

# Shaping the future of pharmacy practice

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Change is a constant in one's personal life, our profession, our country, and the world. Change is usually incremental and slow. However, the coronavirus disease 2019 (COVID-19) pandemic taught us that pharmacists and other healthcare providers, with the support of pharmaceutical manufacturers and federal, state, and local governments, can accelerate the pace of change during a crisis. The pharmacy profession is not in a crisis. However, the faster we take steps to shape further the future of pharmacy practice, the more likely the role of pharmacists as healthcare providers will expand. I am hopeful that some of my perspectives—presented here tonight—will contribute to the ongoing profession-wide conversation about the future of pharmacy practice.

## Pharmacy association teamwork

I have benefited from my memberships in ASHP, the American Pharmacists Association (APhA), the American College of Clinical Pharmacy (ACCP), and the American Association of Colleges of Pharmacy (AACP). Some of the most challenging areas for associations to address are legislative and regulatory matters affecting pharmacy and healthcare, payment systems for pharmacy services, and collaboration with other health organizations to improve healthcare.

My question to pharmacy association leaders is whether these and other common interests or services of pharmacy associations can be more effectively and efficiently provided by working together more effectively? Members of the Joint Commission of Pharmacy Practitioners (JCPP) should discuss potential benefits and methods of working together to achieve common interests and services. Some common interest areas or services that would benefit from a unified voice include

- Developing profession-wide plans for the future of pharmacy practice
- Achieving provider status for pharmacists nationally and in all states
- Addressing other federal legislative and regulatory matters that affect our patients and our practices
- Advocating for equitable payment systems for drug fulfillment and clinical services
- Partnering with other healthcare organizations to address common issues
- Communicating with the public about the value of pharmacist care

## Strategic planning, metrics, and tools for pharmacy executives to advance pharmacy practice

ASHP has a long history of conducting consensus conferences to determine the most likely and desirable changes in health-system pharmacy settings in the future. The consensus findings are helpful for strategic planning by pharmacy executives in healthcare systems. The ASHP Practice Advancement Initiative (PAI) 2030<sup>1</sup> provides health-system pharmacy leaders with tools and resources to develop or expand services. All pharmacy practice organizations should develop a method to determine consensus on the most likely and desirable practice changes that would affect their areas of pharmacy practice in the future. Pharmacy organizations should also develop quantitative and qualitative metrics to annually track the progress of their members towards achieving desirable practice changes. Lastly, all pharmacy organizations should provide tools and resources (eg, PAI 2030 initiative, ACCP's comprehensive medication management initiative<sup>2</sup>) to help pharmacists develop pharmacy services.

Current healthcare and pharmacy practice trends predict the future and opportunities to improve and expand pharmacy practice. Pharmacy leaders

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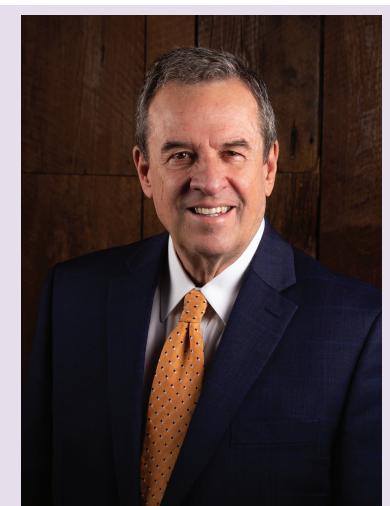
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should review and address trends as a component of strategic planning.

### Changes in pharmacy practice

**How can we reduce the costs of drug fulfillment patient services?** All patient care services must be clinically effective, safe, valued, and cost-effective. Using automation, technologies, and pharmacy technicians, we can further reduce the cost of drug fulfillment services and reduce the time spent by pharmacists dispensing. The profession should encourage state governments and pharmacy boards to establish rules and regulations that expand the role of technicians. An initial change would be to allow technicians to dispense refill prescriptions independently, with pharmacists' consultation as needed. Long-term pharmacy technicians who are adequately educated and certified should provide drug fulfillment services independently. This change would have a considerable impact on the cost of drug fulfillment services in community pharmacies. At the same time, this would allow pharmacists in independent and pharmacy chain pharmacies to focus on providing value-added clinical services. Over the long term, pharmacists need to be valued for the comprehensive medication management services pharmacists provide and not drug fulfillment services.

A question I have is: What do consumers want from community pharmacies? Many consumers wish to minimize the time to obtain prescriptions and opt to use drive-thru windows or mail order to obtain their prescriptions. Like the mail-order pharmacy programs that preceded them, corporations such as Amazon may lead the way to develop safe, cost-effective, and profitable drug fulfillment services. If you look online at the Amazon pharmacy service section, you will immediately recognize that the focus of Amazon pharmacy is drug fulfillment and delivery services. Amazon uses automation and technology processes to accept prescriptions, review prescriptions for potential safety issues, gather insurance information, and



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He has held positions as a Director of Pharmacy (City Memphis Hospital, Memphis, TN, and Medical University of South Carolina Medical Center, Charleston), academic chairman (College of Pharmacy, University of Tennessee Center for the Health Sciences, Memphis; College of Pharmacy, Medical University of South Carolina, Charleston; and College of Pharmacy, University of Iowa, Iowa City) as well as a teacher and student and resident preceptor.

He is the author of over 100 publications. His research interests consