. The team that involved the student increased productivity from assessment and interviews of approximately 10 patients per day to 15 to 20 patients per day, depending on the service covered. Although an economic assessment was not conducted, other studies related to contributions of students have shown both reduced patient readmissions and emergency department visits.[15] In particular, APPE students and their preceptors have a documented impact on cost avoidance in both inpatient and outpatient pharmacy settings. Researchers at Northeastern University found that APPE students and their preceptors saved over $900,000 through the course of one APPE cycle.[18] Per post-rotation assessments, students were evaluated and were able to effectively conduct the medication-related transitional care activities at discharge. Based on this information, academic medical centers can consider the role of students in the discharge process, including the transition of care to outpatient pharmacies.[16]

Although it may not be possible for preceptors to address all areas of practice, they should take the role of developing skills that learners can implement at any practice setting in the future. Preceptors should provide learners with the opportunity to not only see but also assess processes in place. Of particular importance, preceptors can highlight transitions of care among different areas of practice. Transitions of care and interdisciplinary care can be seen within institutions, across institutions, and within practices or services. Learners should be given the opportunity to work with interdisciplinary teams, when available, as this will enhance their ability to work with others when they enter into practice.

Opportunities for student participation in community and outpatient pharmacy medication therapy management (MTM) programs have grown since the introduction of formalized MTM programs in the United States.[19] In addition, curricular enhancements within colleges of pharmacy have provided a more formalized training of learners who are more prepared to deliver MTM within the community setting.[20,21] Hata and colleagues[13] at Western University of Health Sciences implemented a MTM project for APPE students to provide MTM services in collaboration with supervising preceptors at community pharmacy practice sites. Learners involved in the MTM project practiced and enhanced the skills learned in the pharmacy curriculum. Students were able to demonstrate the effectiveness of a MTM program, even if the preceptors were not currently offering the service. Student recommendations were forwarded to the patient's primary care provider. Of those recommendations, 75% sent to the prescribing provider were accepted, which promotes interprofessional collaboration with the community pharmacist. Students' involvement in the MTM process at community and outpatient pharmacies would be dependent on state regulations regarding intern pharmacists. Students participating in MTM services would require direct supervision and oversight by a licensed preceptor.[13] MTM programs can provide a rich learning environment for students, allowing them to incorporate drug knowledge, patient interviewing skills, communication skills, patient assessment, development and implementation of a plan, follow-up, and monitoring. Students are also afforded the opportunity to interact with the prescribing provider to make recommendations utilizing evidence-based medicine. Outpatient pharmacies affiliated with a medical center can provide an enhanced learning opportunity for students, especially if they have access to multiple sources of health information, including laboratory data, recent visit notes, and hospitalization information. This information allows students to conduct a much more thorough assessment of patients.

Similar to MTM, immunization training has been incorporated into most pharmacy school curriculums in the United States. Student involvement in immunization programs can provide a benefit to the practice site. Although not specific to community practice, the University of Oklahoma College of Pharmacy integrated students on IPPEs and APPEs into campus-based influenza clinics.[22] This provided students with a direct patient care experience and made a significant impact on the university's vaccination program. Learners can be utilized for immunization clinics or immunization at request within the pharmacy. At MUSC, learners complete an immunization training program as part of the curriculum. After being on APPE, learners gain additional hands-on experience early in the rotation schedule through observation of the precepting pharmacist. The learner is then coached through administration of an immunization. This provides students with a direct patient care activity. They then become the primary immunizer under direct supervision of the precepting pharmacist. State laws vary regarding the use of pharmacy interns in the immunization process.

An alternative or additive approach to creating indispensable pharmacist-extenders is focusing learner activities. These activities are recommended to provide direct patient care[23] and the inclusion of learners in direct patient care activities can yield significant benefits to individual practice sites and organizations.[24] Activities such as conducting medication histories, performing medication reconciliation, discharge counseling, answering drug information questions, IV to PO switches, duplicate therapy, drug-drug interactions, allergy evaluations, and therapeutic drug monitoring can all be accomplished by pharmacist-extenders. When learners are encouraged to actively address drug-related problems, rather than passively observing preceptors, they accomplish higher-level interventions.

PRECEPTOR PEARLS

Utilizing learners as pharmacist-extenders can assist in meeting PPMI goals.

Other approaches to consider when creating an environment that supports the indispensable pharmacist-extenders include advanced independent rotations (AIPs). AIPs are rotations where residents spend a set period of time, usually 3 to 4 weeks, understanding and learning the patient population and then spend the second half of the rotation acting as the primary clinical pharmacist. Rotation activities and expectations mirror those of a clinical pharmacist. In addition, the resident is expected to co-precept any students during the learning experience with support. This assists in meeting the PGY1 residency objective, R5.1.3, which requires the resident to demonstrate skill in the four preceptor roles employed in practice-based teaching: direct instruction, modeling, coaching, and facilitating.[25] The resident will have an assigned preceptor for the AIP rotation who is expected to meet on a regular basis with the resident to discuss specific patient cases and provide feedback as needed. The main difference between this rotation and others is that it is focused on residents learning independent practice—a real life experience as a pharmacist.

Numerous studies have indicated that pharmacists' active involvement in patient care and the medication-use process benefits outcomes in health systems and the community.[26,27] Utilizing learners in the appropriate capacity as pharmacist-extenders can assist in meeting PPMI goals such as moving pharmacists closer to patients and developing a plan to allocate student time to drug therapy management services.[1]

Performance Management Strategies for Preceptors and Learners

Although the design and assignments of experiential rotations will differ from organization to organization, strategic incorporation of learners on rotations is ideal. One way to accomplish this goal is to evaluate pharmacist-to-patient ratios. Although there is no set number in the literature, many organizations have landed on a ratio of 1:30 for acute care and 1:18 for critical care. For example,

for a medical intensive care unit (MICU) service, you may have an average pharmacist-to-patient ratio of 1:26; this may not be enough to secure an additional resource. However, strategically placing a resident or student on this rotation the majority of the year will allow the pharmacist support to manage such a number. Furthermore, evaluating the months that a learner is on rotation may also be key—you may want to have a PGY2 critical care resident earlier in the residency year and then move to a PGY1 and then to a student. This ensures the highest level of competence in the learner and further support for the preceptor. Some questions to consider when developing a strategy for rotation assignments are:

- What pharmacist responsibilities can be delegated?
- What service lines need additional support?
- What patient populations are underserved?

Providing feedback effectively, a core function of precepting and a critical step in the learning process, is perhaps the most essential skill for preceptors. Feedback is an ongoing process—a formative one that presents nonjudgmental information that helps the learner build on the foundation of skills and behaviors.[28]

There are many factors that influence the quality of feedback that are discussed briefly here. *Environmental factors* include the frequency, place, and timing of feedback. *Interpersonal factors*, including personalities and styles of both the preceptor and learner and the relationship between them, can be barriers if they are not given appropriate consideration.[29-32]

A neutral, private setting is always the safest environment for feedback. Learners appreciate uninterrupted one-on-one time and the feeling of importance they get when preceptors take time to talk. Timing of feedback is also critical; it should be on a daily and regular basis and provided as close to the event as possible. Finally, feedback content is crucial. There is a need for specificity in feedback. The lack of specificity, even with positive feedback, does not give the learner actionable information for either reinforcing or improving behavior.

Although providing effective feedback is extremely challenging, there are a number of actions that can be implemented to assist in supporting preceptors. Consider the development of a mandated, pre-rotation meeting for residents. This meeting will allow preceptors to review goals, objectives, and performance evaluations and set the stage for how and when feedback will be provided. Consider the use of a personality assessment tool or communication style tool for residents to educate preceptors on adapting feedback to best address resident personality. One recommendation is *Now, Discover Your Strengths*.[33] Finally, create a forum where more experienced preceptors can share knowledge and specific scenarios. This kind of open forum is rewarding to preceptors and enriching to the program.

Although the majority of hospitals in the United States are not academic medical centers, community, rural, and critical access hospitals can still tap into the potential of using learners as pharmacist-extenders. No matter the type of practice setting, learners should have opportunities for independent management and some level of autonomy as they will quickly transition into the role of pharmacist on graduation. These newly minted practitioners can take their transferable skill set honed during their experiential training and become levers to nudge pharmacy practice model initiatives forward at their future places of employment.

Summary

Students and residents become indispensable to your pharmacy practice model when enabled to work as pharmacist-extenders. Evidence supports the value of learners providing essential patient care. Effective and efficient training and orientation is crucial for successful integration of the learner into your department. Block or sequential experiential training as well as extended duration rotations are useful in minimizing the on-boarding processes. Viewing learners as customers rather than burdens will ensure demand for your practice site and a reliable supply of pharmacist-extenders.

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APPENDIX 8-1. SLHS Student/Resident Education Satisfaction Survey

SLHS Student/Resident Education Satisfaction Survey

As part of our continuing effort to evaluate and improve the quality of SLHS education programs, we ask you to complete this satisfaction questionnaire for this quarter. Your answers are your opinions and are kept confidential.

Facility

Which SLHS facility was your educational experience located?

- Saint Luke's Hospital of Kansas City
- Saint Luke's Northland
- Saint Luke's South
- Saint Luke's East - Lee's Summit
- Saint Luke's Home Care
- Crittenton Children's Center
- Anderson County Hospital
- Cushing Memorial Hospital
- Hedrick Medical Center
- Wright Memorial Hospital
- Saint Luke's Medical Group

Other (please specify)

OVERALL:

	Strongly Disagree (1)	Disagree (2)	Neither Agree Nor Disagree (3)	Agree (4)	Strongly Agree (5)	Do Not Know
1. SLHS is meeting my educational needs.						

APPENDIX 8-1. continued

SLHS Student/Resident Education Satisfaction Survey

EDUCATION:

	Strongly Disagree (1)	Disagree (2)	Neither Agree Nor Disagree (3)	Agree (4)	Strongly Agree (5)	Do Not Know
2. SLHS provides adequate hands-on experience in patient care for my level of training.						
3. SLHS program curriculum is appropriate for my education.						
4. SLHS physical facilities are conducive to learning.						
5. SLHS computer services, including equipment and IT support, are adequate.						
6. My SLHS educational experience helps prepare me to pass my board examinations or other tests/evaluations (if applicable).						

APPENDIX 8-1. continued

SLHS Student/Resident Education Satisfaction Survey

FACULTY/PRECEPTOR:

	Strongly Disagree (1)	Disagree (2)	Neither Agree Nor Disagree (3)	Agree (4)	Strongly Agree (5)	Do Not Know
7. The SLHS faculty/preceptor provides frequent feedback to improve my performance.						
8. SLHS faculty/preceptor is competent and skilled.						
9. The faculty/preceptor provides me with evidence based daily training.						
10. SLHS faculty/preceptor members are effective teachers.						
11. The SLHS faculty/preceptor creates an atmosphere where I feel free to ask questions, initiate discussions, or express opinions.						
12. SLHS faculty/preceptor is accessible.						
13. The SLHS faculty/preceptor values diversity (i.e., age, background, culture, experience, gender, language, race, etc.).						

OVERALL:

	Strongly Disagree (1)	Disagree (2)	Neither Agree Nor Disagree (3)	Agree (4)	Strongly Agree (5)	Do Not Know
14. I would recommend SLHS for training.						

15. When exploring career opportunities, would you seriously consider SLHS?

Yes　　No

Comments

APPENDIX 8-1. continued

SLHS Student/Resident Education Satisfaction Survey

16. Do you have any suggestions for SLHS to better meet your educational needs? (Please be specific.)

17. Do you recall a faculty member/preceptor who did an excellent job during your educational experience? (Please identify and explain.)

Demographics:

What is your student/resident category?

- Nursing
- Clinical Laboratory Science
- Phlebotomy
- Advanced Imaging
- X-ray
- Pharmacy Student
- Pharmacy Resident
- Chaplain
- Psychology Intern/Social Work
- Medical Student
- Anesthesia Assistant Student
- Resident
- Fellow
- Other (please specify)

Demographics, contd. (optional)

APPENDIX 8-1. continued

SLHS Student/Resident Education Satisfaction Survey

How many years have you trained at SLHS?

- Less than 1 year
- 1 year
- 2 years
- 3 years
- 4 years
- 5 or more years

How do you identify yourself?

- White (not of Hispanic origin)
- Black or African American
- Hispanic/Latino
- American Indian or Alaskan Native
- Native Hawaiian/Pacific Islander
- Asian
- Two or more races
- Other (please specify)

What is your current age?

- Under 21
- 21 to 29
- 30 to 39
- 40 to 49
- 50 to 54
- 55 to 64
- 65 and over

Gender:

- Male
- Female

Contact Request

If you would like to be contacted by our education administrators regarding any issues or concerns, please complete the following:

Name:

Phone Number:

Best time to reach you:

- Daytime (8 a.m.–5 p.m.)
- Evening (after 5 p.m.)

Thank you for your time and feedback.

Source: Courtesy of Saint Luke's Hospital of Kansas City, Department of Pharmacy, Kansas City, Missouri.

APPENDIX 8-2. Resident Orientation Schedule

2015 Resident Orientation Schedule

Monday	Tuesday	Wednesday	Thursday	Friday	Sat	Sun	Shift Times
							C1/A- 0700-1500
8-Jun	9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun	D1 - 1430-2230
Hospital Orientation	Take Action/Safety Training	Customer Service Training	Pharmacy Conference Room	Pharmacy Conference Room			D2 - 1000-1800
			0830-0900 - Overview	0800-0930-Tour			IV Room 0800-1600
			0900-1200 - Admin	0930-1030-Operations			PAT - 0800-1630
			1200-1300 - Lunch	1030-1100-McKesson			MRT shift hours* page tech you are with
			1300-1400 - SharePoint	1100-1145-Pre-Pack			- MRT HC1 - 0800-1630
			1400-1500 - HR Benefits	1145-1230-Lunch			- MRT MRF - 1300-2130
			1500-1600 - Lab coats/scrubs	1230-1300-IV Rm Ops			- MRT IM - 0800-1630
				1300-1600-IV Rm RPh			- MRT IM2 - 0800-1630
15-Jun	16-Jun	17-Jun	18-Jun	19-Jun	20-Jun	21-Jun	ED - 1430-2230
Pharmacy Conference Room	Library G024	Library G024	Library G024	Pharmacy Conference Room			2EB - 1000-1800
0830-1000-SOP Overview	EPIC classrom training - Day 1	EPIC classrom training - Day 2	0800-1200 Transitions of Care	0800-0930 Critical Care			1E,2EA,3EA,4E,5E - 1430-2230
1000-1130-Abx,lab,kinetics	0800-1600	0800-1600	1200-1300 Lunch	0930-1100 Cards			Day Teams, Weekends - ask preceptor
1130-1230-Lunch			1300-1400 Pulmonary Hypertension	1100-1200 Lunch			
1230-1300-Amb care			1400-1600 Workflows	1200-1330 Peds			
1300-1330-Investigational				1330-1400 SOT			
1330-1500 -Projects				1400-1430 Internal med			
1500-1600-Reporting & Outlook				1430-1500 General			
22-Jun	23-Jun	24-Jun	25-Jun	26-Jun	27-Jun	28-Jun	
		IV Training	IV Training	A Training			HSPA
Pharmacy Conference Room	Westwood Multipurpose Room	MRT Training (MRF w/Amy)	2EB Training	PAT Training			HSPA
0830-1200 - Med Safety	0800-1700 Pharmacy ACLS	2EB Training	PAT Training	MRT Training			HSPA
		PAT Training	Team 4A Shadow	Team 2A Shadow			HSPA
1200-1330 - Lunch		Team 3A Training	Team 3A Training	Team 3A Training			PGY1 IM
1330-1400 - KUH Organization		Team 3EA Training	Team 3EA Training	Team 3EA Training			PGY1 IM
1400-1600 - Competency Time		Team 2B Training	Team 2B Training	Team 2B Training			PGY1 Cards
		Team 2EA Training	Team 2EA Training	Team 2EA Training			PGY1 Cards
		Team 1B Training	Team 1A Training	Team 1A Training			PGY1 Peds
		Team 1E Training	Team 1E Training	Team 1E Training			PGY1 Peds
29-Jun	30-Jun	1-Jul	2-Jul	3-Jul	4-Jul	5-Jul	
A Training	C1 Training	D1 Training	D1 Training				HSPA
Team 1A Shadow	Team 4A Shadow	Team 2A Shadow	Team 3G Shadow				HSPA
PAT Training	PAT Training	ED Shadow	Team 5C Shadow	Holiday - Residents Off			HSPA
MRT Training	2EB Training	PAT Training	Retail Shadow				HSPA
Team 3EA Training	Team 3EA Training	Team 3EA Training	Competency Day				PGY1 IM
Team 3A Training	Team 3A Training	Team 3A Training	Competency Day				PGY1 IM
Team 2EA Training	Team 2EA Training	Team 2EA Training	Competency Day				PGY1 Cards
Team 2A Training	Team 2C Training	Team 2B Training	MRT Training (IM2 w/ Jessica)				PGY1 Cards
Team 1E Training	Team 1E Training	Team 1E Training	PAT Training				PGY1 Peds
Team 1B Training	Team 1A Training	Team 1A Training	A Training				PGY1 Peds
	ED Training	STAFF C1	STAFF 2EA				PGY2 Crit Care
6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul	
D1 Training	Rainbow 39 Shadow	A Training	D1 Training	IV Room Training			HSPA
Team 3D Shadow	ED Shadow	PAT Training	Competency Day	Off			HSPA
Team 1A Shadow	Team 4A Shadow	Team 2A Shadow	Team 3G Shadow	Team 3D Shadow			HSPA
ED Shadow	Team 1A Shadow	Team 3G Shadow	Team 3D Shadow	Team 5C Shadow			HSPA
IV Room Training	A Training	D1 Training	MRT Training (HC1 w/ Jessica)	PAT Training			PGY1 IM
C1 Training	IV Room Training	Competency Day	PAT Training	MRT Training (MRF w/ Renee)			PGY1 IM
MRT Training (HC1 w/ Robin)	C1 Training	IV Room Training	A Training	D1 Training			PGY1 Cards
PAT Training	Competency Day	C1 Training	IV Room Training	A Training			PGY1 Cards
Off	MRT Training (HC1 w/ Robin)	1A Training	1A Training	1A Training			PGY1 Peds
MRT Training (MRF w/ Renee)	PAT Training	Competency Day	C1 Training	Off			PGY1 Peds
Team 4C Training	Team 4C Training	Heme/Onc/BMT Shadow	STAFF 2EA	Team 4B Training	4B Train	4B Train	PGY2 Crit Care
Hospital Orientation	Take Action/Safety Training	Customer Service Training	0800-1130 - Admin w/RPD	Team 4 A/D Training			PGY2 Crit Care
Hospital Orientation	Take Action/Safety Training	Customer Service Training	1230-1600 - O2 vidoe/TLC O2 Exam	Chemo Compounding training			PGY2 Onc
13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul	
Off	Team 2A Shadow	Team 1A Shadow	Team 3G Shadow	Team 5C Shadow	D2 Train	D2 Train	HSPA
Team 5C Shadow	A Training	C1 Training	IV Room Training	PAT Training	D2 Train	D2 Train	HSPA
Off	Competency Day	IV Room Training	A Training	C1 Training	2B Train	2B Train	HSPA
Off	IV Room Training	A Training	C1 Training	D1 Training	A Training	A Training	HSPA
Off	C1 Training	Competency Day	Team 3A Training	Team 3A Training	3A Train	3A Train	PGY1 IM
A Training	Off	D1 Training	Team 3D Training	Team 3D Training	3D Train	3D Train	PGY1 IM
Off	Competency Day	PAT Training	Team 2A Training	Team 2A Training	2A Train	2A Train	PGY1 Cards
D1 Training	Off	Competency Day	Team 2C Training	Team 2C Training	2A Train	2A Train	PGY1 Cards
Team 1B Training	Team 1B Training	Competency Day/Beacon 1230-4*	Off	Team 1C Training	1A Train	1A Train	PGY1 Peds
IV Room Training	D1 Training	Competency Day/Beacon 1230-4*	Team 1B Training	Team 1B Training	1A Train	1A Train	PGY1 Peds
ACLS Provider Course	ACLS Provider Course	Team 4B Training	STAFF 2EA	Off for weekend training			PGY2 Crit Care
Team 4B Training	Team 4B Training	Team 4 A/D Training	Team 4C Training	Team 4C Training			PGY2 Crit Care
Meet with Michelle (830-4)	WW CCIV training (730-4)	WW/Beacon Training 1230-4*	WW VER1 training (7-330)	WW VER1 training (7-330)			PGY2 Onc
20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	
Off	A Training	C1 Training	C1 Training	C1 Training	2B Train	2B Train	HSPA
Off	D1 Training	D1 Training	D1 Training	D1 Training	A Training	A Training	HSPA
Off	IV Room Training	IV Room Training	IV Room Training	IV Room Training	D2 Train	D2 Train	HSPA
Off	PAT Training	Indian Creek Shadow	Rainbow 39 Shadow	A Training	2B Train	2B Train	HSPA
Off	Team 3A Training	Team 3A Training	Team 3A Training	Team 3A Training	3A Train	3A Train	PGY1 IM
Off	Team 3D Training	Team 3D Training	Team 3D Training	Team 3D Training	3D Train	3D Train	PGY1 IM
Off	Team 2C Training	Team 2C Training	Team 2C Training	Team 2C Training	2A Train	2A Train	PGY1 Cards
Off	Team 2A Training	Team 2A Training	Team 2A Training	Team 2A Training	2A Train	2A Train	PGY1 Cards
Off	Team 1A Training	Team 1A Training	Team 1A Training	Team 1A Training	1A Train	1A Train	PGY1 Peds
Off	Team 1B Training	Team 1B Training	Team 1B Training	Team 1B Training	1A Train	1A Train	PGY1 Peds
Team 4C Training	Team 4C Training	STAFF 2B	STAFF 2B	STAFF 2B			PGY2 Crit Care
Team 4F Training	Team 4F Training	ED Training	ED Training	Pharmacy Conference Room			PGY2 Crit Care
5A shadow	5E shadow (12-8)	Compentency day	WW VER 2 training (830-5)	0800-1600 Ops Overview			PGY2 Onc
27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	1-Aug	2-Aug	
Off	IV Room training	Team 3D Shadow	Team ED Shadow	Team 4A Shadow	D2 Train	D2 Train	HSPA
Off	Retail Shadow	Indian Creek Shadow	Rainbow 39 Shadow	C1 Training	2B Train	2B Train	HSPA
Off	D1 Training	D1 Training	D1 Training	A Training	A Training	A Training	HSPA
Off	C1 Training	C1 Training	C1 Training	IV Room Training	D2 Train	D2 Train	HSPA
Off	Team 3A Training	Team 3A Training	Team 3A Training	Team 3A Training	3A Train	3A Train	PGY1 IM
Off	Team 3D Training	Team 3D Training	Team 3D Training	Team 3D Training	3D Train	3D Train	PGY1 IM
Off	Team 2A Training	Team 2A Training	Team 2A Training	Team 2A Training	2A Train	2A Train	PGY1 Cards
Off	Team 2C Training	Team 2C Training	Team 2C Training	Team 2C Training	2A Train	2A Train	PGY1 Cards
A Training	Off	Team 1C Training	Team 1C Training	D1 Training	1A Train	1A Train	PGY1 Peds
Off	Team 1A Training	Team 1A Training	Team 1A Training	Team 1A Training	1A Train	1A Train	PGY1 Peds
Team 4F Training	Team 4F Training	Team 4F Training	Team 4F Training	Team 4F Training			PGY2 Crit Care
Pharmacy Conference Room	Library G024	Library G024	Library G024	Pharmacy Conference Room	4A Train	4A Train	PGY2 Crit Care
0830-1600 Clincal Overview	0800-1600 EPIC training - Day 1	0800-1600 EPIC training - Day 2	0800-1600 TOC, workflows, PH	Classroom Order Verify			PGY2 Onc
3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug	
Off	D1 Training	Indian Creek Shadow	Competency Day	Retail Shadow	A Train	A Train	HSPA
Off	C1 Training	C1 Training	A Training	A Training	D2 Train	D2 Train	HSPA
Off	A Training	A Training	C1 Training	C1 Training	D2 Train	D2 Train	HSPA
Off	IV Room Training	IV Room Training	D1 Training	D1 Training	2B Train	2B Train	HSPA
Off	Team 3A Training	Team 3A Training	Team 3A Training	Team 3A Training	3A Train	3A Train	PGY1 IM
Off	Team 3D Training	Team 3D Training	Team 3D Training	Team 3D Training	3D Train	3D Train	PGY1 IM
Off	Team 2C Training	Team 2C Training	Team 2C Training	Team 2C Training	2A Train	2A Train	PGY1 Cards
Off	Team 2A Training	Team 2A Training	Team 2A Training	Team 2A Training	2A Train	2A Train	PGY1 Cards
C1 Training	Off	Team 1B Training	Team 1B Training	IV Room Training	1A Train	1A Train	PGY1 Peds
Off	Team 1C Training	Team 1C Training	Team 1C Training	Team 1C Training	1A Train	1A Train	PGY1 Peds
Team 4E Training	Westwood Multipurpose Rm	Team 4E Training	Team 4E Training	Team 4 A/D Training	4A Train	4A Train	PGY2 Crit Care
0830-12 Med Safety; 1230-16 TLC	0800-1700 ACLS	Off	IV Room Training	Competency Day			PGY2 Crit Care
0830-12 Med Safety; 1230-16 5C	Team 5C Training	Team 5C Training	Beacon competency (830-5)	Beacon competency (830-5)			PGY2 Onc
Med Safety in Pharmacy Conf Room							
10-Aug	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug	
	MRT Training	PAT Training	PAT Training	PAT Training			HSPA
	A Training	IV Room Training	IV Room Training	IV Room Training			HSPA
	Retail Shadow	Indian Creek Shadow	Rainbow 39 Shadow	C1 Training			HSPA
Critical Thinking and	Competency Day	A Training	A Training	D1 Training			HSPA
Clinical Skills Workshop	Team 3A Training	Team 3A Training	Team 3A Training	Team 3A Training			PGY1 IM
1006 Orr Major	Team 3D Training	Team 3D Training	Team 3D Training	Team 3D Training			PGY1 IM
	Team 2A Training	Team 2A Training	Team 2C Training	Team 2C Training			PGY1 Cards
	Team 2B Training	Team 2B Training	Team 2A Training	Team 2A Training			PGY1 Cards
	Team 1A Training	Team 1A Training	Team 1A Training	Team 1A Training			PGY1 Peds
	Team 1C Training	Team 1C Training	Team 1C Training	Team 1C Training			PGY1 Peds
Team 4E Training	ED2 Training	Competency Day	Off for weekend training	A Training			PGY2 Crit Care
A Training	C1 Training	Team 4E Training	Team 4E Training	Team 4E Training			PGY2 Crit Care
Team 5C Training	Team 5C Training	Team 5C Training	Team 5C Training	Team 5C Training	5A train	5A train	PGY2 Onc
17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	
C1 Training	IV Room Training	Off	WW VER2 training (830-5)	A Training			PGY2 Onc

APPENDIX 8-2. continued

	MONTH 1 TRAINING (3 WEEKS + 2 WEEKS GROUP TRAINING)														MONTH 2 PRIMARY STAFFING TRAINING - 4 WEEKS																		WEEKEND-MONTH 2			
	Central Training				TOC		Day Team			Eve Team					Day Team Training																		WE 1	WE 2	WE 3	WE 4
PGY1 - Int Med	C1	A	IV	D1	MRT	PAT	3A	3A	3A	3EA	3EA	3EA	TLC	TLC	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A
PGY1 - Int Med	C1	A	IV	D1	MRT	PAT	3A	3A	3A	3EA	3EA	3EA	TLC	TLC	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D
PGY1 - Cards	C1	A	IV	D1	MRT	PAT	2A	2C	2B	2EA	2EA	2EA	TLC	TLC	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2C	2C	2C	2C	2C	2C	2B	2B	2A	2A	2A	2A
PGY1 - Cards	C1	A	IV	D1	MRT	PAT	2A	2C	2B	2EA	2EA	2EA	TLC	TLC	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2C	2C	2C	2C	2C	2C	2B	2B	2A	2A	2A	2A
PGY1 Peds	C1	A	IV	D1	MRT	PAT	1A	1A	1B	1E	1E	1E	TLC	TLC	1A	1A	1A	1A	1B	1B	1B	1B	1C	1C	1C	1C	1B	1B	1B	1B	1A	1A	1A	1A	1A	1A
PGY1 Peds	C1	A	IV	D1	MRT	PAT	1A	1A	1B	1E	1E	1E	TLC	TLC	1B	1B	1B	1B	1A	1A	1A	1A	1B	1B	1B	1B	1C	1C	1C	1C	1B	1B	1A	1A	1A	1A

	Central Training			Day Team Training										Eve Training				WE 1
PGY2 Crit Care	C1	A	IV	4A/D	4A/D	4B	4B	4C	4C	4F	4F	ED	ED	4E	4E	4E	TLC	4A
PGY2 Crit Care	C1	A	IV	4A/D	4A/D	4B	4B	4C	4C	4F	4F	ED	ED	4E	4E	4E	TLC	4A

	Central Training		
PGY2 Heme/Onc	C1	A	IV
PGY2 Heme/Onc	C1	A	IV
PGY2 Heme/Onc	C1	A	IV

Chapter 9

Legal and Ethical Aspects of Practice

Robert L. Lamontagne and Diane B. Ginsburg

Chapter Outline

Pharmacy Rules and Regulations:
State Board of Pharmacy Requirements for Preceptors 152
Pharmacy Program Experiential Requirements 155
Liability Issues for Preceptors 155
Ethical Aspects of Precepting Learners 156
Patient Confidentiality and Health Insurance Portability and Accountability Act 157
Summary 158

In civilized life, law floats in a sea of ethics.

Earl Warren

Learning Objectives

- Describe each of the six common requirements for pharmacists to become preceptors within their respective states.
- Describe the difference in experiential education requirements between pharmacy programs.
- Discuss liability issues for preceptors.
- Understand the Code of Ethics and Oath of a Pharmacist and explain how they apply to experiential training.
- Define the Health Insurance Portability and Accountability Act (HIPAA) and describe how it applies to experiential training programs.

The curriculum in pharmacy education today is divided almost evenly between didactic and experiential learning. Learners must devote many hours toward hands-on learning in order to achieve their pharmacy degree. Pharmacy preceptors willing to train and teach learners must adhere to specific guidelines in order to supervise pharmacist interns. In addition, preceptors must also follow ethical and HIPAA guidelines when directing interns. This chapter will review requirements for preceptors.

Pharmacy Rules and Regulations: State Board of Pharmacy Requirements for Preceptors

A preceptor plays a significant role in the training and development of future pharmacist practitioners. Most states mandate that hours worked in a pharmacy must be under the direct supervision of a pharmacist who is certified as a preceptor, if those hours are to be counted toward graduating from a college or school of pharmacy. This requirement does not necessarily apply to hours that learners must complete to satisfy degree requirements of their respective academic program. It is not uncommon for pharmacist interns to complete a rotation during their experiential program and be supervised by a physician or other healthcare provider.

PRECEPTOR PEARLS

States vary widely in their requirements for preceptors, but they usually include some combination of the following: predetermined length of practice, application, approval or certification, a training seminar, and good legal standing.

For certification as a preceptor, most states require that a pharmacist be licensed and have at least 1 year of experience in his or her respective practice setting. Some states recognize pharmacy residency program training and allow pharmacy residents to apply for preceptor certification during their residency (e.g., Texas will allow a pharmacist who has been in an ASHP-accredited residency for at least 6 months to serve as a preceptor if all other requirements are met).

Only a few states require some form of preceptor education as part of the initial certification process. To maintain preceptor status, preceptors are required to complete additional hours of preceptor-specific educa-

tion to maintain their certification. In some states, this continuing education is tied to the licensure renewal cycle. Some colleges and schools require that preceptors complete continuing education specific to their program prior to their certification as preceptors. Many colleges and schools offer annual preceptor education conferences as well as partnering with state professional associations to provide preceptor training.

Each state has its own requirements regarding the ratio of preceptors to interns. Most states limit this ratio to one-to-one when providing direct patient care activities. In some states, colleges and schools of pharmacy may apply for an exemption to this rule to allow for an expansion of this ratio. This exemption may be necessary in nontraditional practice settings or in situations where the hours completed by an intern are for satisfying degree requirements rather than for licensure.

The supervision and teaching of future practitioners is a large responsibility for preceptors. The purpose of the internship program is for learners to grasp the proper way to practice pharmacy while abiding by all laws and rules that govern pharmacy practice. Licenses must be in good standing in order for pharmacists to supervise pharmacy learners. Unfortunately, things can happen in a pharmacy that can result in disciplinary action against the pharmacy or pharmacist's license even if he or she was not directly responsible. Even though there may not have been any malicious intent on the part of the pharmacist preceptor, a pharmacy and pharmacist who are the subjects of a board-imposed penalty should not precept learners until the disciplinary action has been resolved and the licenses have been returned to good standing. Some states allow pharmacists to petition the board to have their preceptor certification reinstated at an earlier time. In this case, it is up to the individual board of pharmacy to render this decision. Pharmacy board requirements for preceptors by state are listed in **Appendix 9-1**.

Licensure

Although pharmacists are required to be licensed by the board or regulatory agent of the particular state in which they are serving as preceptors, Appendix 9-1 highlights the different internship hour requirements between states. Every state has deemed pharmacists to be preceptors because they are licensed pharmacists and have met the other requirements. Most often it is noted that the pharmacist must be in good standing. Some states do not require preceptors in the areas of drug research within a pharmacy school or industry to be licensed pharmacists. An exception to this would be pharmacists practicing in federal facilities who are required only to have a current license in at least one state. Pharmacists practicing in any of the military branches, the Veteran's Administration, or the Bureau of Prisons are required to be licensed only in one state and may practice pharmacy in any facility regardless of location. Federal laws, not individual state laws, have jurisdiction in these facilities.

Length of Practice

Only 22 states require that a pharmacist have practiced for a specific length of time before he or she can precept learners, and the length of practice is typically 1–2 years immediately before becoming a preceptor. Some states specify a number of years (e.g., in Alabama, 2 years), but others require a certain number of hours practicing (e.g., in Minnesota, 4,000 hours with 2,000 of the 4,000 hours within the state).

Complete Application

Fourteen states require pharmacists to complete an application before they can be considered preceptors. These forms are typically located on the website of the board or regulatory agent. This application usually registers pharmacists as preceptors for the particular state in which they are applying.

Approval and Certification

The board of pharmacy or regulatory agent of a state will grant preceptor approval to pharmacists who meet the requirements needed to precept learners. Eighteen states require either certification or approval to become preceptors, whereas Texas requires pharmacists to be both approved and certified. It is common for preceptors to be certified for a

specified number of years, after which they must apply for recertification, which sometimes involves an exam and fees. Many of the states that require certification also require that the certificate be displayed in a conspicuous location.

Training Seminar

Very few states (i.e., Alabama, Minnesota, Montana, Texas, and Washington) have a required board-approved preceptor training seminar for applicants. These seminars are required for initial approval and then as often as the state deems necessary to meet requirements, ranging from 2 to 5 years. Attendance at this training program must be completed again when pharmacists' current licenses are to be renewed.

Legal Standing

Twenty-six state boards of pharmacy and regulatory agents cite good legal standing as a requirement for preceptor applicants. This means that they must be in compliance with the law and must not have violated any laws or statutes related to the practice of pharmacy. Most states list "good standing with the Board" after licensure requirements, and this can often be interpreted as good legal compliance with the rules and regulations of the state's pharmacy laws. However, it is best to give an exact legal compliance time frame, so that expectations are clearly projected. *Legal standing* refers to either the specific time period of law observance or if law observance was noted for a particular state. States might require that pharmacists have an unrestricted pharmacist's license or apply for and receive special permission to become a preceptor if they are involved in any legal issues.

The requirements for pharmacists to become preceptors vary widely from state to state, with some states having unique requirements (see **Box 9-1**). Being a licensed pharmacist is the only criterion that all states have in common. Appendix 9-1 makes it apparent that some states have highly structured procedures that are expected of pharmacists wanting to become preceptors. It is important to fully research the requirements of your state to ensure you follow all necessary procedures.

BOX 9-1. Examples of Unique State Requirements

- The Arkansas State Board of Pharmacy requires that a pharmacist must "be a pharmacist employed in a pharmacy which currently holds a Class A rating indicated by the Inspection Sheet for pharmacies as outlined by the State Board of Pharmacy." The pharmacist must also complete a preceptor requirements test that was developed and administered by the board or board representatives. It is required that one preceptor from an intern site be a member of an "appropriate" national pharmaceutical organization. Each individual preceptor is required to be a member of a professional state organization and attend one professional meeting during the previous calendar year. Regulation 01-00-0007 specifies fees that are required during the renewal process that takes place every 2 years and requires a new application.
- In Colorado, the school of pharmacy establishes preceptor requirements.
- In the District of Columbia, pharmacists wanting to be preceptors must take the "Oath of Preceptor," which is as follows: "I submit that I shall answer all questions concerning the training of a pharmacy intern under my supervision truthfully to the best of my knowledge and belief and that the training I provide will be predominantly related to the practice of pharmacy as required by law."
- To be preceptors in Kentucky, pharmacists must submit a written request.
- In Ohio, a preceptor can be a pharmacist or a "person who is of good moral character and is qualified to direct the approved experience in the area approved by the director of internship pursuant to paragraph (D) of rule 4729 3 05 of the Administrative Code."
- Oklahoma requires pharmacists to take a preceptor exam that is prepared by the board and pay a fee.
- In Oregon, nonpharmacist preceptors can be designated to supervise interns with the board's approval.

PRECEPTOR PEARLS

Use Appendix 9-1 or do an online search to learn all of the requirements for your state.

Pharmacy Program Experiential Requirements

The Accreditation Council for Pharmacy Education (ACPE) sets standards for pharmacy programs to achieve accredited status.[1] For example, the 2016 ACPE Standards dictate that introductory pharmacy practice experiences (IPPEs) total no less than 300 clock hours of experience, with a minimum of 150 hours to be balanced between community and institutional health-system settings. However, beyond those 150 hours, pharmacy programs are at liberty to decide what other experiences are worthwhile to a learner's education. Similarly, the advanced pharmacy practice experiences (APPEs) are mandated to be no less than 36 weeks (1,440 hours) and must occur in four required practice settings (community pharmacy, ambulatory patient care, hospital/health-system pharmacy, and inpatient general medicine patient care) as well as elective practice settings chosen by the learner.

Appendix 9-2 lists the different IPPE and APPE requirements among pharmacy programs in the United States. Typical variations include number of rotations, length of rotations, total hours required, and units used to signify credit. Although there are vast differences between pharmacy program requirements, in order to be an ACPE-accredited institution, the program must strictly adhere to the aforementioned requirements.

Beyond ACPE accreditation standards, individual programs may decide to require additional experiences beyond what is mandated. For example, The University of Texas at Austin College of Pharmacy requires an additional 200 hours of early practice experience (EPE) to be completed outside of the required experiential education included in the curriculum. These hours are the sole responsibility of the learner and must be completed prior to the start of the P4 year. Other examples of these additional experiences are courses strictly devoted to interprofessional education (IPE) and pre-IPPE/pre-APPE courses. With the implementation of the ACPE Standards 2016, colleges and schools of pharmacy will be increasing the number of IPE experiences in didactic and experiential components of the curriculum.

Liability Issues for Preceptors

The training of future pharmacists is a rewarding experience for most preceptors. Learners are eager after many years of training to function as licensed practitioners and provide direct patient care. Many learners, when they enter the final year of their program, are very mature and appear ready to undertake the responsibilities of licensed pharmacists. The important thing to remember is that, although they may seem ready to function as licensed practitioners, they are not licensed. The responsibility of all learner actions rests with the preceptor's license.

PRECEPTOR PEARLS

Remind learners that you, as their preceptor, are *ultimately responsible* for everything they do and that your license could be disciplined for failure to be in compliance with appropriate laws and rules.

Most colleges of pharmacy understand the major responsibility that preceptors have when they are supervising learners. Preceptors not only have to worry about their actions (and in some cases, the actions of their staff if they are the pharmacist-in-charge or in another supervisory role), but they also have to worry about the actions of their learners. Most learners do not intentionally try to make an error; however, the nature of their learning process lends itself to the fact that learners are going to make mistakes. Preceptors are ultimately responsible for any errors made by learners. This reinforces the importance of checking all work completed by learners.

Most programs require that learners purchase liability insurance prior to starting their rotations. These policies, which range between \$10.00 and \$20.00, only cover activities that the learners perform during college or school-based practice experiences. These policies are not the same as the malpractice insurance that most licensed pharmacists carry.

Ethical Aspects of Precepting Learners

The practice of pharmacy is governed by a strict Code of Ethics (see **Box 9-2**). This code has been endorsed by virtually all facets of pharmacy and reflects the nature of practice today, a cooperative relationship between pharmacists, other healthcare providers, and patients. As pharmacists, we think of ethics and this code as the way pharmacy should be practiced; for most of us, this is the way we practice.

BOX 9-2. Code of Ethics for Pharmacists

PREAMBLE

Pharmacists are health professionals who assist individuals in making the best use of medications. This Code, prepared and supported by pharmacists, is intended to state publicly the principles that form the fundamental basis of the roles and responsibilities of pharmacists. These principles, based on moral obligations and virtues, are established to guide pharmacists in relationships with patients, health professionals, and society.

I. A PHARMACIST RESPECTS THE COVENANTAL RELATIONSHIP BETWEEN THE PATIENT AND PHARMACIST.

Considering the patient-pharmacist relationship as a covenant means that a pharmacist has moral obligations in response to the gift of trust received from society. In return for this gift, a pharmacist promises to help individuals achieve optimum benefit from their medications, to be committed to their welfare, and to maintain their trust.

II. A PHARMACIST PROMOTES THE GOOD OF EVERY PATIENT IN A CARING, COMPASSIONATE, AND CONFIDENTIAL MANNER.

A pharmacist places concern for the well-being of the patient at the center of professional practice. In doing so, a pharmacist considers needs stated by the patient as well as those defined by health science. A pharmacist is dedicated to protecting the dignity of the patient. With a caring attitude and a compassionate spirit, a pharmacist focuses on serving the patient in a private and confidential manner.

III. A PHARMACIST RESPECTS THE AUTONOMY AND DIGNITY OF EACH PATIENT.

A pharmacist promotes the right of self-determination and recognizes individual self-worth by encouraging patients to participate in decisions about their health. A pharmacist communicates with patients in terms that are understandable. In all cases, a pharmacist respects personal and cultural differences among patients.

IV. A PHARMACIST ACTS WITH HONESTY AND INTEGRITY IN PROFESSIONAL RELATIONSHIPS.

A pharmacist has a duty to tell the truth and to act with conviction of conscience. A pharmacist avoids discriminatory practices, behavior, or work conditions that impair professional judgment and actions that compromise dedication to the best interests of patients.

V. A PHARMACIST MAINTAINS PROFESSIONAL COMPETENCE.

A pharmacist has a duty to maintain knowledge and abilities as new medications, devices, and technologies become available and as health information advances.

VI. A PHARMACIST RESPECTS THE VALUES AND ABILITIES OF COLLEAGUES AND OTHER HEALTH PROFESSIONALS.

When appropriate, a pharmacist asks for the consultation of colleagues or other health professionals or refers the patient. A pharmacist acknowledges that colleagues and other health professionals may differ in the beliefs and values they apply to the care of the patient.

VII. A PHARMACIST SERVES INDIVIDUAL, COMMUNITY, AND SOCIETAL NEEDS.

The primary obligation of a pharmacist is to individual patients. However, the obligations of a pharmacist may at times extend beyond the individual to the community and society. In these situations, the pharmacist recognizes the responsibilities that accompany these obligations and acts accordingly.

VIII. A PHARMACIST SEEKS JUSTICE IN THE DISTRIBUTION OF HEALTH RESOURCES.

When health resources are allocated, a pharmacist is fair and equitable, balancing the needs of patients and society.

Adopted by the membership of the American Pharmacists Association, October 27, 1994. This applies to the Code of Ethics.

Source: American Pharmacists Association. *Code of Ethics for Pharmacists.* http://www.pharmacist.com/code-ethics

In addition, voluntary declaration of the commitment to patients, practice, and society as practitioners pledge themselves to the profession when reciting the Oath of a Pharmacist.[2] The Oath of a Pharmacist is included in **Box 9-3**. Preceptors should review this oath along with the Code of Ethics with

their learners, as these two documents should serve as a compass for professional, ethical practice.

Box 9-3. Oath of a Pharmacist

I promise to devote myself to a lifetime of service to others through the profession of pharmacy. In fulfilling this vow:

- I will consider the welfare of humanity and relief of suffering my primary concerns.
- I will apply my knowledge, experience, and skills to the best of my ability to assure optimal outcomes for my patients.
- I will respect and protect all personal and health information entrusted to me.
- I will accept the lifelong obligation to improve my professional knowledge and competence.
- I will hold myself and my colleagues to the highest principles of our profession's moral, ethical, and legal conduct.
- I will embrace and advocate changes that improve patient care.
- I will utilize my knowledge, skills, experiences, and values to prepare the next generation of pharmacists.

I take these vows voluntarily with the full realization of the responsibility with which I am entrusted by the public.

Source: American Association of Colleges of Pharmacy. Oath of a pharmacist. http://www.aacp.org/resources/studentaffairspersonnel/studentaffairspolicies/Documents/OATHOFAPHARMACIST2008-09.pdf. 2007.

The preceptor's role is multifold. Preceptors are teachers, mentors, coaches, references, and role models. The future of the profession, our learners, look up to us for guidance, information, and to mirror our actions. These reasons reinforce the importance of ethical behavior and a review of the code that governs our practice.

PRECEPTOR PEARLS

Review the Code of Ethics and Oath of a Pharmacist with your students and discuss how they impact your practice.

Many learners remember receiving the Code of Ethics and reciting the Oath of a Pharmacist during the white coat ceremony that is usually held during new student orientation. As novices, they blindly recite the words, not truly understanding the significance behind them. Many will not think to pull out this document until something happens and they are reminded of this code and oath. As preceptors, it is essential that learners see you uphold and abide by this code and oath. Review and discuss with your learners what the Code of Ethics and Oath of a Pharmacist mean to you as a pharmacist and how you demonstrate them in your practice.

As important as this code and oath are to practice, it is equally important that preceptors and their staff treat learners with respect and dignity. Many issues come into play when precepting learners: demands of the workplace, staff needs, knowledge base of the learners, and generational differences. Today's learners can use automated databases and computers more comfortably than a print textbook. They have been taught drug information using an integrated approach rather than by discipline (e.g., chemistry, pharmacology, clinical application). For some tenured practitioners, this presents both an opportunity and a challenge. The opportunity is one in which learners can teach preceptors and expose them to the benefits of their education. The challenge for some preceptors is resistance to a new model for pharmacy practice and the way students are being taught. Preceptors need to embrace the generational nuances that today's students bring to the practice environment and respect the methods by which learners access and retrieve information.

Patient Confidentiality and Health Insurance Portability and Accountability Act

The issue of patient confidentiality was heightened as a result of privacy laws enacted by the federal government. HIPAA increased the level of due diligence that healthcare providers must exercise to ensure confidentiality of patient-protected health information (PHI). Pharmacies and all healthcare institutions have implemented safeguards and protective measures, including training to staff, to ensure protection of PHI.

Most colleges and schools of pharmacy have incorporated HIPAA information in pharmacy jurisprudence courses as part of their discussion of federal law. In addition, HIPAA and privacy issues are discussed prior to the beginning of experiential training for most programs and included in course syllabi for the internship. This does not preclude the HIPAA training requirements of the individual practice site. Students may be expected to complete HIPAA training for each rotation if they are completed at different institutions. A review of HIPAA and privacy rules should be included as part of the orientation to the practice site and conducted during the beginning of the rotation experience.

Summary

Precepting learners can be a very rewarding experience for pharmacists. A good preceptor must balance the needs of their practice and patients while teaching learners. Preceptors must follow and adhere to all applicable laws and regulations when precepting learners. Not only will this ensure that pharmacy is being practiced in a legal and ethical manner, but the preceptor establishes him or herself as an effective role model when practicing in this manner.

References

1. Accreditation Council for Pharmacy Education. Accreditation standards and key elements for the professional program in pharmacy leading to the doctor of pharmacy degree. https://www.acpe-accredit.org/deans/StandardsRevision.asp. 2016.
2. American Association of Colleges of Pharmacy. Oath of a pharmacist. http://www.aacp.org/resources/studentaffairspersonnel/studentaffairspolicies/Documents/OATHOFAPHARMACIST2008-09.pdf. 2007.

APPENDIX 9-1. Board of Pharmacy Requirements for Preceptors

State	Length of Practice	Complete Application	Approval/ Certification	Training Seminar	Legal Standing	Intern Hours Required
Alabama[1]	2 years	Yes	Approval	Yes	No	1,500
Alaska[2]	n/a	No	n/a	No	No	1,500
Arizona[3]	1 year	Yes	Approval	No	Yes	1,500
Arkansas[4]	1 year	Yes	Certification	No	Yes	2,000
California[5]	n/a	No	n/a	No	Yes	1,500
Colorado[6]	n/a	No	n/a	No	No	1,500
Connecticut[7]	n/a	No	n/a	No	No	1,500
Delaware[8]	2 years	No	n/a	No	No	1,500
District of Columbia[9]	2 years	No	Approval	No	Yes	1,500
Florida[10]	n/a	No	n/a	No	Yes	2,080
Georgia[11]	n/a	No	n/a	No	No	1,500
Hawaii[12]	n/a	No	n/a	No	No	2,000
Idaho[13]	n/a	No	n/a	No	No	1,500
Illinois[14]	n/a	No	n/a	No	No	400
Indiana[15]	n/a	No	n/a	No	No	1,500
Iowa[16]	n/a	No	n/a	No	Yes	1,500
Kansas[17]	2 years	No	Approval	No	No	1,500
Kentucky[18]	1 year	No	Approval	No	Yes	1,500
Louisiana[19]	2 years	No	n/a	No	Yes	1,500
Maine[20]	2 years	No	n/a	No	No	1,500
Maryland[21]	n/a	No	n/a	No	No	1,560
Massachusetts[22]	1 year	No	Approval	No	Yes	1,500
Michigan[23]	1 year	Yes	Approval	No	5 years	1,600
Minnesota[24]	4,000 hours	Yes	Approval	Yes	Yes	1,600
Mississippi[25]	n/a	No	n/a	No	Yes	1,600
Missouri[26]	n/a	No	Approval	No	Yes	1,500
Montana[27]	2 years	Yes	Approval	Yes	3 years	1,500
Nebraska[28]	n/a	No	n/a	No	Yes	1,500
Nevada[29]	n/a	No	n/a	No	No	1,740
New Hampshire[30]	n/a	No	n/a	No	No	1,500
New Jersey[31]	2 years	Yes	Approval	No	Yes	1,440
New Mexico[32]	1 year	Yes	Certification	No	3 years	1,500
NewYork[33]	1 year	No	n/a	No	No	1,040
North Carolina[34]	n/a	No	n/a	No	Yes	1,500
North Dakota[35]	n/a	No	Approval	No	Yes	1,500
Ohio[36]	n/a	No	n/a	No	Yes	1,500
Oklahoma[37]	1 year	Yes	Certification	No	Yes	1,500
Oregon[38]	1 year	Yes	Approval	No	No	1,440
Pennsylvania[39]	n/a	Yes	n/a	No	Yes	1,500
Rhode Island[40]	n/a	No	n/a	No	No	1,500
South Carolina[41]	n/a	No	n/a	No	No	1,500

APPENDIX 9-1. continued

State	Length of Practice	Complete Application	Approval/ Certification	Training Seminar	Legal Standing	Intern Hours Required
South Dakota[42]	n/a	Yes	n/a	No	No	2,000
Tennessee[43]	n/a	No	n/a	No	No	1,500
Texas[44]	1 year	Yes	Both	Yes	3 years	1,500
Utah[45]	2 years	No	n/a	No	Yes	1,740
Vermont[46]	2,000 hours	No	Approval	No	Yes	1,740
Virginia[47]	n/a	No	n/a	No	No	1,500
Washington[48]	1 year	Yes	Certification	Yes	Yes	1,500
West Virginia[49]	n/a	No	n/a	No	No	1,500
Wisconsin[50]	n/a	No	n/a	No	No	1,500
Wyoming[51]	2 years	Yes	Certification	No	No	1,200

[1]Alabama: http://www.albop.com/
[2]Alaska: http://commerce.state.ak.us/dnn/cbpl/ProfessionalLicensing/BoardofPharmacy.aspx
[3]Arizona: http://azsos.gov/rules/arizona-administrative-code#ID4
[4]Arkansas: http://pharmacyboard.arkansas.gov/licenseeInfo/Pages/lawBook.aspx
[5]California: http://www.pharmacy.ca.gov/laws_regs/pharmacy_lawbook.shtml
[6]Colorado: http://cdn.colorado.gov/cs/Satellite?c=Document_C&childpagename=DORA-Reg%2FDocument_C%2FCBONAddLinkView&cid=1251657154814&pagename=CBONWrapper
http://www.ucdenver.edu/academics/colleges/pharmacy/AcademicPrograms/PharmDProgram/ExperientialProgram/Pages/Preceptors.aspx
[7]Connecticut: http://www.ct.gov/dcp/cwp/view.asp?a=1620&q=512954
[8]Delaware: http://regulations.delaware.gov/AdminCode/title24/2500.shtml
[9]D.C.: http://doh.dc.gov/node/306502
[10]Florida: http://floridaspharmacy.gov/licensing/pharmacist-examination-application-for-u-s-and-puerto-rico-graduates/
http://floridaspharmacy.gov/resources/
[11]Georgia: http://rules.sos.state.ga.us/cgi-bin/page.cgi?g=GEORGIA_STATE_BOARD_OF_PHARMACY%2FLICENSURE_AS_A_PHARMACIST%2Findex.html&d=1
[12]Hawaii: http://cca.hawaii.gov/pvl/boards/pharmacy/statute_rules/
[13]Idaho: http://bop.idaho.gov/code_rules/
[14]Illinois: http://www.ilga.gov/commission/jcar/admincode/068/068013300C03000R.html
[15]Indiana: http://www.in.gov/pla/2965.htm
[16]Iowa: http://www.state.ia.us/ibpe/pharmacists/index.html
http://www.state.ia.us/ibpe/pharmacists/preceptor.html
[17]Kansas: http://www.pharmacy.ks.gov/licensing-registration/pharmacy-interns
[18]Kentucky: http://pharmacy.ky.gov/statutesandregulations/Pages/default.aspx
[19]Louisiana: http://www.pharmacy.la.gov/index.cfm?md=pagebuilder&tmp=home&pid=267&pnid=0&nid=58
[20]Maine: http://www.maine.gov/sos/cec/rules/02/chaps02.htm#392
[21]Maryland: http://dhmh.maryland.gov/pharmacy/SitePages/faqs.aspx
http://dhmh.maryland.gov/pharmacy/SitePages/pharmacistforms.aspx
[22]Massachusetts: http://www.mass.gov/courts/case-legal-res/law-lib/laws-by-source/cmr/200-299cmr/247cmr.html
[23]Michigan: http://www.michigan.gov/lara/0,4601,7-154-35299_63294_27529_27548---,00.html
www7.dleg.state.mi.us/orr/Files%5CAdminCode%5 C1102_2012-095LR_AdminCode.pdf
[24]Minnesota: https://www.revisor.mn.gov/rules/?id=6800.5350
https://www.revisor.mn.gov/rules/?id=6800.5400
[25]Mississippi: http://www.mbp.state.ms.us/mbop/Pharmacy.nsf/webpages/RegulationsLN_regdb?OpenDocument
[26]Missouri: http://www.sos.mo.gov/adrules/csr/current/20csr/20csr.asp#20-2220
[27]Montana: http://bsd.dli.mt.gov/license/bsd_boards/pha_board/board_page.asp
[28]Nebraska: http://dhhs.ne.gov/publichealth/Pages/crl_medical_pharm_pharmlic_regs.aspx
[29]Nevada: http://bop.nv.gov/services/newapps/Pharmacist/Intern/
http://www.leg.state.nv.us/NAC/NAC-639.html - NAC639Sec262
[30]New Hampshire: http://www.gencourt.state.nh.us/rsa/html/XXX/318/318-18.htm
[31]New Jersey: http://www.nj.gov/lps/ca/pharm/phar_rules.htm
[32]New Mexico: http://164.64.110.239/nmac/parts/title16/16.019.0005.htm
http://www.rld.state.nm.us/boards/Pharmacy_Forms_and_Applications.aspx
[33]New York: http://www.op.nysed.gov/prof/pharm/part63.htm
http://www.op.nysed.gov/prof/pharm/pharmlic.htm#exp
[34]North Carolina: http://www.ncbop.org/lawandrules.htm
[35]North Dakota: https://www.nodakpharmacy.com/laws-rules.asp
[36]Ohio: http://codes.ohio.gov/oac/4729-3-05
http://codes.ohio.gov/oac/4729-3
[37]Oklahoma: http://www.ok.gov/OSBP/Rules/index.html
[38]Oregon: http://arcweb.sos.state.or.us/pages/rules/oars_800/oar_855/855_031.html
[39]Pennsylvania: http://www.pacode.com/secure/data/049/chapter27/s27.26.html
[40]Rhode Island: http://health.ri.gov/licensing/healthcare/#pharmacy
[41]South Carolina: http://www.llr.state.sc.us/POL/Pharmacy/index.asp?file=LIC2.HTM
[42]South Dakota: http://legis.sd.gov/Rules/DisplayRule.aspx?Rule=20:51:02&cookieCheck=true
http://doh.sd.gov/boards/pharmacy/intern.aspx
http://doh.sd.gov/boards/pharmacy/pharmacist.aspx
[43]Tennessee: http://health.state.tn.us/boards/Pharmacy/applications.shtml
[44]Texas: http://www.pharmacy.texas.gov/infocist/Exam_intro.asp
http://www.pharmacy.texas.gov/infocist/preceptor.asp
[45]Utah: http://www.dopl.utah.gov/licensing/pharmacy.html
[46]Vermont: https://www.sec.state.vt.us/professional-regulation/professions/pharmacy/statutes-rules.aspx
[47]Virginia: http://www.dhp.virginia.gov/pharmacy/pharmacy_laws_regs.htm
[48]Washington: http://app.leg.wa.gov/wac/default.aspx?cite=246-858
http://www.doh.wa.gov/LicensesPermitsandCertificates/ProfessionsNewReneworUpdate/Pharmacist/ApplicationsandForms
[49]West Virginia: http://www.legis.state.wv.us/WVCODE/code.cfm?chap=30&art=5#05
[50]Wisconsin: http://dsps.wi.gov/Boards-Councils/Administrative-Rules-and-Statutes/Pharmacy-Administrative-Rules-and-Statutes/
[51]Wyoming: http://pharmacyboard.state.wy.us/laws.aspx

APPENDIX 9-2. Experiential Requirements

Institution	IPPE	APPE
Alabama		
Auburn University: Harrison School of Pharmacy	Institutional/Community	(8) 5-credit rotations (1,600 hours)
Samford University: McWhorter School of Pharmacy	6 IPPE courses (7 course credits)	(8) 5-week rotations
Arizona		
Midwestern University College of Pharmacy–Glendale	Institutional/Community	(6) 9-credit rotations
University of Arizona College of Pharmacy	3 IPPE courses (6 total credit units)	(7) 5-credit unit rotations (1,575 hours)
Arkansas		
Harding University College of Pharmacy	8 IPPE courses (4 total credit hours)	(9) 4-credit hour rotations
University of Arkansas for Medical Sciences College of Pharmacy	Institutional/Community (7 total credit hours)	(9) 4-credit hour rotations
California		
California Health Sciences University College of Pharmacy	4 IPPE courses (8 total credit hours)	(6) 6-credit hour rotations
California Northstate University College of Pharmacy	4 IPPE courses (8 total credit units)	(6) 6-unit rotations
Chapman University School of Pharmacy	3 IPPE courses (7 total credit hours)	(6) 6-week rotations
Keck Graduate Institute College of Pharmacy	4 IPPE rotations (328–448 experiential hours)	(7) 6-week rotations (1,680 hours)
Loma Linda University School of Pharmacy	3 IPPE courses (6 total credit hours)	(6) 6-credit hour rotations
Touro University College of Pharmacy	5 IPPE courses (10 total units)	(10) 6-unit rotations
University of California–San Diego: Skaggs School of Pharmacy and Pharmaceutical Sciences	4 IPPE courses (300 hours)	(7) 6-week rotations
University of California–San Francisco School of Pharmacy	8 IPPE courses (12 total units)	(4) 7-unit rotations
University of the Pacific: Thomas J. Long School of Pharmacy and Health Sciences	5 IPPE courses (300 total hours)	(6) 6-week rotations (1,440 hours)
University of Southern California School of Pharmacy	~300 hours in years 1–3	(6) 6-week rotations
West Coast University School of Pharmacy	3 IPPE courses (360 total hours)	(6) 6-week rotations (1,440 hours)
Western University of Health Sciences	3 IPPE courses (8 credit hours; 300 experiential hours)	(6) 6-week rotations
Colorado		
Regis University: Rueckert-Hartman College for Health Professions	5 IPPE courses (10 total semester hours)	(7) 6-semester hour rotations
University of Colorado Anschutz Medical Campus: Skaggs School of Pharmacy and Pharmaceutical Sciences	5 IPPE courses (5 total credit hours) + an advanced IPPE rotation (6 credit hours)	(7) 6-week rotations

APPENDIX 9-2. continued

Institution	IPPE	APPE
Connecticut		
University of Connecticut School of Pharmacy	6 PPE courses (9 total credits)	(9) 4-credit rotations
University of Saint Joseph School of Pharmacy	5 IPPE courses (8 total credits)	(6) 6-credit rotations
District of Columbia		
Howard University College of Pharmacy	2 IPPE courses (320 total contact hours)	(8) 5-week rotations
Florida		
Florida A&M College of Pharmacy and Pharmaceutical Sciences	460 total contact hours	(9) 4-week rotations (1,440 hours)
Lake Erie College of Osteopathic Medicine School of Pharmacy–Bradenton Campus	4-year program: 2 IPPE courses (8 total credits) Distance education pathway: 2 IPPE courses (8 total credits)	4-year program: (9) 4-credit rotations Distance education pathway: (6) 6-credit rotations
Nova Southeastern University College of Pharmacy	4 IPPE courses (7 total credit hours)	(9) 4-credit rotations
Palm Beach Atlantic University: Lloyd L. Gregory School of Pharmacy	3 IPPE courses (6 total credit hours)	(9) 4-credit hour rotations
University of Florida College of Pharmacy	4 IPPE courses (4 total credits)	44 total credits of rotations
University of South Florida College of Pharmacy	5 IPPE courses (5 total credit hours)	(7) 6-credit hour rotations
Georgia		
Mercer University College of Pharmacy	6 IPPE courses (6 total credit hours)	(8) 5-credit hour rotations
Philadelphia College of Osteopathic Medicine School of Pharmacy	4 IPPE courses (4 total credits)	(8) 4-credit rotations
South University School of Pharmacy	2 IPPE courses (16 total credit hours)	(7) 8-credit hour rotations
University of Georgia College of Pharmacy	5 IPPE courses	(8) 5-credit hour rotations
Hawaii		
University of Hawaii–Hilo: Daniel K. Inouye College of Pharmacy	7 IPPE courses (300 total hours)	(6) 6-week rotations (1,440 hours)
Idaho		
Idaho State University College of Pharmacy	4 IPPE courses (4 total credit hours)	(7) 6-week rotations
Illinois		
Chicago State University College of Pharmacy	5 professional practice courses (9 total credits)	(7) 5-credit rotations
Midwestern University Chicago College of Pharmacy	7 IPPE courses (12 total credit hours)	(6) 9-credit rotations
Roosevelt University College of Pharmacy	4 IPPE courses (8 total credit hours; 320 contact hours)	(6) 8-credit rotations (1,440 hours)
Rosalind Franklin University of Medicine and Science College of Pharmacy	11 IPPE courses (15.5 total credit hours)	(6) 9-credit rotations
Southern Illinois University–Edwardsville School of Pharmacy	4 IPPE courses (6 total credit hours)	(7) 6-credit rotations

APPENDIX 9-2. continued

Institution	IPPE	APPE
University of Illinois at Chicago College of Pharmacy	5 IPPE courses (12 total credit hours)	(6) 4-credit rotations
Indiana		
Butler University College of Pharmacy and Health Sciences	3 IPPE courses	(10) 4-credit rotations
Manchester University College of Pharmacy	2 IPPE courses (6 total credit hours)	(10) 4-credit rotations
Purdue University College of Pharmacy	2 IPPE courses (8 total credit hours)	(10) 4-credit rotations
Iowa		
Drake University College of Pharmacy and Health Sciences	306 + total IPPE contact hours	(8) 5-credit rotations (1,600 contact hours)
University of Iowa College of Pharmacy	4 IPPE courses (8 total credit hours; 315 total contact hours)	(8) 6-credit rotations (1,600 contact hours)
Kansas		
University of Kansas School of Pharmacy	2 IPPE courses (8 total credit hours; 320 total contact hours)	(9) 4-credit rotations
Kentucky		
Sullivan University College of Pharmacy	5 IPPE courses (8 total credit hours)	(7) 6-credit rotations
University of Kentucky College of Pharmacy	2 IPPE courses (8 total credit hours)	(7) 6-week rotations
Louisiana		
University of Louisiana at Monroe School of Pharmacy	2 IPPE courses (320 total contact hours)	(7) 6-week rotations
Xavier University of Louisiana College of Pharmacy	7 IPPE courses (6 total credits; 300 total contact hours)	(7) 6-week rotations
Maine		
Husson University School of Pharmacy	2 IPPE courses (6 total credit hours)	(6) 6-credit rotations
University of New England College of Pharmacy	2 IPPE courses (7 total credits)	(6) 6-credit rotations
Maryland		
Notre Dame of Maryland University School of Pharmacy	2 IPPE courses (6 total credits)	(7) 5-credit rotations
University of Maryland School of Pharmacy	5 IPPE courses (9 total credits)	(9) 4-credit hour rotations (1,440 hours)
University of Maryland–Eastern Shore School of Pharmacy	4 IPPE courses (4 total credits)	(8) 5-credit rotations
Massachusetts		
Massachusetts College of Pharmacy and Health Sciences University–Boston	2 IPPE courses (3 total semester hours)	(6) 6-credit rotations
Massachusetts College of Pharmacy and Health Sciences University–Worcester (Accelerated PharmD)	2 IPPE courses (10 total semester hours)	(6) 6-credit rotations
Western New England University College of Pharmacy	3 IPPE courses (6 total credit hours)	(6) 6-credit rotations

APPENDIX 9-2. continued

Institution	IPPE	APPE
Michigan		
Ferris State University College of Pharmacy	4 IPPE courses (6 total credits)	(6) 6-credit rotations
University of Michigan College of Pharmacy	2 IPPE courses (4 total credits)	(8) 4-credit rotations
Wayne State University College of Pharmacy and Health Sciences	5 IPPE courses (7 total credits)	(7) 4-credit rotations
Minnesota		
University of Minnesota College of Pharmacy	2 IPPE courses (6 total credits)	36 credit hours of rotations
Mississippi		
University of Mississippi School of Pharmacy	4 IPPE courses (5 total credit hours)	(8) 5-week rotations
Missouri		
St. Louis College of Pharmacy	6 IPPE courses (9 total credit hours)	(8) 5-week rotations
University of Missouri–Kansas City School of Pharmacy	4 IPPE courses (5 total courses)	36 credit hours of rotations
Montana		
University of Montana: Skaggs School of Pharmacy	2 IPPE courses (6 total credits)	(7) 4-credit rotations + (1) 8-credit rotation
Nebraska		
Creighton University School of Pharmacy and Health Professions	3 IPPE courses (5 total semester hours; 216 contact hours)	(8) 5-week rotations
University of Nebraska Medical Center College of Pharmacy	4 IPPE courses (7.5 total semester hours; 300 clock hours)	(10) 4-credit rotations (1,600 clock hours)
Nevada		
Roseman University of Health Sciences College of Pharmacy	3 IPPE courses (328 total contact hours)	(6) 6-week rotations (1,440 contact hours)
New Hampshire		
Massachusetts College of Pharmacy and Health Sciences University–Manchester (Accelerated PharmD)	2 IPPE courses (10 total semester hours)	(6) 6-credit rotations
New Jersey		
Fairleigh Dickinson University School of Pharmacy	3 IPPE courses (9 total credits)	(9) 4-week rotations
Rutgers University: Ernest Mario School of Pharmacy	2 IPPE courses (4 total credit hours)	(8) 5-credit rotations
New Mexico		
University of New Mexico College of Pharmacy	2 IPPE courses (320 total contact hours)	(9) 4-week rotations (1,440 hours)
New York		
Albany College of Pharmacy and Health Sciences–Albany Campus	4 IPPE rotations (8 total credit hours; 320 contact hours)	(7) 6-credit rotations
D'Youville College School of Pharmacy	10 IPPE courses (12 total credits; 344 contact hours)	(6) 6-week rotations (1,440 hours)

APPENDIX 9-2. continued

Institution	IPPE	APPE
Long Island University Pharmacy: The Arnold and Marie Schwartz College of Pharmacy and Health Sciences	4 IPPE courses (9.5 total credits)	(8) 5-credit rotations
St. John Fisher: Wegman's College School of Pharmacy	4 IPPE rotations (320 total contact hours)	(7) 6-week rotations
St. John's University College of Pharmacy and Health Sciences	No information available	No information available
Touro College of Pharmacy	2 IPPE courses (4 total credits)	(11) 6-credit rotations
University at Buffalo School of Pharmacy and Pharmaceutical Sciences	6 IPPE courses (10 total credit hours)	(6) 6-week rotations
North Carolina		
Campbell University College of Pharmacy and Health Sciences	2 IPPE courses (2 total credit hours)	(9) 4-week rotations
University of North Carolina at Chapel Hill: Eshelman School of Pharmacy	2 IPPE courses (9 total semester hours)	(9) 4-week rotations
Wingate University School of Pharmacy	2 IPPE courses (4 total credit hours)	(9) 5-week rotations
North Dakota		
North Dakota State University College of Pharmacy, Nursing, and Allied Sciences	3 IPPE courses (7 total credit hours)	(3) rotations (9, 16, and 15 credits, respectively)
Ohio		
Cedarville University School of Pharmacy	6 IPPE courses (6 total credits)	(9) 4-credit rotations
Northeast Ohio Medical University College of Pharmacy	11 total practice settings (444 total hours)	(2) 8-week rotations + (6) 4-week rotations
Ohio Northern University: Rabbe College of Pharmacy	2 IPPE courses	(9) 4-credit rotations
The Ohio State University College of Pharmacy	7 IPPE courses (7 total credit hours)	(9) 3-credit rotations
University of Cincinnati: James L. Winkle College of Pharmacy	4 IPPE courses (6 total credit hours; 314–330 contact hours)	(9) 4-week rotations
University of Findlay College of Pharmacy	6 IPPE rotations (300 total contact hours)	(3) 8-week rotations + (3) 4-week rotations
University of Toledo College of Pharmacy and Pharmaceutical Sciences	5 IPPE courses (5 total credit hours)	(8) 4-credit rotations
Oklahoma		
Southwestern Oklahoma State University College of Pharmacy	2 IPPE courses (6 total credit hours)	(9) 4-credit rotations
University of Oklahoma College of Pharmacy	6 pharmacy practice courses (12 total credit hours)	(9) 4-week rotations
Oregon		
Oregon State University College of Pharmacy	9 courses requiring off-campus practicum (15 total credit hours)	(7) 6-week rotations
Pacific University School of Pharmacy	4 IPPE courses (10 total credits)	(7) 6-credit rotations
Pennsylvania		
Duquesne University: Mylan School of Pharmacy	3 IPPE courses (2 total credits)	(7) 4-credit rotations

APPENDIX 9-2. continued

Institution	IPPE	APPE
Lake Erie College of Osteopathic Medicine School of Pharmacy–Erie Campus	3-year program: 2 IPPE courses (8 total credits) Distance education pathway: 2 IPPE courses (8 total credits)	3-year program: (6) 6-credit rotations Distance education pathway: (6) 6-credit rotations
Temple University School of Pharmacy	3 IPPE courses (6 total credits; 300 contact hours)	(6) 6-credit rotations
Thomas Jefferson University: Jefferson School of Pharmacy	6 IPPE courses (8 total credits)	(6) 6-week rotations
University of Pittsburgh School of Pharmacy	6 experiential learning courses (6 total units)	(7) 5-unit rotations
University of the Sciences–Philadelphia College of Pharmacy	4 IPPE courses (6–8 total credits)	(7) 5-credit rotations
Wilkes University School of Pharmacy	5 IPPE courses (6 total credits)	(7) 5-credit rotations
Rhode Island		
University of Rhode Island College of Pharmacy	3 IPPE courses (1 credit; 252 contact hours)	(6) 6-credit rotations (1,440 contact hours)
South Carolina		
Presbyterian College School of Pharmacy	5 IPPE courses (8 total credit hours)	(9) 4-week rotations
South Carolina College of Pharmacy	2 IPPE courses (8 total credits; 300 contact hours)	(9) 4-credit rotations (1,440 contact hours)
South University School of Pharmacy	2 IPPE courses (8 total credit hours)	(7) 8-credit hour rotations
South Dakota		
South Dakota State University College of Pharmacy	2 IPPE courses (6 total credit hours)	(8) 5-credit rotations
Tennessee		
Belmont University College of Pharmacy	5 pharmacy practice experiences (8 total credit hours)	(10) 4-credit rotations
East Tennessee State University: Bill Gatton College of Pharmacy	4 IPPE courses (7.5 total credits)	(9) 4-credit rotations
Lipscomb University College of Pharmacy	5 IPPE courses (8 total credit hours)	(10) 4-credit rotations
South College School of Pharmacy	4 IPPE courses (10 total credit hours)	(10) 4-credit rotations
University of Tennessee Health Science Center College of Pharmacy	2 IPPE courses (2 total credit hours)	(11) 4-week rotations
Union University School of Pharmacy	3 IPPE courses (6 total credits)	(10) 4-credit rotations
Texas		
Texas A&M Health Science Center: Irma Lerma Rangel College of Pharmacy	4 IPPE courses (4 total credit hours)	(6) 6-credit rotations
Texas Southern University College of Pharmacy and Health Sciences	6 IPPE courses (6 total credit hours)	(8) 6-credit rotations
Texas Tech University Health Science Center School of Pharmacy	2 IPPE courses (2 total credit hours) + 4 clerkship rotations (8 total credit hours)	(8) 6-credit rotations
University of Houston College of Pharmacy	3 IPPE courses (8 total credit hours)	(7) 6-credit rotations

APPENDIX 9-2. continued

Institution	IPPE	APPE
University of North Texas Health Science Center College of Pharmacy	8 IPPE courses (10 total credit hours)	(7) 6-credit rotations
University of Texas at Austin College of Pharmacy	2 IPPE courses (5 total credit hours; 160 total contact hours)	(7) 6-credit rotations
University of the Incarnate Word: Feik School of Pharmacy	2 IPPE courses (6 total credit hours)	(6) 6-credit rotations
Utah		
University of Utah College of Pharmacy: L.S. Skaggs Pharmacy Institute	2 clerkship rotations (8 total credits)	(7) 6-credit advanced clerkships
Vermont		
Albany College of Pharmacy and Health Sciences–Vermont Campus	4 IPPE rotations (8 total credit hours; 320 contact hours)	(7) 6-credit rotations
Virginia		
Appalachian College of Pharmacy	5 IPPE courses (9 total credits)	(8) 5-credit rotations
Hampton University School of Pharmacy	3 IPPE courses (3 total credits; 360 contact hours)	(8) 4-credit rotations
Shenandoah University: Bernard J. Dunn School of Pharmacy	5 IPPE courses (7 total credits)	(6) 5-credit rotations + (1) 3-credit rotation + (1) 2-credit rotation + (1) 1-credit rotation
Virginia Commonwealth University School of Pharmacy	3 IPPE courses (7.5 total credits; 300 contact hours)	(8) 5-week rotations (1,600 hours)
Washington		
University of Washington School of Pharmacy	3 IPPE courses (10 total credits; 300 contact hours)	(9) 4-week rotations (1,440 hours)
Washington State University College of Pharmacy	2 IPPE courses (300 total contact hours)	(6) 6-week rotations (1,440 hours)
West Virginia		
Marshall University School of Pharmacy	8 IPPE courses (8 total credit hours)	(8) 5-credit rotations
University of Charleston School of Pharmacy	4 IPPE courses (8 total credit hours)	(8) 5-credit rotations
West Virginia University School of Pharmacy	4 IPPE courses (10 total credits)	(8) 5-credit rotations
Wisconsin		
Concordia University School of Pharmacy	4 IPPE courses (10 total credits)	(7) 6-credit rotations
University of Wisconsin–Madison School of Pharmacy	6 IPPE courses (6 total credits)	(6) 7-8-credit clerkships (35 credits required)
Wyoming		
University of Wyoming School of Pharmacy	2 IPPE courses (8 total credit hours)	(9) 4-credit hour rotations

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Chapter 10

Sociological Attributes of Pharmacy Practice

Lourdes M. Cuéllar, Tanya M. Dougherty, and Marta A. Miyares

Chapter Outline

The Language of Diversity 173
Managing Cultural Diversity in the Preceptor-Learner Relationship 173
Health Disparities: Understanding and Closing the Gaps 177
Socioeconomic and Racial Inequality and Access to Healthcare 180
Cultural Competency in Modern Healthcare 184
The Importance of Health Literacy in Healthcare Outcomes 192
Implementing Best Practices in Transitions of Care 197
Summary 200

Cultural differences should not separate us from each other, but rather cultural diversity brings a collective strength that can benefit all of humanity.

Robert Alan

There is incredible liberation in realizing you can change the world simply by changing your perception.

Deepak Chopra

Learning Objectives

- Define *diversity* and describe the value of the diversity of our student population.
- Demonstrate understanding and appreciate the value of working in a culturally diverse environment.
- Identify patients at risk and factors associated with health disparities.
- Teach students how to perform an adequate socioeconomic assessment.
- Understand transformations in U.S. healthcare policy that have improved access to healthcare and expanded preventive services, and identify individuals who may remain uninsured.
- Define *culture* and *cultural competency,* and explain the importance of providing culturally-appropriate care.
- Explain how culture can shape a person's attitude toward health and healing and how this may impact health outcomes.
- Identify behavior indicators, impaired skills, and specific interventions to improve medication and health understanding related to low health literacy.
- Understand assessment tools that can be used to identify patients with low health literacy skills.
- Identify vulnerable patient populations and recognize challenges pharmacists may encounter in dealing with ethnically and culturally diverse patients with low literacy.
- Understand the role of preceptors and learners in transitions of care.

> Culture is a pattern of learned beliefs, values, and behavior that are shared within a group; it includes language, styles of communication, practices, customs, and views on roles and relationships. We all belong to more than one culture, which may, for example, be social, professional, or religious; the concept goes beyond race, ethnic background, and country of origin. Culture shapes the way we approach our world and affects interactions between patients and clinicians.[1]

Preceptors can effectively teach learners, directly and through role modeling, the knowledge and skills, especially communication and assessment skills, needed to be able to provide services that are appropriate for a diverse patient population. Cultural competency is a journey; even a seasoned preceptor must continue to learn and maintain cultural competency skills.

This chapter will provide preceptors information about social and economic issues relating to healthcare, including access to care and transitions of care, health literacy, managing cultural diversity in the workplace, and cultural competency. This information will help preceptors to enhance learners' understanding, knowledge, and skills relating to the influence of cultural, social, and economic

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factors that impact safe and effective healthcare. By becoming aware of causal factors that could be eliminated or modified, and applying appropriate knowledge and skills, we can improve our patients' health status. The result will be improved patient understanding of medication therapy and better medication adherence.

The Language of Diversity

Although the terms *race* and *culture* are often implied when one is speaking about issues relating to diversity or inclusion, it is important to separate these terms from the broader definitions to provide a meaningful context.[2]

- *Race*—the category to which others assign individuals on the basis of physical characteristics and the generalizations and stereotypes made as a result.
- *Culture*—the belief systems and value orientations that influence customs, norms, practices, and social institutions, including psychological processes and organizations.
- *Ethnicity*—the acceptance of the group mores and practices of one's culture of origin and the concomitant sense of belonging.
- *Diversity*—individual's social identities, including age, gender, sexual orientation, physical disability, socioeconomic status, race, ethnicity, workplace role or position, religious and spiritual orientation, and work and family concerns.
- *Inclusion*—a sense of belonging: feeling respected, valued for who you are; feeling a level of supportive energy and commitment from others so that you can do your best work.

Managing Cultural Diversity in the Preceptor-Learner Relationship

An important focus of this chapter is how preceptors can manage and teach ethnically diverse learners so they, in turn, can provide quality patient care. In *Building a House for Diversity*, Thomas[3] states that although race and ethnicity are the most obvious components of culture, there are many factors that shape a person's values, ideas, attitudes, and experiences. These include age, gender, disability, sexual orientation, level of education, income, preferred language, urban versus rural location, native versus foreign-born status, customs, beliefs, and practices. An appreciation of the diversity of our pharmacy learners is especially important today as health systems and healthcare practitioners must respond to an increasing racially and ethnically diverse patient population. Encouraging collaboration and understanding, displaying sensitivity, and fostering an atmosphere of inclusion is central when working with individuals with diverse backgrounds. Likewise, learners from different cultural backgrounds will help both the preceptor and the learner gain new perspectives, build awareness and understanding, and increase value to the organization.

For persons with disabilities, inclusion and acceptance is very important. The preceptor and co-workers should educate themselves and be sensitive toward the challenges faced by persons with disabilities.

- Do not make assumptions about what a learner can or cannot do. The preceptor should be attuned to physical barriers that may impede learners' ability to access the tools needed to complete their rotation. Work with learners to determine what accommodations would enable them to successfully complete their rotation. Ask questions if unsure about what to do or how to handle accommodations.
- Speak up if you hear any negative remarks by coworkers, and be proactive in educating them about learners' abilities versus disabilities; focus on their strengths.

Effective preceptors demonstrate commitment to diversity and continuous learning, view all learners on rotation from a holistic point of view, and accommodate for any individual's physical disabilities.

During the first days of the rotation, it is essential to establish the preceptor-learner relationship. First, engage learners in a conversation about what drives and motivates them to succeed. Learning new skills and under-

standing how to advance within the profession of pharmacy motivate learners from racial or ethnically diverse backgrounds. Second, establish the manner and frequency of formal communication and feedback. One style of providing mentoring and feedback with learners from ethnically diverse backgrounds does not fit all. For example, feedback about performance may be delivered directly or in a more indirect and subtle way. In some cultures, direct questions or feedback may not be common practice. Similarly, positive reinforcements, such as a pat on the back or public acknowledgement, may be seen as humiliating.[4] A private acknowledgement or written feedback may be more acceptable.

It has been postulated that females will make up the majority of the U.S. workforce early in the 21st century. Gender diversity of pharmacy students and young practitioners has changed dramatically over the last two decades. The following data demonstrate the vast difference in diversity of pharmacists in the state of Texas versus the general population (see **Figure 10-1**).[5] With respect to age and race/ethnicity, among white/Caucasians 50.1% of the pharmacists were over 50 years of age; 41.5% of black/African American pharmacists were under 40 years of age; 15.5% of Hispanic/Latino pharmacists were under 30 years of age; and 60.8% of other pharmacists were under 40 years old (see **Figure 10-2**).

The *Overview of Race and Hispanic Origin: 2010* Census brief illustrates our country's growing diversity.[6] More than half of the total U.S. population growth between 2000 and 2010 was due to the increase in the Hispanic population. By 2010, Hispanics comprised 16%. Between 2000 and 2010, the Asian population grew faster than any other major race group increasing to 5% or 14.7 million. Blacks or African Americans represent 13% of the population. Minority populations comprised nearly half of the Western U.S. population at 47%, with California leading with 22.3 million. Between 2000 and 2010, Texas joined California, the District of Columbia, Hawaii, and New Mexico in having a majority-minority population where more than 50% of the population was part of a minority group.

A quick review of the demographic of today's pharmacy students indicates that the portrait of our future practitioners differs significantly from what it was even 10 to 15 years ago. Today, there are far more females; students with prior degrees, including advanced degrees; as well as older individuals. Likewise, the cultural or ethnic diversity of pharmacy students is significant in many areas of the United States. However, the diversity of our pharmacy graduates does not match the growing diverse demographics of the U.S. population. The chance of the composition of

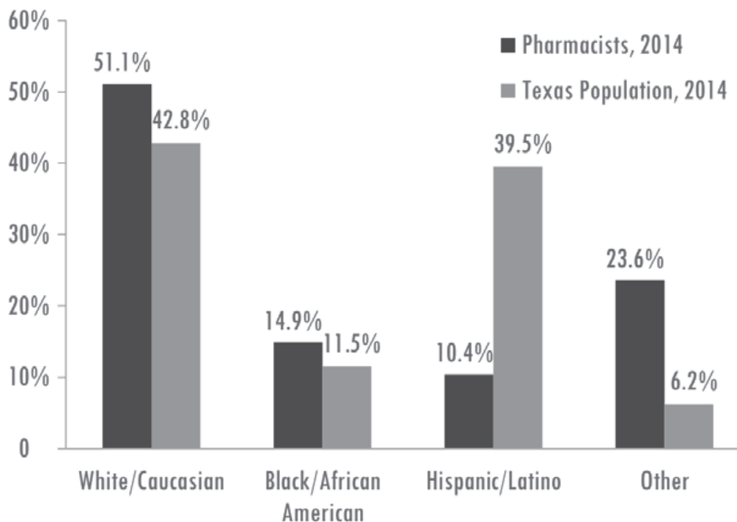

FIGURE 10-1. Race/ethnicity of pharmacists.

Source: Trends, Distribution, and Demographics: Pharmacists 2014. Health Professions Resource Center under the governance of the Texas Statewide Health Coordinating Council. Texas Department of State Health Services. Publication #: 25-14555, March 2015.

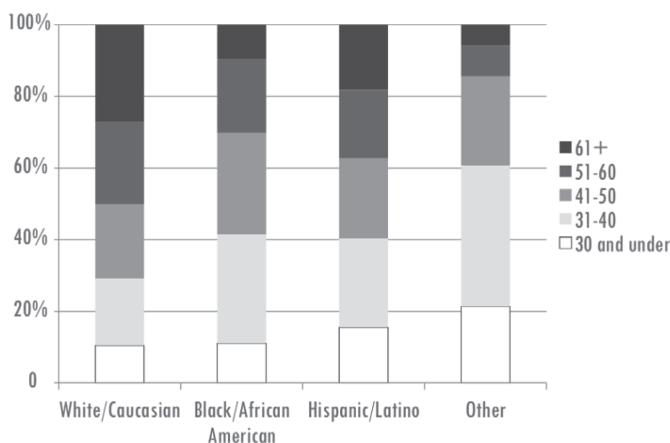

FIGURE 10-2. Age distribution of pharmacists by race/ethnicity.

Source: Trends, Distribution, and Demographics: Pharmacists 2014. Health Professions Resource Center under the governance of the Texas Statewide Health Coordinating Council. Texas Department of State Health Services. Publication #: 25-14555, March 2015.

the U.S. healthcare workforce reflecting the diversity of our population in the near future is low.

The American Association of Colleges of Pharmacy's *Profile of Pharmacy Students*[7] also provides vital insight into this disparity between diversity of pharmacy graduates versus the U.S. population. Professional (PharmD) degrees conferred 2012 to 2013 indicate that more women than men received degrees (61.7% women and men, 38.3%). White Americans received the majority of degrees, at 56.6%; underrepresented minorities received 11.9% (6.9% black, 4.3% Hispanic, 0.3% Native Hawaiian or Other Pacific Islander, and American Indian 0.4%).

Today, organizational focus has turned toward cultural awareness, or valuing differences. The Institute of Medicine's (IOM) report states that increasing racial and ethnic diversity among healthcare professionals is a very important aspect of providing healthcare, because evidence suggests that diversity is associated with improved access to care for racial and ethnic minorities.[8] In addition, it provides for greater patient choice in providers, improved patient satisfaction, better patient-clinician communication, and better educational experiences for learners in health professions.

Preceptors should be aware that culture greatly influences how learners view their entire world, whether they are at school, at home, or completing an experiential rotation. You may notice differences among learners in such areas as the generally accepted roles for women and men, the importance of the individual versus the family or community, the role of religion in everyday life, modesty in dress, body language, personal interactions, and boundaries regarding eye contact and personal space. Culture also affects how learners may deal with critically ill patients and issues surrounding death and dying patients. Learners may bring with them their own history or beliefs regarding folk wisdom and common sense compared to formal education and scientific knowledge. The preceptor should thoughtfully enquire about learners' beliefs regarding illness versus wellness and holistic approach to health (mind, body, spirit) versus Western medicine. As we move further toward evidence-based medicine, the need for alternative therapies and their benefits will go under even greater scrutiny and potentially could be ignored or dismissed, making an understanding of cultural diversity even more important.

Preceptors should also recognize their own biases or perceived stereotypes. Do you interact with learners in ways that manifest double standards? Do you undervalue comments made by learners whose English is accented or who appear foreign? It is very important to avoid ethnocentrism, in which we

PRECEPTOR PEARLS

- Become acquainted with your learners individually; try to understand their interests, beliefs, and values. Do this on the first day of the practice experience.
- Ascertain every learner's name and the name he or she prefers, and use that name. If you are not sure, ask for the correct pronunciation.
- Try to anticipate and acknowledge issues of sexuality, religion, or other values when you give projects or assignments.
- Introduce controversial topics in impersonal or nonjudgmental ways.
- Do not overlook capable but quiet learners; give male and female students equal attention when mentoring and providing feedback.
- Inquire early in the rotation learners' preferred method for receiving feedback.
- Treat learners as individuals, not as representatives of their gender or ethnicity. Do not assume that there is a collective identity minority learners share.
- Do not make assumptions regarding a learner's language capabilities based on ethnic background. (e.g., a learner with a Hispanic last name may not necessarily read, speak, or understand Spanish).
- Take advantage of life experiences as well as the different perspectives that older learners bring to the experiential rotation.
- Remember that learners may be dealing with children, mortgages, jobs, marriages, or divorces while they study to become a pharmacist.
- Assume that learners hold different religious beliefs. Accommodate learners' important religious holidays. Allow for these holidays when planning learners' schedules.
- If you have a learner with a physical disability or challenge, ask him or her privately what you can do to facilitate learning. Adapt to the learner's need without lowering your usual course standards.
- Assume that certain topics may affect some learners personally; for example, dealing with illness and disease.

believe our own culture and way of doing things are the best. Preceptors need to acknowledge and accept that cultural differences exist and may impact their interactions with learners. It is important to understand that incorporating the strengths of many cultures enhances the capacity of the whole group. Likewise, the preceptor should recognize that diversity within cultures is as important as diversity between cultures, and as preceptors and educators, we need to value diversity.

The essential concept is that teaching for diversity means teaching to each individual learner. One of the greatest challenges you face as a preceptor is modifying your teaching or precepting style to meet the different educational adaptation styles of each learner. By taking an interest in the students' experiences, interests, beliefs, and goals, you take the most important step in making learners feel that they will succeed on your rotation.

As a preceptor, you are a role model. Help learners understand the value of a diverse

perspective in their future professional lives. Use examples from your own life and practice.

Healthcare practitioners and learners need to understand and respect the value of a culturally diverse environment, experience culture and gender differences, and appreciate the value of diversity in their daily decision-making process. Teach learners the importance of integrating values and beliefs into the daily operations of their practice. Preceptors can exemplify this cultural awareness while interacting with their colleagues, other healthcare providers, and patients. This is integral to the cultural proficiency process. Reach out to learners who are different in race, culture, or gender. Teach all learners how to navigate successfully within a diverse environment.

Health Disparities: Understanding and Closing the Gaps

The terms *health disparities* and *health inequalities* have been used to define differences in health and health-related outcomes in population subgroups. The IOM defined health disparities as "racial or ethnic differences in the quality of health care that are not due to access-related factors or clinical needs, preferences, and appropriateness of intervention."[9] This report concluded that racial and ethnic minorities receive a lower quality of healthcare than non-minorities, even when access-related factors, such as insurance status or income, are controlled. Factors contributing to health disparities are multifaceted beyond racial or ethnic differences. The U.S. Department of Health and Human Services (HHS) *Healthy People* 2020 objectives expand the definition as "a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage."[10] Race, ethnicity, income, or socioeconomic status are strongly linked to poorer health outcomes.

The goal is to eliminate all unjust and avoidable variances in health, health-related outcomes, and healthcare. This is referred to as *health equality* or *health equity*. The *Healthy People 2020* recommendations define health equity as "attainment of the highest level of health for all people."[10] The relationship between health disparities and health inequalities are inseparable. What populations are at risk of health disparities? The Office of Minority Health and Health Equity has identified racial and ethnic minority populations as American Indian and Alaska Native, Asian, black or African American, Hispanic or Latino, and Native Hawaiian and Other Pacific Islander.[11]

In addition, populations with disabilities and sexual or gender orientation preference (lesbian-gay-bisexual-transgender [LGBT]) groups are at risk and have been underrepresented in surveillance and research on disparities in health and healthcare.

Factors that contribute to health disparities are numerous and multifaceted. Generally, contributing factors can be classified as:

- Biologic—race, ethnicity, age
- Socioeconomic
- Sexual orientation or gender identity
- Disability—cognitive, sensory, or physical
- Religious
- Mental health
- Environmental—geographic location
- Individual behaviors—tobacco or alcohol use
- History or experience linked to discrimination—research in vulnerable populations or less developed areas

The World Health Organization (WHO) uses the term *social determinants of health* as contributing factors of health inequalities. Social determinants of health are defined as the social and economic conditions and circumstances in which people are born, grow, live, work, and age.[12] These conditions are then responsible for health inequities or unfair and avoidable variances in health. The social environment is such a large contributor toward health inequities and health disparities that organizations have placed it as a top priority item to address. In addition to WHO, HHS strategies and initiatives aimed at reducing and eliminating heath inequities and health disparities include Healthy People 2020,[13] the National Partnership for Action to End Health Disparities,[14] and the National Prevention and Health Promotion Strategy.[15] It is important to recognize the impact that

TABLE 10-1. *Examples of Health Disparities*

Population	Example of Disparity
African Americans/non-Hispanic blacks	Heart disease and stroke: Highest mortality compared to all other racial/ethnic groups in 2009[18]
American Indian/Alaska Natives	Stroke: The overall drug-induced death rate is highest among American Indian/Alaska Native adults compared to any other ethnicity group[19]
Native Hawaiian/Other Pacific Islanders (NHOPI)	Tuberculosis: Rate in NHOPI population is 8 times higher than non-Hispanic white population[20]
LGBTs	Sexual minorities are more likely to have been a victim of sexual assault (2.9 times higher for lesbian and gays and 3.9 times higher for bisexuals)[21]
Women	Stroke: Every year, 55,000 more women than men experience a stroke[18]

social determinants have on health outcomes of specific populations. Social determinants of health directly correlate with quality of life. To best serve a specific patient population, it is imperative to understand the living environment, including community access to primary and acute care, healthy foods, public safety, transportation, religious and community organizations, pollutant-free air, and housing. The *National Healthcare Disparities Report* on the state of health disparities concluded that healthcare quality and access for minority and low-income groups is suboptimal (see **Table 10-1**).[16]

National efforts to increase public awareness of chronic conditions that require screening and prevention have been effective and can be used as a model to close gaps in health disparities. One such example is diabetes screening. Although the prevalence continues to be higher among ethnic minority and lower household income populations, public initiatives aimed at increasing awareness have resulted in significant improvements in diabetes screening among those at highest risk. Preceptors should engage learners in opportunities to participate in disease screening and prevention campaigns. Disease prevalence also disproportionately effects select populations, with 44% of new HIV infection diagnoses occurring in the non-Hispanic black population.[17] Significant gaps in mortality continue to be seen between groups of populations. Cardiovascular disease is the leading cause of death in the United States overall, but compared to non-Hispanic whites, non-Hispanic blacks are 50% more likely to die of a premature cardiovascular event before the age of 75 years. Examples of access disparities are listed in **Table 10-2**.

Preceptors have the opportunity to not only increase student awareness of health disparities among the population for which they are serving but also to contribute to the available research data among minority populations. Ethnicity is under-reported and under-evaluated within the pharmacy literature. Preceptors can assist junior pharmacy researchers in evaluating the impact of pharmacy services on health-related outcomes to further contribute to narrowing the gap.

TABLE 10-2. *Examples of Access Disparities*

Population	Example of Disparity
Hispanics/Latinos	Lack of health insurance: Highest uninsured rate out of any ethnic group; two out of every five Hispanics lacked health insurance[22]
American Indian/Alaskan Native	Poverty: Largest age-standardized percent of adults in poverty compared to non-Hispanic whites[22]
Disabled	Barrier to care: Twice as likely to report cost as a barrier to care, including inability to pay for prescription medications[23]
Rural living	Emergency services: Longer response times for emergency services leading to an increased risk of death[24]

PRECEPTOR PEARLS

Preceptors can assist pharmacy learners in their approach toward communicating with patients at risk of health disparities. Many speak another language than English. Learners should be encouraged to use professional interpreters to prevent communication barriers. An assessment of drug benefit coverage is important. If needed, pharmaceutical assistance plans should be applied to find the most affordable options.

African Americans/non-Hispanic Blacks:

May have a feeling of distrust toward the medical system due to a long history of discrimination and unethical treatment, as was the case with the Tuskegee Syphilis Study. Communication should be built on relationship and respect to avoid feelings of being experimented on when determining medication regimens.

Hispanics/Latinos:

Immigration status may be variable; some individuals are citizens, some are legal residents, and some are undocumented. A fear of deportation may prevent seeking medical care.

American Indian/Alaska Natives:

Members of federally recognized tribes receive healthcare through the Indian Health Service (IHS) and may live on reservations. Access to IHS programs is lost when tribe members relocate to urban areas.

Learners should be encouraged to enquire about herbal medicine use, which is used in traditional Indian healing.

Asian Americans:

New immigrants, the elderly, and those from impoverished regions may be the most vulnerable to healthcare disparity.

NHOPIs:

Learners should be encouraged to enquire about herbal medicine use, which is used in traditional Hawaiian healing.

Socioeconomic status influences medication use.[25] Individuals at the lowest poverty level were five times more likely to not receive a medication because of cost. Despite insurance coverage, poverty was a significant factor in receiving a prescription medication. Ethnicity may also reduce access and eligibility to receive medication therapy management (MTM) services. Pharmacists may be unable to provide MTM services to minority groups who are most likely to benefit from this service to lower prescription drug costs, improve adherence, and control conditions. Preceptors can serve as role models to learners in assessing a patient's ability to afford medications and providing assistance regardless of socioeconomic status or ethnicity.

Pharmacy clinicians frequently carry and maintain lists of $4 or $5 per 30-day supplies of generics available at pharmacies to make appropriate therapeutic substitution recommendations for patients with little or no financial resources. Pharmacists can improve access to healthcare and reduce health risk for their patients by providing warm, friendly greetings as well as visual observation and active listening to perceive commonalities and health concerns. Preceptors can teach learners by demonstrating how ascertaining and enhancing the patient and family's knowledge and use of available resources provides the patient with an indispensable support system for successful self-management of his or her disease or acute or chronic condition (see **Box 10-1**).

BOX 10-1. Expand the Patient and Family's Use of Available Resources

- Assist with weighing the costs and advantages of the treatment options.
- Because language barriers may lead to misinterpretation, obtain competent, nonbiased interpretive services to increase patient participation and satisfaction as well as confidence, adherence, and positive outcomes.
- Provide patients with information about Medicaid and Children's Health Insurance Program to assist poor and low-income children or adults with healthcare expenses that are accessed through state agencies.
- Inform patients that Medicaid benefits include transportation services to medical appointments and to pick up prescription medications.
- Direct patients to drug company patient assistance Internet sites, such as www.rxassist.org; www.rxhope.com; www.needymeds.com; www.rxoutreach.com; www.helpingpatients.org; www.Medicare.gov/prescriptions/home.asp; www.TogetherRxAccess.com; and www.ashp.org/PAP/.
- Direct patients or provide them with information on $4 or $5/30-day supply or $9 or $10/90-day pharmacy-sponsored medication supply programs.
- Direct patients to www.Medicare.gov for Medicare information on public and private programs that offer discounted or free medication, using generic medications and other means to reduce healthcare costs, and Medicare health plans that have prescription benefits.
- Inform patients that individuals with terminal illness or severe disability expected to last 12 months or more may be eligible for Social Security Disability Income (may eventually receive Medicare benefits with this) or supplemental Security Income and Medicaid benefits from the Social Security Administration (1-800-772-1213 or www.ssa.gov/disability/).
- Provide patients with information about financial counseling services such as Money Management International (1-800-493-2222 or 1-800-388-2227 or www.moneymanagement.org), a nonprofit agency that helps consumers budget for expenditures and negotiate reasonable payment arrangements.
- Inform patients that local or state-wide hospital districts may be able to provide free or discounted healthcare services.
- Inform patients that city and county health departments/clinics provide free or very low cost immunizations and other healthcare services.

PRECEPTOR PEARLS

As a learning activity, conduct a community assessment to understand resources available to the patient population served (location of grocery stores, transportation, gyms, and prevalent buildings in the area). For assistance go to: http://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/describe-the-community/main

Socioeconomic and Racial Inequality and Access to Healthcare

Rising healthcare costs are burdening the U.S. economy and its people. Health spending for 2013 totaled $2.92 trillion, up 4% from 2012. In 2014, health spending growth was forecasted to increase to 7.4% with rising coverage expansions from the Patient Protection and Affordable Care Act (Affordable Care Act [ACA]) of 2010. Growing government spending on healthcare is anticipated to be due to the accelerated growth in Medicare enrollment,

expanded Medicaid coverage, and the introduction of premium and cost-sharing subsidies for health insurance exchange plans.[26]

In addition, the rate of U.S. poverty increased from 11.3% in 2000 to 15.1% in 2010. The federal poverty limit in 2012 was $11,170 per person and $23,050 for a family of four.[27] In 2011, 1.65 million households were living in a state of extreme poverty. Though average real income increased by 1.7% from 2009 to 2011, the incomes of the top 1% grew by 11.2% while the incomes of the bottom 99% decreased by 0.4%. This income inequality has been associated with disparities and inferiority in population health, lower life expectancy, higher infant mortality, and more preventable deaths.[28]

Research performed using national Medicare data found that although black patients lived within closer proximity to higher-quality hospitals than white patients, black patients were 25% to 58% more likely to receive surgery at low-quality hospitals. In addition, black patients living in racial segregation were 41% to 96% more likely compared to white patients to undergo surgery at a hospital of lower quality. Comparative quality measures could potentially guide patients and physicians to high-quality hospitals, while improvement efforts could concentrate on enhancing hospitals that serve black patients. Unfortunately, disparities may worsen as pay-for-performance, bundled payments, and nonpayment for adverse events is diverted to high-quality hospitals.[29]

Performing Social Assessment

An essential duty provided from preceptor to learner is to perform an adequate patient social assessment. Learners should feel comfortable asking questions in an empathetic and professional manner to determine factors that may impact adherence and ability to take medications. Gathering information about patients' background and family support and recognizing language or cultural barriers that may affect perceptions and response to disease and treatment are imperative. The goal of the social assessment is to distinguish patient's social situations and understand how these influence the patient's complaint.[30] Often, the reason why the patient is hospitalized may have nothing to do with the admitting diagnosis. For example, a family without the resources to take care of the patient may leave him or her at the emergency department. Other patients may not take their medications because they cannot afford them; others may be unable to care for themselves in their current living circumstance. Therefore, the clinical scenario must not only be matched with the social evaluation but also the financial assessment. Understanding patients' insurance coverage (or lack of coverage), qualification for Medicaid or Medicare, need for assistance in obtaining medications or other resources, and referral to the hospital's financial assistance department are central in helping patients meet optimal health outcomes.

PRECEPTOR PEARLS

Social Assessment Criteria

- Living situation
- Access to community services
- Language spoken
- Preferred language for health information
- Financial concerns
- Religious/cultural needs
- Ability to read and write
- Learning preferences, including watching, reading, hearing, and doing
- Place of birth and upbringing
- Highest level of education
- Current and past occupation
- Number of children
- Overall perception of patient's general satisfaction with life

Medicare and Medicaid

Medicare is a U.S. social insurance program providing health insurance for Americans 65 years and older who have contributed to the system throughout their working years. Younger patients with disabilities, end-stage renal disease, and amyotrophic lateral sclerosis are also eligible for this health insurance (see **Box 10-2**).

Medicaid is a social program for persons with low income. Recipients of Medicaid must be U.S. citizens or legal permanent residents with low income. Persons with certain disabilities are also eligible. Before Medicaid, only a small percentage of people living in poverty had health insurance.

BOX 10-2. Understanding Medicare

- *Part A: Hospital/Hospice Insurance*

  Covers inpatient hospital care, including rehabilitation, skilled nursing facilities, hospice, and home health services

- *Part B: Medical Insurance*

  Covers doctor and clinical lab services; outpatient and preventive care; screenings, surgical fees, and supplies; and physical and occupational therapy

- *Part C: Medicare Advantage Plans*

  Combines Part A and Part B plans together in one plan. These plans can also be combined with Part D prescription drug coverage

- *Part D: Prescription Drug Plans*

  Can be a stand-alone plan or combined with a Medicare Advantage Plan

The Patient Protection and Affordable Care Act

Regardless of coverage with Medicare and Medicaid, the percentage of the population without health insurance has persisted. Although persons without health insurance struggle to access essential health services,[31] attainment of health insurance is associated with improvement in health access and outcomes.[32]

Since inception, the law has resulted in coverage of millions of people. Children are now allowed to stay on their parents' insurance until age 26.[33] Before ACA, many with pre-existing disorders paid high premiums, were rejected from insurance coverage, or had yearly or lifetime limits on their coverage. The current law eliminates these norms and prices insurance premiums without regard to claims, health status, or individual patient characteristics. After full ACA implementation, approximately 30 million nonelderly adults will remain without insurance.[34] Furthermore, some will remain underinsured and have to spend more than 10% of their income on health expenses.[35]

PRECEPTOR PEARLS

INDIVIDUALS REMAINING UNINSURED[36]

- Unauthorized immigrants
- People who are eligible but not enrolled in Medicaid
- People who choose to remain without insurance
- People in states that are not expanding Medicaid who cannot afford to buy insurance because they do not qualify for premium subsidies.

To address the needs of the insured, the ACA will increase the number of primary care providers. Eleven billion dollars will be allotted for the expansion and construction of health centers throughout the country. Because ACA was designed to address the rising cost of healthcare establishment of the Hospital Readmissions Reduction Program, a program linked to value was created. Effective October 2012, ACA required the Centers for Medicare & Medicaid Services (CMS) to reduce Medicare payments for inpatient prospective payment system hospitals with excess readmissions. Another approach expected to generate large savings is the Center for Medicare and Medicaid Innovation within CMS to test various payment and service delivery models to achieve better care for patients, better health for communities, and lower costs through improving the healthcare system. These various care models will provide the opportunity for pharmacy preceptor and learner integration within these programs to expand. Clinical care models/programs include federally qualified health centers, patient-centered medical homes, health homes, accountable care organizations, Meaningful Use, and Promatores de Salud.

Federally Qualified Health Centers

Although federally qualified health centers (FQHCs) or community health centers have been accessible since 1965, ACA resulted in increased federal funding to FQHCs to aid in meeting the anticipated healthcare demand from the millions who would gain healthcare coverage. FQHCs must serve an underserved area or population, offer a sliding fee scale, provide comprehensive services such as primary care, dental care, mental healthcare, and specialty services, have an ongoing quality assurance program, and include a governing board of directors. Patients who receive care at FQHCs have a 24% lower total cost of care compared to those who do not utilize FQHCs.[37]

Patient-Centered Medical Home

The patient-centered medical home (PCMH) program is based on the primary care providers supported by an interdisciplinary team delivering primary and preventive care. The core functions and attributes must include accessibility, high quality, safety, and patient-centered, comprehensive, coordinated and improved access to care with shorter waiting times. Studies have demonstrated that patients participating in medical homes are associated with improved health, better access to preventive care, improved glycated hemoglobin control, decreased use of the emergency department, and improved patient satisfaction.[38] As a result of these positive outcomes, providers that achieve PCMH status receive incentive payments from Medicare and Medicaid.

Health Homes

Another care model designed to achieve ACA goals is the health home model. A health home is not an actual location but rather coordinated care by providers who aim to provide primary care, behavioral healthcare, and substance abuse services. The goal of the health home model is to provide high-risk patients with a primary care provider to avoid unnecessary utilization of resources such as the emergency department. Outreach workers attempt to find the most vulnerable patients and enroll them in the health home.[39]

Accountable Care Organizations

Accountable care organizations (ACOs) are groups of doctors, hospitals, and other healthcare providers who come together voluntarily to give coordinated high-quality care to their Medicare patients. The aim is to ensure patients receive appropriate and timely care while avoiding unnecessary duplication of services and preventing medical errors. When an ACO succeeds in delivering high-quality care and spending healthcare dollars efficiently, it shares in the savings it achieves for the Medicare program.

Meaningful Use

The Medicare and Medicaid electronic health record (EHR) incentive programs provide financial incentives for the meaningful use of certified EHR technology to improve patient care. To receive payment, providers have to show they are meaningfully using their EHRs by meeting requirements for certain objectives. Some of the core requirements of meaningful use include maintenance of an active medication list, allergy list, drug-drug and drug-allergy checks, and an up-to-date problem list of current and active diagnoses.

Promotores de Salud

Promotores de Salud translated to English means “promoters of health.” They are community health workers—lay, yet effective—who provide health promotion and disease prevention outreach services to undeserved Latino/Hispanic communities. Frequently, promotores are community residents and leaders and serve as liaisons between their community, health professionals, and social service organizations.

Although these models can lead to better health for people who access these services, health outcomes in the community will not be addressed. Pharmacy preceptors, learners, and other healthcare professionals can work with community-based organizations to address general health outcomes while reducing costs.

Supporting Prevention Through the Affordable Care Act

Until recently, the emphasis of the U.S. health system has been on treatment rather than

prevention. The ACA responded to the lack of preventive health services by placing emphasis on new initiatives and funding for disease prevention. It provides access to clinical preventive services and removes cost as a barrier. Opportunities for pharmacy preceptors and learners in the area of preventive services are vast, and preceptors should encourage learners to promote preventive services as risk reduction strategies to reduce disease for the population.

Undoubtedly, socioeconomic and racial disparities are prevalent. Pharmacists are well positioned to deal with these disparities, and via efforts from the pharmacy preceptor-learner team these inequalities can be appropriately addressed. In the future, the role of pharmacy preceptor-learner teams may expand to include providing medication information to primary care extenders with chronic disease management and preventive care responsibilities. In addition, through establishment of these clinical care models and programs, pharmacists and preceptors may be consulting from physician practice offices. Undoubtedly, ACA is improving access to healthcare, expanding preventive services, and increasing opportunities for healthcare providers such as pharmacists to make a positive impact.

Cultural Competency in Modern Healthcare

The National Center for Cultural Competence (NCCC) states that there are numerous reasons to justify the need for cultural competence in healthcare at the patient-provider level.[40] These include, but are not limited to, the following:

- The perception of illness and disease and their causes varies by culture
- Diverse belief systems exist related to health, healing, and wellness
- Culture influences health-seeking behaviors and attitudes toward healthcare providers
- Individual preferences affect traditional and nontraditional approaches to healthcare
- Patients must overcome personal experiences of biases within healthcare systems
- Health providers from culturally and linguistically diverse groups are underrepresented in the current service delivery system

Assessing Cultural Competency

The HHS Office of Minority Health defines *cultural competency* as the ability of the healthcare providers and organizations to understand, respect, and respond effectively to the cultural and linguistic needs brought by patients to the healthcare setting. Pharmacy students must learn how to communicate with and provide direct patient care services to patients of varying cultures and healthcare preferences. Learners and preceptors should demonstrate understanding and respect for patients with differing health beliefs and health-seeking behaviors and practices, thereby demonstrating cultural proficiency. Preceptors and learners must appreciate their patients' cultural beliefs; this is critical in the delivery of optimal care.

The *American Journal of Public Health* devoted an entire special issue to the significant disparities in the burden of disease and illness experienced by racial and ethnic minorities that still persist. Historically, most medical treatments have been designed for the average individual, not reflecting the diversity and patient mix that is reality. Most clinical trials continue to lack adequate inclusion of diverse racial and minority groups that may be relevant to therapy. Consequently, what is printed in the product's safety and efficacy profile may lack sufficient information relating to key population subgroups.[41]

PRECEPTOR PEARLS

How a patient expresses pain can vary significantly between cultures as well as between men and women. In some cultures stoicism is expected.

U.S. Bureau of the Census, Population Estimates Program is updated annually (see http://www.census.gov/popest/estimates.html). In accordance with Office of Management and Budget (OMB) guidelines, the Census Bureau collects race data based on self-identification. The racial categories included in the census

questionnaire generally reflect a social definition of race recognized in this country and not an attempt to define race biologically, anthropologically, or genetically. In addition, it is recognized that the categories of the race item include racial and national origin or sociocultural groups. People may choose to report more than one race to indicate their racial mixture, such as "American Indian" and "white." People who identify their origin as Hispanic, Latino, or Spanish may be of any race.

Population estimates use the race categories mandated by OMB's 1997 standards: white; black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander. These race categories differ from those used in Census 2010 in one important respect. Census 2010 also allowed respondents to select the category, "Some Other Race." The following definitions were used[42]:

- *White.* A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.
- *Black or African American.* A person having origins in any of the black racial groups of Africa. It includes people who indicate their race as "black, African American, or Negro."
- *American Indian and Alaska Native.* A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment.
- *Asian.* A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent.
- *Native Hawaiian and Other Pacific Islander.* A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- *Two or more races.* People may have chosen to provide two or more races either by checking two or more race response check boxes, by providing multiple responses, or by some combination of check boxes and other responses.
- *The concept of race is separate from the concept of Hispanic origin, Non-Hispanic white alone persons.* Individuals who responded "No, not Spanish/Hispanic/Latino" and who reported "white" as their only entry in the race question.

Asian Americans represent a wide variety of languages, dialects, and cultures. They are as different from one another as individuals from non-Asian cultures. In the 2010 Census, respondents who reported being Asian alone or in combination, 46% lived in the West, 22% lived in the South, 20% in the Northeast, and 12% in the Midwest.[43] The top three states with the highest proportions of Asian alone or in combinations were California, New York, and Texas, with New York City, Los Angeles, and Houston representing the largest populations in these three states. When looking at the Asian population by detailed group, the largest populations were Chinese, Filipino, Asian Indian, Vietnamese, Korean, and Japanese.

Language is the most prominent barrier for Asians and Pacific Islanders, with the majority speaking a language other than English at home; many Asian Americans do not speak English fluently.

Although Cuban Americans are often classified as Hispanics or Latinos, their customs and traditions differ from Mexican American, Central American, or South American. Latinos/Hispanics come from different nations and cultures. Hispanic origins are not races but considered to be a separate concept from race. The U.S. Hispanic population is projected to increase from 17.7% in 2015 to 22.8% by 2035. Hispanics are the largest racial/ethnic minority population in United States.[44] Hispanic life expectancy has been found to be higher for foreign-born Hispanics compared with U.S.-born Hispanics, suggesting that country of birth plays an important role in Hispanic health. However, published national health estimates stratified by Hispanic origin subgroup and nativity are lacking.

In 2013, Mexicans, Puerto Ricans, and Central Americans together comprised 82.4% of all Hispanics living in the United States (64%, 9.5%, and 8.9%). Hispanics were twice as likely to live below the poverty level, four times as likely not to have completed high school, and 20 times as likely not to speak English proficiently.[44]

According to the 2010 Census data, over half of the Hispanic population in the United States resided in just three states: California, Texas, and Florida. Fourteen million (28%) of the total Hispanic population live in California.[45] The largest concentration is in New York, Los Angeles, Chicago, Houston, and San Antonio. In addition, Hispanics were the majority of the population in 82 or 3,143 counties, accounting for 16% of the total Hispanic population. Data from the Kaiser study indicates that Hispanics are the most likely to be uninsured because the jobs held by many Hispanics do not provide health benefits (e.g., migrant workers, day laborers, housekeepers, etc.).[46]

PRECEPTOR PEARLS

About one in six persons living in the United States is Hispanic or Latino.

Hispanics are not all alike. Country of birth and cultural heritage influence health behaviors and health outcomes.

To help in improving the health of Hispanics in your community consider partnering with lay community health workers (promotores de salud).

Health education materials need to be written in Spanish and English. Remember to ask in what language the patient prefers his or her health information.

Access to culturally appropriate healthcare services and preventative care is essential; consider the need for lower health literacy and education materials needed for many Hispanics.

The 2010 Census showed that out of the total U.S. population, 38.9 million people, or 13% identified themselves as black alone.[47] In addition, 1% reported black in combination with one or more other races. From all respondents in the 2010 census, 55% lived in the South, 18% in the Midwest, 17% in the Northeast, and 10% in the West. The black population represented over 50% of the total population in the District of Columbia and over 25% of the total population in six southern states: Mississippi 38%, Louisiana 33%, Georgia 32%, Maryland 31%, South Carolina 29%, and Alabama 27%. The places with the largest black population were New York, Los Angeles, Chicago, Houston, and Philadelphia.

The national standards for culturally and linguistically appropriate services (CLAS) in healthcare were set forth by the HHS Office of Minority Health to provide guidelines on policies and practices aimed at developing culturally appropriate systems of care.[48] The scope of these standards, the teaching approaches, and the challenges to consider when implementing these standards are applicable to all health professionals.

Cultural competence has evolved from the making of assumptions about patients on the basis of their background to the implementation of the principles of patient-centered care, including exploration, empathy, and responsiveness to patients' needs values and preferences.[1] It is important not to stereotype patients broadly based on their ethnicity or culture. Unfortunately, this frequently happens when our care is based on textbook methods of addressing patients within the same cultural population, such as Hispanics, Asians, or African Americans. There is no one way to treat any racial or ethnic group.

Aspects of cultural competence that you should teach your students include fundamental knowledge, such as concepts of race, culture, ethnicity, family structure, gender roles, religion, death, differing communication styles, and principles of disease management as they relate to certain cultures. Preceptors can demonstrate and teach effective communication skills, relationship building, language proficiency or effective use of interpreters, ability to differentiate varying views of illness and healing, and how to recognize culture-related problems. You can teach how to integrate the patients' beliefs into the overall treatment strategy or plan.

Finally, complementary and alternative medicine (CAM) has growing social, economic, and clinical significance. It is important for pharmacist-preceptors and students to understand the implications of CAM for their patients: what it is, who uses it, and why.

PRECEPTOR PEARLS

To perform a cultural assessment, identify or assess the following:

- The patient's level of ethnic identity (e.g., first- versus third-generation)
- Language or communication barriers
- Influence of religion, spiritual beliefs, or supernatural effects on the patient's health belief system
- Concerns about racial or ethnic discrimination or bias
- Education and literacy, including health literacy levels
- Current economic status
- Cultural health beliefs and practices
- Influence of family in compliance to prescribed treatment plan and medical decision-making process

The National Center for Complementary and Alternative Medicine defines CAM as a broad range of healing philosophies (schools of thought), approaches, and therapies that mainstream Western (conventional) medicine does not commonly use, accept, study, understand, or make available.[49] A few of the many CAM practices include the use of acupuncture, herbs, homeopathy, therapeutic massage, and traditional oriental medicine to promote well-being or treat health conditions. Many CAM therapies are called *holistic*, which generally means they consider the whole person, including physical, mental, and spiritual aspects.[50]

PRECEPTOR PEARLS

Ask patients if they are taking any home remedies (herbs, teas, etc.) or if they have sought advice for their condition from others, including family, friends, or alternative healers (e.g., abuela, sobrador, or curandero).

Cultural Competence: A Continuing Learning Process

One of the most important traits that a preceptor can model for learners is respect and understanding of their patients. Addressing your patient with the appropriate salutation or title can be extremely important and effective when communicating with patients with diverse backgrounds. For example, in Mexico and throughout Latin America professionals with a doctoral degree in any field, medical or nonmedical, are addressed as "doctor." Although many assimilate to the mainstream culture in the United States, many Latin Americans tend to retain their language and cultural identity. Simple gestures such as using the appropriate salutation (e.g., Mr., Mrs., Señor, Señora, etc.), asking permission before touching the patient (e.g., to take a blood pressure), honoring elders, and demonstrating respect for patients' culture can go a long way in establishing a positive patient-provider relationship. Learn how to demonstrate respect in various cultural contexts (see **Box 10-3**).[51]

BOX 10-3. Cultural Sensitivity: Behaviors That May Cause Cultural Offense

- Calling a patient by first name instead of title and surname
- Touching a patient without asking permission
- Making (or expecting the patient to make) direct eye contact
- Getting right to business (e.g., taking a medical history) before establishing a personal connection
- Taking a blood or urine sample
- Patting a child on the head
- Crossing one's legs; showing the bottom of one's shoes
- Examining a patient of the opposite gender
- Making American hand gestures ("okay" sign, or thumbs-up gestures)
- Asking a spouse to wait in the waiting room
- Limiting visiting hours in the hospital

PRECEPTOR PEARLS

Ask patients what language they prefer when discussing their medical care and in what language they prefer to receive any written healthcare information.

When first interacting with patients who were born in another country, it is best to use their last name when addressing them.

Do not be insulted if a patient does not look at you directly in the eye or fails to ask questions. In many cultures it is not respectful to look at another person, especially someone in authority or highly respected (such as a healthcare provider).

The following examples illustrate some of the challenges that pharmacists and learners may encounter in dealing with ethnically and culturally diverse patients.

CASE EXAMPLE

An elderly Iranian woman has been admitted to the hospital where you work. Neither the patient nor her family reads, speaks, or understands English. Her Muslim faith requires modesty, and she may not be the primary decision maker in her healthcare. Using this example, how would you teach students to interact with this patient or her family? You might use one or more of the following services appropriate for this patient: the use of interpreter staff; written information materials and consent forms that have been translated to Farsi; appropriate food choices; and clinical and support staff who understand how to interact appropriately with the patient and family.

CASE EXAMPLE

An elderly African American patient's blood pressure has been difficult to control since the doctor changed his therapy to a new medication. If you teach your students how to assess the patient through a thoughtful and respectful inquiry, they may discover that a distant relative had been involved with the Tuskegee Syphilis Study. For many African Americans, the Tuskegee study became a symbol of their mistreatment by the medical community, causing participants and their family members to be particularly distrustful of healthcare providers. This information is critical to this patient's care.

CASE EXAMPLE

An elderly African American woman is waiting in the examining room in the pharmacist wellness clinic for her first anticoagulation management follow-up after hospitalization. The pharmacist walks in the room and says, "Good morning Mary" and pats her back. Not being aware of the cultural dynamics, the pharmacist has unintentionally offended the new patient. The pharmacist could have initiated a more respectful encounter by first knocking on the door before entering and addressing the patient by title and last name (Mrs. Jones). Before touching the patient to take her blood pressure, the pharmacist should have asked permission.

PRECEPTOR PEARLS

Consider the following culturally sensitive patient assessment questions:

- What do you think caused your illness or problem?
- What do you call your sickness or illness? How severe is it?
- What problems has your illness caused you?
- What kind of treatment do you think you should receive?

Source: Adapted from Kleinman A. *Patients and Healers in the Context of Culture.* The American Medical Student Association. Berkeley, CA: University of California Press; 1980. http://www.amsa.org/programs/gpit/cultural.cfm. Accessed July 16, 2015.

Religion

If we teach learners the importance of insightfully asking patients about the religious beliefs that impact their care, our students will learn to provide appropriate recommendations suitable for their patients' beliefs. This will foster a trusting and respectful environment between the practitioner and the patient.

Learners will invariably come across patients of various religious backgrounds regardless of their practice settings. Patients' religious beliefs are an important component to consider in a social assessment because they can impact the patient's healthcare. It is

essential that you teach students how to assess their patients' beliefs to ensure adequate care while being sensitive to their religious practices.

The followers of some religions prohibit use of the content of some legend (prescription) and over-the counter medications. This is essential knowledge for the practitioner that must be documented appropriately in the patient record and considered when recommending medication therapy, therapeutic changes, or dispensing medications, and in counseling patients. For instance, many Jehovah's Witness followers do not believe in taking any medications that contain human components. Thus, a discussion about individual beliefs of patients is important before prescribing or dispensing certain medications such as forms of epoetin and albumin.

Some followers of Hinduism, Buddhism, Islam, and Judaism have beliefs that incorporate dietary restrictions on meat products or taking medications during fasting periods. A discussion is also important before prescribing many capsule formulations that include gelatin. In many instances, it may be possible to use noncapsule dosage forms or using capsules made with kosher gelatin, which many followers of Judaism and Islam would feel comfortable taking.

During Ramadan, adult Muslims are required to refrain from taking any food, beverages, or oral drugs between dawn and sunset. Because Ramadan can occur in any of the four seasons, the hours spent fasting can vary from 11 to 18 hours per day. The first meal is usually taken immediately after sunset and the second might be taken shortly before dawn. Many Muslim patients with chronic diseases insist on fasting even though they do not have to do so.[52] These patients may choose to change the time and dosing of their medications without seeking advice from their physician or pharmacist. Learners should inform their Muslim patients about when they should take their medication with regard to their altered food intake (before, with food, or after). A thorough patient history, including religious beliefs, will allow the student to recommend and design a medication regimen that will be medically effective but sensitive to the patient's beliefs.

The Role of Family and Faith in Healthcare

Many cultural communities, such as Mexican and Mexican American families, place value on having family members live close by, providing one another with mutual aid. Students should expect several family members to accompany a loved one to an appointment in a physician's office or clinic. This is particularly true following a hospital admission, when family members eagerly await the outcome of the medical team's assessment or a surgical procedure.

No matter the social status or economic standing, caring for the elderly is considered the sole responsibility of the family in many cultures. Family links in Mexico have always been extremely strong, and as a result, caregiving of the elderly, sick, and poor is a socially recognized responsibility of the family, including members of the extended family.

PRECEPTOR PEARLS

In Hispanic and African American families, family can play an important role in ensuring adherence to prescribed medication therapy or disease management.

Patients may wish to have a religious symbol such as a rosary or other special amulet on them or near them during medical treatment. Learners may encounter a patient bringing personal articles to various departments throughout a clinic or hospital that have a special meaning, such as ensuring the success of an examination or procedure.

Personal Space

Personal space is both an individual and cultural matter. As a general rule, patients tend to be very conservative about their personal space and modest about exposing their bodies to others—including health professionals. For example, Latin Americans may be hesitant to have pelvic examinations or even complete physicals. Students conducting a physical assessment should be aware of modesty concerns for both female and male patients.

Communication and Support

Patients not familiar with the American healthcare system should be reassured and provided with appropriate information in a language they understand about what is happening and what is going to happen regarding their medical care. For many patients, support is most appropriately provided by family members. Preceptors should encourage learners to consider incorporating family members and allowing them to be present whenever possible.

Rather than objecting to something, Mexican Americans tend to use silence. A patient may appear to agree because of the cultural value of courtesy and respect.[53] Therefore, it is critical that students validate that a patient understands what is being communicated and provide an opportunity for open dialogue. Communicating respect is very important for the Mexican American when meeting someone, especially a healthcare professional. They in turn expect to be treated with respect until rapport is established over time and a less formal approach is acceptable.[54] Learners should be cognizant of the tone of voice used, as well as eye contact, when communicating respect.

Preceptors need to educate learners how to thoughtfully assess their patients' health beliefs, health-seeking behaviors, and general health knowledge. Coach them in the skill of gathering important patient information without being judgmental. Be quick to apologize, and accept responsibility for cultural missteps (e.g., calling a woman by her husband's last name—it is common for a woman to change her last name after marriage in the United States, but not commonly practiced outside the United States). Encourage students to read and learn more about the history and culture of the patients they are serving.

Providing Culturally Competent Care for Persons with Disabilities

Most of us will experience disability sometime in our lives, whether our own or that of a family member. Understanding the culture of disability makes it easier for the pharmacist and student to recognize barriers, make changes in your physical work environment, and prevent secondary conditions in your patients with disabilities.

The International Classification of Functioning, Disability, and Health attempts to bridge many of the definitions of *disability* by considering disability as an umbrella term for impairments, activity limitations, and participation restrictions.[55] The Americans with Disabilities Act of 1990 definition is an inclusive definition that tends to capture both the largest and broadest estimate of people with disabilities. It describes a disability as a condition that limits a person's ability to function in major life activities—including communication, walking, and self-care (such as feeding and dressing oneself)—and that is likely to continue indefinitely, resulting in the need for supportive services.

The U.S. Census Bureau also uses a broad definition of disability.[55] The Census Bureau expands the ADA definition to identify people 16 years of age or older and categorizes types of disabilities into communicative, physical, and mental domains according to a set of criteria described below. If a person has more than one type of disability, he or she may be identified as having disabilities in multiple domains.

People who have disability in the communicative domain reported one or more of the following:

- Were blind or had difficulty seeing
- Were deaf or had difficulty hearing
- Had difficulty having their speech understood

People who have disability in the mental domain reported one or more of the following:

- Have a learning disability, an intellectual disability, developmental disability or Alzheimer disease, senility, or dementia
- Had some other mental or emotional condition that seriously interfered with everyday activities

People who have disability in the physical domain reported one or more of the following:

- Used a wheelchair, cane, crutches, or walker
- Had difficulty walking a quarter of a mile, climbing a flight of stairs, lifting something as heavy as 10-pound bag of groceries, grasping objects, or getting in or out of bed

PRECEPTOR PEARLS

When interacting with a person with a disability:

- Identify yourself as a pharmacist/student and explain your role or purpose for the interaction.
- Let the individual ask for assistance; don't assume the need, generalize, or make assumptions without appropriate information.
- Plan extra time for appointments when a patient uses an augmentative communication device.
- Identify physically accessible rooms or facilities, with space to maneuver a wheelchair or scooter or containing an adjustable examination table or chair.
- Always address the individual (patient), not any other person or persons accompanying the patient, unless required because of cognition issues or problems.
- If the patient is cognitively impaired, it is important that you validate the patient's understanding by having him or her re-state the information you have provided. Also minimize noise or other distractions in the area or surrounding environment to allow for better patient comprehension.
- Maintain and access community resources; develop educational information designed for persons with learning disabilities or sensory (visual, hearing, speech) impairments. Provide important educational materials (e.g., disease management) in written form; consider using a larger font, Braille, or an electronic format so a visually impaired person using a screen reader can access it.
- Learn how to use a text telephone or teletypewriter.
- Provide disability-specific in-service education; keep abreast of the continuing advances in assistive technology and supportive equipment for people with disabilities.

- Listed arthritis or rheumatism, back or spine problem, broken bone or fracture, cancer, cerebral palsy, diabetes, epilepsy, head or spinal cord injury, heart trouble or atherosclerosis, hernia or rupture, high blood pressure, kidney problems, lung or respiratory problem, missing limbs, paralysis, stiffness or deformity of limbs, stomach/digestive problems, stroke, thyroid problem, or tumor/cyst growth as a condition contributing to a reported activity limitation

The 2010 Census recorded an estimated 56.7 million persons, or nearly 19% of the population, living with disabilities. About 38.3 million people (12.6%) had a severe disability. Persons with disabilities are individuals who have shared experiences and healthcare needs. Pharmacists and students should be familiar with their patients' limitations whether they are physical, sensory (vision or hearing), cognitive (following brain injury), or mental, to provide optimal care.

According to the American Association on Health and Disabilities, for the millions of people with disabilities, health maintenance and promotion often gets lost in the healthcare system quagmire. People with disabilities are:

- Less likely to receive wellness screening
- Less likely to have access to specialists and follow-up care
- More likely to be obese and heavy smokers
- Less likely to participate in an exercise program

The Importance of Health Literacy in Healthcare Outcomes

Health literacy is the degree to which individuals can obtain, process, and understand the basic health information and services they need to make appropriate health decisions. Health literacy skills include text literacy (the ability to read, understand, locate, and interpret text in documents), numeracy literacy (the ability to use quantitative information), and oral literacy (the ability to speak and listen successfully).[56] Health literacy is the same thing as literacy, the ability to use printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential.

A person can possess a doctorate degree but have poor health literacy. Health literacy skills are a stronger predictor of health status than age, income, employment status, education level, and race. Preceptors should encourage learners to approach patients with the assumption they are at risk of limited health literacy unless otherwise determined during a patient counseling or education encounter. A variety of skills are necessary to navigate the complexities of managing health (individual factors) and the healthcare system (system factors); see **Table 10-3**.

In 2003, the U.S. Department of Education, National Center for Education Statistics conducted the first National Assessment of Adult Literacy (NAAL)[57] survey, which included a section on health literacy. Adults were asked to use printed health information to perform tasks such as directions for taking medication and preventative healthcare. A sample question from the survey asks the participant to answer the question, "The patient forgot to take this medication before lunch at noon. What is the earliest time he or she can take it in the afternoon?" The question is based on a prescription label with the instructions to take one tablet on an empty stomach before a meal or 2–3 hours after a meal.

This assessment was conducted in over 19,000 adults residing in 38 states plus the District of Columbia. The levels of health literacy were grouped into the categories listed and described below. Population rates within each category were estimated based on the adult population size when the survey was conducted (see **Table 10-4**).

Results of the NAAL assessment revealed that approximately 30 million Americans have below basic health literacy skills compared to 26 million Americans who have proficient health literacy skills. Over one-third of adults would have difficulty following directions on a prescription label. Who is at risk for poor health literacy? Everyone is at risk. However, higher rates of limited health literacy according to the NAAL assessment were found in the elderly, those without a high school degree, adults who spoke a language other than English, racial and ethnic minority groups, and populations of low economic status or poverty. Regardless of ethnicity, one-third of those aged 65 or older had below basic health literacy skills. Adults who received Medicare, Medicaid, or did not have insurance had higher rates of below basic health literacy.[58]

Numeracy skills, the ability to use and interpret numbers, are a separate component of health literacy skills. Think about all

TABLE 10-3. *Skills Necessary to Manage Individual and System Factors*

Individual Factors Related to Health Literacy Skills	System Factors Related to Health Literacy Skills
Language	Medical terminology
Level of education	Regulations (complex forms and billing)
Social support	Medical uncertainty
Culture	Time constraints
Age and gender	Insurance coverage
Disabilities	Provider bias
Burden of illness	Language/cultural barriers

TABLE 10-4. *Levels of Health Literacy*

Health Literacy Level	Tasks Associated with this Level	Percentage of the Population
Below basic (poor/limited)	Circle date of appointment on an appointment slip. Read a set of short instructions and identify what is permissible to drink before a procedure.	14%
Basic (marginal)	Locate one piece of information on a short document. Read a pamphlet and give two reasons a person with no symptoms should be tested for a disease.	21%
Intermediate (adequate)	Determine health weight on a BMI chart. Read instructions on a prescription label and determine what time a person can take the medication.	53%
Proficient	Using a table, calculate an employee's share of health insurance costs for a year. Read a complex document and find information required to define a medical term.	12%

Source: America's Health Literacy: Why We Need Accessible Health Information. An Issue Brief from the U.S. Department of Health and Human Services. 2008. http://www.health.gov/communication/literacy/issuebrief.

the ways in which patients must understand, use, and interpret numbers to make informed decisions about their medications and overall health. Use of sliding scale insulin, risks and benefits of a novel chemotherapeutic agent, and dosing of an infant's acetaminophen are some examples. All these actions require a comprehension of numbers. The misunderstanding of numbers can have devastating results. According to the last NAAL assessment, 22% of participants had below-basic quantitative skills. Low health numeracy has a higher prevalence in the United States than low health literacy. Self-efficacy in controlling chronic conditions such as diabetes is impaired in patients with low numeracy skills. Although the existing evidence points to an association of low numeracy on health outcomes, the data are sparse and limited. Additional research is needed to fully understand the relationship of low numeracy on outcomes and the utility of specific interventions based on low numeracy skills. The effects of low numeracy include misleading perceptions of risks and benefits of screening, lower rates of medication adherence, impaired access to treatments, impediment to risk communication, and adverse medical outcomes.[59]

With the shift to patient-centered healthcare, patients are responsible for medical decision-making and disease management. Low numeracy skills make it difficult for patients to make informed decisions about their health. The various sources of medication information available may influence decisions about the risks and benefits of medications and adherence. Direct-to-consumer advertising, social media, and the Internet impact perceptions of medications. The pharmacist's role is to state the risks and benefits of a medication in a way that is easily interpreted. A clear explanation and translation of absolute risk reduction is paramount. The most difficult for patients to understand is the number needed to treat. That is, one cardiovascular event (CVE) will be avoided for every 100 patients who take a statin for primary prevention for 5 years. The use of absolute risk reduction may be the most easily interpreted statistic. The use of frequencies (e.g., 10 out of 100 experience myalgia) may be easier for some patients to understand rather than percentages (10% of the patients experience myalgia). Preceptors have the opportunity to demonstrate the power of numbers when making informed decisions about medications. You are encouraged to be a role model for learners in discussing the risks and benefits of medications with patients. Other suggested recommendations in communicating risk and benefits with patients are to use plain language, be brief and to the point, express numbers qualitatively (20% risk of having a CVE is a high risk), indicate time to effect or benefit, discuss expected versus

unexpected or worrisome adverse effects and course of action, and supplement with simplified written material.

PRECEPTOR PEARLS

Resources for Helping Patients Understand Risk:

- https://www.harding-center.mpg.de/en
- http://www.riskliteracy.org/shareddecisions.mayoclinic.org (offers journal clubs, patient cases, literature, condition-specific decision resources for patients)

Patients with low health literacy have poorer health-related outcomes. Evidence shows that patients with low health literacy have the following adverse consequences[60]:

- Use of services
  - Increased hospitalization rates
  - Increased emergency department visits
  - Reduced mammography rates
  - Reduced influenza vaccination rates
- Health outcomes
  - Greater mortality risk for older patients
  - Poor overall health status for older patients
- Medication skills
  - Poor ability to demonstrate taking medication appropriately
  - Poor ability to interpret medication labels and health messages

The effect of health literacy on adherence, self-efficacy, healthcare costs, and control of chronic conditions (diabetes, hypertension) has not been adequately studied to draw any meaningful associations. Factors that may explain the association between health literacy and some outcomes such as adherence and diabetes control are knowledge, self-efficacy, and individual beliefs. Factors that may reduce the magnitude effect of low health literacy on adherence are social support and relationship with the healthcare system and/or provider. When a patient has limited health literacy, having consistent social support of family or friends and having a trusting relationship with a primary care provider may attenuate any effect on adherence or ability to understand medications.

PRECEPTOR PEARLS

Encourage learners when addressing adherence to also enquire about support at home for assistance with medications, transportation, and activities of daily living.

Learners should also enquire about the relationship or comfort level of a patient with his or her provider.

Performing an Assessment

Identifying a patient who is at risk for limited health literacy may be conducted informally or formally. An informal assessment includes behavioral indications or impaired skills that may indicate a patient is at risk of low health literacy. Learners should be educated to be on the lookout for these "red flags." Pharmacists are often the most accessible and utilized healthcare professionals to patients. They often may be the first healthcare provider to recognize that a patient is having health literacy problems. By increasing awareness of the impact of health literacy, learners will recognize patients at risk and employ effective counseling and intervention techniques described further in the chapter. Behavior indications of low health literacy include the following[61]:

- Chronic pattern of nonadherence
- Frequent errors in medications or self-care instruction
- Inability to name medications (especially a medication the patient has taken for a long time)
- Inability to explain a medication's purpose
- Inability to keep appointments
- Making excuses (e.g., "I forgot my glasses")
- Postponing decision making (e.g., "May I take the instructions home?" "I'll read through this when I get home")
- Not completely filling out forms, possibly only providing name

- Failing to look at printed material (or failing to turn it right side up)
- Handing written materials to a relative or other person accompanying the patient

Indications of impaired skills resulting from low health literacy include the following:

- Inability to self-demonstrate medical device technique
- Inability to obtain appropriate dose from a pill bottle or syringe
- Inability to proactively request refills when needed

PRECEPTOR PEARLS

Brief informal strategies can be taught to learners to recognize low health literacy risk in an unsuspecting manner:

Hand the patient a document (educational pamphlet or current list of medications) upside down. See if the patient automatically flips it right side up to read it. If not, ask a question pertaining to the document, for example, "Did I include the new insulin dose on your current medication list?" When reviewing the patient's medication list, state a medication they are currently not prescribed or invent a medication name to see if the patient identifies it as incorrect.

Assessment Tools

Health literacy can be measured formally using assessment tools (see **Table 10-5**). These instruments are used to identify patients at risk of low health literacy and determine the effect of targeted interventions. Preceptors should be familiar with these instruments and consider their application in research. When adequately trained, these instruments may be useful tools for learners in supplementing and contributing toward research initiatives.

The Brief Health Literacy Screening (BHLS) tool is a brief screening tool to administer that is the most time-efficient and has a strong correlation to risk of inadequate health literacy.[66] Three questions are asked of the participant with a corresponding Likert scale of five possible answers. The question that has been shown to be a good predictor of poor health literacy is "How confident are you filling out medical forms by yourself?"[67]

Interventions Related to Health Literacy

There is consistent evidence that a multimodal and multidisciplinary approach to promote self-efficacy for management of chronic conditions is effective. Outcomes of targeted interventions based on literacy status are summarized below.

Comprehension

Strategies such as presenting essential information by itself, presenting essential information

TABLE 10-5. *Health Literacy Assessment Tools*

Health Literacy Assessment Tool	Skill Tested	Time to Administer	Considerations
Test of Functional Health Literacy in Adults (TOFHLA)[62]	Reading comprehension and numeracy	20–30 minutes	Available in English and Spanish; considered the gold standard
Short Test of Functional Health Literacy in Adults (sTOFHLA)[63]	Reading comprehension and numeracy	7–10 minutes	Available in English and Spanish
Rapid Estimate of Adult Literacy Medicine (REALM)[52]	Work recognition and medical word pronunciation	2–3 minutes	Available in English and Spanish; estimates reading level
Rapid Estimate of Adult Literacy Medicine (REALM-SF) short[64]	Work recognition and medical word pronunciation	2 minutes	Available in English and Spanish; correlates strongly with REALM
Newest Vital[65]	Numeracy	3 minutes	Available in English and Spanish

first, adding icon arrays to numerical presentations of treatment benefit, and adding video to verbal narratives demonstrated improvement in comprehension for populations with low health literacy.[68] Using the terms *morning*, *noon*, *evening*, and *bedtime* rather than once, twice, or three times daily may result in improved comprehension and adherence. This approach aligns with recommendations from the United States Pharmacopeia on standard universal patient-centered prescription labeling, the Institute for Safe Medicine Practices principles of designing a medication label, and the Agency of Healthcare Research and Quality universal medication schedule.

Use of Healthcare Services

Intensive self-management and adherence interventions appear to be effective in reducing emergency department visits and hospitalizations. Preceptors are encouraged to guide learners toward targeted health literacy–friendly interventions and measure the impact on the use of healthcare services.

Health Outcomes

Program characteristics that may improve health outcomes such as disease severity in low health literacy include those with intensive disease-management or self-management behavior guidance. Programs that require time investment, are piloted prior to implementation, and emphasize skill building are the most successful. It is estimated that low health literacy costs the national healthcare system between $106 and $238 billion each year.[69] A Healthy People 2020 goal is to increase the proportion of persons reporting that healthcare professionals always gave them easy-to-read materials, always asked them to describe how they will follow the instructions, and were always offered help in completing forms.[70] By improving knowledge, self-efficacy and behavior health outcomes improve.

Effective Communication to Enhance Health Literacy

The use of "brown bag" or medication reviews with patients can be helpful ways to identify and address problems with health literacy. Be alert to patients who have difficulty expressing medical concerns or have no questions. Create an environment where patients are not embarrassed to ask questions or express their concerns. The most successful interventions for promoting medication adherence include the use of both written and verbal communication. Often using visual tools or pictures helps patients understand the recommended action or behavior. Students should be taught to choose words that are at the sixth-grade level and that show respect for a patient's culture. The communication should emphasize the desired behavior rather than medical or medication facts. Using the "teach-back" or "show me" approach with patients are reliable methods to determine the extent of patients' understanding instructions for taking their medication.

Be a role model to your students and show them patient-centered communication skills. Demonstrate to learners how to encourage patients to ask questions. Speak slowly and start with the most important information or message first. Use repetition and demonstrate when needed. Recognize when follow-up phone calls may be helpful. Teach them, when appropriate, to give instructions not only to patients but also to family members or other caregivers. Most importantly, students should listen actively to their patients, so they can learn about and address their patients' concerns.

Students must learn to tailor the medication schedule to fit a patient's daily routine. The use of colors as codes or the use of pictures such as the sun or the moon can be used to indicate morning and night. Likewise, the use of charts, calendars, and picture books may also be helpful.

PRECEPTOR PEARLS

To verify readability statistics, use the readability statistics function in Microsoft Word as an option within the grammar/spell check feature. The results will give a Flesch reading ease score and Flesch-Kincaid grade level score (the goal Flesch score is 90–100; the goal Flesch-Kincaid score is 5.0–6.0).

When preparing written materials, make sure they are easy to read and written at a fifth- or sixth-grade reading level. Make the document or information look easy to read with bullet points, short sentences, and plenty of white space. For elderly patients, print or use a larger font (12- to 16-point size) for written materials. Keep a patient's culture in mind when developing written patient information. For example, in some cultures, a patient may adhere to prescribed therapy if you say something is "important" rather than "helpful." If the patient has difficulty understanding written or verbal directions, a good approach may be to say "Many people have trouble reading and remembering these instructions. How can I help you?" Students should learn to deliver short, concise messages. Patients usually remember less than 50% of the information provided during each encounter. Teach students to use common, everyday language when speaking to their patients.

PRECEPTOR PEARLS

Being familiar with communication techniques such as the Indian Health Service, Teach Back, and Ask Me 3 can help facilitate individualized medication-related education and maximize patient comprehension.

Students should know when and how to use an interpreter. Many healthcare providers rely on family members and coworkers to serve as interpreters. Use a skilled interpreter who is competent to interpret and translate medically related issues. Coworkers or staff may overestimate their own skills and abilities, especially when a patient wishes to expand the discussion or requests additional information. Even patients who are bilingual may choose to communicate in their first language when the issues are emotional or involve their health. Remember to teach students how to look for nonverbal cues that a communication problem exists.

PRECEPTOR PEARLS

When talking to patients whose primary language is not English, speak clearly and slowly using a caring tone of voice. When possible, use pictures to help patients understand; repeat the message if necessary to ensure understanding.

In summary, a person with good health literacy skills should be able to do the following:

- Understand diagnosis or condition
- Understand medication instructions (e.g., take on an empty stomach, take twice a day, etc.)
- Repeat back healthcare information and demonstrate the ability to utilize tools to manage chronic conditions, such as a glucometer
- Understand consent forms and accurately complete standard screening forms
- Initiate questions with health providers.
- Understand how to effectively use insurance.

The first impression you make on your patients can make a big difference. Demonstrate an attitude of helpfulness, caring, and respect, and put patients at ease so that they feel comfortable in asking questions.

Implementing Best Practices in Transitions of Care

Transitions of care refers to moving patients between settings as their condition and need for care change, such as admission to a hospital or facility, transitioning between levels of care within the same hospital, discharge from one facility to another other than home, discharge from hospital to home, and transitions within the ambulatory care setting. For example, a patient receiving care from a specialist in the ambulatory care setting may be transitioned to an inpatient admission with a hospital physician before moving on to a skilled nursing

facility or other post-acute care service or facility. Subsequently, the patient may return home to receive care from a visiting nurse.

Inadequate care transitions place patients at increased risk of medication errors, misunderstanding about the care plan, inadvertent gaps in treatment, and increased resource utilization. Several studies have investigated the impact of fragmented care transitions, such as medication errors and adverse events after discharge.[71,72] Patients may also experience barriers to medication access after discharge including cost, wait times at the pharmacy, and transportation. The study results demonstrated that inefficient care transitions compromise patient safety and place difficulty on patients, their families, and caregivers.[73]

Recently, transitions of care have taken top priority among many agencies and organizations. During the 2009 Transitions of Care Consensus Conference, over 30 organizations created Standards for transitions of care.[74] The National Transitions of Care Coalition (NTOCC) made several recommendations to improve transitions between settings.[57] Two proposals were the implementation of payment systems that align incentives and the development of performance measures. A key recommendation was an improvement in communication with well-timed and accurate information as patients transition across different settings. Increased accountability and communication between the patient, providers, and caregivers was noted as essential to achieve positive outcomes. For example, prescribing heparin to a patient who recently experienced heparin-induced thrombocytopenia could lead to increased morbidity, mortality, and increased expenditure. Effective communication could prevent the medication error and associated misadventures. As communication is essential to medication understanding and adherence, patients should also be informed about their condition and plan of action. Most patients may believe that all relevant information is automatically transferred to the new provider. In addition, certain culture, ethnicity, and health literacy levels can hinder communication. A Cochrane review of 33 studies that provided interventions for helping patients address their information needs demonstrated that coaching and provision of written materials before consultation resulted in increased satisfaction and a statistically significant effect on patients asking more questions. Moreover, the patients' anxiety level decreased compared to the level prior to the consultation.[75]

CASE EXAMPLE

The following case illustrates challenges pharmacists may encounter in dealing with ethnically and culturally diverse patients with low literacy. An elderly Muslim woman from Bangladesh was admitted to the hospital with multiple myeloma and complications secondary to her cancer. As she had minimal family support, the physician recommended the patient be transitioned to palliative care. When the pharmacist attempted to counsel the patient on her medications, the patient told the pharmacist "The medications I am taking do not matter as I am being sent to palliative care to die." After further discussion, the pharmacist realized the patient did not know the difference between palliative care and hospice care and took the opportunity to explain the two. The pharmacist explained that her physician intended for her to recover with support as she had no family nearby to care for her.

PRECEPTOR PEARLS

Vulnerable Patient Populations

- People who speak a different language or are from a cultural background that is infrequently encountered by the healthcare provider
- Children with special healthcare needs
- Adults with disabilities
- The frail elderly
- People with cognitive impairments
- People with complex medical conditions
- People who are at the end of their lives
- People with a low income
- People who move frequently, including retirees and those with unstable health insurance coverage
- Those receiving behavioral healthcare

The NTOCC also recommends the use of case management and professional care coordination in addition to the expanded role of pharmacists in transitions of care.[57] A new role of pharmacists encompasses not only medication reconciliation but also expansion into the discharge process. The Pharmacy Practice Model Initiative Summit recommended several activities considered imperative to pharmacist-provided drug therapy management as it relates to discharge pharmacy services: pharmacists should facilitate medication-related continuity of care; medication reconciliation should take place in the emergency department, at admission, inter-hospital transfer, and discharge, and in the ambulatory care setting; establishment of processes to ensure medication-related continuity of care for discharged patients; and provision of medication-related education at discharge.[76]

CASE EXAMPLE

This next case highlights an issue that may arise due to poor communication. An elderly man is transferred from the nursing home to the hospital. On arrival, the medication for his dementia is not restarted because it is not in the hospital's formulary, and the staff views the dementia as too advanced for him to suffer meaningful consequences from discontinuation while he is hospitalized. The patient, his family, and the physician are never told the medication was not restarted. On transfer back to the nursing home, the physician did not prescribe the medication as it was not in the hospital profile.

Recently, the Accreditation Council for Pharmacy Education (ACPE) standards included the assurance of quality care by advanced pharmacy practice experience (APPE) students as patients transition between healthcare settings.[78] To ensure medication safety and quality as stated in the Standard, the reconciliation of medications is proposed when transitioning patients between settings as well as providing appropriate communication to pharmacy providers involved in patient care. Various publications have detailed the experience and positive contributions of APPE students in transitions of care activities such as medication reconciliation.[79-81]

PRECEPTOR PEARLS

Ten Steps to Achieve Comprehensive Medication Management[77]

1. Identify patients who have not achieved optimal goals of therapy
2. Understand the patient's personal medication experience/history and preferences/beliefs
3. Identify use patterns of all medications
4. Assess each medication for appropriateness, effectiveness, safety, and adherence, and focus on achievement of the clinical goals of each therapy
5. Identify all drug therapy problems
6. Develop a care plan addressing recommended steps needed to achieve optimal outcomes
7. Ensure that patients agree with and understand the care plan, which is communicated to the prescriber/provider for their consent and support
8. Document all steps and current clinical status versus goals of therapy
9. Ensure that follow-up patient evaluations, which are critical to determine the effects of changes, reassess actual outcomes, and recommend further therapeutic changes to achieve desired clinical goals/outcomes
10. Remember that comprehensive medical management is a reiterative process; all team members must understand personalized goals of therapy

As stated in the ACPE standards, these activities should be integrated during clinical rotations as part of the APPEs. Although not mandated in the ACPE standards, students in their introductory pharmacy practice experiences could be familiarized and exposed to transitions of care practices including medication reconciliation and barriers and challenges encountered during care transitions. Students should be encouraged to perform medication reconciliation and identify and resolve discrepancies as they occur. In addition, student participation in interdisciplinary teams is vital in preparing them to work successfully with other team members as they gain experience in providing smooth transitions for patients. In the near future, it may be routine practice for hospital pharmacists and students to communicate with community pharmacists as part of care transitions to the home as well as providing medication-related information to primary care extenders with chronic disease management and preventive care responsibilities. Provision of services during home visits for elderly persons or those with disabilities where transportation may be problematic may also be commonplace.

Similarly, the updated 2015 ASHP Accreditation Standard for Postgraduate Year 1 Pharmacy Residency Programs incorporated transitions of care as a means to ensure and support continuity of care in collaboration with other healthcare professionals.[82] It is imperative that residency programs promptly integrate the necessary criteria into rotation activities for the objective referring to managing transitions of care. The following table lists the required criteria for managing transitions of care effectively.[83] Preceptors are appropriately positioned to help residents achieve these criteria to ensure continuity of care during patient transitions.

By enhancing communication during transitions of care, quality of care and health outcomes will significantly improve. Pharmacists should seek to expand their roles during the discharge process while mentoring students and residents in these new roles and responsibilities.

PRECEPTOR PEARLS

Criteria to Manage Transitions of Care Effectively:

- Effectively participates in obtaining or validating a thorough and accurate medication history
- Participates in thorough medication reconciliation
- Follows up on all identified drug-related problems
- Participates effectively in medication education
- Provides accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider, as appropriate
- Follows up with patient in a timely and caring manner
- Provides additional effective monitoring and education, as appropriate
- Takes appropriate and effective steps to help avoid unnecessary hospital admissions or readmissions

Summary

Preceptors can teach learners the skills needed to be able to implement services that are accessible to and appropriate for diverse patient populations. Understanding the social and cultural background of the patients you serve and the environment that they live in is critical to providing quality patient care services. It is important to demonstrate to students how culturally competent clinical encounters result in more favorable outcomes, increase the satisfaction of the patient, and enhance the patient-provider experience. Being culturally competent will not only make you a more effective provider, but it will also make you a provider of choice.

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Chapter 11

Professionalism and Professional Socialization

Lea S. Eiland, Nishaminy Kasbekar, and John E. Murphy

Chapter Outline

Professionalism 206
Professionalism and Social Media 208
Addressing Lapses in Professionalism 210
Engagement of the Pharmacist 213
Summary 216

Strive not to be a success, but rather to be of value.

Albert Einstein

Learning Objectives

- Define *profession, professional, professionalism,* and *professionalization.*
- Identify areas throughout pharmacy education where learners are exposed to professionalism.
- Compare and contrast appropriate and nonappropriate uses of social media in the pharmacy profession.
- List strategies for handling a learner's lapse of professionalism.
- Describe opportunities for learners to engage in the community.
- Describe activities where a preceptor can assist learners in selecting professional organizations for membership.

The subject of professionalism emerged as a prevailing concern for the pharmacy profession in the 1990s yet, interestingly, has always been a core value of the profession. Professionalism curricula, tenets, assessments, and accreditation criteria are readily available for the profession today. Professionalism is not just taught and developed in a classroom, rather, it is a longitudinal experience that includes service opportunities and experiential learning as key components of a curriculum throughout pharmacy school. Professionalism is best described as a lifelong commitment as a professional to best interact with our patients and other healthcare professionals.

Professionalism

To understand the role of professionalism in pharmacy practice, it is important to first understand the meanings of *profession*, *professional*, *professionalism*, and *professionalization*. A *profession* is an occupation whose members share 10 common characteristics (see **Table 11-1**), and a *professional* is a member of a profession who displays 10 common traits (see **Table 11-2**).[1] *Professionalism* is the active demonstration of the traits of a professional and *professionalization* (professional socialization) is the process of instilling the profession's attitudes, values, and behaviors so one learns to become professional.[1]

Developing professionalism in learners is included as an expected outcome in the curriculum standards for pharmacy education. Students should "exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society," and schools must be able to demonstrate outcomes of students' growth of professionalism.[2] In addition, schools must provide a culture of demonstrating and developing professionalism that includes the faculty, staff, affiliate preceptors, and students. The professionalization of students requires a variety of activities in a diverse set of environments (e.g., didactics, experiential and professional society settings) that influence their professional perspectives and development. For example, professionalism is commonly discussed within new student orientation, and introduction of the specific commitments and responsibilities of a pharmacist often occurs at a White Coat Ceremony, where students recite the Oath of a Pharmacist. This oath is generally repeated at graduation to re-instill the importance of these actions prior to the pharmacist prac-

TABLE 11-1. *Common Characteristics of a Profession*

1. Prolonged specialized training in a body of abstract knowledge
2. A service orientation
3. An ideology based on the original faith professed by members
4. An ethic that is binding on the practitioners
5. A body of knowledge unique to the members
6. A set of skills that forms the technique of the profession
7. A guild of those entitled to practice the profession
8. Authority granted by society in the form of licensure and certification
9. A recognized setting where the profession is practiced
10. A theory of societal benefits derived from the ideology

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TABLE 11-2. *Traits of a Professional*

1. Knowledge and skills of a profession
2. Commitment to self-improvement of skills and knowledge
3. Service orientation
4. Pride in the profession
5. Covenantal relationship with the client
6. Creativity and innovation
7. Conscience and trustworthiness
8. Accountability for his/her work
9. Ethically sound decision-making
10. Leadership

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ticing independently for the first time. Most students join professional pharmacy organizations during school and are exposed to leaders and role models in various areas of practice. Throughout pharmacy school, students may have professionalism topics and activities embedded into didactic or experiential experiences. Students may also be required to dress professionally for school or wear their white coats for particular courses or special events.

Learners are also exposed to a hidden curriculum where cynicism and some of the more negative aspects of healthcare delivery can erode professionalization methods.[3] Negative role models may create an unprofessional environment, resulting in a lack of development of professionalism in a learner. Realistically, all learners are exposed to positive and negative professional issues throughout their development. Sometimes the negative influences can actually be a strong learning tool for positive outcomes. For example, respect may be taught by observing disrespect. These experiences may not only be in real life but could be through a pharmacist's portrayal on a television show, stories of pharmacist encounters from family members or friends, or social media. It is important that positive professional socialization greatly outweigh negative.

PRECEPTOR PEARLS

Learners are exposed to positive and negative professional socialization throughout their education. Observing negative behaviors can actually be a strong learning tool for positive outcomes, and it is important to discuss both positive aspects of professionalism as well as negative behaviors with learners.

Faculty, staff, preceptors, and fellow learners are core influences in the professionalization process. However, other healthcare professionals such as physicians, nurses, social workers, and pharmacy technicians interact with pharmacy learners and may serve as role models, mentors, or teachers of professionalism. The ASHP Statement of Professionalism calls for pharmacists to "serve as mentors to students, residents, and colleagues in a manner that fosters the adoption of high professional aspirations for pharmacy practice, high personal standards of integrity and competence, a commitment to serving humanity, habits of analytical thinking and ethical reasoning, and a commitment to lifelong learning."[4] All learners are primarily

responsible for their own professionalization and self-development. Reflection and assessment of their own actions as well as role models' performances promote growth as a professional.

As schools have to adequately assess the knowledge, skills, and abilities of students for progression throughout a pharmacy curriculum, assessment of students' professionalism must also occur. Faculty and preceptors are usually asked to assess the professionalism of students throughout the curriculum. Many schools have developed their own tenets of professionalism, introducing them at orientation and incorporating them into teaching environments. Assessment of professionalism may be an independent faculty or preceptor assessment, a self-evaluation, or incorporated into various classroom or experiential evaluations. In 2009, the American College of Clinical Pharmacy (ACCP) published six tenets of professionalism for pharmacy students that include altruism, honesty and integrity, respect for others, professional presence, professional stewardship, and dedication and commitment to excellence.[5] These tenets provide a well-rounded core of professional attitudes and behaviors that can be used in development and assessment of professionalism. ACCP also published a white paper on the development of student professionalism using these tenets and identified five traits of professionalism as a foundation for student behaviors and actions.[6] These traits include care and compassion, commitment to excellence, honesty and integrity, respect for others, and responsibility.

The verbal and nonverbal actions of preceptors toward others are watched by learners. Preceptors serve as role models in all situations from answering the phone and interacting with other health professionals, to counseling a patient. As attitudes, values, and beliefs are always being demonstrated, professionalism never escapes evaluation by others, especially learners. It is important to model, discuss, and assess professionalism throughout a learner's education period as well as throughout one's career.[6]

PRECEPTOR PEARLS

Preceptors serve as role models in all situations, from answering the phone and interacting with other health professionals to counseling a patient.

Professionalism and Social Media

Inappropriate Use

To say that social media has taken over communication around the world would almost be an understatement. Increasingly, people rely on various forms of social media to gather information, news, and to communicate with friends and family every day. With the use of platforms such as Facebook, Twitter, Blogger, Instagram, Snapchat, and new applications arriving almost daily, it is easy to be bombarded with information about people and entities "followed" through these outlets. Furthermore, there is almost no filter on what can be shared or on the commentary that can exist. For example, there are many examples of cyber bullying, racially or culturally insensitive/damaging posts, or more simply, a lack of inhibition when posting comments that are harmful to individuals or groups. This type of communication can damage the reputations of the individuals posting material considered inappropriate by others as well as the individual or group that is the target of the posts. It is well known, for example, that many companies search social media websites for an individual's "posts" as well as complete an Internet search of individuals they are considering hiring, to use in decision-making. With the footprint of social media being almost perpetual, it is challenging to permanently erase past activity.

Many people are willing to share information on these outlets without much consideration of the consequences of doing so. Pharmacy students are not immune from limited insight into the implications of the things they post,[7] and consequently many colleges and schools in all the health professions have

developed policies or guidelines (because policies are sometimes hard to enforce) to help guide the appropriate use of social media among their professional students. Some items in the policies are absolute, such as not posting HIPAA prohibited patient health information, whereas others are designed to make sure students aren't posting pictures or comments that are simply unprofessional in nature and reflect badly on the individual and institution. In general, guidelines or policies focus on how to (1) protect yourself, (2) protect the privacy of others, and (3) protect the institution's assets and reputation. No images may be posted with protected patient information, and universities and colleges generally require releases from the individuals depicted in images posted on their websites. Pharmacy fraternities also have developed policies to guide members in appropriate and inappropriate use of photographs and other postings on websites such as Facebook, Twitter, or Instagram to ensure that members always project a professional image and avoid harming the reputation of the organization. Examples of forbidden images in pictures where students can be identified as members of a fraternity (e.g., wearing fraternity gear, written descriptions use the fraternity name, or on the chapter's website) include such things as no alcohol or clearly intoxicated individuals, no obscene gestures or attire, and no racist or culturally insensitive images.

Research has demonstrated that when pharmacy students are presented with policies or presentations on professionalism related to social media they tend to strengthen their online security and use more of the privacy features available (e.g., not having all information available to the public).[7,8] One study of pharmacy students from four public and private colleges found that about three-quarters of respondents believed they should edit their profiles on social media sites prior to graduation.[9] This is certainly an indicator that these individuals must believe that their past posts could in some way jeopardize career opportunities in the future. Thus, it appears that pharmacy students do take note of the issues and the importance of a more professional image associated with their presence on social media sites when education is provided.

PRECEPTOR PEARLS

Though most pharmacy learners understand they are expected to be professional in their behavior, research shows that pharmacy students are not immune to using social media in ways that they later consider to potentially jeopardize future career opportunities. Preceptors should discuss professionalism and social media uses with learners to help them better navigate the decisions on what is appropriate and inappropriate.

Appropriate Use

Though there are many opportunities to use social media inappropriately, there are also many positive uses. Social media allows friends, family, and organizations to keep in touch, be up-to-date on activities, and to spread information quickly and broadly about important (or not so important) life happenings. These platforms can also be considered for educational purposes. Pharmacy faculty have described various ways to use social media in their teaching.[10,11] Cain[11] used Facebook as an informal way to connect external experts with students without requiring student participation in the postings. Results from a questionnaire showed students appreciated the exposure to experts using this approach. DiVall[10] and colleagues used Facebook as a way to facilitate discussions between students and faculty about course material in a disease management course. Students were over twice as likely to post comments on the Facebook page compared to discussions on the course management system (Blackboard) and more than half indicated they would miss the opportunity to use Facebook in this manner if not provided in future courses. Preceptors may wish to take advantage of opportunities to use social media to help students and residents learn while at their practice site. There are many educational opportunities on the Internet and links to these can be placed on a social media site dedicated to the institution or the specific clerkship.

PRECEPTOR PEARLS

With appropriate safeguards, social media postings can be a way to quickly communicate with learners about important issues and events occurring at the training site as well as connecting learners with experts in given areas. Discussing in advance the appropriate use and appropriate responses to posts is recommended.

Recommendations

Although many health science profession colleges and schools have developed policies for students, faculty, and staff on appropriate and inappropriate use of social media, there are legal and ethical issues that need to be considered when creating and enforcing these policies. Cain and Fink[12] published a useful review of these issues that we suggest reading.

Preceptors need to be aware of the policies and issues on social media and posting of images of their own institution and of the college or school of pharmacy (when a student is the learner). These issues and policies should be discussed at the beginning of a learner's clerkship/rotation. Such orientation is particularly critical if the institution's policies are more stringent than those of the college or school of pharmacy, as learners may not pay much attention to policy differences unless they are specifically highlighted. It is always worth stressing and reminding students that discussion of individual patients in any place where others outside the healthcare team may overhear or see the information is prohibited. It is particularly important that such information is never posted on social media.

Preceptors may find out that learners are posting items on social media sites that are not clearly illegal but might be questionable, or that they are posting images of individuals that have not given their permission to post. This information should be discussed with the college or school of pharmacy personnel rather than attempting to make sole personal decisions on whether the posting is inappropriate. The colleges or school will have support of attorneys and human resources personnel who can make the determination. As an example, there may be a fine dividing line between expressing a point of view (freedom of speech) and expressing thoughts forbidden by policy.

Preceptors may wish to take advantage of the use of social media for their learners. Announcements of upcoming activities and deadlines, links to specific education sites, podcasts, or patient care apps as well as other uses may add value to the educational experience of the clerkship.

Finally, preceptors must also consider their own use of social media. Although a preceptor may decide personally not to 'friend' or 'follow' learners, the preceptor may be 'friends' with another colleague who allows learners to access his or her social media applications. Thus, the preceptor posts may be seen by learners through other's posts as privacy policies can be individualized.

Addressing Lapses in Professionalism

Professional behaviors and attitudes are expected from our learners as well as from those involved in professionalizing learners. Preceptors may be asked to assess professionalism one or more times during student clerkships. Some schools may also ask for 'on-the-fly' professionalism assessments that can be reported at any time. It is important to understand when and how you will be asked to evaluate a learner's professionalism. Unfortunately, there can be times when a learner demonstrates a lapse of professionalism and the behavior must be noted and discussed. Examples of poor professional behavior noted in medical schools include lack of respect, inappropriate behaviors or language, poor relations with the healthcare team, unmet responsibilities, lack of timeliness/initiative, or poor rapport with patients or caregivers.[13,14] One medical school identified the following unprofessional behaviors or actions in the classroom setting: interruptions in class, unacceptable timing of requests for special needs with test taking, and inappropriate behaviors in small group with peers

and faculty.[15] A focus group of clinical faculty at a medical school in Canada identified two types of professionalism problems: (1) a minor behavior that is challenging to define but potentially remediable, and (2) an easy-to-define behavior that is more likely to be irremediable.[16] Their hypothesized reasons for unprofessional behaviors included stress, poor role modeling, inexperience, and institutional tolerance.[16] It may be challenging and disappointing to witness such behaviors, but as a preceptor it is critical to assess and provide informal or formal corrective action in situations of learners' unacceptable actions. Challenges of identifying and providing formative feedback on such behaviors include cultural differences, false allegations, and various definitions of tenets of professionalism.[13] In addition, many scenarios may not be absolutely clear in terms of the degree of inappropriateness of the behavior. Assessment is imperative but may be meaningless unless it leads to improvement in behaviors and actions.[3]

Depending on the incident, corrective action may be warranted immediately or at a later time but should not be too much later. Time may be needed to gather information, evaluate the situation, and think about how to handle the discussion with the learner. As well, the learner may need time to reflect on what occurred and how he or she handled the situation. It is definitely helpful to be familiar with the school's or institution's professionalism policies, as they can assist in understanding violations and processes of corrective action. Depending on the incident, the director of experiential learning, course coordinator, dean of student affairs, or the practice site director or coordinator may need to be involved. As the identified event may or may not be the leaner's first issue with unprofessional behavior, it is important to provide feedback to the program. Schools must carefully balance privacy issues and notification of concerns to preceptors without resulting in perceived notions of behaviors to expect. If the appropriate action to take in resolving the situation is not clear, first contact the course coordinator if the situation occurred in the classroom or the director of experiential learning (or equivalent) if this occurred in the experiential setting. It is best to confront the issue in an appropriate time frame and to avoid only including or discussing the circumstance in a later evaluation. The course coordinator or director of experiential learning can provide help on handling the situation. Sometimes the same or a similar situation has previously occurred with this or another learner and the coordinator or director can provide advice from past experiences handling the unprofessional behavior. In addition, schools may have a professionalism committee, honor board, or something similar that handles initial and repeat professionalism issues of students. If a resident has demonstrated a lack of professionalism, discuss the situation with the residency program director. If this was not a first time issue with professionalism, the program may already have a plan in place on what to do to confront the issue.

PRECEPTOR PEARLS

When a learner demonstrates a lack of professionalism, inform the school or institution of the issue and jointly develop a plan of action.

Binder and colleagues[13] recommend the following strategies for handling unprofessional behaviors: early intervention, counseling, and attempts at remediation. Informal or formal discussions with the student or resident about the behavior exhibited and potential consequences of the unprofessional actions should occur along with documentation of the incident. The goal of the meeting should be for the learner to understand why an assessment and report was submitted, to provide them with appropriate feedback on behavior and actions, and to help the learner improve in future interactions.[15] Reviewing institutional policies or guidelines with the learner is also important.[13] The overall process for handling unprofessional behaviors should be educational and not punitive; however, learners commonly interpret them as punitive.[15] It may be worthwhile to state the goal of the meeting at the beginning of the discussion.

CASE EXAMPLE

Josephina is a third-year pharmacy student on her introductory pharmacy practice experience (IPPE) rotation at a local community hospital that has both medical and pharmacy residency programs. IPPE duties include gathering the medication lists for patients on the internal medicine ward to which Josephina is assigned and providing the information to the fourth-year pharmacy student (P4), Jane, and pharmacy resident for use during rounds. At the bedside of Mr. Slovenko, a patient nearing death from heart failure, the chief medical resident, Dr. Singh, asks Jane about the doses of two drugs the patient is receiving. On hearing the answers, the resident states that Jane is incorrect as the doses were changed 2 hours ago and admonishes the P4 to get her information correct before coming on rounds so that errors aren't made. An obviously embarrassed Jane tells the resident that it will not happen again and apologizes to the team. She does not implicate Josephina in providing the inaccurate information but later asks her to be careful with patient information (and makes a mental note to double-check medications just before rounds tomorrow).

Later that evening, Josephina posts the following statement on her pharmacy fraternity's Facebook page about the incident. "I can't believe what an arrogant jerk Dr. Singh is. He blasted poor Jane in front of the whole team at Mr. Slovenko's bedside, with the poor guy near death as it is. It was the worst example of belittling another professional I have ever seen. Obviously he doesn't respect women either. And how are we supposed to keep up with all the medicines anyway if they are changing them just before rounds." Another student on rotation at the site points out the posting to the site preceptor the next morning.

WHAT ISSUES EXIST IN THIS SCENARIO?

- The first and most egregious is violation of HIPAA policy. Patient information must never be discussed in such a manner.
- The berating of another professional in a public forum demonstrates very poor judgment, even if their behavior is less than stellar (which does not appear to be the case here).
- Accusing a person of bias toward others can be a way of bullying and an attempt to discredit that person.
- There is no recognition of Josephina's own role in the matter or realization that accurate information is important to making good decisions.

HOW WOULD YOU HANDLE THE SCENARIO?

This situation obviously requires immediate notification of both institutional authorities and the college/school experiential coordinator with regard to the HIPAA violation. The student's posting should be immediately removed as soon as discovered and the college/school should address it directly with the student. The outcome of this aspect of lack of professionalism for the student will depend on the legal or regulatory penalties for such a violation.

The handling of the matter would also focus on discussing the poor choices made by Josephina in posting negative comments about other professionals and taking responsibility for her own part in the event. Even if the chief resident had berated Jane, which would have demonstrated a lack of professionalism on his part, social media is not the place to air the issues. In this scenario he was more likely attempting to teach the importance of accurate information to the team's decision-making process. Furthermore, based on the scenario there was no indication that Dr. Singh did not respect women, and to indicate such would besmirch his reputation. Even if true, social media is still not the place to air such issues. Josephina should be required to read all policies and guidelines on the use of social media and have an in-depth discussion of the various lapses in professionalism exhibited by her posting.

A discussion of communicating accurate information and honesty with the medical team about patient care should also occur. Josephina should have taken responsibility for the incorrect information and apologized to her colleagues.

The student that reported Josephina's posting should be personally commended in order to reinforce the importance of identifying and reporting lapses in professionalism as a professional responsibility. Though use of the reporting student's name should be avoided, discussing the importance of such reporting with other students using this example can reinforce the role of other professionals in reducing or curbing poor behavior.

Some of the outcomes of the scenario are that, depending on legal, regulatory, and policy issues, Josephina could face expulsion or other penalties from the college/school and fines for negligence. She could be banned from posting on any social media site of the college or institution and would need to receive training in professionalism. She may be pulled from her IPPE and be required to repeat the session if she is allowed to remain in school.

We suggest having both the learner and preceptor, and potentially a witness, depending on the scenario, sign documentation that the issue occurred, was discussed, and a plan was agreed on. The learner may need to apologize to others involved in the incident in addition to working on modifying his or her behavior. The learner may require or seek counseling to assist with developing permanent changes in attitude and behaviors. Generally, the school will assist with providing or educating on counseling opportunities. Cultural competency issues are challenging to solve but multiculture awareness programs can assist with education on communication and work ethic differences.[13] Remediation can be challenging in that a learner may need to repeat activities to demonstrate competency; however, depending on the behavioral issue, there may not be a specific activity to repeat and only continued evaluation necessary.

PRECEPTOR PEARLS

Discussions with the learner about unprofessional behavior exhibited should occur along with documentation of the incident. The goal of the discussion should be for the learner to understand why his or her actions were unprofessional, to provide the learner with appropriate feedback on behavior and actions, and to help him or her improve in future interactions.

It is not easy to report professionalism issues or to levy sanctions against someone else. Disincentives such as paperwork, time, and fear of repercussion are reasons medical faculty may remain silent with unprofessionalism issues.[16] Other reasons include a perceived lack of power, inadequate feedback skills of their own, lack of confidence in their own judgment, and a lack of remediation or support network when the issue is identified. Directors of experiential learning can assist with conducting or scheduling training sessions on developing feedback skills. In addition, scholarly books and articles are available as resources. It should be considered a responsibility of the school and institution to provide preceptors with the support needed in citing and confronting professionalism issues. Asking the institution to provide guidance on how past violations were managed and the appropriate level of consequences can assist preceptors in learning about how to handle similar situations.

Best practices for addressing lapses in professionalism are lacking; thus, past experiences, current methods, and new approaches to consider should be shared among colleges, schools, and institutions. Addressing problems with repeat offenders is especially challenging and successful management approaches should be shared in order to assist others in the profession.

Engagement of the Pharmacist

Community Involvement

Each year, consumers rate pharmacists as one of the nation's most honest and ethical professionals.[17] This designation is built on the trust generated in the patient-pharmacist relationship and the competence associated with providing medications and related information and by attending to the healthcare needs of patients. It is also likely an indicator of how a pharmacist's role and influence expands beyond his or her place of employment and penetrates into the community.

As a large proportion of the population becomes of advanced age and patients demonstrate better understanding of the morbidity and mortality of diseases, the role of population health becomes significantly more important, and the opportunities for pharmacists to become more engaged in this role increases. *Population health* refers to the promotion of general wellness and positive healthcare practices in the community. It includes areas such as health screenings, vaccinations, and improving healthy behaviors that prevent disease.

Pharmacists are well suited to advance the health outcomes of our entire population. They have more points of interaction with patients than any other healthcare provider. Pharmacists educate and communicate regarding medication needs and issues in addition to promoting wellness for patients' diseases. Pharmacists can promote health and wellness through pharmacist-led patient support groups, disease education, and discussions

CASE EXAMPLE

Kevin is a P4 on rotation with Dr. Judy. Kevin finished his patient care activities this morning and asks Dr. Judy if he could work at the hospital library on his project for the afternoon. Dr. Judy agrees and Kevin gathers his materials and leaves the patient care area. Early that afternoon Dr. Judy was notified of a potential medication error that Kevin was involved in and goes to the library to address the issue. Kevin is not currently there, nor has he been seen by the library staff all day. Dr. Judy calls Kevin, who states he went home to work as he forgot his computer charging cord.

WHAT ISSUES EXIST IN THIS SCENARIO?

- Kevin leaving the practice site rotation without permission or notifying the preceptor
- Potential lying about computer cord
- Medical error issue possibly due to rushed work in order to leave early

HOW WOULD YOU HANDLE THIS SCENARIO?

Although there may not be one best way to handle this situation, there are many options. Dr. Judy could ask Kevin to come immediately back to hospital to discuss the concerns or may convey the issues over the phone, asking Kevin to think about his actions overnight and stating they would discuss this tomorrow morning. It would be important for Dr. Judy to notify the school regarding Kevin leaving the practice site without permission or notification. The school may have specific consequences for this action listed in its policies. Depending on the severity of the potential medication error, Kevin may need to complete further documentation or education, which may need to occur immediately or at a later time.

An outcome of the scenario is that Kevin is asked to come immediately to the hospital to have a discussion with Dr. Judy. During this time, Dr. Judy contacts Dr. Lawley, the director of experiential learning, and learns that leaving the practice site is a repeat occurrence for Kevin, for which he has already received a warning. The school's plan for Kevin currently states he would be removed from a rotation without credit if he had a repeat performance. Dr. Lawley asks Dr. Judy to discuss the importance of preceptor-learner communication with Kevin and contacts Kevin later today informing him not to return to the rotation. When Kevin arrives at the hospital, Dr. Judy asks Kevin to reflect on his unprofessional behavior. Kevin states that he should not have lied about going to the library to work, and it was not professional of him to go home. He states he has lost trust from his preceptor and was not honest or responsible. Dr. Judy asks Kevin what he would do in the future to earn these aspects of professionalism. Kevin states he would have to change his actions.

Dr. Judy then explains that the unit nurse found the wrong medication in bins in the automated dispensing cabinet this afternoon. Kevin should have restocked those bins this morning as part of his practice responsibilities. Dr. Judy asks Kevin if he restocked the bins this morning, and he replied yes. Dr. Judy asks how this could have happened. Kevin said he rushed restocking medications because he wanted to get home to work on his project and may have not placed the correct medications in each bin. Dr. Judy asks Kevin to state what would have happened if a patient received a wrong medication. Kevin stated potential consequences and Dr. Judy asked how he would feel if this happened to his family member. Kevin had not thought about hurting anyone with his actions but stated he understood what could have happened. He offered to recheck all of the bins for accuracy once they finished the discussion and Dr. Judy allowed him to do this. Dr. Judy also made him apologize for his actions and thank the nurse for bringing the issue to Dr. Judy's attention. Dr. Judy documented the incident and had Kevin sign the document, acknowledging his actions and consequences.

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on key pharmacy issues such as medication education and adherence, finding a pharmacy provider, and reducing polypharmacy. Pharmacists can demonstrate professionalism and promote the profession and enhance medication use by volunteering to speak at local schools, organizations, or other venues. Pharmacists can also help prevent disease and disability by providing vaccinations; by providing education on smoking cessation, weight reduction, or prescription and nonprescription drug abuse; and by participating in healthcare screenings such as blood pressure, diabetes glucose checks, and bone density evaluations.

By participating in their communities, pharmacists can find the experience to be exciting and rewarding and will gain unique insight into geographic or cultural differences that may assist in making our patients healthier. This can help foster better communication and provide a basis for discussion between pharmacists and community practitioners.

PRECEPTOR PEARLS

Preceptors can effectively teach learners in leading by example. Preceptors should engage in a community area they are passionate about and invite the learner to participate.

Many pharmacists engage in activities with community centers, shelters, church groups, and homeless clinics, to name just a few. Preceptors who actively engage in the community have great opportunities to mentor students in this type of professional behavior. Preceptors should emphasize that participating in our communities is a civic obligation as a healthcare provider that allows us to use our clinical knowledge to give back to those less fortunate. Preceptors should seek opportunities for learners to join them in community engagements that can help the learner define and participate in the interaction and understand the value they can provide to patients and the society. Learners can then determine their service-related interests and create their own path and personalized interactions. Learners can learn how acting responsibly and being accountable in community interactions will lead to professional and personal fulfillment.

The Importance of Professional Organizations

During pharmacy school, students are provided opportunities to join professional organizations and must make decisions on those that will best suit their aspirations as professionals. At this time of their career, students often seek the assistance of a mentor, faculty member, or preceptor to learn more about the various organizations and help make these decisions.

There are a number of pharmacy organizations to choose from at the local, regional, and national levels. The organizations vary in scope from those that seek to represent the entire profession or major portions of the profession to those that focus more on particular areas of pharmacy such as managed care or nuclear pharmacy. The organizations with more diverse focus may also have a local and regional impact by tying into state, regional, and school affiliates and may be more appropriate for students early in their time in pharmacy school. However, more focused organizations may be appropriate for learners who plan to or already know that they will practice in a specific area. Overall, the goal of all pharmacy organizations focused on professional practice, either broad or more narrowly focused, is to provide a collective voice in advancing pharmacy practice and public policy. Preceptors should have learners read the ASHP Statement on Professionalism, which discusses the importance of achieving goals through "collective efforts" more specifically described as having a common voice regarding practice advancements to our profession.[4]

In addition to the organizations focused on professional practice, students have the opportunity to pledge and join professional fraternities (e.g., Kappa Epsilon, Kappa Psi, Phi Delta Chi) and may be invited for membership in the leadership and honorary fraternities (e.g., Rho Chi, Phi Lambda Sigma). These organizations also offer opportunities to provide a variety of community service, philanthropic activities, and leadership development that help cultivate professionalism.

There are numerous benefits of belonging to a professional organization. Professional organizations allow learners the ability to network with peers and prominent members of the local and national pharmacy community. It broadens their horizons on topics and general issues facing pharmacy practice and allows learners to present their ideas and suggestions for advancing local practice or the profession. Most pharmacy organizations offer learners the ability to volunteer for committees, projects, and activities and serve in leadership positions. Large organizations also offer learners resources and tools that may be helpful as they near graduation such as curriculum vitae building and review, selecting the right residency, interview techniques, and potential employment opportunities. The benefits of joining pharmacy organizations also continue after learners graduate, and they should be encouraged to continue membership in organizations as a pharmacist throughout their career.

A mentor or preceptor can assist greatly in helping learners select professional organizations that are right for them. Learners can be asked to define their short- and long-term professional goals, the practice setting(s) they are considering initially as a career, and what they are looking for in a professional organization. Recommending learners attend a local or state chapter meeting as a guest of the preceptor is a good start. Reviewing organizational websites, resources, and tools with learners is helpful. Some organizations allow reduced fees for members to join and allow learners to take on various leadership roles as well. Active involvement in professional organizations can help foster the development of future leaders, build and maintain professional networks, and instill a sense of pride in and obligation toward the profession. In the long term, preceptor and learner involvement in organizations can lead to a sense of professionalism, improved patient care, and enhancements to the pharmacy profession.

PRECEPTOR PEARLS

Preceptors and learners should engage in an active discussion describing the professional organizations a preceptor belongs to and how these have assisted in achieving his or her professional goals. Preceptors should invite learners along to local, state, and national meetings, when feasible.

Summary

The professionalization of learners primarily occurs throughout their educational period, but professionalism continues throughout one's pharmacy career. Preceptors must discuss the professional traits with learners as well as positive and negative aspects of professionalism. In addition, in today's society, social media must be incorporated into professionalism discussions. Unfortunately, lapses in professionalism of learners occur, and these situations must be handled fittingly. As each situation differs, best practices should be shared within the pharmacy profession.

Preceptors are role models for learners, and their professionalism is always being evaluated. Preceptors can influence learners through community and professional organization activities. We challenge you to think about your professional footprint and how it can positively impact a learner's professionalization. Spend time with learners discussing professionalism and instilling that it is a lifelong commitment.

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Chapter 12

Partnerships with Schools

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Chapter Outline

Developing Partnerships: The Preceptor Perspective 220
Developing Partnerships: The School Perspective 227
Benefits for the Site and School or College 231
Educational Affiliation Agreements 234
Providing Feedback to Schools to Improve Learner Competencies 238
Summary 241

Power in organizations is the capacity generated by relationships.

Margaret Wheatly

Our success has really been based on partnerships from the very beginning.

Bill Gates

Friendship is essentially a partnership.

Aristotle

Learning Objectives

- Understand the rationale for schools of pharmacy and practice sites to enter into partnerships.
- Describe the benefits of educational affiliation agreements to each of the following: the preceptor, the school of pharmacy, and the practice site.
- Explain the process of and reasoning for continuous quality improvement once the experiential education begins for the learner.
- Recognize how a partnership agreement between a school of pharmacy and an affiliated practice site can enhance preceptor training and development.
- Establish a program and process to have a consistent preceptor development program in partnership with the practice site and the school.
- Identify how student learners and financial support can be advantageous in the creation of a partnership agreement.
- Understand how documenting positive outcomes can affirm the value of the partnership and provide justification for additional resources.
- Learn to develop precepting methods to excel as a clinical instructor, an evaluator, a role model, and a mentor.
- Discuss the primary and secondary components of written educational affiliation agreements.
- Develop activities that enhance preceptor advancement and student/resident learning.
- Describe the purpose of providing bidirectional feedback to the school and the practice site regarding learner preparedness, learner performance, and educational and clinical outcomes.
- Determine well-defined expectations for the learner, the practice site, and the school.
- Explain the importance of partnering with the school to address difficult or failing students.

Developing Partnerships: The Preceptor Perspective

Importance of a Partnership

Developing a partnership between a facility/institution and a school/college of pharmacy is essential in advancing the future of pharmacy practice. As healthcare becomes increasingly complex and the role of the pharmacist shifts from dispensing to being a provider, developing this partnership can be beneficial to both the practice site and the school/college of pharmacy. Developing this partnership includes sharing resources, improving patient outcomes, growing the profession, and fostering a culture of continuous learning. By incorporating learners into various types of practice environments, benefits are seen with expansion of services, implementation of best practices, and quality improvements while enhancing patient safety and reducing costs. Benefits are observed when the site and academic institution work together to support education, strengthen the profession, and care for patients and the communities served.

The practice site and the school of pharmacy must develop a true and lasting partnership to ensure success of the experiential education program for all involved.

These partnerships take time and resources from both the site and school, but with good communication and planning it can be a rewarding relationship. Both partners must spend time initially to learn the needs and expectations of one another. It is often necessary to compare the needs and expectations to any existing relationships with other schools of pharmacy to promote standard practices for both learner and preceptor. Standardizing learner experiences among all affiliated schools allows preceptors and sites to provide an organized and positive approach to learning. Consider establishing policies and procedures for precepting both students and residents to develop a consistent and standardized approach to training. It is also important to understand the operation and culture of both organizations. The chances of building a successful long-term partnership are much greater if the site's practice model and the school's education and training program fit well together and the mission, vision, philosophy, and core values of both partners are in alignment.

A partnership may be defined by what is written in the formal educational affiliation agreement, but the success is determined by the relationships developed between key persons at the practice site and at the school of pharmacy. The site coordinator in charge of organizing the experiential education program at the site and the assistant/associate dean responsible for experiential education or his or her designee at the school need to work closely together and communicate often to ensure expectations are clear for both parties. This relationship is very important, as the school administrator will be the site coordinator's primary contact person and interface with the school. Having a good relationship is especially important when managing rotation schedules, preceptor responsibilities, or dealing with challenging learners. It is also of critical importance when staffing vacancies or emergencies occur within a practice site affecting the feasibility of student rotation schedules and preceptor availability. Maintaining an open dialogue is most important when dealing with challenges that arise for either the preceptor or individual learner in question. The overarching goal for both site and school is to successfully educate and mentor future generations of pharmacists that will give back to the profession.

Establishing the Partnership

Establishing a relationship and partnership between the site and school often starts with a face-to-face interaction. To observe students on rotation and ensure facilities are meeting program expectations, schools will engage with preceptors and pharmacy staff with on-site visits. Visits can be impromptu in nature, in which school administrators will tour the facility and meet with preceptors and pharmacy leadership. More formally, school administrators may also request to meet with the preceptor group to provide an overview of the experiential program objectives and school policies. Alternatively, practice sites may invite school administrators or faculty to highlight student and resident participation, preceptor involvement, and pharmacy services provided to patients. Preceptors and school administrators can exchange information about the training opportunities at the site and the experiential education program requirements. To credential preceptors schools may require preceptors to submit a current curriculum vitae, provide documentation of their license, and complete information about their teaching philosophy and practice interests prior to providing any type of faculty appointment within the school. Typically, schools will provide rotation-specific experiential education manuals that contain the goals and objectives, required learning activities, and the evaluation process. Often, this documentation, evaluations, and schedules are provided through an online module. In addition, preceptors and pharmacy leadership should formally meet to discuss departmental goals, staffing needs, and preceptor availability to best schedule student rotations. It is important to balance both preceptor responsibilities and learner needs. The potential types of rotations and the number of preceptors available should be discussed, as well as the site capacity for students on a frequent and annual basis. The site and the school should agree on the optimal preceptor-to-learner ratio for each available rotation and confirm this with their respective state board of pharmacy or licensing agency for verification of supervised hours, if applicable. This will be

important when the site coordinator and school administrator work on constructing a schedule for learner placement. Ultimately, a shared vision and plan for the future should be created. Then both site and school can budget for and allocate the necessary resources to accomplish mutual goals and objectives in a structured and timely manner. Future plans could include such things as slowly increasing the number of learners per month, developing additional elective rotations, hiring more pharmacists, recruiting and placing a faculty member(s) at the site, and incorporating the residency programs at the site.

• PRECEPTOR PEARLS •

Establishing and maintaining a good relationship with the school administrator will help solve problems relating to the pharmacy practice experience within the practice site more efficiently.

When these partnerships are in place, an affiliation agreement between the practice site and school should be initiated to outline the requirements for each partner. Although the educational affiliation agreement does not determine the success of the partnership, it is an important legal document that clearly defines policies and procedures necessary to train and host student pharmacists. An educational affiliation agreement should be in place before students begin experiential education at a practice site. This can be a time-consuming process, especially if changes to the school's standard educational affiliation agreement are proposed, either as a result of negotiation between the site coordinator and the school administrator or through review by the site's legal department. In the latter situation, the school's administration must then approve the proposed changes. Finally, representatives in each organization with the power to authorize such a partnership must sign the agreement. Both the practice site and the school will retain a copy for their records. Like any business transaction involving a written contract, do not rely on verbal commitments. For example, if the school has offered financial support to the site for precepting services or to provide faculty appointments, textbooks, or additional library benefits beyond the required standard, the agreement should include this information either in the body of the text or in an appendix.[1] It is also important to note that some school affiliation agreements cover a specific period of time and must be renewed on expiration. Other affiliation agreements may continue indefinitely. Occasionally there may be a need to reassess the relationship if strategic priorities or expectations change with either the site or school.

Establishing the relationship between the practice site and program also depends on the success of the preceptor and learner relationship. A contract or agreement between the preceptor and the learner plays a role in setting clear expectations for the rotation. The site coordinator or preceptor should discuss the elements of the student contract during the orientation process. These contracts may contain policies on absences/tardiness, using social media resources, and confidentiality (see **Figure 12-1**). In addition the preceptor should also construct a rotation-specific outline/syllabus of rotation activities and responsibilities to ensure the experience is rewarding for both the preceptor and learner. Having these elements in place at the practice site demonstrates a commitment to the success and growth of the school's experiential learning program.

Incorporating preceptor development is also an essential part of the practice site and school relationship. Many experiential programs offer preceptor development programs on campus or offer online training modules for their faculty and preceptors. Online modules may be the only opportunity some preceptors will have to interact with the school administrator or other preceptors in a given region and especially in remote practice sites. Preceptor development should be ongoing and made available in various formats to accommodate different learning styles, time commitments, and practice environments. It is important to note that preceptor development is not only essential for experiential programs but is a required element for ASHP-accredited residency programs. ASHP's Commission on Credentialing requires all accredited programs to establish and maintain a robust

Name (*print*): ______________________________

Preceptor and Site Expectations	**Comments**
1. Introduce yourself at all first encounters and greet patients and other healthcare professionals with a smile and/or positive inflection in your voice. Speak effectively (*e.g., not condescending, sarcastic, meek, or overly assertive*).	
2. Guard patient information from disclosure and seek permission to disclose information to other parties (*e.g., family, other healthcare professionals*).	
3. Be professional and respectful at all times. Apply knowledge, experience, and skills to the best of your ability.	
4. Demonstrate effective listening skills (*good eye contact, nonverbal cues*) and the willingness and flexibility to contribute to the well-being of others.	
5. Be well-groomed and dress with clothing that is professional in appearance (*e.g., appropriate to the culture of the institution/facility as defined by the preceptor, site dress code, and professional norms*). Minimize wearing of jewelry in patient care areas.	
6. Arrive each day prepared with equipment and assignments. Demonstrate a sense of duty and earnest desire to learn.	
7. Contact preceptor if you are to be physically absent (*e.g., sick*) from a rotation site. Submission of experiential education hour sheets indicating absences at the rotation site that are not reported to preceptor are subject to disciplinary actions.	
8. Notify preceptor if you must work at a job outside of your rotation for >16 hr/week.	
9. Actively participate in all rotational experiences (*e.g., patient rounds, meetings, discussions, counseling*) and complete all requested assignments on time without plagiarism. Demonstrate accountability without repeated reminders.	
10. Do more than you think you can on your rotational experiences (*e.g., request projects to avoid being idle*).	
11. Maintain your student portfolio and actively share with each student, preceptor, and potential employer.	
12. Be present and actively participate in all requested site meetings and presentations.	
13. Meet all requested site deadlines for submission of assignments and presentations.	
14. Submit complete experiential education paperwork at least 48 hours prior to the end of the rotation.	
15. Provide constructive feedback on each preceptor and site after each rotation (*good or bad*) by the deadline given.	
16. Be present for and pass all required student exams (*clinical, community, institutional*) on the assigned dates.	
17. Actively participate in professional organizations and community service.	
18. Investigate professional career options from preceptors, students, and the community.	

I have received training on the above expectations and understand my responsibilities.

____

Student Signature Date

FIGURE 12-1. Sample student contract.

preceptor development program. Preceptor development can include valuable tools to train all types of learners. Most importantly, preceptor development is needed to create and support a highly trained preceptor pool committed to the ever-expanding number of pharmacy school and resident graduates.

Benefits for Preceptors

The demand for highly qualified preceptors will only increase over the next two decades with increasing numbers of students enrolling into doctor of pharmacy programs. Meeting the educational needs of students is a challenge for both schools, institutions, and community practices. In 2011, Payakachat et al.[2] discussed how the demand for preceptors creates recruitment challenges for schools and colleges of pharmacy; however, knowledge of intangible benefits perceived by preceptors may prove helpful in recruitment efforts. They go on to say that "Teaching and mentoring others can bring greater satisfaction to one's work life and the opportunity to do so is one of the biggest draws of an academic career."[2] There are numerous benefits to precepting, both intrinsic and extrinsic in nature. Over the past decade, studies looking at job satisfaction among preceptors demonstrated that intrinsic rewards, such as the enjoyment of teaching, far outweigh the benefits of extrinsic rewards (for example, financial compensation).[3,4] In 2003, as reported in the *Journal of the American Pharmacy Association*, Skrabal et al.[5] found preceptors reported increases in their enjoyment of the practice of medicine (82%); time spent reviewing clinical medicine (66%); desire to keep up with recent developments in medicine (49%); and patients' perception of their stature (44%). Furthermore, these authors reported their own experiences in precepting pharmacy students during their advanced practice experiences, citing their expectations during the rotation and approach to teaching students.

It is important for schools to develop initiatives to recognize their preceptors. In a 1995 article Zarowitz[6] describes pharmacy practitioners as having a "fundamental need to be noticed, to feel important, and to be recognized for excellence." Pharmacy practitioners voiced additional reasons for precepting, including enhancement of the practitioner's knowledge of the subject area as a direct result of learner questions, expansion of clinical services to reach more patients, and giving back to the profession.

The reasons for becoming a preceptor are unique to the individual and are usually multifactorial. The reasons for precepting and its perceived benefits may be divided into two categories—tangible and intangible.

Tangible benefits include the following:

- *Preceptor development* (preceptor academies).
- *Access to drug information*. Preceptors are required to have access to library resources. Not all colleges are in control of these offerings, but for pharmacists who have limited library offerings this can provide an excellent resource.
- *Access to free continuing education programs*. Efforts to move the profession of pharmacy toward continuous professional development (CPD) increase the need for specific educational programs. Whether offered specifically for a practice site or as part of a school-specific program, continuing education programs can be fit into both the needs and goals of all parties.
- *Adjunct faculty appointments*. The awarding and designation of formal adjunct faculty appointments has been embraced by many pharmacy schools and universities. In addition to these faculty appointments serving as a reward, they can also serve as an incentive for practitioners to become involved with and committed to the school through establishing new rotations or maintaining existing ones.
- *Awards* (e.g., Preceptor of the Year). Recognitions of this level are a source of pride for the individual preceptor and his or her practice site. It can also be used for advancement in the profession via salary increases or for earning recognition from pharmacy professional organizations, such as in conferment of fellow status.
- *Educational newsletters*. Not only do newsletters provide general school information, they can also be used to highlight and recognize activities of preceptors.

- *In-kind gifts.* These gifts may vary, but receiving a gift bearing the school's name or emblem can be a source of pride for practitioners and give a sense of belonging and community.
- *Invitation to college events* (e.g., White Coat ceremonies, commencement ceremonies, receptions at national meetings). School events can generate a considerable amount of pride and sense of acceptance among practitioners as well as provide opportunities to reconnect with former colleagues and instructors.
- *Financial incentives and support for professional meetings.*
- *Support in research, grant writing, drug utilization reviews, and quality and performance improvement projects.* Learners can bring a level of energy and experience to these types of activities. In addition, the school can benefit from research opportunities.
- *Technology support.*

• PRECEPTOR PEARLS •

Familiarize yourself with the benefits of your site's educational affiliation agreements and take advantage of every opportunity to help yourself become a better preceptor.

Intangible benefits:

- *Involvement in faculty committees and advisory boards.* Many people seek a way to give back to their profession. Invitations to participate at this level can provide that opportunity as well as reinforce the level of respect a school has for an individual by requesting input on these activities.
- *Networking opportunities with other practitioners.* Having a common tie to other practitioners can be very useful when questions arise in your pharmacy practice or while trying to develop new clinical services.
- *Cognitive opportunities.* Learners provide a different perspective and may ask questions you have never considered. Teaching is an excellent learning tool and improves your own level of expertise in the subject area.
- *Recognition.* Preceptors appreciate being recognized for their contribution to the education of future pharmacists. Recognition can be achieved through verbal acknowledgment at school events, certificates, awards, written acknowledgment in a preceptor section of school newsletter, and appreciation letters, among other ways.
- *Emotional benefits.* A thank-you note directly from a learner or from the school can convey the simple emotion of gratitude that many individuals appreciate.
- *Developing and maintaining clinical activities and services for patients.* Learners can be given the task to help develop a new clinical service, which is both educational and exciting for the learner as well as valuable to the preceptor and the site.
- *Expanding medication therapy management (MTM) initiatives.* The progress toward improved patient outcomes has been limited by the ability to change patient behaviors. Additional counseling opportunities, due to increased manpower (i.e., learner pharmacists), can help improve the lives of the patients especially in the community setting.
- *Gaining new perspective on existing or new projects.* It is easy to get tunnel vision when working in the same facility or project for an extended period of time. The learner can benefit the preceptor by asking new questions and by providing a new perspective because he or she does not already see the conclusion at the beginning of the project. Learners also bring a variety of experience from their rotations that can provide unique and helpful perspectives. You can direct their experience to include a significant amount of time assigned to a specific project that gives them a quality learning experience and is beneficial to you.
- *Keeping abreast of current medications and treatment modalities.* Many practitioners quickly learn it is difficult to stay

current after leaving the academic setting. Journal club presentations, case presentations, or frequent topic discussions can help keep the atmosphere of learning current.

- *Participating in the training of future pharmacists.*
- *Giving back to the profession.*
- *Participating in the evolution of the profession.*

There is never one universal answer to what motivates an individual or what is truly valued.

The list of ideas for ways to recognize and reward preceptors is not meant to be exhaustive; implementing some of these ideas along with other creative reward mechanisms can help build camaraderie, unity, communication, and respect between full-time faculty members and preceptors. More importantly, it will make preceptors feel good about themselves and the jobs they are doing.[7]

Boyle and colleagues[8] provided innovative suggestions to engage preceptors that included recognizing preceptors' excellence, developing preceptors' educational skills, and facilitating preceptors' networking opportunities. Schools should actively seek ways to benefit preceptors in consideration of the roles they play in learner education.

Preceptors should provide feedback concerning their role as a preceptor, whether solicited by the school or not. Similarly, preceptors should take a moment to consider the benefits they receive from their activities and recognize the impact precepting has on their own professional growth. Many pharmacists today have former preceptors to thank for inspiring them to pursue pharmacy to better the lives of patients, not to mention witnessing a learner or resident successfully embark on their own journey in pharmacy can be one of the most rewarding aspects of precepting. The time and commitment necessary to prepare students and residents pays off in many ways for years to come. The important role preceptors play in all levels of the learner experience should be recognized and appreciated by institutions/facilities, academia, and the entire profession of pharmacy.

Maintaining a Partnership

After establishing an experiential education program at a practice site, the process of continuous quality improvement (CQI) must begin. There are always opportunities for improvement and lessons to learn in order to become a better preceptor and build a better experience. The preceptor should develop his or her own pre- and post-assessment tool for each rotation and determine the learner's learning preferences early in the rotation. Obtaining learner feedback on the preceptors and the practice site is critical to the CQI process. The school administrator should provide a summary of learner evaluations of the site and the preceptors on a regular basis. This may be on an annual or semiannual basis depending on the numbers of learners precepted during a given time period. It is important to ensure the integrity of the evaluation process and maintain anonymity of comments in order to obtain honest and useful information. In addition, the preceptor should obtain timely oral or written feedback from learners for the purposes of CQI during and at the end of the learning experience. This feedback, whether affirmative or critical, may help the preceptor restructure the rotation, revisit his or her teaching style, or validate the quality of preceptor instruction. Incorporating feedback into the learning experience benefits both the preceptor and the learner. Some practice sites have successfully developed and implemented a separate learner questionnaire (e.g., Survey Monkey) regarding the specific preceptor and rotation to provide more timely alterations as needed for optimal experiences on both ends. The school administrator will most likely make periodic site visits. This allows the site coordinator and other preceptors the opportunity to seek his or her advice and for the school administrator to share information on best practices observed in other sites. Preceptors can also tell the school administrator their personal observations regarding learner preparedness and assimilation of coursework and experiential competencies. In addition to incorporating feedback from the learner or program, CQI should also focus on providing quality experiences, expanding learner capacity, and enhancing preceptor skills.

• PRECEPTOR PEARLS •

Use your schools as a resource; have them connect you with preceptors in other facilities who have had similar struggles or found ways to use learners creatively.

Preceptors should also actively seek advice and share their ideas, successes, and failures with other preceptors at their practice site either with peer-to-peer discussions or more formally at preceptor committee meetings. Preceptors should also take opportunities to network with other preceptors in their region to share their experiences with teaching learners and residents and how to overcome challenges that often arise. Furthermore, they should be encouraged to share those innovations, success stories, and best practices with their peers by presenting at professional organizations at the local, state, and national level. Presenting posters and clinical pearls at regional or national preceptor conferences is both beneficial to fellow preceptors/educators and to preceptors themselves. Publishing articles in pharmacy journals or school/society newsletters is another opportunity for preceptors to tell their story. Sharing common experiences from both the site and school perspective is an excellent way to encourage others to consider the benefits and importance of precepting all types of learners. Developing, establishing, and maintaining relationships between preceptors, practice sites, and schools require frequent and ongoing communication, well-defined expectations, and a commitment to growing the profession of pharmacy and improving the lives of our patients.

Developing Partnerships: The School Perspective

The 2016 revisions and updates to the Accreditation Council for Pharmacy Education (ACPE) accreditation standards for the professional program in schools of pharmacy have continued to emphasize the importance of experiential education in the training of student pharmacists.[9] Introductory pharmacy practice experiences (IPPE) must be no less than 300 clock hours (Standard 12.6), and advanced pharmacy practice experiences must meet the minimum standard of 1440 hours (Standard 13.4). There is considerable discussion within the profession with the amount of practical experience required and the present growth of pharmacy schools needing experiential sites. Whereas the concern may be valid for some practice areas, many schools and practice sites overcome this issue by incorporation of learner-pharmacists in almost every aspect of the pharmacist's job functions. Schools of pharmacy are keenly aware that experiential requirements of the curriculum cannot be resourced appropriately without the development of academic partnerships. The consideration of pharmacy schools to enter into partnerships with practice sites is based on many critical factors beyond accreditation and training requirements. The preeminent partnerships incorporate best practices, specific requirements for each party, legal and liability needs, policy, and financial parameters.

• PRECEPTOR PEARLS •

Reach out to the school to assess their particular rotation needs prior to scheduling rotations. Some schools may need the site to handle more required rotations vs. electives based on need.

Benefits to the School

Partnerships evolve because each individual or group perceives a benefit of working together instead of singularly. These benefits should be articulated during the early stages of discussion on forming a partnership for experiential education. The primary benefits for the school include access to a quality practice site for learners, increased access to preceptor faculty to participate in didactic teaching, and the opportunity to gain additional recruiting advantages by sharing the partner's contacts or resources. Many sites also provide multiple opportunities for interprofessional education, which is required in the 2016 standards and critical for student learning.[10]

Some partnership agreements for experiential education may also include provisions

for shared salary for clinical faculty based at the facility of the partner. These faculty salary relationships can take numerous forms, but one of the most common is that the faculty will be contracted to the partner practice site. In this relationship, the benefit to the practice site is that the practitioners receive the services of an advanced trained practitioner for a reduced cost without accrued liability for retirement, vacation, or healthcare. The school of pharmacy retains the services of a faculty member but shares the cost of that faculty member's salary and benefits with the partner. A critical factor in making these types of arrangements successful is a detailed written agreement that provides clear definition on the amount of work that will be completed at the practice site as well as the school. Agreements that establish parameters at the beginning of the partnership and have frequent communication between the school and the practice site tend to be highly productive and successful.

These combination faculty support/affiliation arrangements are not without consequences should either party decide to cancel the contract for the experiential training affiliation or the clinical faculty support. Generally, legal counsel or the school business office will provide guidance on whether to bundle educational affiliation agreements and clinical faculty support contracts. In areas where practice sites take learners from multiple schools, specific details on faculty support functions as well as the number of learners to precept from the specific school will be beneficial to both parties. In addition, other benefits include manpower planning on behalf of the site as learners are incorporated into the patient care workload and the school can demonstrate experiential site capacity for ACPE accreditation.

The demand for experiential education partnerships will continue to increase as schools of pharmacy attempt to find progressive practice sites that are innovative and advance the profession. The increase in student volumes due to the growth in pharmacy education has placed some additional capacity needs in certain geographical areas of the country; however, comprehensive planning in the partnership agreement can overcome many of the challenges. For example, several institutions and schools utilize evening and night shift opportunities for IPPE experiences with positive learner feedback. The primary factor is for both the school and the practice site to work together for distinctive learner experiences that are beneficial to the students, school, and the practice site. The increase in partnership agreements has the added benefit of providing more options to learners when selecting practice sites for rotations. These affiliations increase opportunities for student learning in specialty practice areas that ordinarily might not be available to the school through its faculty. Software programs are available that automate the matching of learners with partners and their preceptors based on factors such as availability, educational requirements of the program, or individual training needs.

Preceptor Development from the School's Perspective

The development of partnerships for experiential education provides opportunities for the school to engage in preceptor development through traditional orientation programs, continuing education (CE), or CPD. Schools conduct orientation programs using a variety of formats, ranging from live presentation to streaming video to video, and usually supplement these presentations with written information in a preceptor manual. If a separate preceptor manual is not used by the school, an alternative is to include a standard section in each rotation manual describing essential elements such as the school's mission, overview of the curriculum and purpose of experiential education, assessment methodologies, and grading philosophies.

Professional development offers the opportunity to more formally engage in the advancement of preceptors as essential members of the academy. ACPE mandates that the school foster the professional development of preceptors in relationship to the educational requirements of the program.[11]

An essential element of any partnership agreement for experiential education is the school's ongoing evaluation of the site and preceptors. Site evaluation typically takes two forms: periodic quality assurance evaluation

of the site to ensure that the program maintains the highest standards of patient care; and preceptor evaluation and feedback that are often a byproduct of learner evaluation of the preceptor's ability to provide instruction, engage learners as members of the patient care team, or serve as a role model for the profession. The periodic assessment should be defined in the partnership agreement as to how often, when this will occur, and what type of situations can prompt an immediate review of the practice site, such as changes in preceptor job function or changes in space and facilities.

A highly useful component of preceptor development is the learner feedback process. Well-structured and timely feedback allows both learners and preceptors to advance in their skills by identification of strengths and weaknesses and ways to improve their practice. Schools should have a policy that defines approriate feedback and procedures by which adverse learner comments can be addressed with the preceptor or site management in a suitable manner. The partnership agreement should also include provisions for addressing a situation where the preceptor believes that the best interests of patient care or site policies and procedures have been compromised or violated. Feedback should be provided in a manner so current learners are not impacted.

Maintaining a Partnership

The educational programs of the college work best when integrated with the pharmacy services of their affiliated heathcare organizations. Routine visits by school administrators to practice sites can be valuable in helping to build relationships between schools and their preceptors. These interactions allow school representatives to better understand practice site dynamics and issues, heighten awareness and understanding of experiential rotations, and help the preceptors with continuous quality improvement of the experiential education. Learner issues regarding their progress, expectations, evaluations, etc., should be addressed at this time. The school should take every opportunity to establish, maintain, and improve good working relationships with both administrative and clinical staff at these sites. Schools that have learners in practice sites that are shared with other schools are encouraged to work together with the practice site and the pharmacy schools to develop identical learner assessment forms to reduce the complication of multiple evaluation forms being utilized.

Preceptors can give feedback to the school on training requirements and learner preparation as well as on the school's organization and service provided to them. This is also a great opportunity for the school representatives to provide preceptors with periodic summaries of the learners' evaluations of the preceptor and site.

Schools should evaluate the performance of preceptors with established criteria, specifically evaluating individuals for the quality and effectiveness of their practice site, and also for the quality of their teaching and mentoring. The evaluation process should consider and acknowledge efforts of preceptor faculty that make contributions toward the advancement of the learners' professional development, such as academic and postgraduate advising, career pathway counseling, research, and mentoring activities. Such evaluation criteria should consider not only learner evaluations of the preceptor site, but also well-defined objective criteria for professional service, scholarship, and practice success. Schools and their respective partner institutions can consider developing this criteria as a team to bring continuity to faculty employed by the institution as well as the school. Many schools include awards for preceptors that recognize excellence in experiential education as part of their awards day or graduation ceremonies.

Issues with Partnership Agreements: The School's Perspective

Although the school may develop a very structured experiential program and engage in a thorough discovery and development process for its preceptors, there is no guarantee that the partnership relationship will not suffer problems because of poor communication, lack of commitment to experiential education beyond free labor or issues of leniency with grades. If the practice site is significantly distant from the school, lack of specificity in the contract about learner support can also become an issue.

Many schools of pharmacy have a longstanding tradition of not providing financial remuneration to preceptors or the site for educational services to learners. The schools argue that the cost to provide experiential education would exceed budgets if every site required compensation for the time invested by preceptors. Even in situations where the school policies provide compensation to sites or preceptors, some sites will not accept funding. Some schools provide financial reimbursement to sites for taking a specified number of learners annually with additional funding for informatics or facilities usage. Regardless of the type of situation, the partnership agreement for experiential education should include within the agreement specific language that addresses all financial considerations, if any, involved in the agreement. This can be included as an attachment, exhibit, or a schedule.

ACPE standards and guidelines mandate the establishment of formal agreements between the school and practice partners.[11] Partnership agreements are built on trust, mutual interests, and the benefits of both parties working together. From the school's perspective, the partnership provides learner practice opportunities that might not be available through full-time faculty. From the partner's perspective, the close relationship with a school of pharmacy is an opportunity to advance the practice site agenda and impact the educational outcomes of the professional program.

Expectations for the Partnership

Expectations of the preceptor. As with any partnership or agreement between two or more parties, there are expectations and responsibilities that are required in order to be considered effective. The expectations of the preceptor on site can vary, but there are basic administrative and teaching responsibilities that all preceptors must fulfill.

Administrative responsibilities:

- Orient learners to the rotation and training site. Clearly identify specific service, objectives, and personal expectations.
- Introduce learners to office and ancillary care staff, who will in turn be helpful and make learners feel a part of the team.
- Complete a formal written evaluation of learner performance during the rotation according to the school's policy.
- Contact the responsible experiential program representative to discuss issues of concern and learner performance.

Teaching responsibilities:

- Serve as a mentor who assists learners in applying knowledge and building skills to perform assigned tasks and to problem-solve patient care.
- Provide appropriate training and supervision.
- Challenge learners with deliberate and thoughtful questions.
- Allow learners to participate in departmental or institutional activities.
- Provide written and verbal feedback to learners in a constructive and timely manner.
- Be available, on site, for assistance during assigned tasks, training, and patient care activities.
- Share learning resources (texts, computers, and educational programs) sufficient to increase learner knowledge and productivity.
- Assign readings, literature searches, or medical information gathering pertinent to patient care.
- Integrate learner's didactic knowledge base into the designated or assigned pharmacy practice site.

Expectations of the learner. Experiential education is designed to help learners become active participants in providing contemporary pharmacist patient care services. Under the direction of their preceptors, learners will integrate their knowledge of pharmacotherapy, diseases, dosage formulations, and pharmacokinetics in developing and assessing therapeutic plans and evaluating drug selection or optimization for patients. Each rotation should emphasize outcomes-oriented decision-making in clinical situations regarding drug therapy.

Learners are expected to attend physician rounds, interprofessional team meetings, attend conferences and discussions, monitor and present assigned patients, and interact

with patients and healthcare professionals. Over the course of their experience, learners will learn to develop recommendations and participate in decisions about drug therapy with regard to efficacy, toxicity, pharmacoeconomics, and unique methods of drug delivery.

While the list below is not all-inclusive, learners should be able to perform many of the following functions at the end of their rotations, depending on their level in their respective program:

- Understand the requirement for the pharmacist to accept responsibility and accountability for medication therapy outcomes.
- Dispense and compound prescriptions in accordance with all legal, ethical, and patient care standard practices.
- Prepare sterile and chemotherapeutic products in accordance with the accepted standard of practice.
- Apply case management skills to drug therapy selection, monitoring, and assessment.
- Develop a plan for continuity of care of patients for drug therapy as part of the healthcare team.
- Develop, implement, and document pharmacist patient care plans that manage patient care needs using drug monitoring and physical assessment skills.
- Identify barriers and propose solutions to manage common disease states in traditionally underserved populations with little or no access to the healthcare system.
- Use strategies to improve patient compliance with drug therapy regimens to enhance outcomes.
- Develop practice management skills relating to documentation and compensation issues, managed care, supervision of supportive or technical personnel, and administrative matters related to operations and patient outcomes.
- Demonstrate the ability to integrate distributive and clinical skills in providing pharmacist patient care.
- Actively participate in clinical process improvement activities and population-based therapeutic drug decision-making for targeted populations or groups of patients.
- Demonstrate professionalism behaviors and values that are consistent with the practice of pharmacy.[12]
- Actively participate in activities related to health promotion and disease prevention in a variety of settings.

In addition, learners will maximize their investment in education and the value of their experiential learning program by adhering to these guidelines:

- Contact the preceptor 10 to 14 days prior to the start of the rotation for the schedule, directions to the site, and any other pertinent information.
- Exhibit appropriate professional dress and behavior consistent with the practice site while on experiential learning assignments.
- Meet deadlines established by the experiential learning office, course masters, and preceptors.
- Demonstrate an eagerness to increase knowledge, skills, and abilities through experiential learning.
- Make up any time away from the site for any reason (i.e., illness, religious/school/government holidays, school or personal activities, etc.) during the scheduled rotation dates. Be proactive in communication of these needs with your preceptor and experiential education director.

Benefits for the Site and School or College

Pharmacy practice facilities choosing to engage in experiential education of learners in many cases gain as much as they give. There are many opportunities to incorporate learners into practice settings that give many benefits to the site and allow additional clinical opportunities to improve patient care. Each site will identify these benefits in ways appropriate to the practice setting, and educational institutions will provide these based on their means. For school's engaging in partnerships with practice facilities, there are often many more benefits in these relationships.

Defining the Role of Pharmacists

Faculty Preceptors

In some practice sites, the pharmacy college or university will provide faculty preceptors. These faculty members can help the pharmacy site provide patient-centered and evidence-based care. Faculty members are clinical specialists that can often allow facilities to provide clinical pharmacy services in additional practice areas. Activities that could be provided include formal and informal medication consultations, patient care rounds, and more committee involvement, while hopefully not negatively impacting the overall pharmacy workload, as the contribution of the college faculty to patient care drives pharmacy services to the forefront.

No Faculty Preceptors

Regardless of whether there are faculty preceptors, experiential learners have the ability to increase many clinical services provided in the institution. Learners on advanced experiential rotations could also assist with medication reconciliation, drug information, discharge counseling, and reporting of adverse medication events.[13] Learners can do pre-rounding and patient work-ups that can assist pharmacist preceptors in providing patient centered care. Their cost-effective involvement could lead to improved patient care and safety.

Financial and Resource Implications

Benefits can be monetary, in kind, or nonmonetary. Monetary remuneration, in the form of payment for learner rotations, or partial or full salary for cofunded pharmacist staff/faculty preceptors, is a type of arrangement that can be made between the practice facility and the educational institution. Depending on the institution, the pharmacy department may be able to keep the monetary remuneration and use it to provide educational and conference opportunities for staff. In-kind benefits include access as mandated by the ACPE by the facility to university resources not otherwise available, such as advanced online libraries and databases, or access of the site to software, computers, reference books, continuing educational programming, and other resources at no cost.[14] Nonprofit institutions also may be able to count education of pharmacy learners as a community benefit; contact your community benefit office to see if it qualifies.

Learners can demonstrate their value to a practice site in a variety of ways, including those pertinent to regulatory agencies, such as The Joint Commission. In the Pharmacy Practice Model Initiative, one of the charteristics of an optimal pharmacy practice model is using learners as pharmacist-extenders.[15] Learners are additional resources that can help provide services the pharmacy team is currently struggling to provide. They can monitor and document pharmacist patient care, including functions such as providing adverse drug event monitoring, performing drug usage evaluations, delivering patient education, presenting therapeutic alternatives (e.g., formulary cost savings), and reducing drug expenditures.[5,16,17] With the increased need for pharmacy resources related to transitions in care, learners can conduct medication reconciliations, provide discharge counseling, make follow-up phone calls, and assist in home visits, all of which can potentially decrease readmissions.[18]

Educational and Competence Implications

The informational resources from the college combined with the faculty's teaching skills contribute to continuing professional development for pharmacists and other healthcare professionals within the practice site. Learners also contribute to practice site learning by providing written drug information (often circulated within the pharmacy via a monthly newsletter), in-service presentations, and patient case presentations. Learner programs also give teaching opportunities to pharmacy residents, including opportunities to co-precept, facilitate topic discussions and journal clubs. The development of practice site competence comes from continual learning and the enhancement of critical thinking and problem-solving skills through practice, as provided by the college faculty and learners.[19]

Another benefit can be the development of preceptor training for the practice site by meaningful instruction from the college. The American Association of Colleges of Pharmacy (AACP) has developed standards

for exemplary pharmacy practice sites and preceptors to include preceptor and student responsibilities. AACP has a listing of available preceptor development programs created by the 2012 AACP Professional Development Committee.[19]

Personal and Professional Advancement Implications

Pharmacy administrators often define the nonmonetary, sometimes intrinsic, benefits to the practice site. A select group of pharmacy administrators questioned on this topic provided the following perspectives on the advantages of participating in pharmacy learner education:

- If the site has a residency program, assists in recruiting residents, and the college may be able to provide opportunities for residents, including teaching certificate opportunities.
- If a site does not have a residency program, supports environment for college to provide resources or co-funding opportunities to start a program.
- Assists in recruiting future pharmacist employees. In geographic areas of critical shortage, this is described as one of the top advantages to hosting learners.
- Shortens training time for possible residents or future employees.
- Contributes to the educational mission of the facility.
- Increases pharmacy visibility in patient care areas of the facility.
- Provides professional development of staff preceptors.
- Exposes learners to the concept of advanced training within the practice site as postgraduate year 1 and 2 residencies or fellowships.
- Helps to maintain relationships with educational institutions in areas outside of the experiential education, such as research.
- Allows collaboration with colleges for professional advancement through research endeavors and grant submission.
- Supplies creativity to rethink current pharmacy models and responsibilities.
- Allows opportunities for layered learning with pharmacists, residents, and students.
- Allows pharmacy to use more of the medical team–based model for providing patient centered care using "attending pharmacists" with residents and students.
- Gains personal satisfaction by serving as teachers and mentors to future pharmacists.
- Provides staff with learners who are a good resource for work on special projects for which pharmacy staff has limited time; similarly, learners often help distribute the workload of an individual preceptor so he or she can do more when learners are present in the facility.
- Educating learners keeps pharmacy staff current because learners are always asking questions. Learners prompt institutions to review practices that may need updating.

Therefore, within the array of tangible and intangible advantages described above, it should be possible to determine benefits to the site that either the facility can recognize on its own, or that can be provided by the college or school of pharmacy.

• PRECEPTOR PEARLS •

Remember that there are more benefits to precepting than just those listed in the formal partnership agreement. Other benefits come from working directly with the learners.

Benefits for School

Clinical rotations, whether advanced or introductory, are not just required but essential to professional education for pharmacy learners. Schools of pharmacy greatly benefit from a diverse array of practice sites that allow learners to apply their knowledge skills with established clinicians that practice in these respective areas. Affiliations with practice environments also provide practice sites for their clinical faculty and an opportunity to develop relationships with nonfaculty clinicians in the area.

A select group of school experiential education coordinators questioned on the topic of partnerships with practice sites has provided the following perspectives on the advantages:

- Allows site evaluations and learner feedback and often provides information about opportunities learners can be given at experiential sites, which can be shared with other practice sites.
- Preceptors can be used for presenters at preceptor development programs and classroom lectures.
- Practice sites that are also potential employers provide feedback on skills that would make newly graduated pharmacists desirable for employment (e.g., immunization skills, MTM certification).
- Sites can provide networking opportunities for potential residency or future employment for learners.
- For new pharmacy schools, relationships with mature sites can convey confidence in the program for current and incoming learners.
- The large diversity of sites has a positive reflection on pharmacy programs.
- Many schools have in their mission to provide CE opportunities for pharmacists in their regional area. The provision of CEs to preceptors can accomplish this mission.
- Allows exposure of pharmacy students to fellowships and residency programs.
- Provides practice sites for faculty and creates additional practice site rotations for learners, including specialized areas (e.g., cardiology, oncology, specialty drugs, etc.).

Educational Affiliation Agreements

Partnership or educational affiliation agreements for experiential programs have been in existence in some form since the beginnings of PharmD education. Educational affiliation agreements formalize the relationships between schools and practice sites to provide additional teaching and training resources beyond school-based faculty. They should describe in detail the responsibilities of both the facility and the educational institution.

This agreement may originate with either party. If the college or school of pharmacy initiates an agreement and is part of a larger university or system of universities, the affiliation agreement may be standard for all healthcare-related schools and then further defined for each individual program (i.e., pharmacy) in an amendment to the original educational affiliation. In the case where a site originates the affiliation agreement, it could be a standard agreement based with the facility's parent company or owner or it could be specific for the individual institution.

The ACPE, through its accreditation standards for doctor of pharmacy programs, encourages schools or colleges of pharmacy to develop partnerships that enhance the mission and goals of the program. Guideline 22.2 of the accreditation standards along with the 2016 Standards Guidance Document provides guidance on these agreements[20]:

- They are formal in that they are signed by representatives of the parties to the agreement
- They define the nature and scope of the affiliation
- They define the legal liability of the parties to the agreement
- They define the financial arrangements between the parties of the agreement
- They define the responsibilities and expectations for each party
- They provide criteria for termination and sufficient notice of termination
- They address malpractice provisions, learner disclosures, background checks, immunization policies, and professional conduct expectations

Guideline 22.2 requires that colleges or schools secure formal affiliation agreements with practice sites used for their experiential learning experiences.[21] The authors of this chapter reviewed a sampling of affiliation agreements from both large and small programs and found that areas of responsibility usually address much of the following:

- Complete identification of both the educational facility and the practice site (full

name, location, type of practice, affiliated institutions, etc.)

- Reference to the need for any additional amending agreements
- Method(s) of conflict resolution
- Responsibilities of the facility, including but not limited to the following:
    1. Compliance with all applicable state, federal, and municipal laws, rules, and regulations, and with all applicable requirements of accreditation authorities
    2. Permission for a designated university representative to inspect the facilities for the purpose of the educational experience
    3. Appropriate supervision of learners by a qualified practitioner and that practitioner's appointment or other recognition within the university (volunteer or adjunct) or articulation of the appointment of the school's faculty to the facility for the purpose of learner supervision
    4. Designation of a liaison from the facility to the college or school of pharmacy
    5. Provision of appropriate space for learner activities.
    6. Provision of equipment, supplies, qualified personnel, and supervised access to patients required for educational activities
    7. Maintenace of all required licenses
    8. Provision of an orientation to the facility
    9. Assumption of sole responsibility for patient care.
- Responsibilities of the educational institution, including but not limited to the following:
    1. Provision to the facility with names of the learners assigned to the facility
    2. Assignment to the facility of only those learners who have completed the prerequisites for participation
    3. Designation of a university liaison to the facility
    4. Development of criteria for learner evaluation and grading
    5. Requirement that learners be covered by professional liability insurance
    6. Assurance that learners have complied with all necessary immunizations and medical releases
    7. Removal of a learner from the facility when the learner has engaged in professional misconduct as defined within the agreement (e.g., learner compromises patient safety or discloses confidential patient information) or has compromised patient care
    8. Compliance with accreditation standards
    9. Periodic review of the program
    10. Assurance that learners are registered, if appropriate, under state law, as interns
    11. Assurance that learners have complied with any criminal background history checks and drug screens required by the facility
    12. Preceptor requirements and a preceptor development plan
        a. Terms and termination of agreement and effective date
        b. Indemnification of either party
        c. General provisions, including but not limited to the following:
            - Statement that learners in the pharmacy program are not employees of the facility
            - The amount of learners on site during a rotation as well as the number of learners assigned to a preceptor
            - Learner responsibility for transportation and meals
            - Nondiscrimination clause
            - Privacy statement(s)

Language that requires the educational institution to guarantee good learner mental and physical health is controversial with many universities because of learner privacy and disability issues. In addition, educational institutions cannot guarantee that learners will behave professionally or be highly motivated; however, it is imperative to articulate in writing the sequence of events within both

the site and the school that are necessitated to address issues of unprofessional conduct. The same learner privacy laws that protect certain learner information (Family Educational Rights and Privacy Act of 1974, or FERPA, is one such regulation) also may, based on legal interpretation on a particular campus, affect the campus policies on learner background checks and drug screens. In addition to these items, agreement regarding reimbursement to the facility or preceptor for learner rotations may be included. Some facilities/sites choose to have agreements that set up as a separate type of contract when direct payments to preceptors are involved instead of payment to an institution. Although multiple avenues can exist for reimbursement, the overarching requirement is for the process to be clearly defined.

Agreements initiated by the school may also define for the site, at a minimum, the expectations for handling behavior issues, how to conduct learning activities, and how to counsel learners that are not meeting expectations. In addition, the practice partner should be expected to complete learner evaluation forms within the time prescribed by the school, to deliver the instruction as defined by the school or as described in a rotation manual, and to participate in program planning activities.

The process of establishing and maintaining affiliation agreements can be cumbersome for both the healthcare facility and the educational program. Corporations, facilities, or universities need to include language in all formal written agreements that works, to the extent possible, to avoid litigation from other parties. Furthur complicating the issue is the multiple groups within an organization that may be involved in the review of contracts. All of these combined factors result in agreements that take months to even years to finalize between contractual parties. This can ultimately delay the assignment of learners to a facility. It is incumbent on both parties to search for mechanisms to facilitate this process to the extent possible.

Partnerships are voluntary agreements based on trust that each partner will fulfill the roles that the agreement defines. A successful partnership is more than a contractual agreement—it requires that both partners feel that their interests are equally represented.

Ways to Become a Better Preceptor

An excellent opportunity for nurturing a successful partnership exists between schools of pharmacy and clerkship preceptors. Schools provide critical support and training to preceptors in order to maximize the experiential component for learners. Precepting is an iterative process that enhances clinical and teaching skills for the preceptor who is fully committed to self-improvement and takes full advantage of school-sponsored training. Unlike classroom teaching, the one-on-one preceptor-learner relationship demands that the preceptor tailor the teaching method to meet the learner's needs. This individualization allows the acquisition of new skills and builds confidence for the preceptor.

Preparation

The didactic information provided to pharmacy learners by school-based faculty comes to life in clinical settings under the guidance of strong preceptors. The ACPE requires schools of pharmacy to provide training programs for their preceptor colleagues.[21] It is important to take full advantage of the training programs provided by professional educators who offer excellent teaching tips and techniques. Be willing and prepared to share precepting challenges and success stories during these sessions, to contribute to the collective group learning process, and individual goals of improving precepting skills. In addition, having a written individualized preceptor development plan will assist the practitioner in elevating their skills. ASHP has a wealth of resources to incorporate into a preceptor plan such as documented improvements to practice, formal recognition by peers, committee service, active service, and others.[22] Although ASHP is focused on health-system practice, the preceptor development ideas can be applied across all practice settings. Preceptors can learn how to be more efficient and effective by tailoring their teaching to the learner's needs, sharing their teaching responsibilities, and broadening the learner's responsibilities.[23]

Ideally, the learner should contact the preceptor prior to their experiential education start date to prepare both the learner and the preceptor for the most successful outcome. The partnership between the preceptor and the learner is critical to the learner's achievement. Important questions to ask include the following:

- What are the learner's professional goals and objectives?
- How much and what type of previous experience has he or she had?
- What did the learner like and dislike about previous experiences?
- How best does the learner learn (reading, observing, doing, teaching)?
- Why did the learner choose your clinical rotation (if he or she had a choice)?
- What are the learner's goals and objectives for the clinical rotation?
- What does the learner expect from you during the rotation?

The learner needs to know where and when to meet you on the first day, but also what to expect during the experiential rotation with you. Alhough understanding expectations is important for the learner, it is essential for the preceptor to understand what the learner needs as well. Open lines of communication between the learner and preceptor throughout the experiential rotation will provide the necessary feedback needed to create a valuable learning experience for the learner, assist you in making sure you are meeting the learner's needs, and improve your own preceptor skills.

• PRECEPTOR PEARLS •

Use different schools' rotation schedules to your advantage by having current learners help with orientation and training of new learners.

Getting Started

From the beginning of the rotation, provide daily feedback on the learner's progress. Cite specific successes each day and offer coaching in areas that need improvement. It is helpful to role-play with the learner to practice communicating clinical recommendations before meeting with other healthcare providers, especially if it is early in the rotation experience.

Use these opportunities to fine-tune your own teaching skills. Remind the learner that it is a symbiotic relationship and a trusted partnership in which they have the responsibility to provide specific feedback on your role as their mentor. Ask the learner if you are meeting the specific educational needs and whether there are any specific suggestions for improving your precepting.

Be patient and persistent. Some learners are not comfortable, initially, being direct with preceptors but will gain confidence over time. Constructive feedback is the greatest gift learners can give to you. Creating an environment in which the learner feels comfortable providing feedback to the preceptor is critical to obtaining the information needed in order to improve your precepting skills. Utilize active listening techniques and ask clarifying questions.

Evaluation

Regardless of the school of pharmacy's evaluation schedule, take the time to provide the learner with a formal progress evaluation each week. This provides opportunity for the learner to alter his or her participation to meet expectations and reduces your frustration with underperforming learners. Consider having learners write a weekly reflection about what they have done and learned that week, to which you respond. During this evaluation, set aside time for the learner to evaluate you. Together, you can plan improvements for each of you to sustain a positive rotation experience.

Formal evaluation requires time and thoughtful preparation. Keep track of specific examples you can use to illustrate both achievements and challenges for your learner. Ask the learner to discuss your strengths and opportunities for growth as his or her preceptor. Specifically inquire about his or her favorite and least favorite parts of the rotation and listen carefully to discover hints about your skills as a preceptor.

Finally, make sure you receive feedback through the school of pharmacy's formal evaluation process. Although academic institutions rules vary, most preceptors receive some type of evaluation that can be very useful in self-improvement activities. Ideally, organizations and preceptors should partner with the schools to create the most useful evaluation and feedback tool for learners, preceptors, and the school. This collaboration leads to continuous improvement for the clerkship programs and preceptors. Evaluations generally focus on the following:

- The preceptor's preparation for the learner
- The preceptor's accessibility and willingness to answer questions
- The preceptor's attitude toward the learner and toward the clinical experience
- The quality and quantity of feedback
- The independence granted to the learner
- The preceptor's ability as a role model

Preceptors and schools of pharmacy rely on each other's unique contributions to produce the highest quality pharmacist graduates. Nurturing this partnership ensures that learners receive a balanced education that integrates didactics with practice. The additional professional benefit from precepting pharmacy learners is the opportunity to "pay it forward." In turn, learners will keep you on your toes and encourage your development as a better pharmacist and preceptor by providing challenges. Building your precepting skills ensures that your learners are well prepared to meet the professional demands they will face and ensures the future of pharmacy.

Providing Feedback to Schools to Improve Learner Competencies

There is nothing unique about the important elements of a good working relationship with a school. As in most relationships, good communication and clear expectations are critical. Other chapters discuss the ways of developing effective communication and effective evaluations. Hopefully you, as the preceptor, will be giving only positive feedback to the school, but it is just as important to be honest about problems and issues. There is an important element preceptors bring to the learner evaluation process; you have the opportunity to observe their abilities and skills on a one-on-one basis in clinical practice. This is not always possible during didactic learning settings.

• PRECEPTOR PEARLS •

As soon as you feel there might be challenges with a learner, document concerns and notify the school. The more time you have for the learner to improve during the rotation the better.

Establishing Relationships with Schools

The first step in this process is to establish the appropriate contacts and the best methods for communicating with those individuals. There are generally several ways to identify these individuals. The best practice is to obtain an updated contact list from each school that your organization has an established affiliation agreement. Another option is to consider asking other preceptors who are their contacts, or if you are new to an area check the school websites and send an inquiry e-mail to site coordinators. Different schools will have different organization structures so it is important to determine which school personnel handle specific issues (e.g., scheduling the learners, handling performance issues). Contact these individuals before there are any issues in order to help establish a relationship that can be useful in problem solving.

Encourage regular site visits from the main school contacts. These visits allow the school to see what type of rotation the learner is experiencing. They also allow the school to provide feedback to preceptors and outline resources they have available.

Another important area is the process required to document learner performance. Schools are required to maintain adequate evaluation records in order to meet accreditation and regulatory standards. It is very important to have clear documentation on a learner's performance throughout the rotation and not just at the end of the time together.

High performaning rotations consist of daily feedback and documentation throughout a rotation.

Beyond just the direct feedback to the school about performance, feedback on scheduling is important. School coordinators must work with many different sites to coordinate schedules for often hundreds of different learners at one time. Help schools plan their schedules by advising them of the dates you will not be available at your work site. Many schools have availability forms to complete. Please make sure to complete this on time and to indicate times you will not be able to take learners. Keep in mind annual vacations and times where precepting resources might be less, i.e., when new resident class is starting or major projects in the department. It is useful for the school to know if the learner is going to have to be in different locations due to a preceptor's vacation or other scheduling conflict. This information allows the school to relocate the learner if needed. As soon as you are aware of workflow or staffing changes that will affect your site's ability to take learners, you should let the school know. Schedules do change, but advance notice allows the school to find alternative sites or adjust times. If you change your work site, inform the school of this as well. Developing a good relationship with quality preceptors can be difficult. Many schools want to maintain the relationship not only with the site, but also with the individual. The relationship between school and preceptor is important, but for it to be an effective relationship, you must keep an open line of communication (M. Woo, University of Houston, College of Pharmacy, e-mail communication, June 9, 2004).

• PRECEPTOR PEARLS •

Work with your school to see if having "block" rotations, of having a learner for more than one rotation, is a possibility.

Establishing Expectations of the School

At the same time you establish your relationships, you should establish your expectations of the school. Tell them how far in advance you need a schedule of learners. Let them know if your site requires any specific paperwork to be completed before learners arrive on site and how far in advance you need it. Let them know if there are times that you are not able to take learners due to vacations or workload. Tell them the best way to contact you.

In establishing your expectations with the school, ask whether you will be getting learner feedback on your activities as a preceptor, and how you will receive that feedback. The school must work to balance the need for honest feedback from the learner with the need for preceptor feedback, taking into account the learner perceptions of possible negative repercussions if providing critical comments. It is, however, appropriate to ask how and if this feedback might be available.

The school should provide basic goals for rotations. You can use these as a baseline for creating your expectations of the learners. Communicate these to the learners and use them as a basis of your evaluation. Establishing your expectations with the learners may help avoid misunderstandings and give them specific goals to work toward. If you find that the goals for a specific rotation need updating or improvement, communicate that with the school as well. This allows for improving future rotations. Remember that, because you work one-on-one with the learners, if problems arise, you should also share your expectations with the school so they can understand your point of reference.

• PRECEPTOR PEARLS •

It is critical to establish expectations with the learners, but it will also benefit the partnership if you communicate your expectations to the school as well.

Sharing Evaluations

The next level of communication should include honest evaluations about learner performance. You should try to be as objective as possible and limit the influence of personality differences. It can be helpful to review the specific goals of the rotation and relate comments back to these. Likert scales on learner skills may be an efficient manner of evaluation, but written comments make it

possible to develop a full picture of strengths and weaknesses. Be specific and cite examples in your written evaluation. Written comments not only improve learner understanding of strengths, but also help the school compare activities and skills between rotations.

As with most effective relationships, the communication between schools and preceptors should start early and occur often. If you are having problems with a learner, notify the appropriate individuals as early in the rotation as possible.

If, in the first weeks of a rotation, a learner is not meeting expectations, express your concerns to the school no later than the midpoint of the rotation. This allows time to address specific problems and create a plan to improve the learner's outcome. If learners need to improve in a particular area clinically or professionally it is important that it is addressed early so they can improve.

If a learner cannot improve his or her performance to successfully complete the rotation, and it is necessary to give a failing grade, the school is now also prepared to make additional plans. Informing the school of the problems you experience with a learner allows the school to put together the entire picture if the learner protests the grade.

If a learner is having difficulty in the experience, consider the following issues:

- Is there a problem integrating knowledge with clinical decisions?
- Is it a communication problem?
- Is there difficulty working effectively with physicians, nurses, or other healthcare providers?
- Does the learner lack confidence in his or her clinical skills?

These issues can be difficult to overcome, but it is essential for schools to know about these crucial skills. If a learner is having problems with these issues with you as a preceptor, these same problems may continue on other rotations if they are not addressed.

• PRECEPTOR PEARLS •

Be sure to address problems as they arise, and communicate them to the school as appropriate.

Working with Problem Learners

Preceptors and schools should undertake all efforts possible to identify any barriers to learner success. The first step is, of course, to discuss these issues with learners while keeping the school aware of your concerns. The next step is to get the school involved in problem solving. When working with a learner who does not meet the minimum requirement, work with the school to develop a plan for improvement. This plan could include moving the learner off site until issues can be resolved, assigning additional reading, or providing additional time on a rotation.[24] If these interventions still do not allow the learner to progress, and failing the learner is necessary, document the actions you took to help the learner. The school also needs specific details on how the learner failed to meet expectations because the learner can appeal that decision. The school cannot accurately represent its side without details. Documentation of all details is important, including concerns about work problems, such as tardiness.

When examining the barriers to success, consider personality issues, cultural issues, personal issues, and lack of knowledge. These problems can make for a difficult preceptor-learner relationship, but by specifically addressing them, it may be possible for the learner to succeed in the experience. Schools often have experience resolving these issues and can serve as a resource for preceptors as well as a resource for learners to find outside help if needed.

• PRECEPTOR PEARLS •

Do not be afraid to fail a learner; you just might do him or her a favor. Be sure to fully document your reasons, however, so as to ensure you do not act unjustifiably.

Issues such as personality differences or cultural influences may not be able to be resolved, but a working relationship is still possible. Though it would be nice to be friends with your learner, your primary goal and responsibility is to facilitate learning. Let the school know if you need help addressing these issues or finding ways to create workable solutions.

Failing Students

The school is using you to help teach their students, but it is unreasonable to expect them to have a solution to make each student perform exactly the same way, or to assume the school can solve all problems. Difficult students cannot always be moved from the site. School faculty struggle with how to motivate students just as preceptors do. The schools should be viewed and treated as a partner in developing students into practitioners.

You also should not assume that the school will take care of a problem you do not want to address. If you do not fairly evaluate a student because you do not want to deal with the emotional side of failing a student, the school has no grounds on which to fail a student. Failing a student is, hopefully, a rare event, but you should always consider the impact the student will have on the profession and future patients. The decision to fail a student should not be taken lightly and will never be an easy experience. Failing a student may ultimately give that person the opportunity to become a better practitioner. Remember, if the student does not meet expectations, it is the student who caused the failure, not you. This relates back to the importance of establishing your expectations early and using these as the focus of your evaluation.

Make sure to document all steps you take to address deficiencies. Let the school know you are intending to fail a student and provide them with documentation as a basis for your decision. Explain to the student how you reached this decision and how he or she can avoid it in the future.[25]

Assimilation of Learning: From Classroom to Patient Room

Finally, if a learner has knowledge deficits, it may be possible to assign additional readings or tutorial time. Consider requesting the learner to review his or her school notes with you so you can draw parallels from the learning experiences. If you have discovered a significant knowledge deficit that affects a learner's performance, the school may have resources to help address the problems as well.[26]

There are many theories on effective teaching styles. Within healthcare education, colleges are moving away from what is known as passive learning (a professor who serves in the role of expert, verbalizing information to the learner or student) to more active styles of small group and problem-solving styles.[16] However, when the learner's reasoning and decisions are going to directly affect a patient, the impact on the learner can be significantly different. It is important to emphasize problem solving rather than memorization and discuss the differences in clinical decisions. It is also important to discuss why guessing, even correctly, can result in unnecessary risk to the patient. If the learner recommends an unusual or nontraditional treatment plan or does not fully understand the reasoning behind his or her choice, suggest that he or she present evidence from the literature to support the plan. Discuss why it is inappropriate to defend a treatment option with such unsupported statements as, "They say," or "That's what my professor told us." This emphasizes the importance of evidence-based medicine and develops the habit of lifelong learning.

It is also very important for preceptors to provide information to schools of trends they see from their learners. These trends such as poor drug literature skills, lack of particular drug knowledge, or lack of recognition of generic drug names if identified can be opportunities for schools to adjust curriculum to make sure it meets the needs of learners.

Summary

The job of precepting can be equally rewarding and challenging, but remember that there are resources and tools available. Preceptors should work to access and utilize the tools the schools of pharmacy offer and view them as partners in the student learning experience. Experiential training is just as essential as all

other formalized training pharmacy learners complete. Colleges of pharmacy work toward improving didactic teaching techniques and experiences, but this is only one step in the process. They also try to find the best instructors for the experiential year—the preceptors. Preceptors help turn classroom learning into hands-on skills. As such, the schools depend on the preceptors to provide truthful evaluations of learner skills and judge their ability to be pharmacy practitioners. Preceptors have the unique opportunity to work one-on-one with learners and thoroughly evaluate their skills. The schools are dependent on preceptors to share this information.

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Chapter 13

Career Advising

Michael D. Sanborn and Scott E. Mambourg

Chapter Outline

Pharmacy Practice Settings 246
Career Planning: The Preceptor's Role 247
Career Planning: Generating Interest Among Students 249
Careers in Pharmacy 249
Advanced Pharmacy Training 257
Summary 264

What is the recipe for
successful achievement?
To my mind there are just
four essential ingredients:
Choose a career you love,
give it the best there
is in you, seize your
opportunities, and be a
member of the team.

Benjamin F. Fairless

Learning Objectives

- Describe ways in which preceptors can initially engage students in career planning discussions.
- Identify ways for preceptors and students to effectively participate in the career path planning process during and after rotations.
- Identify, contrast, and discuss the different career path opportunities available for pharmacists.
- Define, contrast, and provide general information on residencies and fellowships and their importance with respect to pharmacy practice.
- Discuss changes in the profession of pharmacy that may require additional training, education, and sound credentials based on clinical competencies.
- Describe other helpful methods to assist students in the career planning process.

Career advising is an important element of the preceptor-student interface. Preceptors have the ability to have an immeasurable impact on a student's career path and long-term job satisfaction. The enthusiastic preceptor who models professional pharmacy practice behavior and strives for excellence can ignite the student's passion for the profession. Oftentimes, the preceptor's interaction with a student is the first experience the student has had in that particular pharmacy environment. The doctor of pharmacy student that crosses the threshold of your pharmacy is not a blank slate but is a complex mixture of a multitude of life experiences that you may or may not share. However, preceptors will share this rotational experience with their students, and it is important to provide them with a positive and enlightening experience while introducing new career possibilities. For preceptors, helping students explore and plan different career paths is imperative, regardless of the field or stage a preceptor or student is either entering or is in currently. The goal of this chapter is to assist the preceptor in expanding and guiding the student's knowledge regarding various pharmacy careers and the credentials needed to pursue them.

Pharmacy Practice Settings

Although it seems natural for a preceptor to guide students toward a particular career path relative to his or her own choices and views, avoid this, as students or residents should not overlook their unique characteristics and desires that contribute to their own career path. On the other hand, candid professional discussions regarding the pros and cons of all types of practice can be very helpful to students and can assist them with the difficult decision of what to do after graduation.

Many pharmacists traditionally begin their career in community- or hospital-based settings. Both settings have evolved to embrace pharmaceutical care in which pharmacists are directly responsible for achieving outcomes that improve a patient's quality of life. Also, advanced clinical pharmacy practice models now reach across the continuum of care to

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allow pharmacists to be involved in everything from the development of clinical programs to decision-making for insurance plan benefit programs administered by managed care organizations (MCOs), including pharmacy benefit managers (PBMs).

Pharmacist opportunities in healthcare continue to expand. Technology was once considered a threat, but has ultimately lead to more career opportunities for pharmacists as seen in the increasing number of Internet and mail-order pharmacies, the growth of electronic prescribing and electronic medical/health record (EMR/EHR) companies, and the evolution of the informatics pharmacist. Additionally, when the Medicare prescription benefit was implemented in 2003, it provided many opportunities for pharmacists to help beneficiaries understand their benefit, the concepts of a medication formulary, and become more involved in medication therapy management.

A preceptor can tailor the rotational experience to facilitate career planning in two ways. The first way is to tailor the experience to the student's interests and to expand the student's knowledge base of those areas while continuously pointing out career paths that match student interest. Conversely, the rotation can cover gaps in the students' knowledge with exposure to new practice environments (such as introduction to an HIV clinic, leadership opportunities, or investigational drug service) and may expand the student's existing knowledge to career paths that would have otherwise been unknown. The route your rotation will take is a decision you, as a preceptor, must make, which means that it may not always be exactly what the student wants or initially expects.

Career Planning: The Preceptor's Role

According to ASHP:

- "Preceptors must demonstrate a desire and an aptitude for teaching that includes mastery of the four preceptor roles fulfilled when teaching clinical problem solving (instructing, modelling, coaching, and facilitating)."[1]
- "Mentorship can be defined as a developmental relationship between a more experienced mentor and a less experienced mentee focused on enhancing the mentee's growth and skill development."[2]

A preceptor's role is not only to help the student learn, but also to integrate those learning experiences into a foundation for a successful career. As discussed, a good preceptor will see part of his or her role as an opportunity to introduce students to new professional encounters that expand their understanding of the breadth and depth of pharmacy practice.

The first step in assisting students with their career planning process is to assess understanding of the pharmacy field and career goals and to expose them to broad leadership topics. Discovering which pharmacy environments the student has experienced can help; the student may be overlooking certain career opportunities because he or she has decided that a certain area is not a good fit, even though he or she may not have any direct experience in that particular practice specialty. In this situation, it is helpful to initiate an open discussion focusing on tailoring the rotation to fit career goals and providing the student with possible unique rotation options. After reviewing the available options, allow the student to reflect on these options and formulate a thoughtful response. Although it may feel uncomfortable, this active listening process is important and will give the student time to weigh the options and respond with complete, intelligent responses. The key is to listen. Be a sounding board for the student, who may rarely have the opportunity to share his or her ideas and plans with an experienced pharmacist.

Always provide students with feedback regarding their ideas about their career path and planning in a timely, constructive, and positive manner. Throughout the rotation, preceptors can discuss and review various rotation experiences as they relate to career options. Effective methods of impacting the student's career choices include the following:

- Discuss alternative career options that the student may not have considered.
- Expose the student to additional experiences within his or her desired area of practice.

- Review career path enhancements such as residencies and fellowships.
- Continuously coach students regarding next steps as they move toward a desired career path.
- Review career resources that are available to the student.
- Instill the idea that trainee presence (student and post-graduation programs) are year-long interviews. Students should demonstrate their best in order to receive quality references.
- Assist networking between students and leaders in areas of interest.

• PRECEPTOR PEARLS •

Start a conversation with the student about career planning. Consider using the following:

- Have you thought about an immediate post-graduation plan? A 3- to 5-year plan?
- What areas of pharmacy practice did you have the greatest passion for?
- What practice activities did you like doing the most on your rotations?
- What tasks or responsibilities in pharmacy do you get the most praise for?
- What are the important things to you in relation to a pharmacy career (i.e., money, praise, challenge, fame)?
- Describe a project or task you really enjoyed.
- Are there areas of pharmacy practice to which you have not been exposed?

The last one listed is one of the most important aspects of career exposure. The preceptor can be invaluable in assisting with developing a potential network of professional contacts. It is important to encourage the student to develop a critical appraisal of possible career options. Have the student begin to identify the advantages and disadvantages of various career options from his or her point of view. Also remember that, although you may find a particular aspect of a career as a positive, your student may find it as a negative. For example, some students may initially be intimidated by rounding with physicians and other healthcare professionals as part of the healthcare team. Work with the student to build confidence in this role, but also understand that it may be something that they do not truly enjoy. There is a distinction between disinterest and lack of confidence. A good preceptor should be able to assist the student to maneuver the fine line between them.

It is also helpful to review your own career path and share your experiences—both positive and negative—and discuss why you have made the career decisions that you have made. A good mentor should share these personal and professional experiences and provide examples of areas of career success and opportunities for improvement. Engage students in asking why things did or did not work. Every preceptor has lived through situations that could be useful if shared with an engaged student. Also, ensure learners understand they are a priority to you at critical points in their training. This will build trust and respect. For example, at graduation, students should see a willingness by preceptors to assist the students in finding employment or seeking advanced training opportunities.

Mentorship can be a lifelong relationship or a time-delineated professional experience. According to the ASHP Pharmacy Student Forum's "Quick Guide to Mentorship,"[3] the formal mentorship relationship only needs to last long enough for both parties to have a positive professional influence on each other. Ending the formal relationship is perfectly acceptable when both parties feel that the full benefit of the relationship has been achieved. This might be at the end of a learning experience rotation or could extend much further.

Career Planning: Generating Interest Among Students

There are some unique ways to increase the student's interest and participation in career planning. Preceptors can help students start their career planning efforts by asking them to visualize the end of their careers. Some mentors may ask students for their short- or long-term plans, or use another unique method, which may include asking the student to develop an obituary, a life purpose statement, or principles of practice statement. Fred Eckel, a pharmacy professor at the University of North Carolina, has assisted many health-system leaders using this future reflection process. Students who participate in this type of activity often walk away with a detailed career plan that they believe in. They can then begin to implement and revise this plan throughout their lives. This process is analogous to the visualization techniques that premier athletes use to create a mental image of success, such as returning a punt for a touchdown or running a record time in the quarter-mile. Decision-making becomes clearer and easier when they have a more detailed vision of the future. One should also take the opportunity to introduce the concepts of clinical career ladders and some generally accepted opportunities for advancement (i.e., post-graduate training and Board certification). However, it should be stressed that opportunities and processes are facility specific and that asking directed questions may help when making career decisions.

Another way for preceptors to generate interest in career planning is to encourage the student to become involved in professional organizations outside of work. This is an important way for students to develop a professional network, to expose themselves to expanded career opportunities, and to gain experience. Working in local, state, and national organizations will also help develop skills needed for future roles. Students need exposure to potential opportunities that will be available to them in the future.[4]

Careers in Pharmacy

The diverse career opportunities available today signify a robust opportunity for pharmacists to choose thoughtfully between practice settings, taking into consideration their unique talents, interests, skills, and competencies, along with balancing personal and professional life. The variety of choices today, versus the more historical and limited choices of the past, has created greater challenges for practicing professionals (and employers of pharmacists) to create work environments that take advantage of and reflect both educational achievement and growing generational diversity.

Many pharmacists have sought practice settings that more fully utilize their skills and abilities yet also allow for growth in their careers. Pharmacists have many opportunities well beyond the more traditional product-based dispensing, distribution, supervision of technicians, and delivery of medications. Many pharmacists have sought practice settings that more fully utilize their skills, allow them to practice at the "top of their license," and provide for growth in their careers. These settings present pharmacists with almost limitless opportunities to impact patient care. In fact many of these newer nontraditional practice settings have been the driving force behind the changing roles seen today.

Although it is true that diverse practice settings and career opportunities for pharmacists have never been greater, it is the remarkable advancement of the profession that allows for highly talented and motivated pharmacists to exist at many important points along the healthcare continuum. Thus, it is even more important now that faculty, preceptors, mentors, and residency program directors are as familiar as possible with these opportunities to provide guidance to students and to provide for a match between skills, competencies, and personal objectives.

As a preceptor, students will look to you for insight concerning possible pharmacy career opportunities. It is important for you

to have some background on many of the different pharmacy career options, and it may be possible for you to assist the student in learning more about a particular type of practice. It is also important for you to be aware of each student's strengths as well as areas to strengthen and what role these may play in their future pharmacy career options. Your particular insight about pharmacy careers should stimulate the student to further investigate on their own what may be best for them knowing this will likely change based on multiple contributing factors in their lifetime.

As a preceptor you may be able to utilize your own network of colleagues if necessary. You may assist the student in making a connection with a colleague in a particular pharmacy practice setting to allow the student greater insight into that career option. It is important to note that as preceptors we should allow our enthusiasm for the profession to engulf the student and to be supportive of their pharmacy career choice, whatever that may be.

It is impossible to develop a comprehensive outline of all current practice settings available to pharmacists, and the opportunities will continue to expand given the ever-changing healthcare system in the United States. This is a positive testament to the flexibility of the profession. The following information outlines many of the current, broader practice settings available to pharmacists, and covers the expanding opportunities relative to the changing dynamics of healthcare today.

Box 13-1 summarizes some of the many examples of careers currently available to pharmacists. In almost all of these settings, pharmacists collaborate with physicians, nurses, administrators, and other healthcare professionals to develop, implement, and monitor a therapeutic plan that ensures satisfactory clinical, economic, and humanistic outcomes for the patient. A detailed discussion of some of the more common types of practice settings follows, and sharing this information with students can be quite valuable as they continue to develop their own career path.

BOX 13-1. List of Common Career Opportunities for Pharmacists

- Community pharmacy
- Compounding
- Hospital-based (health-system) pharmacy
- Drug information
- Home care/long-term care pharmacy
- Managed care pharmacy
- Pharmaceutical industry
- Regulatory affairs
- Academia
- Research
- Consultant pharmacy
- Government practice
- Civic and political leadership
- Military service
- Nuclear pharmacy
- Nutrition support
- Clinical specialist (oncology, infectious disease, cardiology, transplant, etc.)
- Operating room pharmacist
- Pediatric pharmacist
- Poison control
- Veterinary pharmacist
- Professional associations
- Employee benefit consulting
- Clinical research organizations
- Medical marketing, editorial, and communication organizations
- Pharmaceutical and healthcare distributors
- Healthcare information technology
- Emergency department pharmacist
- Medication safety officer or patient safety officer
- Post-acute care
- Oncology and pediatric medical homes
- Palliative and hospice care
- Primary care (collaborative practice)
- Accountable care organizations and medical homes
- Transitional care

Community Pharmacy

Community practice is probably the most familiar type of pharmacy practice to the American public. It employs a large number of pharmacists—in fact just over 6 out of 10 pharmacists provide care to patients in a community setting.[5] Pharmacists in a community setting provide information and advice on health, provide medications and associated services, and refer patients to other sources of help and care when necessary. Many community pharmacies have developed further specialties in durable medical equipment, homeopathic medicine, and customized compounding. There are multiple different types of community pharmacies, including private independent businesses, retail chains, pharmacies incorporated into grocery and retail stores, and community pharmacies affiliated with a hospital or health system, just to name a few.

Community pharmacists also assist patients in understanding their prescription benefit program and may provide disease and care management in a variety of areas, including immunizations, diabetes, asthma, hypertension, and hyperlipidemia. Many pharmacists achieve specialty certifications in these key disease areas in order to better educate and assist patients in managing their healthcare. Unfortunately, many community pharmacy practice settings have continued to use pharmacists in a more traditional dispensing role rather than incorporate these other activities into their operational and business model.

Significant management and entrepreneurial opportunities also exist for those with interest and abilities in this area. Supervising a retail store, owning or operating a private compounding pharmacy, or serving as a district manager for a large retail chain are examples of such leadership opportunities. Although many of the skills and competencies required for such roles can be achieved through experience or on-the-job training, additional instruction in areas of business, process engineering, quality tools, and leadership can be valuable in achieving these types of positions.

Hospital-Based (Health-System) Pharmacy

There has been an increased need for pharmacists to provide care through organized healthcare settings, including hospitals, nursing homes, extended care facilities, neighborhood health centers, accountable care organizations (ACOs), medical homes, and ambulatory care clinics. Although pharmacists work in these settings as drug information experts and systems control experts, they are also responsible for supervising and controlling drug distribution and pharmacy technology to ensure that patients receive the appropriate medications. The increased focus on medication education as part of the Hospital Consumer Assessment of Healthcare Providers and Systems survey has increased opportunities for pharmacist counseling prior to discharge. Many pharmacists are involved in pharmacy and therapeutics committees as well as preparing drug monographs and therapeutic class reviews. Performance improvement activities such as developing and performing drug utilization review (DUR) programs, as well as educating other healthcare professionals within the organization, are yet another large component of a hospital pharmacist's role and responsibilities. Pharmacists are also adjunct faculty and serve as educators at pharmacy, nursing, and medical schools, especially in academic centers.

The focus on medical errors revealed by the Institute of Medicine report, *To Err Is Human: Building a Safer Health System*,[6] has enabled pharmacists who have a systems aptitude to become involved in organization- or enterprise-wide teams and to be primary participants in teams that are working to implement complex safety systems such as computerized provider order entry, bedside bar-code scanning, and other decision support technology within automated systems.

Pharmacists in health systems typically work with physicians and nurses in a collaborative team environment to provide direct patient care. These roles require pharmacists to possess additional competencies such as excellent communication skills, influence and persuasion capabilities, negotiation skills, and critical-thinking/problem-solving skills.

Box 13-2 identifies some of the unique areas in which pharmacists in health-system practice as well as other practice settings specialize. Note that these areas often require additional training or specialty residency such as postgraduate year (PGY) 2 or board certification.

BOX 13-2. Areas of Specialization

- Nuclear pharmacy
- Infectious diseases
- Psychiatry
- Nutrition
- Oncology
- Solid organ transplant
- Internal medicine
- Cardiology
- Drug information
- Nephrology
- Geriatrics
- Critical care
- Informatics
- Pediatrics
- Poison control
- Primary care
- Emergency department medicine

Many pharmacists also pursue leadership positions within health-system practice, in which there are a variety of opportunities available. Management of clinical services, patient care operations, and department technology also offer rewarding career paths and opportunities for advancement. Administrative positions at the director or chief pharmacy officer level offer an even more expansive level of responsibility in the areas of finance, drug use policy, personnel management, and setting the department's overall strategic direction. These positions may also require additional educational training, such as a PGY2 administrative residency combined with a master's degree.

Long-Term Care Pharmacy

Pharmacists practicing in long-term care and post-acute practice settings are responsible for drug information, education, and drug therapy management of a growing segment of our population. Many, but certainly not all of these patients are older and often have complex drug regimens. This area of pharmacy is practiced in home care agencies, skilled nursing facilities, adult day-care centers, hospices, memory centers, and other long-term care facilities.

These patients often require DUR and adjustments to drug therapy due to diminished hepatic and renal function and the quantity of medications this population often uses. Given the increased medication use and longer life expectancies in general, along with the Baby Boomer population accessing more and more health services, specialization in geriatric pharmacy is expected to grow rapidly.

Managed Care Pharmacy

Managed care pharmacy practice has grown dramatically within the last decade due to the need to manage the increase in healthcare expenditures, especially the double-digit trend in drug cost inflation. Passage of the Affordable Care Act in 2010 has also expanded the number of insurance plan offerings available through state and federal exchanges. Providing a prescription drug program as a part of the medical benefit has become increasingly difficult for many employers and other payers who recognize the importance of providing access to prescription drugs.

Many payers (government, employers, etc.) contract with MCOs, including health plans and PBMs, to help manage the quality, cost, and access of a prescription drug benefit. The primary goal is to ensure that what is spent on prescription drugs is appropriate, effective, and safe, as well as to ensure that medications are properly used. There are thousands of pharmacists practicing in managed care settings.[7]

Managed care pharmacists are responsible for plan design; clinical program development; clinical management; pharmacoeconomic analysis; outcomes research; communication and education of patients, prescribers, and pharmacists; and drug distribution and dispensing, as well as performing the clinical interventions to support the DUR, formulary management, and disease management of the populations the MCO serves. Pharmacists are also more and more involved in the develop-

ment, administration, and management of the pharmacy provider networks that provide care to patients, as well as in the performance and quality monitoring, reporting, auditing, and contracting of the network and services.

Another area within a health plan or PBM where a pharmacist's unique skills are valued is in the pharmaceutical contracting group. There, pharmacists monitor manufacturers' drug pipelines and develop forecasting models to determine the impact of that drug on a payer's program. In addition, they are often responsible for clinically assessing and evaluating the product, negotiating the purchase or use of contracts, developing and implementing the programs designed to maximize the formulary, recommending formulary decisions, and administration.

Several large employers and insurers have also recognized the value and expertise of pharmacists in designing and managing drug programs and have hired pharmacists as a part of their managed medical team, many taking on roles of chief pharmacy officer—similar to the chief medical officer—within the management team. The integration of pharmacy into the medical strategy is very important in achieving the goals of quality, cost effectiveness, and patient access.

Many MCOs use mail order or online services as a management tool within the benefit. This creates opportunities for pharmacists as managers of operations (pharmacies owned and operated by the MCO or contracted entities), as well as specialists in key areas like targeted DUR programs, formulary management (including generic and therapeutic substitution), and disease management programs.

Specialty Pharmacy

Managing biotechnology and self-administered injectables is a growing area of concern for many health systems, MCOs, and pharmaceutical manufacturers due to the complexity of the drug administration need for specific patient education/management, avoidance of adverse events, and unique product storage requirements. Furthermore, the cost of these drugs is usually high and, therefore, ensuring proper use, administration, storage, and management is important.

Historically, these self-administered drugs had often been paid for as part of the medical benefit and have not been managed as unique products requiring additional services. More recently, the growing trend is to "carve out" the management of these drug products usually through the PBM or health plan. As a result, there are more specialty pharmacy organizations that focus only on the management of these drug therapies. The growth is directly related to the required, related services due to the complexity of therapy and the need for patient education as well as to the growing number of biotechnology drugs available to treat diseases.

This provides pharmacists with another area of specialty practice focused on supporting patients living with complex health conditions. This includes education on the storage, administration, and special handling and delivery requirements for these products. See **Box 13-3** for examples of complicated diseases in which pharmacists play a critical role in clinical program development.

With the growing number of biotechnology products available or expected and the advent of pharmacogenomics, this is certainly an exciting time for pharmacists who want to pursue this field to utilize their clinical and business management skills.

BOX 13-3. Complicated Diseases for Pharmacists

- Acromegaly
- Cystic fibrosis
- Growth hormone disorders
- HIV/AIDS
- Multiple sclerosis
- Psoriasis
- Solid organ transplant
- Chronic granulomatous disease
- Gaucher disease
- Viral hepatitis
- Infertility
- Oncology-related conditions
- Rheumatoid arthritis
- Hepatitis
- Other autoimmune disorders

Pharmaceutical Industry

The pharmaceutical industry provides many career opportunities for pharmacists. It is not only broad in its offerings, but it continues to evolve. In this industry, pharmacists hold positions in sales, training and education, clinical research, product development, marketing, outcomes research, pharmacoeconomics, regulatory affairs, epidemiology, clinical trials, and administration. Many pharmacists involved in pharmaceutical companies go on to obtain postgraduate degrees, such as a masters in business administration, in order to meet the technical demands and scientific duties required in pharmaceutical manufacturing and general business management.[8]

Pharmacists with an interest in sales and administration can combine their clinical expertise in positions such as medical service representatives or liaisons, or clinical educators. Like many other areas of practice, the roles for pharmacists have grown tremendously; however, industry pharmacists typically do not have patient contact.

Another growth opportunity within the pharmaceutical industry is the medical information group, which is responsible for answering off-label drug information questions and the preparation of the product dossier that is a required part of the Format for Formulary Submission.[8] Additional opportunities exist in generic drug companies as well as in wholesale drug companies.

Academia and Research

One more rewarding career opportunity for pharmacists is serving in either a part- or full-time capacity within a college of pharmacy. In this role, pharmacists are responsible for the teaching and education of the future members of the profession or in graduate programs for existing pharmacists. Many faculty members hold administrative and management positions within the university or college, or they teach in other health sciences areas. They are also involved in research; public service; and consulting to local, state, national, and international organizations. Becoming a member of the faculty at a college of pharmacy may require a postgraduate degree or training, for example, PhD or PGY1/PGY2 residency or fellowship training following the professional degree program.

In addition to teaching and research, many pharmacy practice faculty have active patient care responsibilities and precept students during internships and clerkships (experiential rotations). Pharmacists can also hold faculty positions in pharmaceutical sciences research, in which an expertise in study design, methodology, and analytics is required to solve complex problems of drug utilization management healthcare delivery, marketing, management, and other practice issues.[5] It has been stated that "Perhaps no other job in pharmacy has such far-reaching effects on the profession as that of an educator. It is in academia that one can excite individuals about pharmacy and lay the groundwork for continuing advances in the field."[8]

Consulting Pharmacy

Consultant pharmacists provide expert advice on the use of medications by individuals or within institutions, or on the provision of pharmacy services to institutions. The phrase *consultant pharmacist*, first used by George F. Archambault, who is considered the founding father of consultant pharmacy, originated in the nursing home environment, when a group of innovative pharmacists focused on improving the use of medications in these facilities. However, consultant pharmacists are found today in a variety of other settings, including sub-acute care and assisted-living facilities, psychiatric hospitals, hospice programs, and in-home and community-based care.[9]

In addition to the more traditional definition and description above, there are increasing numbers of experienced pharmacists who consult in a variety of areas of expertise from managed care, to specialty disease areas or populations, to electronic prescribing and plan design. Many pharmacists work for individual consulting companies providing expertise and advice associated with different areas of pharmacy practice, EHR implementation, regulatory compliance, and healthcare management.

Government

Traditionally, pharmacists can be employed in staff and supervisory positions by the government at the federal level (e.g., Public Health

Service, Indian Health Service, Veterans Health Administration, the U.S. Food and Drug Administration, and the U.S. Armed Services). At the state and local levels they are employed by regulatory, health, and social service agencies, including agencies charged with regulating the practice of pharmacy to preserve and protect the public health. As some state health agencies are consolidating their purchases, pharmacists are also engaged in procuring pharmaceuticals and supplies for the entire state. Some positions provide commissioned officer status whereas others are under civil service. Other pharmacists hold positions within state Medicaid programs, especially in the DUR boards formed by many states.

Additional important and exciting opportunities have also been created after passage of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003. For example, pharmacists are employed by federal government agencies such as the Centers for Medicare & Medicaid Services and are serving as experts and committee leaders in organizations such as the National Committee on Vital and Health Statistics and the National Quality Forum. Finally, there are some pharmacists who have been elected to political office at the local, state, and national levels.

Professional Associations

Pharmacists also have careers in state and national professional associations. Several national professional associations are led and staffed by pharmacists with an interest and special talent in organizational work, including educational programming and services, meeting planning and management, writing, project management, research, and fundraising.

Some of the largest and most well-known pharmacy practice associations are:

- ASHP—American Society of Health-System Pharmacists
- APhA—American Pharmacists Association
- AMCP—Academy of Managed Care Pharmacy
- ASCP—American Society of Consultant Pharmacists
- ACCP—American College of Clinical Pharmacy
- FIP—International Pharmaceutical Federation

These organizations are a small sampling of pharmacist organizations created to represent large groups of pharmacists, and they are instrumental in shaping practice trends. Their advocacy role for the profession is also critically important.

Employee Benefit Consulting

As mentioned in the managed care section, payers are facing a significant challenge in providing a healthcare benefit, and there is an increased focus on the prescription drug program. Typically employers do not have the clinical expertise in-house and utilize one of many available benefit consultants to help with plan design and benefit management, as well as their expertise and knowledge in selecting a PBM. Many even continue to use these organizations on an ongoing basis to manage the PBM relationship. Pharmacists with managed care and business experience are finding rewarding careers in these benefit consultant organizations as clinical program managers, account or client service managers, and in-house experts in developing and reviewing PBM services and contracts.

Contract Research Organizations

Contract research organizations (CROs) design, manage, monitor, and analyze preclinical and clinical trials. These services are provided to the pharmaceutical industry and are increasingly valuable because the clinical trials are the basis for determining the safety and efficacy of pharmaceuticals, biologics, and medical devices. These organizations have experienced increased popularity and growth over the last several years as the rigor and complexity of medication research continues to increase. CROs will continue to provide career opportunities for pharmacists, especially in the Phase IV clinical trials required by the FDA.

Medical Marketing and Communication Organizations

Many pharmacists who excel at written and verbal communication skills have found

exciting careers at medical communications companies, which develop clinical content for educational and promotional programs and publications for clinical and management professionals. Positions can be either staff or supervisory and typically focus on the following areas: medical writing, program development, project management, clinical education, meeting planning and management, strategy, facilitation, business development, and account management.

Pharmaceutical and Healthcare Distributors

Distributors are an essential part of the pharmaceutical supply chain, and their chief role is to simplify and consolidate the purchasing process. Pharmacists in these organizations ensure that the medications and other healthcare products needed to diagnose, prevent, and treat illnesses are distributed to the appropriate locations. In addition to the delivery of these products, many pharmaceutical and healthcare distributors have expanded their service offerings to include information management, 340B program management, automation, program development, consulting, and other tools to improve their customer's efficiency and effectiveness.

Pharmacists play a valuable role in all of these expanded services from designing and developing the programs, to the implementation and delivery of them. An important function of pharmaceutical and healthcare distributors is protecting the quality and security of the products distributed. They also provide economies of scale to reduce distribution expenses, manage inventories to ensure product availability, and simplify distribution to ensure vital medication is available where and when it is needed.

Group Purchasing Organizations

Group purchasing organizations primarily provide contracting services to hospitals, clinics, and health systems. Pharmacists employed in this area assist with contract management and vendor evaluation for pharmaceuticals and other products, and may also be involved in the development and provision of other services such as monograph development, data analysis, education, and consulting.

Healthcare Information Technology Companies

Many students and new practitioners are familiar and comfortable with healthcare technology. In fact, many use online resources more frequently than any other resource, often using the Internet and company websites over traditional printed sources of information. Therefore, it stands to reason that many are interested in careers that combine technical pharmacy knowledge with technology to deliver more integrated, efficient, and safe healthcare. In addition to healthcare information technology companies, a large number of electronic prescribing companies, offering EMRs and EHRs, employ pharmacists as domain experts, in software implementation, or in program development and management.

A principal goal of the healthcare industry is to enhance patient safety by accelerating the adoption of information technology. The federal government has incentivized implementation of EHRs throughout the healthcare continuum in hospitals, physician offices, and other patient care locations through the use of offsetting payments under the Meaningful Use Medicare and Medicaid EHR Incentive Programs. Pharmacists can play a significant role in helping to design, develop, and implement prescribing standards within information technology companies. They can also play an important role in bringing together healthcare providers and professionals in achieving this goal.

Accountable Care Organizations and Medical Homes

The lines between traditional community pharmacy practice and health-system pharmacy practice blur somewhat when considering pharmacist responsibilities in ACOs and medical homes. These new models of healthcare are focused on a more holistic approach to patient care across the healthcare continuum more so than the traditional focus on a single acute-care episode. Efforts to improve discharge planning, care coordination, prevent readmissions, and otherwise focus on improving patient wellness are central drivers in both ACOs and medical homes. Payment models are also being restructured to focus

on health outcomes and maintenance. Pharmacists are placing increased value on the use of medications based on patient-centeredness and coordination of information. Multidisciplinary care teams are emerging in response to the triple aim of improving the patient experience, increasing patient quality of care, and decreasing healthcare costs.[10]

The pharmacist opportunities for collaborative drug therapy management with the care team as well as coordination with the discharging physician and hospital are extensive and can dramatically improve patient care. Pharmacists can also be integral in ongoing patient education, facilitating medication access, compliance monitoring, and reducing costs. Details on pharmacist opportunities in ACOs and within medical homes are provided in a recent publication entitled "Report of the 2012 ASHP Task Force on Accountable Care Organizations."[11]

Advanced Pharmacy Training

As the complexity of pharmacy practice continues to grow, advanced postgraduate training becomes increasingly important. Graduating with a doctor of pharmacy degree provides pharmacists with a broad scope of knowledge in a variety of settings. However, practicing pharmacists—especially those in direct patient care roles—often need to attain advanced practice knowledge and enhance their clinical skills. Pharmacists are charged with both professional and legal responsibility for all medication-use activities. That responsibility is clear in professional standards, statutes, regulations, and internal and external quality standards. In addition, the complexity of medication ingredients and products will continue to expand.

Clinical career ladders are structured programs that provide levels of advancement within an organization through recognition of clinical knowledge, competency, achievement, training, or certifications. This section describes several advanced pharmacy training opportunities that can be used for clinical advancement. But, each organization has different regulations regarding advancement and organization-specific questions should be asked when developing career paths. This section should be used to explore potential advanced training opportunities and their potential benefits weighed against practice interests. These benefits could include qualifying for positions or promotions as a result of the advanced training completed.

Pharmacy Residencies

In preparing themselves for future opportunities and leadership positions, students should consider completing a pharmacy residency. ACCP and ASHP have both adopted positions whereby pharmacists will be expected to complete residency training if they will provide direct patient care.[12-14]

Increasingly, employers are also seeking pharmacists who have completed an accredited residency. Completing a residency is also important to the development of clinical maturity. Pharmacy graduates may have a broad scope of knowledge, but they may not have the confidence to apply that knowledge to optimize drug therapy for their patients. A pharmacy residency gives residents the opportunity to enhance their confidence and sharpen their skills in ensuring that patients are receiving the best care possible. As stated, pharmacists who aspire to an academic career will be expected to have residency training as a minimum requirement.[11] In addition, a residency helps in developing interpersonal skills. Often residents are put into challenging positions that may be uncomfortable for them, but the residency provides the supportive environment necessary for learning.

Pharmacy residencies are critical in producing clinicians, managers, and leaders for the pharmacy profession. The role of residency training has been heightened by changes in the delivery of healthcare and in the opportunities that are afforded to pharmacists for drug therapy management and for health promotion and disease prevention activities. Healthcare reimbursement changes have resulted in a redistribution of patient care from the inpatient to the outpatient setting, which has increased the acuity level of patients in both settings. Pharmacists with more specialized knowledge and training are needed to manage these very complex patients. Beyond more practice complexity is the move toward the use of much higher technology processing.

New standards for PGY1 residency programs were released in September 2014 with plans for full implementation on July 1, 2016.[1] The specific definitions of PGY1 and PGY2 residencies are listed in **Box 13-4**.

BOX 13-4. Summary Explanation of Residency Types

PGY1 RESIDENCY

PGY1 of pharmacy residency training is an organized, directed, accredited program that builds on knowledge, skills, attitudes, and abilities gained from an accredited professional pharmacy degree program. The first-year residency program enhances general competencies in managing medication-use systems and supports optimal medication therapy outcomes for patients with a broad range of diseases.

PGY2 RESIDENCY

PGY2 of pharmacy residency training is an organized, directed, accredited program that builds on the competencies established in PGY1 of residency training. The second-year residency program is focused in a specific area of practice. The PGY2 program increases the resident's depth of knowledge, skills, attitudes, and abilities to raise the resident's level of expertise in medication therapy management and clinical leadership in the area of focus. In those practice areas where board certification exists, graduates are prepared to pursue such certification.[9]

Pharmacy Fellowships

Another postgraduate training route is pharmacy fellowship. Unlike a residency, fellowships are designed to prepare the participant to become an independent researcher. Fellowships are typically 2 years in duration, and based in pharmacy schools or academic health centers. The ACCP defines fellowships as a minimum of 3,000 hours over 2 years that is devoted to research activities. ACCP lists 25 different categories for fellowship training in 61 different locations in 2015.[15] There is also a voluntary peer review process among these fellowship programs aimed at improving the preceptors and research programs. See **Box 13-5** for additional resources on residencies and fellowships.

BOX 13-5. Resources on Residencies and Fellowships

RESIDENCIES

- Visit the ASHP website (www.ashp.org). The site includes definitions, accreditation standards, a directory of accredited programs, the resident matching program, the residency showcase, links to the regional residency conference websites, and federal funding.
- Managed care pharmacy residencies: visit the AMCP website (www.amcp.org).
- Community pharmacy residencies: visit the APhA website (www.aphanet.org).

FELLOWSHIPS

- Visit the ACCP website (www.accp.com). The site includes a listing of fellowships and residencies.

The Case for Additional Credentials

Students with both short- and long-term career plans should consider the types of education, training, and credentials that will be required or helpful to help position them for desired future opportunities. Professional growth and development, lifelong learning, and career advancement necessitate continuous pursuit of new knowledge and skills. This may go beyond what is acquired through attending routine continuing education programs and engaging in self-directed, independent study. Medical and pharmaceutical information is increasing at an exponential rate. The practice of pharmacy is changing and adapting based on new professional and patient needs. Fortunately, there are many options available for working pharmacists to obtain additional education, training, and credentials, including focused education courses, advanced degrees, skills-based training workshops, and certifications.

The long-range vision or strategic plan for pharmacy practice shows that much has been written about the need for the profession to become clinical. What this means broadly is that most pharmacists of the future are expected to be clinical pharmacy practitioners who provide advanced patient care services. This consensus represents the opinion of multiple pharmacy organizations

with the shared vision that "pharmacists will be the healthcare professionals responsible for providing patient care that ensures optimal medication therapy outcomes."[16] The Joint Commission of Pharmacy Practitioners (JCPP) vision for 2015 is that education will prepare a pharmacist to provide patient-centered and population-based care.

Advanced Education

Focused education courses are typically offered by a university or by a university working in partnership with a professional society or healthcare organization (employer). The most visible examples are executive management and leadership courses. These vary in length from intensive weeklong courses to full semester courses delivered during the evenings or on the weekends. This option may be good for pharmacists who want education in a specific area but do not want to invest the time, money, and effort into completing an entire degree program. The week-long courses do not provide college credit, but the full semester courses usually do, and this credit may possibly be applied to obtaining a degree in the future.

Master's and doctoral degree programs are offered in a variety of fields that may be of benefit to practicing pharmacists, and many universities have master's and doctoral degree programs targeted toward working adults. These can be distance education programs provided either online or through a variety of media or campus-based programs offered during the evenings or on the weekends. Pharmacists commonly obtain master's degrees in hospital pharmacy administration (MS), business administration (MBA), healthcare administration (MHA), and public health (MPH). These credentials may be important when pursuing administrative positions in hospitals and other healthcare organizations.

Some pharmacists may even decide to obtain a doctoral degree in one of these areas (e.g., PhD, DBA, DHA, or DrPH), especially if they work in an academic health center and are heavily involved in teaching students, residents, and fellows. Some pharmacists whose primary responsibility is teaching obtain a master's degree (MEd) or a doctoral degree (PhD) in education. This is particularly useful in academia when the pharmacist is responsible for curriculum development and outcomes assessment, faculty development, distance education programs, and experiential education programs. Of course, many pharmacists have obtained a nontraditional doctor of pharmacy degree. These programs have been important for pharmacists transitioning from a drug distribution role to a patient care role. Finally, a few pharmacists go back to graduate school full-time to obtain a doctoral degree in one of the pharmaceutical sciences (PhD) and pursue a research-oriented career track in academia or the pharmaceutical industry. Keep in mind that some employers may pay for their employees to complete master's or doctoral programs if it will better prepare them for their current position or for a future position with the organization.

Skills-based workshops are offered in a variety of clinical areas (e.g., basic clinical skills, physical assessment, anticoagulation, asthma, diabetes, immunizations, and herbals). Skills-based workshops are usually developed by pharmacy professional organizations and pharmacy schools. These skills-based workshops are typically one or two days in length and provide continuing education approved by the Accreditation Council for Pharmacy Education (ACPE). Some of these workshops are linked to certification programs. This option may be good for pharmacists who want focused training in a specific area, especially those looking to expand the scope of their practice. Also, various healthcare organizations offer skills-based certification courses in basic life support (BLS) and advanced cardiac life support. These can be useful for anyone in general, especially BLS, and they are of particular importance in institutions where pharmacists serve as members of the code team.

Competencies and Credentials

A credential is simply any formally documented evidence of qualifications. *The credentials needed to enter pharmacy practice for new practitioners include the following:*

- Graduation from an ACPE-accredited PharmD training program
- Successfully passing the National Association of Boards of Pharmacy License Examination

- Fulfillment of any additional state board of pharmacy licensure requirements (e.g., state law exam, internship hours, etc.)

Pharmacists with the above credentials can independently and legally provide patient care and manage pharmacotherapy. However, a pharmacist may seek further credentials when comparing the different competencies that must be met by a recent pharmacy graduate with those of pharmacists having more training and experience.

Pharmacists develop proficiency through both formal training and practice experience. For example, during doctor of pharmacy degree training programs, students are exposed to broad disease training and experiences promoting general therapeutic principles. Competency statements are written by each college of pharmacy for all aspects of training and education. ACPE doctor of pharmacy accreditation curricular standards state that "graduates must possess the basic knowledge, skills, and abilities to practice pharmacy independently, at the time of graduation."[17]

There are a variety of credentials that pharmacists voluntarily earn to document their advanced or specialized knowledge and skills.[17] These credentials are earned when pharmacists complete competencies that are beyond those earned in doctor of pharmacy programs. As discussed, PGY1 residency programs are designed around competency statements that offer the pharmacist additional training beyond those learned in PharmD programs and deepen a pharmacist's knowledge as well as promote the development of better patient care skills, problem solving, and clinical judgment. Although preferred, PGY1 residencies are not the only way to develop this higher level of knowledge, skill, and ability, but are probably the shortest way to achieving the desired competencies. In addition, when residency programs are accredited by a national accrediting body such as the Commission on Credentialing of ASHP, others in the profession can be ensured programs and graduates will meet certain minimum standards.

We have also learned that PGY2 residency programs allow residents to develop even more in-depth knowledge and skills by working in specialized or differentiated areas of practice. Educators tell us that repetition is essential in the development of any practice skill; therefore, the level of performance of a pharmacist depends on the amount of patient care practice time devoted to develop that skill. Developing the skills correctly can most effectively be done under the supervision of an experienced practitioner who can prepare and mentor the learner for more complex problem solving, decision making, and independence. Although meeting competency statements assigned through educational programs or attaining credentials does not ensure a practitioner's competence to practice, a key factor in developing competence is the continual learning of new knowledge and the enhancement of critical thinking and problem-solving skills through practice.

Quality Assurance and Improvement

Many efforts are underway to improve the quality of healthcare in the United States. Activities that contribute to defining, assessing, monitoring and improving the quality of patient care are referred to as *quality assurance*.[18] *Quality improvement* is a method of planning and implementing continuous improvements in systems or processes to provide quality healthcare reflected by improved patient outcomes. Credentials of healthcare providers are used by healthcare quality assurance organizations such as The Joint Commission and the National Committee for Quality Assurance as indicators of competence and qualifications to provide certain levels of patient care service. These organizations are promoting rules that determine which providers can provide certain types of services to provide the highest levels of patient care.[19]

Credentialing is the process by which an organization or institution obtains, verifies, and assesses a pharmacist's qualifications to provide patient care services.[20] Credentialing and privileging are determined by the bylaws or policies of a healthcare organization. Credentialing is required for many types of healthcare professionals to be hired in a health system and determines their level of specific patient care services.[19] As discussed, credentials in the pharmacy profession can be obtained through a variety of mechanisms. For example, in addition to the credentials that we have already listed, pharmacists

may complete a lengthy and targeted disease education program or become board certified.

Certification programs are defined by ACPE as "structured and systematic post-graduate continuing education experiences for pharmacists that are generally smaller in magnitude and shorter in time than degree programs, and that impart knowledge, skills, attitudes, and performance behaviors designed to meet specific pharmacy practice objectives."[20] Certification programs should not be confused with continuing education (CE), which is needed in most states for relicensure. Compared to CE, certification programs are designed to expand practice competencies, usually in a specific area (e.g., smoking cessation, diabetes education, immunization, and anticoagulation).

Pharmacy Board Certification

Certification is a voluntary process by which a nongovernmental agency or an association grants recognition to an individual who has met certain predetermined qualifications specified by that organization. This formal recognition is granted to designate to the public that the individual has attained the requisite level of knowledge, skill, or experience in a well-defined, often specialized, area of the total discipline. Certification usually requires initial assessment and periodic reassessments of the individual's knowledge, skills, or experience. Certification can be a useful credential for pharmacists in either a clinical or a management career track.

Certification is a credential granted to pharmacists and other health professionals who have demonstrated a level of competence in a specific and relatively narrow area of practice that exceeds the minimum requirements for licensure. Certification is granted on the basis of successful completion of rigorously developed eligibility criteria that include a written examination and, in some cases, an experiential component. The certification process for pharmacy is undertaken and overseen by the Board of Pharmaceutical Specialties (BPS) or the Commission on Certification in Geriatric Pharmacy (CCGP).

The development of a certification program includes the following steps:

1. Defining the area in which certification is offered (role delineation)
2. Creating and administering a psychometrically valid content-based examination
3. Identifying other criteria for awarding the credential (e.g., experience)
4. Identifying recertification criteria[21]

The following is a breakout of each of these steps:

- ***Role delineation.*** The first step is to define the area in which certification is to be offered. This is done through a process called role delineation or task analysis. An expert panel of individuals in the proposed subject area develops a survey instrument to assess how practitioners working in the area rate the importance, frequency, and criticality of specific activities in that practice. The instrument is then sent to a sample of pharmacists who are practicing in that field.
- ***Development of content outline.*** On the basis of responses to the survey, a content outline for the certification program is developed.
- ***Preparation of examination.*** The written examination component of the certification program is developed on the basis of the content outline.
- ***Other activities.*** Appropriate measures are taken to ensure that security and confidentially of the testing process are maintained, that the examination and eligibility criteria are appropriate, and that the knowledge and skills of those who are certified do, in fact, reflect competence.

In 1976, APhA established the BPS to grant specialty certification to qualified pharmacists. Since that time eight specialties are a part of the BPS core mission, which is to improve patient care through recognition and promotion of high level training, knowledge, and skills in pharmacy through board certification of pharmacists.[22] The nine currently recognized board certifications (eight from BPS and geriatric practice from ASCP) are listed in **Box 13.6**. In addition to specialty certification, BPS will provide added qualification within the pharmacotherapy specialty for enhanced level of training and experience within cardiology or infectious diseases.

BOX 13-6. Currently Recognized Pharmacy Board Specialties

PHARMACOTHERAPY

Includes two added qualifications in infectious diseases and cardiology and is designated board-certified pharmacotherapy specialists

NUCLEAR PHARMACY

Designated board-certified nuclear pharmacists

NUTRITION SUPPORT PHARMACY

Designated board-certified nutrition support pharmacists

PSYCHIATRIC PHARMACY PRACTICE

Designated board-certified psychiatric pharmacists

ONCOLOGY PHARMACY PRACTICE

Designated board-certified oncology pharmacists

AMBULATORY CARE PHARMACY

Designated board-certified ambulatory care pharmacists

CRITICAL CARE PHARMACY

Designated board-certified critical care pharmacists

PEDIATRIC PHARMACY

Designated board-certified pediatric pharmacy specialists

GERIATRIC PHARMACY PRACTICE

Designated certified geriatric pharmacists

Additional information can be located on the BPS website at http://www.bpsweb.org/08_Resources.html.

The value of certification is evident on many levels. **Box 13-7** lists additional organizations that provide healthcare-focused certification. Although the fundamental intent of certification has been to enhance patient care, current board-certified pharmacists have reported both personal and professional benefits. Board-certified practitioners have reported increased marketability and acceptance by other healthcare professionals, and improved feelings of self-worth, which differentiates them from general practice pharmacists.[23] Some board-certified pharmacists have received financial rewards, including salary increases, job promotion, bonus pay, and direct compensation for services. Board certification is a respected and accepted credential that can be listed on credentialing, privileging, and collaborative drug therapy management applications to allow for care in advanced practice areas.

BOX 13-7. Additional Organizations Providing Healthcare-Focused Certifications

- American Board of Clinical Pharmacology (www.abcp.net) offers a certification exam in clinical pharmacology.
- American Board of Toxicology (www.abtox.org) offers a certification exam in toxicology.
- American Association of Diabetes Educators (www.aadenet.org) offers a certification exam in diabetes education.
- American College of Healthcare Executives (www.ache.org) offers a certification exam in healthcare management.
- National Institute for Standards in Pharmacist Credentialing (www.nispcnet.org) offers certification exams in disease management, including asthma, diabetes, dyslipidemia, and anticoagulation.

It has been suggested that board certification of clinical pharmacy practitioners should be used as a marker of quality because it is an indicator of an individual's knowledge at a predefined level that has been rigorously validated.[24] Furthermore, board certification should be adopted as an expectation of clinical pharmacy practitioners to meet the JCPP Vision of Pharmacy Practice.[25] To further strengthen the case for board certification, academic recommendations for pharmacists involved in precepting students also urge pharmacy practice faculty to pursue board certification and suggest that faculty with patient care responsibilities be board certified.[26] A more recent report suggested minimum hiring qualifications for clinical faculty should include 2 years of residency training, 3 years of experience in a progressive clinical practice, or board certification.[27] In addition, the ASHP Accreditation Standard for pharmacy residency programs requires that when certification is offered in the specialty of your residency, a residency program director should be board certified.[28]

• PRECEPTOR PEARLS •

If you are a preceptor who works in an organization that may have more than one student at a time, schedule a lunch discussion with the students and include one or two other preceptors. Have the students participate in an informal debate and discussion regarding key career issues such as ambulatory versus hospital practice, rationale for residencies and fellowships, and the importance of obtaining advanced credentials. When moderated effectively by a preceptor, these types of peer interactions can be very enlightening to students.

Additional Career Planning Support

When the student has made a well-informed decision regarding a particular career path, there is still much that a preceptor can offer to further assist the student and help him or her to be successful. Assisting students in developing a network of pharmacist contacts is one important element. This can be accomplished in a variety of ways, but one of the easiest is to take them to a local or state professional meeting or continuing education program. Introduce students to the people you know and encourage them to "work the room" and meet others, with a focus on helping students connect with pharmacists in their desired career path. Take students to as many hospitals, businesses, or other types of meetings as possible and make sure that they are welcomed. Introduce them to your supervisor and others in leadership roles. Helping students develop relationships with physicians, nurses, and other healthcare professionals will not only improve their rotation experience, but could also open career path doors later on.

It is important to note that in today's age of social media, there are a variety of both personal and professional outlets that can be used to expand the student's network. Sites like Facebook, Twitter, and LinkedIn can provide connections to colleagues and other professionals but also must be used with caution. Students should be reminded that everything they post is permanent and before posting anything they should consider whether it would be something that they would show their boss or potential employer directly. Many employers will screen social media sites to determine the potential employability of a candidate. LinkedIn is geared toward career development and is one of the better sites for connecting with employers and colleagues. It can also be used to research particular companies, healthcare organizations, and their leadership. It is a good idea to engage your student in a discussion around the use of social media for career development. The advice that you can provide from your own experience can be invaluable to students and can allow them to leverage the technology and prevent them from making mistakes.

The preceptor can also provide help to students by reviewing their curriculum vitae (CV) and online profile and ensuring that key elements of their experience and education are highlighted and detailed to match their career goals. You may want to share your CV with students to provide them with another example and format. Many colleges of pharmacy work with students on résumé development, and additional review by the preceptor can be very helpful.

Location is another important consideration to discuss with students. Many students find comfort in staying close to home when looking for their first job or residency program, and there may be family reasons that limit relocation prospects. On the other hand, the point at which they complete their degree is often a period in life where graduating students are most mobile. Where applicable, speak with students about organizations and programs that may be outside of their perceived geographic boundaries. This is especially pertinent for students that want a specific type of residency or specialty opportunity or would like to pursue a career in a more unique practice setting.

Students that have decided on a specific career path should be coached regarding the importance of doing additional research as they identify organizations where they may want to seek employment. Just as they would

research information on a major purchase, they should also critically evaluate potential employers. Understanding the organization's patient population, mission, and current financial status can help clarify potential employment choices. If possible, encourage the student to speak with other pharmacists from that organization that are in similar positions.

Finally, helping the student polish their interview skills can be very valuable. Develop a set of common interview questions and pose one or two of these questions to the student every week. Role playing answers to specific questions can also prepare the student for the job seeking process. Using common questions like "What are your strengths and weakness?" or "What makes you well-suited for this role?" are good questions to start with. Using behavioral-based questions such as "Tell me about how you would handle a situation where a physician disagreed with you and you knew you were right?" can help prepare students for some of the tougher interviews that they may experience.

Summary

Rewarding careers are the result of thoughtful planning, effort, and sacrifice. The preceptor's role is to help students understand the importance of career planning, help them discover their interests and aptitudes for possible careers, and learn more about the available careers for pharmacists. It is also important for preceptors and students to learn the appropriate considerations related to credentialing and that further credentials can be invaluable to a student's future success. The preceptor's potential impact on a student's career is virtually limitless and can result in a professional relationship that spans decades. Being part of a student's career planning efforts is rewarding and may even provide insight into the preceptor's own career path.

• PRECEPTOR PEARLS •

Sample open-ended and behavioral interview questions that can help prepare students.

- What tips or tricks do you use to make your job easier or increase your effectiveness?
- You receive a phone call from an angry and rude nurse saying that she has been waiting 5 hours for pharmacy to send an antibiotic. What do you do?
- Tell me about an instance where you changed your opinion after receiving new information.
- Describe a work or school situation where your behavior served as a model for others.
- You find out that you have made a medication error. It is minor and likely that no one will ever know. What do you do?
- How do you decide what gets top priority when you schedule your time?
- Tell me about a time when you had to deal with a difficult boss or coworker. Physician?
- What are the most important things that you expect to find at our organization (benefits, salary, job responsibilities, advancement, etc.)?

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Chapter 14

Pharmacy Residencies and Fellowships

Tony Huke, Christine L. Hall, and Michelle W. McCarthy

Chapter Outline

Advising Students on the Residency Process 268
Precepting Different Levels of Learners 272
Summary 278

In learning you will teach; by teaching you will learn.

Latin proverb

Learning Objectives

- Describe the purpose of residency education.
- Identify opportunities for student learners to be successful in navigating the residency process.
- Summarize basic differences between different levels of learners.
- Demonstrate different preceptor roles, with activities based on the level of the learner.
- Define levels of postgraduate training.

Advising Students on the Residency Process

The number of pharmacy residencies continues to increase across the country, and advising students on this career path choice is an increasing responsibility for pharmacy preceptors (see **Figure 14-1**). Students are also planning for this career decision earlier in their education, which can lead to discussions about residency training and its benefit during not only advanced pharmacy practice experience (APPE) rotations but also introductory pharmacy practice experience (IPPE) rotations, or earlier. The ASHP Long-Range Vision for the Pharmacy Work Force in Hospitals and Health Systems describes their vision for pharmacy residencies: "To support the position that by the year 2020 the completion of an ASHP-accredited postgraduate-year-

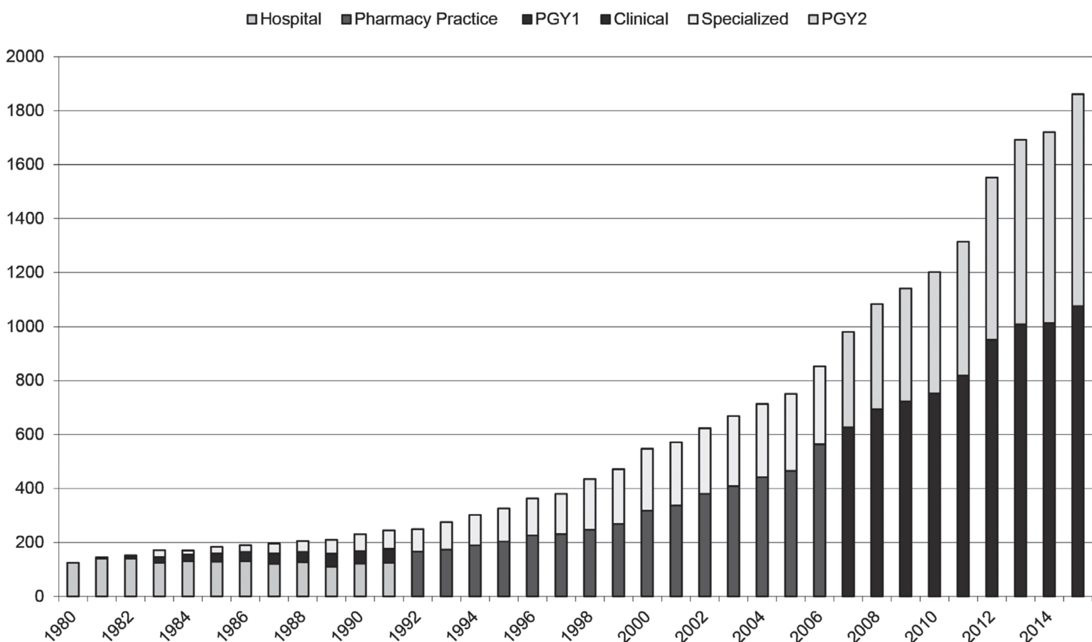

FIGURE 14-1. ASHP-accredited Pharmacy Residency Program growth (1980–2015) as of 1/5/15.

Source: Courtesy of ASHP, Bethesda, MD. Copyright © 2015.

one residency should be a requirement for all new college of pharmacy graduates who will be providing direct patient care."[1] With this message, it is easy to see why so many students wishing to practice health-system pharmacy may come to you for advice. Figure 14-1 depicts the exponential growth in residency program numbers over the last three decades.

The process for and terminology associated with accreditation may be unfamiliar to some. **Box 14-1** summarizes the accreditation process and the various definitions.

BOX 14-1. Helping Learners Understand Residency Accreditation Terminology

ASHP is the only organization that accredits pharmacy residency training programs. The ASHP accreditation standard defines the competency areas, goals, and objectives that must be taught within a program and holds programs to compliance with the standard. The ASHP Commission on Credentialing (COC) determines a program's accreditation status, which can be found within each program's listing on the ASHP Residency Directory. Accreditation is determined based on document review, an onsite survey by a two-member survey team, and review and evaluation by the COC. Because there are multiple designations, ensure those pursuing residencies are familiar with the following designations:

PRE-CANDIDATE: the program has applied for accreditation and is in the process of recruiting their first resident. Ensure learners understand that the program is in development and they could possibly be the program's first resident. Students that are flexible, adaptable, open-minded, and willing to provide feedback are likely the best candidates for being first residents.

CANDIDATE: a program that has a resident in training, has applied to ASHP for accreditation, and is awaiting the official site survey and review and evaluation by the COC. In general, learners should be aware that this program is still new.

PRELIMINARY ACCREDITATION: the program has undergone review (document review and site survey) by ASHP and the survey team has determined that the program appears to meet the requirements for accreditation.

ACCREDITED: the status granted after a program has met set requirements and has been reviewed and evaluated through an official process (document review, site survey, and review and evaluation by the COC).

CONDITIONAL ACCREDITATION: a program that is not in substantial compliance with the accreditation standard due to severity of noncompliance or partial compliance findings. Programs must remedy identified problem areas and may undergo a subsequent onsite survey. In some cases, programs that fail to demonstrate resolution may have their accreditation withdrawn. Ensure that students considering programs that have conditional accreditation understand the risk associated with this status.

The majority of residency programs are ASHP accredited; however, a small number of programs have not sought ASHP accreditation. Preceptors should advise students of the risks associated with unaccredited programs. Only programs that are pursuing accreditation or are accredited utilize the Pharmacy Online Residency Centralized Application Service (PhORCAS) and participate in the Resident Matching Program. It's important that students evaluating unaccredited programs understand that a growing number of employers, particularly hospitals, require completion of ASHP-accredited residency programs for all pharmacists, and those seeking to enter an accredited postgraduate year (PGY) 2 program must have completed an accredited PGY1 program.

Based on the above ASHP vision, the primary reason for completing a PGY1 residency is that it is becoming the industry norm as entry-level training for health-system pharmacists. For health-system careers as well as others within pharmacy, a residency is viewed as the equivalent of 2–3 years of experience and should aid,e in helping the candidate stand out in the crowd, especially when compared to other potential candidates without residency training. ASHP has an excellent resource document titled "Why Should I Do a Residency?"[2] **Table 14-1** identifies some of the key benefits of completing a residency program.

As a preceptor, you may be asked by students to help them throughout the application process. It can be an overwhelming and highly competitive process. **Boxes 14-2** and **14-3** will help you make this a successful journey for the student.

TABLE 14-1. *What Will a Residency Do for Me?*

Gets you the job.
Allows you to qualify for positions that require residency training, a growing trend in hospitals and health systems.
Provides flexibility and adaptability to change during your developing career path.
Distinguishes you from other pharmacists.
Gets you the promotion.
It is becoming a necessity to stay competitive, because most pharmacists in faculty, management, or clinical roles have completed a residency.
Provides networking opportunities.
Finds mentors.
Expands your resource base.
Provides future job opportunities.
Helps you achieve your professional vision.
Plans your career.
Develops leadership skills.
Helps you discover what you are interested in by practicing in a variety of settings.

Source: For more information, see Reference 2.

BOX 14-2. Helping Learners Select a Good Reference Letter Writer

WHO MAKES A GOOD REFERENCE LETTER WRITER?

- Students' IPPE or APPE preceptors (faculty or nonfaculty).
- Managers/supervisors from their place of employment.
- Faculty members who have served as mentors, academic advisors, student organization advisors, or IPPE or APPE preceptors.
- Others that have a good understanding of their professional and clinical skills.
- People who are familiar with the residency application process and fit the above descriptions.
- Preceptors who can describe your professional and clinical skills within that practice setting (if possible).

Advise candidates to educate their letter writers to follow program-specific criteria for the letters of recommendation. Each program is different and may have areas of focus or discussion that should be highlighted in the letters of reference.

WHO DOES NOT *MAKE A GOOD REFERENCE LETTER WRITER?*

- Individuals who do not have the ability to evaluate your professional work or clinical skills.
- People who are not familiar with the letter writing process (these people may become viable letter writers if educated about the process).

BOX 14-3. How to Create a Letter of Intent

Potential employers, including residency programs, require candidates to submit a letter of intent as part of the application process.

The goal of the letter of intent is to demonstrate to the reader what program or site-specific characteristics appeal to the candidate and to correlate the candidate's qualifications to the program/site.

Advise candidates to effectively research the program/employer as part of their application process. Letters that demonstrate that the candidate has "done his or her homework" are more appealing.

The letter should be customized to the recipient ("Dear Sir/Madam" is *not* recommended) and organization (ensure the correct organization is named).

Tips to ensure the completed product is error-free include reading it out loud and asking another individual to critique.

Advise the candidate to follow program-specific criteria for the letter of intent. For some programs these need to be no longer than one page; however, other programs may have different preferences.

Resources that may be valuable to learners seeking more information about the residency programs application and interview process include:

- Caballero J, Clauson KA, Benavides S. *Get the Residency: ASHP's Guide to Residency Interviews and Preparation*. Bethesda, MD: American Society of Health-System Pharmacists; 2012.
- Bookstaver PB, Caulder CR, Smith KM, et al. *Roadmap to Postgraduate Training in Pharmacy*. New York: McGraw-Hill Medical; 2013.
- Bauman JL. *ACCP Field Guide to Becoming a Standout Pharmacy Residency Candidate.* Lenexa, KS: American College of Clinical Pharmacy; 2012.

A common inquiry of students is whether or not to attend the annual ASHP Midyear Clinical Meeting. This meeting allows students to network and attend the Residency Showcase. Attendance is not mandatory, but students contemplating the trip may need guidance from you.

In order to successfully navigate your students through Midyear, please see **Box 14-4**.

BOX 14-4. Tools to Help Students Succeed at the ASHP Midyear Clinical Meeting

THIRD YEAR (P3)

- Attendance can be encouraged but remind students it is not required. It can alleviate anxiety for those students who plan to attend Midyear during their fourth year.
- Encourage students to utilize all networking opportunities (state receptions, site-specific receptions, etc.) in order to introduce themselves to residency program directors.
- Recommend student educational sessions on Sunday designed to help inform students about residency programs and other programs such as Career Pearls and Résumé Writing.
- Discuss the ASHP Residency Showcase with students. They can use the showcase to gather information on residency programs they may not have access to at state or regional meetings. It is recommended they attend the second half of the showcase in order to allow applicants for the current year the time and access to programs.

FOURTH YEAR (P4)

Before:

- Have students update their résumé and review it or have it reviewed by another advisor.
- Have students prepare business cards to share with new contacts they meet at the multiple networking opportunities.
- Recommend the use of ASHP's Residency Directory (http://accred.ashp.org/aps/pages/directory/residencyProgramSearch.aspx) to research programs in advance.
- Encourage students to utilize program websites to find information on how a specific program may be recruiting (showcase only, showcase vs. personnel placement service [PPS]) as well as to find information on preferred methods of communication. For instance, do not call a residency program director; email is a preferred method.
- Determining which programs in advance are participating in PPS can enable students to make the best decisions for the limited time they are at the meeting. PPS is an additional cost and is more commonly utilized by PGY2 programs and full-time jobs.
- Have students plan their trip in advance. Review their schedule and discuss each event, reviewing the appropriate attire, who may be in attendance, etc. This will increase the confidence of students when in attendance.

During:

- Continue to encourage networking opportunities and educational sessions as noted above.
- Provide information regarding the Residency Showcase:
  - Three Sessions: Monday afternoon, Tuesday morning, and Tuesday afternoon. Programs participate in only *one* of these sessions.
  - Plan the route for each session using the maps provided.
  - Be respectful of each program's time. Have questions prepared before students' visit to each booth.
  - Talk to residents, preceptors, and residency program director, if able.
  - Ask program-specific questions to show they have researched their program as well as a consistent set of questions they can ask programs to help the student compare programs when needed.

After:

- Encourage communication with programs (thank-you notes or emails) of interest.
- Start the application process within PhORCAS and start preparing for interviews.

Residency training is *not* a filler or place holder for individuals who think they will not find a job. A residency is a serious commitment and should not be entered into lightly. Because spaces are limited, you do not want to have a candidate who is not committed to the process—it will take a spot away from a candidate who truly wants and will benefit from residency training.

One aspect of residency training that any potential resident and any preceptor advising students should be aware of is the Match, which is the informal name for the ASHP Residency Matching Program (RMP) administered by National Matching Services

Inc. (NMS). This program is the formal way to match candidates with programs for PGY1 and PGY2 residencies after onsite interviews have been conducted.

Beginning with the 2016 Match cycle, ASHP has instituted a Phase II Match. The purpose of the Phase II Match is to ensure that student pharmacists have another structured opportunity to connect with open positions, helping to level the playing field and providing an orderly application process. Prior to this initiative, students who did not match participated in an informal "Post-Match Scramble." When the Phase II Match has concluded, any remaining candidates or programs will proceed using the traditional informal scramble. Of note, "Results of the RMP constitute binding agreements between applicants and residency programs that may not be reversed unilaterally by either party."[3] Backing out of a position post-Match should be avoided unless a candidate has a significant situational change that is clearly communicated to the program in as timely a manner as possible. This should be avoided if at all possible.

CASE SCENARIO 1

You are the preceptor of three APPE students in September of their last year of pharmacy school. Each has expressed interest in residency training and has asked you to discuss the topic and advise them on the application, interview, and matching process. You ask each candidate the following question: ***Can you tell me why you are interested in residency training and in what area of pharmacy do you hope to be practicing in 5 years from now?***

Candidate 1 hopes to practice critical care pharmacy in a large academic teaching institution as part of a multidisciplinary team. She is looking for advice on the best way to reach this goal.

Candidate 2 answers that he hopes to get a job at his home-town community store. The owner encouraged him to study pharmacy since the candidate was a child. The owner says he has a job waiting for him whenever he is ready for it. However, while completing pharmacy school he realizes the practice at the store could be improved to provide more medication therapy management services and hopes to implement changes if he were hired.

Candidate 3 would prefer to start her career and make some "real money," but the city in which she wants to live has a very competitive market. She thinks it will be difficult for her to find a hospital job and is interested in residency to help increase her chances of getting a good job next year, but she would not turn down a job offer if she received one.

What advice would you give each candidate?

Candidate 1 has the most clear-cut decision. She displays prototypical health-system residency candidate traits. She knows she wants to practice in health-system pharmacy and has a subspecialty identified. You can advise her that a PGY1 and then a PGY2 in critical care may be the best training path in order to reach her goals. Advise her on the application, interview, and matching process, and wish her luck.

Candidate 2 may be a great candidate for a PGY1 community pharmacy program. He could hone his skills during a residency, learn project management and leadership skills, and use those to implement the changes he described the following year. Advise him on this option and continue with the application, interview, and matching process, and wish him luck.

Candidate 3 has the most complicated scenario. Wanting to complete a residency to prepare for a career in health-system pharmacy is one of the primary reasons to do so. But the commitment of the Match should be discussed heavily. Candidate 3 needs to be counseled that if she pursues a residency and completes the process through the Match, she would no longer be eligible to accept a job offer if presented with one and must complete her residency as scheduled. Weighing her financial concerns with her ability to find health-system pharmacy employment should be her primary decision point. If she chooses to pursue residency training after careful consideration, advise her about the application, interview, and matching process, and wish her luck.

PRECEPTOR PEARLS

Midyear is an opportunity to network and attend the Residency Showcase. Give your students tools to make the most of the meeting and sessions.

Precepting Different Levels of Learners

As a preceptor, you may be exposed to more than one type of learner, from IPPE students to PGY2 or PGY3 pharmacy residents. It can be challenging at times to precept different levels of learners, especially concurrently.

To make a distinction between precepting students and residents, we will first discuss some basics on how these learners are different (see **Table 14-2**). Students tend to be less experienced and are focused on gathering information and developing basic critical thinking skills. Students typically continue in the "college" mentality while on practical rotations. Residents typically have more experience and are focused on the synthesis of information or skill-based development. In contrast to students, they have typically shifted to a career-focused mentality. The quality of students can also vary considerably with APPE rotations, whereas residents tend to be high performers and are highly motivated. Students typically have a variety of interests and are still being exposed to different practice areas within the pharmacy profession. PGY1 residents have usually narrowed their focus down to a practice setting (health system, ambulatory, community, etc.) and may continue to have a variety of interests or have already identified a specific area of interest. PGY1 residents also spend the full year at one institution or system, whereas students may switch to different sites every 4–6 weeks while on APPE rotations (or even more frequently with IPPE students). The consistent onsite presence of residents allows for improved communication between preceptors and allows the customization of their learning experiences. The qualifications for preceptors of students versus residents are also different and will be discussed in further detail.

Preceptor Requirements for Students Versus Postgraduate Year 1 Residents

Expectation and criteria for preceptors can differ for students and residents. Below are examples of how these qualifications differ.

Students

The Accreditation Council for Pharmacy Education has summarized qualifications for preceptors of pharmacy students. They

- practice ethically and with compassion for patients;
- accept personal responsibility for patient outcomes;
- have professional training, experience, and competence commensurate with their position;
- utilize clinical and scientific publications in clinical care decision making and evidence-based practice;
- have a desire to educate others (patients, caregivers, other healthcare professionals, students, pharmacy residents);
- have an aptitude to facilitate learning;
- are able to document and assess student performance;
- have a systematic, self-directed approach to their own continuing professional development;
- collaborate with other healthcare professionals as a member of a team; and
- are committed to their organization, professional societies, and the community.[4]

Postgraduate Year 1 Residents

ASHP has specific requirements for the eligibility and qualifications of PGY1 preceptors; they are summarized in **Table 14-3**.

Preceptors must demonstrate the ability to precept residents' learning experiences by meeting one or more qualifying characteristics in all of the following areas[5]:

- Demonstrate the ability to precept residents' learning experiences by use of clinical teaching roles (i.e., instructing,

TABLE 14-2. *Differences Between Student and PGY1 Resident Learners*

Student	PGY1 Resident
Licensed interns	Licensed pharmacists
Multiple practice sites	Focused practice site
Less experienced	More experienced
Variety of interests	Generally more focused in specific practice area
Variable performers	High performers
Knowledge focused	Skill focused

modeling, coaching, facilitating) at the level required by residents

- Have the ability to assess residents' performance
- Have recognition in the area of pharmacy practice for which they serve as preceptors
- Have an established, active practice in the area for which they serve as preceptor
- Maintain continuity of practice during the time of residents' learning experiences
- Demonstrate ongoing professionalism, including a personal commitment to advancing the profession

Setting Expectations for Students Versus PGY1 Residents

With both learners, expectations should be established at the beginning of the learning experiences and be well defined. Students might have less independence and require more guidance throughout the learning experience. Residents are typically more independent; however, in new experiences they may require more coaching and modeling in the beginning. At the beginning of each learning experience, preceptors should assess students' and residents' skill levels and customize their expectation and goals.

Preceptor Roles for Students versus PGY1 Residents

Use of the Learning Pyramid (see **Figure 14-2**) can help guide preceptors in determining appropriate tasks for PGY1 residents versus students. As students and residents progress through their programs, the preceptor's role should also advance to reflect this.

Direct Instruction

Direct instruction is the teaching of content that is fundamental in nature.[6] IPPE and APPE students will both require a fair amount of direct instruction through their experiences. Direct instruction is also appropriate in PGY1 residents, especially early in the residency year or if the resident is new to an area. Examples of tasks associated with direct instruction are readings, topic discussions, case-based teaching, lectures, etc. Although both learners may need direct instruction, it is important to keep in mind that PGY1 residents have greater independence and should be tasked with reviewing the materials themselves and then checking their understanding. Students, on the other hand, may benefit from didactic lectures, by tying it to a specific care problem.

TABLE 14-3. *Characteristics of Preceptors for Postgraduate Learners*

PGY1 Residents	PGY2 Residents	Clinical Research Fellows
Licensed pharmacists who: • have completed an ASHP-accredited PGY1 residency followed by a minimum of 1 year of pharmacy practice experience; or • have completed an ASHP-accredited PGY1 residency followed by an ASHP-accredited PGY2 residency and a minimum of 6 months of pharmacy practice experience; or • without completion of an ASHP-accredited PGY1 residency, have 3 or more years of pharmacy practice experience. • Additional qualifications related to practice and professional contributions can be found in the accreditation standard.	Licensed pharmacists who: • Have completed an ASHP-accredited PGY2 residency followed by a minimum of 1 year of pharmacy practice in the advanced practice area; or • without completion of an ASHP-accredited PGY2 residency but must demonstrate mastery of the knowledge, skills, attitudes, and abilities expected of one who has completed a PGY2 residency in the advanced practice area *and* have a minimum of 3 years of practice in the advanced area. • Additional qualifications related to practice and professional contributions can be found in the accreditation standard.	Clinical scientists with an established and ongoing record of independent research, accomplishments, and expertise in the area of specialization related to the fellowship, which may be exemplified by: • fellowship training, a graduate degree, and/or equivalent experience; • acting as principal or primary investigator on research grants and/or projects; and • having published research papers in peer-reviewed scientific literature on which the preceptor is the primary or senior author. • Active collaborative research relationships with other scientists.

Modeling

Modeling is demonstrating a skill or process while "thinking out loud," so the learners can witness the thoughts and problem-solving skills as well as any other observable action of the preceptor. One example is the providing of warfarin education to a patient as students or residents observe. It is important for preceptors to explain and review their thought processes both before and after the activity. This preceptor role will be used for both students and residents; however, residents may progress to the next level, coaching, more rapidly.

PRECEPTOR PEARLS

It is important for preceptors to explain and review their thought processes both *before* and *after* an activity.

Coaching

Coaching is having the preceptor observe and possibly assist learners as they participate in patient care activities and problem-solving. In this preceptor role, the learner should "think out loud" and explain his or her thought processes. Again, this preceptor role will be used in situations for both students (APPE) and PGY1 residents. When mastery of a specific task is demonstrated, preceptors of higher-performing students and PGY1 residents can transition to facilitation. Preceptors should be comfortable with an individual's ability to perform independently.

Facilitating

In certain situations, high-performing students may progress to facilitating; this preceptor role is used mostly with PGY1 residents and beyond. *Facilitating* allows the learner to practice independently, with the preceptor being available as needed. Preceptors must be comfortable with the learner's ability to self-evaluate and provide patient care activities independently yet be able to provide high-quality feedback in order to continue progressing the growth and development of the learner.

Postgraduate Year 2 Residencies

A 2011 survey of pharmacy residents and fellows identified that a new motivator of pharmacy students to pursue residency and fellowship training is that these additional training programs are prerequisites for certain jobs.[7] PGY2 pharmacy residencies build on the broad competencies that are incorporated into PGY1 pharmacy residencies and "are designed to develop accountability, practice patterns, habits, and expert knowledge, skills, attitudes, and abilities in an advanced area of pharmacy practice."[7] On completion of a PGY2 residency program, graduates should

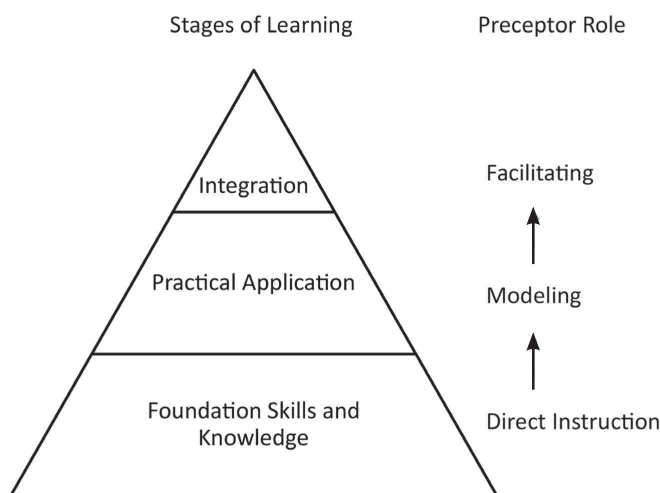

FIGURE 14-2. The learning pyramid.

Source: Nimmo CM. Developing training materials and programs; facilitating learning in staff development. In: Nimmo CM, Guerrero R., Greene SA, et al., eds. Staff Development for Pharmacy Practice. Bethesda, MD; ASHP. Copyright © 2000.

CASE SCENARIO 2

You are the preceptor for an internal medicine rotation. You currently have a PGY1 pharmacy resident and an APPE student. The PGY1 pharmacy resident is completing her second rotation in internal medicine and your APPE student is in his first week on rotation and is new to acute care. During patient review, you notice a vancomycin progress note needs to be completed in the electronic medical record. While assigning this task to your PGY1 resident and student, what preceptor role would be most appropriate for each?

Based on the fact the PGY1 resident has completed a previous internal medicine rotation, it is most appropriate to start with coaching or facilitating. If it has been noted on previous evaluations that the resident needs improvement on her documentation of patient care activities, have her complete the evaluation. Before having the resident document, have her explain her thought process and give any necessary feedback. If the resident has demonstrated she does not need further coaching with this task, ask her to complete the chart documentation independently and discuss her assessment with the medical team.

Because the APPE student is new to your practice setting and patient population, start by reviewing any site-specific processes or policies, protocols, or guidelines with him. The student will need to master this direct instruction phase prior to progressing to modeling.

possess competencies that would allow for attainment of board certification in the practice area, if such board certification exists.[8] PGY2 pharmacy residencies are conducted in many advanced areas of pharmacy practice:

- Ambulatory care pharmacy
- Cardiology pharmacy
- Critical care pharmacy
- Drug information
- Emergency medicine
- Geriatric pharmacy
- Health-system pharmacy administration
- Infectious diseases pharmacy
- Internal medicine pharmacy
- Nuclear medicine pharmacy
- Nutrition support pharmacy
- Oncology pharmacy
- Pain management and palliative care
- Pediatric pharmacy
- Pharmacotherapy
- Pharmacy informatics
- Psychiatric pharmacy
- Solid organ transplant pharmacy
- Medication-use safety

PGY2 residencies are intended to provide residents the opportunity to function independently as practitioners and to increase the breadth and depth of their knowledge and experience. With this in mind, the ASHP accreditation standard has minimum requirements for both PGY2 program directors and preceptors (see Table 14-3). PGY2 program directors and preceptors should actively practice in the particular area and have completed a PGY2 residency in the advanced area of practice. Alternatively, the accreditation standard allows for equivalent practice experience in lieu of completion of a PGY2 residency of 5 years for program directors and 3 years for preceptors. In addition, program directors must have 3 years of post-PGY2 residency experience, and preceptors must have 1 year of post-residency experience. Additional training and experience is required by PGY2 preceptors to support the higher level of knowledge, skills, attitudes, and abilities that are incorporated into PGY2 residency programs.

PRECEPTOR PEARLS

Helping Learners Choose Residencies

Residency Program selection can be based on several factors:

- Areas of interest
- Reputation/word of mouth
- Geography
  - Where does the candidate want to live?
  - Where does the candidate *not* want to live?
- Information found on the ASHP online residency directory[9]
  - Hospitals that have PGY2 programs can aid in finding PGY1 programs that have expertise in areas that may match the candidate's interests

Similar to precepting students and PGY1 residents, precepting PGY2 residents has both challenges and rewards. Although all four preceptor roles are incorporated into PGY2 residencies, the majority of training is accomplished with coaching and facilitation. Direct instruction may be incorporated through independent evaluation and critique of applicable primary literature and practice guidelines. The modeling provided to PGY2 residents is likely concentrated early in the program (orientation) and at the beginning of new learning experiences. After practice expectations are set for the program and learning experience, PGY2 residents should be provided with numerous opportunities to practice independently and serve as practice extenders while still receiving timely and comprehensive feedback. For example, a PGY2 resident in ambulatory care pharmacy can expand patient care services in the ambulatory practice area by starting clinical pharmacy services in a previously unserved area. To facilitate optimal growth, preceptor feedback should focus on both what learners should keep doing and what they need to incorporate into their practice.

PRECEPTOR PEARLS

Provide a PGY2 resident with the information (knowledge) and experience (skills and abilities) that you would desire in a new coworker or employee, and you will produce a highly functioning and employable pharmacist.

Postgraduate Year 3 Residencies

In recent years, the number of individuals seeking training beyond 2 years of residency has increased. The path for PGY3 training is not well established and may vary. In some instances, individuals are completing two specialty (PGY2) residency programs, whereas others are seeking subspecialized training following completion of PGY1 and PGY2 residencies. Helling and Johnson[10] described a framework for pharmacy residency training that includes PGY3 residencies and fellowships. Preceptors should be equipped to discuss career options with trainees and assist them in evaluating training needs with their potential career aspirations.

Fellowships

Given the growing complexity and cost of healthcare, the need for practice-focused researchers has grown. Fellowship programs are generally 2 years and build research skills beyond those provided during residency training programs. Fellowships focus on subspecialty areas ranging from academic research to transplantation (see the American College of Clinical Pharmacy [ACCP] online directory for a complete listing).[11]

ACCP defines a research fellowship as "a directed, highly individualized, postgraduate training program designed to prepare the participant to function as an independent investigator. The purpose of fellowship training is to develop competency and expertise in the scientific research process."[12] Because practice skills relevant to the knowledge area of the fellowship are expected, most fellowship candidates have prior practice experience or have completed a residency program. Fellowship graduates should be able to serve as a principal investigator and conduct research both independently and collaboratively. With support from their program director and preceptors, fellows should be given opportunities to conduct independent research and share their findings through presentation or publication. General fellowship preceptor criteria are summarized in Table 14-3.

Although there are no accreditation standards for fellowship programs, ACCP has approved general guidelines for research fellowship and training programs and has implemented a voluntary, peer-review process to ensure quality and assist preceptors in improving the program. Because fellowship programs are intended to be highly individualized, preceptors should be able to focus the fellow's training and education to his or her specific research interests and knowledge.[12] The ACCP Directory of Residencies, Fellowships, and Graduate Programs, hosted on the ACCP website, is the primary catalog of possible fellowship options. Those interested in pursuing a research fellowship may use this to identify available programs.

CASE SCENARIO 3

You are the PGY1 residency program director of a hospital-based program and have four residents in your program. You are working with each resident to determine post-residency employment options and to update individual development (training) plans.

Resident 1 is interested in general clinical positions and because of personal reasons feels that she must enter the workforce following completion of her PGY1 program.

Resident 2 has a passion for oncology pharmacy practice, and his 5-year goal is to practice as an oncology clinical pharmacist in an academic medical center.

Resident 3 is interested in cardiology clinical research and sees herself as a school of pharmacy faculty member with a heavy focus on cardiology research.

Resident 4 is interested in psychiatric pharmacy and emergency medicine. His ideal career involves caring for psychiatric and emergency medicine patients, and he is willing to invest as much training time as needed to have this type of practice.

What potential career options will you discuss with each resident?

Based on the completion of her PGY1 and interest in joining the workforce, Resident 1 is well suited for an entry-level clinical generalist position in a hospital. Discuss with her job searching strategies, application processes, and offer to serve as a professional reference.

Resident 2's interests and goals would likely be met through completion of a PGY2 oncology pharmacy residency program. Discuss the PGY2 program and application process and offer to serve as professional reference.

Resident 3 could pursue a cardiology clinical fellowship or a PGY2 cardiology residency program, followed by a cardiology clinical fellowship. Discuss with her strategies for evaluating programmatic requirements as well as application processes for PGY2 residency programs and clinical fellowships, and offer to serve as a professional reference.

Resident 4's needs may be met by completion of PGY2 residencies in psychiatric pharmacy and emergency medicine. Discuss with him strategies for evaluating programmatic requirements as well as application processes for PGY2 residency programs, and offer to serve as a professional reference.

Summary

Regardless of the level of your current learner or learners, understanding their knowledge base, skill set, aspirations, and commitment will help you as a preceptor in successfully advising them on choices they can make to meet their career goals.

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Index

A

Academia, 254
Academic Practice Partnership Initiative, 43
Academic program attention, 103–104
Academy of Managed Care Pharmacy, 255
Access disparities, 178
Accountable care organizations, 183, 256–257
Accreditation Council for Pharmacy Education (ACPE), 2, 4, 70, 87, 128, 227, 273
  accreditation standards 2016, 77, 155, 227
  administration-focused competencies, 120
  certification programs, 261
  CQP guideline, 112
  doctor of pharmacy curricular standards, 68
  experiential quality assurance standard, 112
  Guideline 22.2, 234–236
  pharmacy program standards, 155, 199–200
  preceptor access to school resources, 232
  preceptor training, 236
  Standards 1–4, 11–13
  Standards 2016, 155, 227
Accredited, 269
Active learning, 241
Active listening, 28
Activities schedule, 78
Acute care rotations, 94–95
Adherence, 194
Adjunct faculty appointments, 224
Administration careers, 129
Administration-focused competencies, 120
Administrative/management rotation activities, 127
Advanced education, 259
Advanced experiential rotations, 94–95
Advanced independent rotations, 141
Advanced pharmacy practice experience (APPE), 4, 88–89, 135, 268
  daily activities organization, 92
  goals, 88
  healthy professional attitude development, 92
  independent practitioner encouragement, 91–92
  interpersonal skills, 93
  pharmaceutical care/disease management, 90–91
  pharmacy residents as preceptors, 93–94
  professional growth, scholarly development, 92
  professional skills, 89
  -ready, 4
  rotations, 89
  student activities on rotations, 89
  teaching others, 93
  time management, 92
  unique experiences, 90
Advanced pharmacy training, 257
Advisory board involvement, 225
Affective learning, 71, 72, 76
Affiliation agreement, 222, 225
Affordable Care Act of 2010, 180, 182, 252
  prevention through, 183–184
African Americans, 185, 189
Agency of Healthcare Research and Quality, 196

Alaska Native, 185
Allen, David D., 122, 219–243
Ambulatory care pharmacy practice, 123–124, 262
  rotations, 94–95
American Association of Colleges of Pharmacy (AACP), 43, 90
  Master Preceptor Recognition, 43–44
  Professional Affairs Committee, 43
  Professional Development Committee (2012), 233
  Profile of Pharmacy Students, 175
  standards, 232–233
American Association of Diabetes Educations, 262
American Association on Health and Disabilities, 191
American Board of Clinical Pharmacology, 262
American Board of Toxicology, 262
American College of Clinical Pharmacy, 37, 208, 255
  Directory of Residencies, Fellowships and Graduate Programs, 277
  fellowships, 258, 277
  residencies, 257
American College of Healthcare Executives, 262
American Indian, 185
American Journal of Public Health, 184
American Medical Association Manual of Style, 29
American Pharmacists Association (APhA), 61, 90, 95, 255
  Board of Pharmaceutical Specialists, 261
  Code of Ethics, 50
American Psychological Association, 74
American Society for Quality, 111–112, 113
American Society of Consultant Pharmacists, 90, 255
American Society of Health-System Pharmacists (ASHP), 61, 90, 95, 128, 236, 255
  accreditation standard for residency programs, 262
  accreditation standards for PGY1 pharmacy residency programs, 94, 200
  accredited residency, 152, 222
  best practice, 135
  career planning, preceptor's role in, 247
  Commission on Credentialing, 222–223, 269
  Foundation, Health System Administration Accredited Residencies, 37
  Long-Range Vision for the Pharmacy Work Force, 268–269
  Midyear Clinical Meeting, 271, 272
  Pharmacy Forecast, 125
  Pharmacy Student Forum's "Quick Guide to Mentorship," 248
  Phase II Match, 272
  Postgraduate Year 1 Residency Standards, 77
  residencies, 257
  Residency Directory Accreditation, 269
  Residency Matching Program, 271–272
  roles of perception, 44
  Statement on Leadership as a Professional Obligation, 35
  Statement on Professionalism, 207, 215
  survey of pharmacy practice (2009), 132
  Task Force on Accountable Care Organizations (2012), 257
Amyotrophic lateral sclerosis, 181
Analysis, 72
  retrieved observations, 101–102
Antibiotics, 97, 98
Application, 72
Aristotle, 51
Arkansas State Board of Pharmacy, 154
Article publishing, 227
Asian Americans, 185
Ask Me 3, 197
Aspirin, 97
Assessment
  skills, 31–32
  tools, 32
Association for Experiential Education, 68
  principles, 68–69
Atorvastatin, 97
Attitude, 103
Auditory learners, 95, 96
Audits, 128
Awards, 224

B

Baby Boomers, 22, 23, 42
Behavioral goals, 50
Behavioral interview questions, 264
Behavioral learning, 71, 72–73
Big L leader identification, 37
Blanchard, Ken, 37
Block scheduling, 135, 136, 137, 142
Blogger, 208
Bloom's taxonomy, 71–72, 76
Board of Pharmaceutical Specialists, 261
Brief Health Literacy Screening tool, 195
Brittain, Kristy L., 131–150
"Brown bag" reviews, 196
Buddhism, 189
Budget preparation, 125
Building a House for Diversity, 173
Bureau of Prisons, 90
Bureaucracy, 77
Business plans, 127
Busy-work assignments, 77
Butler, Kristina L, 21–39

C

California (State of) Pharmacy Intern Preceptor Manual, 61
Candidate, 269
Career planning
  advising, 246
  generating interest in, 249
  location, 263
  luncheon discussion, 263
  path selection, 263–264
  preceptor's role in, 247–248
  preparation questions for, 264
  student conversation about, 248
  support, 263
Careers in pharmacy, 249–250
Caring attitude, 31
Case management, 199
Case presentation, 33
Census 2010, 186
Center for the Advancement of Pharmacy Education (CAPE)
  Educational Outcomes 2013, 4, 5
Center for Medicare and Medicaid Innovation, 182
Centers for Medicare & Medicaid Services (CMS), 125, 182, 255
Certification programs, 261
Channel, 25
Chart notes, 91
Chartered Institute of Personnel and Development, 70
Checklist rubrics, 33

Children's Health Insurance Program, 180
City/county health departments, 180
Clark, Nicole J., 219–243
Clear direction, 77
Clerkship rotation, 29, 136
Cleveland Clinic Florida, 135–136
Clinical activities/services for patients. 225
Clinical documentation, 123
Clinical pharmacy services, 36
Clinical programs, 123
Clinical specialist-centered model, 132, 133
Closed-ended question, 28
Clusters, 25
Coaching, 29, 44, 61–62, 275
Code of Ethics, 156, 157
Cognitive learning, 71–72, 76
Cognitive opportunities, 225
Cohen, Tammy, 83–118
Collaborative practice agreements, 86
Colleague connections/networks, 250, 263
Colorado schools of pharmacy, 154
Commission on Certification in Geriatric Pharmacy, 261
Communication, 44, 63, 190
  barriers, 27
  case example, 199
  of expectations, 239
  health literacy and, 196–197
  method, 27
  poor, 77
  skills, 25
Communicative disability, 190
Communicator, 25
Community involvement, 213–215
Community pharmacies, 138, 139, 251
Community service
  activities, 18
  education, value of, 17
Compare-and-contrast table, 75–76
Compassion, 31
Competence, 29, 54
  implications of, 232–233
Competencies, 127, 259–260
Competency validation, 78
Competency, 19
  validation, 78
Competency-based assessment, 32–33
Competitive rotations, 95
Complementary and alternative medicine, 186–187
Complicated diseases, 253
Comprehension, 72, 104, 195–196
Conditional accreditation, 269
Confidence, 31
Congruence, 25
Consistency, 19
Constructive feedback, 53, 91
Consulting pharmacy, 254
Content outline, 261
Context, 25
Continuing education, 153, 227
Continuous learning, 173, 187
Continuous professional development, 70, 91, 224, 227
Continuous quality improvement, 111–112, 226
  school requirements, 112, 113
Contract research organizations, 255
Coping skills, 92
Core Competency for Interprofessional Collaborative Practice, 5–6
Corrective action, 211
Cost avoidance impact, 140
Cost-sharing subsidies, 181
Course learning objectives, 87
Covey, Stephen, 122
Credentials, 259–260
  case for additional, 258–259
Criteria-based feedback, 54
Critical care pharmacy, 262
Cuban Americans, 185
Cuéllar, Lourdes M., 171–203
Cultural assessment, 187
Cultural competency, 184, 186, 187
  assessment, 184
Cultural differences, 241
Cultural diversity management, 173–174
Cultural noise, 27
Cultural sensitivity, 187–188
Culturally and linguistically appropriate services, 186
Culture, 172, 173, 175
Current procedural terminology codes, 91
Curriculum vitae, 75
  review of, 263

D

Daily schedule, 50
Data analytics, 126
Davis, David, 51
Debriefing discussion, 78
Decodes, 25
Delaware Healthcare Association, The, 111–112
Delegator, 44
Deming Cycle, 113
DeRemer, Christina, 1–20
Descriptive rubrics, 33, 34
Designated computer, 45
Designated workspace, 45
Desired performance model, 34
Devereaux, Debra S., 59–66
Diabetes
  screening, 178
  experience, 90
Dialysis experience, 90
Didactic learning, 122
  concept application, 91
Difficult learners, situations, 104–106
Direct instruction, 44, 274
Direct observation, 33, 91, 135
Direction, 7
Disabilities, 173, 177, 181, 190
  interactions and, 191
Disabled care, 190–191
Discharge process, 140
Disease management, 90–91
Disease screening/prevention programs, 178
Disparities, access, 178
Dispensing-focused experience, 139
Distributive services, 94
District of Columbia "Oath of Preceptor," 154
Diversity, 7–8, 173
  case examples, 188
  demographics of, 174
  language of, 173
Dodd, Melanie A., 83–118
Dougherty, Tanya M., 171–203
Drug company patient assistance, 180
Drug information access, 224
Drug Information Handbook, 99
Drug monographs, 29

Drug therapy management, 199
Drug utilization reviews, 225
Drug-distribution-centered model, 132, 133
Duffy, Kathleen, 54

E

Early practice experience, 155
Eckel, Fred, 249
Eckel, Stephen F., 119–129
Editing, 29
Educational affiliation agreements, 234–236
Educational benefits, 232–233
Educational goals, 50
Educational newsletters, 224
Educator-centered education, 74–77
Eiland, Lea S., 205–217
Elective advanced specialties, 107–108
Elective rotations, 95
Elements of Style, The, 29
Emotional benefits, 225
Empathy, 92
Employee benefit consulting, 255
Encodes, 25
End-stage renal disease, 181
English II, Dale E., 67–81
Enthusiasm, 35
Environmental factors, 142
Environmental noise, 27
Ethics, 156–157
Ethnicity, 173, 178
Evaluation(s), 53, 72
  instruments, 101–102
  sharing, 239–240
  summaries, 111
Evidence-based medicine, 175
Evidence-based pharmaceutical care, 90–91
Ewachiw, Bryna Delman, 219–243
Examination, 101
  preparation, 261
Expectations, 49–50
  communications of, 239
  setting, 15–16
Experiential benefits
  pharmacy site, 230
  school, 230
Experiential education, 3, 68, 74
  learning strategies, 71–72
  practice principles, 69
  progressing to solo flight, 73
  standards impacting, 3–4
  transition to, 47
  workplace skills and, 77–80
Experiential program
  designing curriculum for, 107
  developing, implementing, coordinating, monitoring, 106–107
  evaluating, 111
  involving others in, 115
  manual components for, 108
  manual construction for, 108
  orientation for, 108–109
  patient involvement in, 110–111
  staff, healthcare professionals, patients involvement, 110–111, 114–116
  supplemental activities, 107
Experiential teaching, 44, 85
Experiential training
  continuous quality improvement process in, 111–114
  elements of successful, 134
  staff recruitment and retention with, 133
Expert, 44
EXPLORE process, 75–76
Extenders, 134–135

F

Facebook, 208, 209, 263
Face-to-face communication, 24, 25
Facilitation, 44, 275
Facilitator, 44
Fact-based questioning, 51–52
Faculty
  committee involvement, 225
  preceptors, 232
Failing learner/student, 35, 106, 241
  documenting reasons for, 240
Failure, 53–54
  criteria, 103
Faith role, 189
Family Educational Rights and Privacy Act of 1974, 236
Family role, 189
Fasting, 189
Federally qualified health centers, 183
Fédèration International Pharmaceutique, 70
Feedback, 6–7, 20, 28, 35, 43–44, 52–53, 76, 92
  environment for, 142
  -evaluation correlation, 55
  general vs. specific, 105
  as motivator, 53
  specificity of, 142
  timing, 142
Fellowships, 277
  resources for, 258
Financial benefits, 232
Financial incentives, 225
Flesch reading ease score, 196
Flesch-Kincaid grade level score, 196
Food and Drug Administration, 90, 95, 255
Formal assessment methods, 33–34
Formal authority, 44
Formal evaluation, 237–238
Format for Formulary Submission, 254
Formative assessment/evaluation, 32, 33, 99–100, 102
Formulary management, 124–125
Forums, 142
Frustration, 92

G

Gans, Dr. John, 61
Gen Y, 22–23
Gender
  diversity, 174
  orientation, 177
General feedback, 105
General hospital rotation, 87
Generation X, 22, 23, 42
Generation Z, 42, 43
Generational traits, 22, 23
Generics, low cost, 179, 180
Geriatric pharmacy practice, 262
Getting Things Done, 122
Ghandi, Mahatma, 61

Ginsburg, Diane B., 151–170
Glowczewski, Jason E., 119–129
Government pharmacy, 254–255
Grant writing support, 225
Grasha, Anthony, 44
Gregory, David F., 219–243
Group discussions, 122
Group learning/training, 75, 136–137
Group purchasing organizations, 256
Group work, 78

H

Hall, Christine L., 267–278
Health disparities, 177–178
  and communicating with patients at risk, 179
  examples of, 178
Health education materials, 186
Health homes, 183
Health inequalities, 177–178
Health Insurance Portability and Accountability Act, 157–158, 209
Health literacy, 192
  assessment, 194–195
  case example, 198
  communication and, 196–97
  effects of, 194
  health outcomes and, 196
  healthcare services use and, 196
  individual factors in, 192
  interventions, 195–196
  levels of, 193
  outcomes and, 194
  skills and, 197
  system factors in, 192
Health outcomes, 196
Health professional feedback, 114
Health Resources and Services Administration 340B drug pricing, 126
Healthcare distributors, 256
Healthcare information technology companies, 256
Healthcare professionals, 114–115
Healthcare services use, 196
Healthy People 2020, 177, 196
Hematology/oncology experience, 90
Herbal medicine, 179
Hidden curriculum, 207
Hinduism, 189
Hippocratic Oath, 2
Hispanics, 185–186, 189
Holistic approach, 175
Hope, 31
Hospital Consumer Assessment of Healthcare Providers and Systems, 135
Hospital-based (health-system) pharmacy, 251–252
Huke, Tony, 267–278

I

Immigration status, 179
Immunizations, 86, 141
Inclusion, 173
Indian Health Service, 90, 95, 179, 197, 255
Influenza clinics, 141
Informatics pharmacist, 247
Information competency, 78
In-kind gifts, 225
Inpatient area, 123
Inpatient/outpatient services, 139–140
Instagram, 208, 209
Institute for Safe Medicine Practices, 196
Institute of Medicine, 175, 251
  on health disparities, 177
  Report: Health Professions Education: A Bridge to Quality, 4
Institutional review board, 135
Instructional styles, 75
Insulin, 97
Integrated, team-based, patient-centered model, 136
Integrative patient care environment, 45–46
Integrity, 31
Intellectual noise, 27
Interactions, 50
Interdisciplinary care, 140
Intermediate practice experiences, 87–88
Internal medicine rotation, 95
International Classification of Functioning, Disability, and Health, 190
International Pharmaceutical Federation, 255
International Pharmacy Student Federation, 90
Internship program, 153
Interpersonal communication, 25–26
Interpersonal competency, 78
Interpersonal factors, 142
Interpersonal relationships, 47–48
Interpersonal skills, 30–31, 93
Interpreter use, 197
Interprofessional education, 227
Interprofessional team, 78
Interview skills polishing, 264
Intraprofessional work, 139
Introductory pharmacy practice experiences, (IPPEs), 85–87, 268
Invitation to college events, 225
Islam, 189

J

Jehovah's Witnesses, 189
Johnson, Spencer, 37
Joint Commission, 232, 260
Joint Commission of Pharmacy Practitioners, 259, 262
Journal article critique/review, 33, 79
Journal of the American Pharmacy Association, 224
Judaism, 189

K

Kasbekar, Nishaminy, 205–217
Kentucky preceptor written request, 154
Kinesthetic learners, 95, 96
Klann, Gene, 50
Knowledge, 68–69, 72
  sharing, 7
Kosher gelatin, 189
Kutscher, Eric C., 67–81

L

Laboratory staff, 116
Lamontagne, Robert L., 151–170
Latino origin, 185, 186
Layered learning, 135

practice model, 77, 122
Leadership, 49, 121–122
exposure, 36–37
skills, 35–38
training, 37
Leading questions, 28
Lean methodology, 128
Learner(s)
benefits, administrative/management rotation, 129
-centered education, 74–77
competencies, feedback to schools, 238
evaluation, 99
evaluations summaries, 226
expectations, 239–240
feedback, 228
partnership expectations, 229–230
performance documentation, 238–239
progress evaluations, 237
questionnaire, 226
responsibilities, 49
types of, 95–96
Learning
by doing, 6
environment, 45
objective–assessment method planning table, 32
promotion, 16–17
pyramid, 274, 275
tools, 98–99
Legal standing, 154
Letter of intent, 270
Letter of recommendation, 55–56
Liability insurance, 155
Liability issues, 155
Liebl, Michael G., 41–57
Lifelong educational habits, 69–70
Lifelong learning, 63, 91
Likert scale, 195
LinkedIn, 263
Lisinopril, 97
Listening, 28, 64
Logic-based teaching system, 105
Longitudinal experiential training, 135
Longitudinal rotations, 95
Long-term care pharmacy, 252

M

Mambourg, Scott E., 245–265
Managed care pharmacy, 252–253
Management, 122
competencies, 122
Management/administrative staff, 116
Manasse, Henri, 3
Marketing materials, 134
Match, 271–272
Maxwell, John C., 37, 49, 51, 121
McCarthy, Michelle W., 267–278
Meaningful Use, 182, 183
Medicaid, 180, 181–182, 192, 255
Medical homes, 256–257
Medical information group, 254
Medical marketing and communication organizations, 255–256
Medical University of South Carolina, 138, 141
Medicare, 180, 181–182, 182
Medicare Prescription Drug, Improvement and Modernization Act, 247, 255
Medication
evaluation, 79
history review, 79
management, achieving comprehensive, 199
reviews, 196
-use process map, 79
Medication therapy management programs, 140, 179, 225
Medications/treatment modalities currency, 225–226
Mental disability, 190
Mentor
as coach and advisor, 62
finding, 65
as guide and host, 62
regeneration, 64
as role model, 62–63
Mentoring, 2, 3, 7, 24, 60–62, 133
compared to precepting, coaching, 61–62
history of, 60–61
methods, 65
paradigm, 63
pitfalls, challenges of, 64–65
roles, 62–63
Mentor-protégé
relationship, 63, 65
goals, benefits, 64
Mentorship, 247, 248
Message, 25
Metformin, 96, 97
Metoprolol, 97
Mexican Americans, 190
Microsoft Word, 196
Millennial Generation, 22–23, 42–43
economic facts about, 23
engaging learners, 24
job flexibility, 23
making a difference, 23
technology use by, 23
Miyares, Marta A., 171–203
Modeling, 44, 275
Money Management International, 180
Motivation, 92, 103, 134
Multi-racial, 185
Murphy, John E., 205–217
Muslims, 189
Mutuality, 64

N

National Assessment of Adult Literacy, 192–193
National Association of Chain Drug Stories, 95
National Center for Complementary and Alternative Medicine, 187
National Center for Cultural Competence, 184
National Center for Education Statistics, 192
National Committee for Quality Assurance, 260
National Committee on Vital and Health Statistics, 255
National Healthcare Disparities Report, 178
National Institute for Standards in Pharmaceutical Credentialing, 262
National Institutes of Health, 90
National Matching Services, 271–272
National Partnership to End Health Disparities, 177
National Prevention and Health Promotion Strategy, 177
National Quality Forum, 255
National Transitions of Care Coalition, 198–199
Native Hawaiian, 185
Negative feedback, 53
Negative role models, 207

Networking opportunities, 225
New perspectives, 225
No faculty preceptors, 232
Noise, 27
Nonpharmacy personnel, shadowing, 99
Nonverbal communication, 25, 26, 27
Northeastern University, 140
Now, Discover Your Strengths, 142
Nuclear pharmacy, 262
Numeracy skills, 192–194
Nursing, 116
Nursing and Midwifery Council, 54
Nutrition support pharmacy, 262

O

Oath of a Pharmacist, 156–157, 206
Objective criteria, activities for, 102
Observation, 92, 101
  encouragement, 18
  record, 101
  record retrieval, 101
Office of Management and Budget, 184–185
Office of Minority Health, 186
Office of Minority Health and Health Equity, 177
Ohio preceptor qualifications, 154
Ohio State University College of Pharmacy, The, 139–140
  Partner for Promotion program, 139
Oklahoma preceptor exam, 154
Oncology pharmacy practice, 262
Open-ended question, 28, 264
Open-minded, 43
Optimism, 31
Oral examination, 101
Oregon nonpharmacist preceptors, 154
Organization benefits, administrative/management rotation, 128
Orientation, 6, 12–13, 48–50. 108–109, 126, 135–136, 138
  checklist, 109
Outcomes-oriented learning, 71
Outpatient pharmacies, 138, 139, 140
Overview of Race and Hispanic Origin: 2010 Census, 174

P

Pacific Islander, 185
Pandya, Dehuti A., 83–118
Paraphrasing, 28
Paraverbal communication, 25, 27
Parish, Edward, 3
Partnership(s), 236
  agreements, school issues, 228–229
  benefits, school, 227–228
  development, school perspective, 227
  establishment, 221–222
  importance, 220–221
  learner expectations, 229–230
  maintenance, 226–228
  preceptor expectations, 229
  teaching method, 86
Passive learning, 241
Patient care
  enhancement, 138
  environment, integrative, 45–46
  experiences, 77
  services, 133–134, 139
  skills, 86, 89
Patient(s), 114–116
  case studies, 91
  confidentiality, 157–158
  feedback, 114
  follow through healthcare process, 79
  interviews, 135
  satisfaction, 125
Patient care
  enhancement, 138
  environment, integrative, 45–46
  experiences, 77
  services, 133–134, 139
  skills, 86, 89
Patient-centered
  communication skills, 196
  integrated pharmacy practice model, 136
  medical home, 183
  -integrated model, 132, 133
  model, 139
Patient Protection and Affordable Care Act, 180
Pediatric Camps, 90
Peer assessment, 113, 114
Peer-to-peer discussions, 227
Performance improvement projects, 225
Performance management, 141–142
Periodic quality assurance evaluation, 227–228
Personal advancement, 233
Personal mission statement, 54–55, 70
Personal model, 44
Personal space, 189
Personality
  assessment tool, 142
  differences, 241
Personalized feedback, 24
PGY1 residents, 258, 274–277
  expectations, 274
  requirements, 273–274
PGY2 residents, 258, 277
Pharmaceutical care, 90–91
Pharmaceutical distributors, 256
Pharmaceutical industry, 95, 254
Pharmaceutical sciences, 259
Pharmacist
  age distribution by race/ethnicity, 175
  community involvement, 213–215
  extenders, 134–135, 141–142
  responsibilities, 116
  role, 232
Pharmacist-to-patient ratios, 141–142
Pharmacotherapy, 262
Pharmacy administration
  areas of focus, 123–127
  learning experience, 120
  precepting benefits, 128–129
  principles, 121–122
Pharmacy administrative/management rotation, 127–128
Pharmacy board
  certification, 261
  specialties, 262
Pharmacy budget, 78
Pharmacy curricula, 2, 162
Pharmacy education, 3
Pharmacy fellowships, 258
Pharmacy fraternities, 209
Pharmacy information systems, 126
Pharmacy organizations, 126–127
Pharmacy practice
  advancement, 126–127

improvement, 117
models, 132–133
residencies, 2–3, 257–258
settings, 246–247
staff, 114–115
Pharmacy Practice Model Initiative (2010) Summit, 132, 199, 232
Pharmacy program experiential requirements, 155
Pharmacy purchasing/supply chain, 124
Pharmacy school standardization, 107
Pharmacy student diversity, 174–175
Pharmacy technicians, 115, 116
Phillips, Holly J., 21–39
Physical disability, 190–191
Physicians, 116
Physiological noise, 27
Plan-Do-Check-Act (PDCA), 113
Policies and procedures, 127–128
Politics, 77
Population estimates, 185
Population health, 213
Portfolios, 11–12, 33
Positive feedback, 53
Positive reinforcement, 24
Postgraduate year 1 residencies, 258, 274–277
expectations, 274
requirements, 273–274
Postgraduate year 2 residencies, 258, 277
Postgraduate year 3 residencies, 277
Post-Match Scramble, 272
Practical examination, 101
Practice, 35
model, 9–11
setting, 104
Practice-based experience, 122
Practice-based research environment, 46
Praise, 99, 100
Pre-candidate, 269
Precepting, 61–62
leadership continuum in, 36–37
different learner levels and, 272–273
potential challenges of, 103–106
origins of, 2–3
Preceptor(s)
application 153
approval, certification, 153–154
benefits, administrative/management rotation, 128–20
biases, perceived stereotypes, 175–176
certification, 152–153
for clinical research fellows, 274
committee meetings, 227
core values, 7–8
development, 222, 224
development, benefits of, 224–226
evaluation and feedback, 228
feedback to schools, 226, 238
getting started, 237
guidelines, 152
-intern ratios, 153
job description, 7
learner interaction, 44
learner progress evaluations, 237
learning students' experiences, goals, 13–14
legal standing, 154
length of practice, 153
multi-faceted role of, 49
partnership expectations, 229
peer-to-peer discussions, 227
performance evaluations, 228
pharmacy practice aspect of, 8–9
pharmacy residents as, 93–94
PGY1 post-residency employment options, 278
PGY1 resident/APPI student case scenario, 276
responsibilities of, 116
role model, 176–177
role determination, 49
roles for PGY1 residents, 274–277, 278
roles for PGY2 residents, 274, 277
roles for students, 274–276
seasoned, 9–11
self-improvement, 236
showcases, 134
teaching for diversity, 176
training seminar, 154
traits of effective, 43–44
ultimate responsibility of, 155
Preceptor-learner relationship, 237
career planning conversation, 248
effective, 42
final evaluation, 55–56
fostering before arrival, 46–48
mutual goals setting, 49
orientation, 48–50
role modeling, 50–51
self-assessment, 42–43
self-reflection, 51–52
winning environments, 45–46
Preliminary accreditation, 269
Premium subsidies, 181
Preparation, 236–237
Prescott, Albert B., 3
Presentation sessions, 138
Proactive management, 124
Probing questions, 28
Problem identification activities, 97
Problem learners, working with, 240–241
Problem solving, 91
diarrhea case scenario, 97, 98
skills, 96–98, 105
triad, 97, 98
Problem-based learning, 71
Problems, 240
Process of care measures, 125–126
Producers, 49
Productive teaching, 16, 17
Profession, 206
characteristics of, 207
evolution of, 226
giving back to, 226
Professional, 206
traits of, 207
Professional advancement, 233
Professional conduct, 103, 104
Professional fraternities, 215
Professional growth, 92
Professional networking websites, 65
Professional organizations/associations, 215–216, 255
presentations, 227
Professional skills, 89
Professional socialization, 206, 207
Professional society activities, 18
Professional writing tone, 26
Professionalism, 7, 19, 29, 206–208
lapses in, 210–211
social media and, 208–209
tenets of, 208
Professionalization, 206, 207–208

Progress notes, 29
Project due dates, 78
Promatores de Salud, 182, 183, 186
Protected health information, 157
Protégé as peer, 64
Psychiatric pharmacy practice, 262
Psychological noise, 27
Public Health Service, 254–255

Q

Qualitative goals, 92
Quality assurance/improvement, 128, 260
Quantitative goals, 92
Questioning skills, 28

R

Race, 173
Racial inequality, 180–181
Ramadan, 189
Rapid Estimate of Adult Literacy Medicine, 195
Rapport, 24, 30
Rating scale, 33
Rationale, 24
Realistic assessment, 32
Receiver, 25
Reciprocity, 64
Recognition, 225
Recognizable assessment, 32
Reference letter writer, 270
Reflection, 33, 44
Reflective questions, 51
Reflective responses, 28
Relationships, 30
Relaxed environment, 24
Relevance, 24
Relevant assessment, 32
Reliable assessment, 32
Religion, 188–189
Religious symbols, 189
Remediation options, 54
Report-back activities, 45
Reprimand, 99, 100
Research, 254
    study, 92–93
    support, 225
Research-based methods, 24
Residency program
    accreditation, 269
    advantages of, 270
    case scenarios, 272
    precepting, 3
    process, 268–269
    selection, 275
    resources, 258, 270
    teaching experience, 94
    types of, 258
Residency Showcase, 272
Resident
    education satisfaction survey, 144–148
    evaluation, 102
    goals, 102
    manpower of, 132–134
    orientation, 137
    orientation schedule, 149–150
    as pharmacist–extenders, 134
    pre-rotation meeting, 142
    rotations, 136
    scheduling, 137–138
Resilience, 54
Resources, 77
    assessment of, 180
    expansion of, 180
    implications of, 232
Respect, 7, 35, 190
Responsibility, 92
Résumé, 75
Revenue cycle, 126
Revised North American Pharmacist Licensure Examination Competency Statements, 4, 5
Risk understanding, 194
Roberts, Rochelle M., 21–39
Robke, Jill True, 131–150
Role delineation, 261
Role model/modeling, 35, 50–51, 62–63, 93, 196, 208, 216
Roosevelt, Eleanor, 62
Rotation
    assignments, 142
    expectations, 6
    goals of, 239
    longer experience, 139
    objectives, 61
    orientation checklist, 48
    planning, 53
    post-test, 91
    pretest, 91
    schedules, 237
    structure, 6
Rubric, 33
Ruskin, John, 61

S

Saint Luke's Health System of Kansas City, 136, 137
Sanborn, Michael D., 245–265
Sargeant, Joan, 51
Satisfaction surveys, 134
Schedule building, 14
Scheduling feedback, 239
Scholarly development, 92
Schön, Donald A., 52
School
    benefits, 233–234
    expectations, 239–240
    feedback, 114
    relationships, 238–239
    rotation needs, 227
School administrator
    relationship, 222
    site visits, 226, 228
Scoring guide, 33
Secretary's Commission on Achieving Necessary Skills, 77
Selective listening, 28
Self-assessment, 42–43, 51
Self-directed learning, 16, 17
Self-efficacy, 193
Self-reflection, 45, 51–52, 79, 91
Semantics, 26, 27
Sender, 25
Sequential advanced experiences, 135–136
Sequential experiential training, 135
Sequential scheduling, 142

Service learning
  environments, 17, 18
  topics, 18
Service-based education, 17
Seven Habits of Highly Effective People, 122
Sexual orientation, 177
Shadowing, 99, 133, 134
Sheaffer, Steven L., 1–20
Short Test of Functional Health Literacy in Adults, 195
Simplified instructions, 34
Simulation training, 74
Site evaluation, 227–228
Six Sigma, 113
Skills assessment, 22, 78
Skills-based workshops, 259
Smart phone applications, 98–99
Snapchat, 208
SOAP note, 33
Social assessment, 181
Social determinants of health, 177–178
Social environment, 177
Social media, 208–209
  appropriate use of, 209
  recommendation, 210
Social Security Administration, 180
Social Security Disability, 180
Socioeconomic inequality, 180–181
Socioeconomic status, 179
Specialization areas, 252
Specialty education, 92
Specialty pharmacy, 124, 253
Specific feedback, 105
Specific responsibilities, 50
Staff schedule, 78
Standardization, 19
Standards establishment, 15
State board of pharmacy, 95
  requirements for preceptors, 152–153, 159–160
Step-wise instructions, 34
Sterile compounding area, 123
Stipends, 133
Strategic planning, 125
Stress, 92
Student(s)
  contract, 222, 223
  education satisfaction survey, 144–148
  evaluation, 102
  expectations, 274
  feedback, 114
  healthcare needs, 92
  manpower of, 132–134
  master schedule, 137
  as pharmacist extender, 134–135
  pharmacist practice model, 109–110
  requirements, 273
  role delineation, 91
Style manuals, 29
Sulfamethoxazole/trimethoprim, 97, 98
Summarizing, 28
Summative assessment/evaluation, 32, 33, 100
  methods of, 101
  success secrets, 102–103
  timing of, 100–101
Supplemental Security Income, 180
Support, 190
Supportive, 35
Supportive physical environment, 45
Survey Monkey, 226
Synthesis, 72, 73
Systems relationships, 79

T

Task analysis, 261
Task completion, 34
Teach Back, 197
Teaching
  environment, 45
  logic-based method of, 96
  methods, 95
  skills, 34–35
  style, 44
  tools, 98–99
  using students to teach others, 93
Team of learners, 135
  leadership, 78
  learning, 74, 77
  membership, 78
Technology use, 79–80, 98–99
Test of Functional Health Literacy in Adults, 195
Texas pharmacy diversity, 174
Time commitment, 7
Time management, 16
To Err Is Human: Building a Safer Health System, 251
Tobramycin adjustment, 91
Total Quality Management, 113
Traditionalists, 23
Trahan, Jason L., 83–118
Training future pharmacists, 226
Transactional model, 25–26
Transformation, 64
Transitions of care, 140, 199–200
  best practices, 197–198
  management, 200
  services, 138
Transitions of Care Consensus Conference, 198
Transparency, 43
Trust, 31, 62
Tuskegee Syphilis Study, 178, 188
21 Irrefutable Laws of Leadership, The, 121
Twitter, 208, 209, 263

U

U.S. Armed Services, 255
U.S. Bureau of Census, 190–191
  Population Estimates Program, 184–185
U.S. Department of Education, 192
U.S. Department of Health and Human Services, 177
U.S. Department of Labor, 77
U.S. poverty rate, 181
U.S. Public Health Service, 90
Uninsured individuals, 182
United States Pharmacopeia, 90, 123, 196
University experiential requirements by state, 161–167
University of Kansas Hospital, The, 136–137
University of Michigan College of Pharmacy University Hospital, 140
University of North Carolina, 249
University of Oklahoma College of Pharmacy, 141
University of Texas at Austin College of Pharmacy, 103, 104, 155
University websites, 168–170
Unprofessional behavior, 103, 211–213
  case example, 212, 214
  discussions, 213

V

VA Learners; Perceptions Survey, 45
Value-based purchasing, 125, 126
Values, 63
Van Amburgh, Jenny A., 41–57
Varkey, Alex C., 41–57
Verbal communication, 27
Verbal cues, 34
Verbalization, 35
Veteran's Administration, 95, 255
Visual learners, 95, 96
Vulnerable patient populations, 198

W

Wayne State University College of Pharmacy, 134
Websites, 98–99
Western University of Health Sciences, 140
White Coat Ceremony, 206
WIFM (What's In it For Me?), 6–7
Wilkinson, Samaneh T., 131–150
Withholding feedback, 53
Work internships, 88
Workplace
  politics, 79
  skills, 77–80
World Health Organization, 177
Writer's block, 29
Writing, 75
Written communication, 28–30
Written examination, 101

Y

Yam, Nancy T., 1–20

Z

Zilz, David A., 59–66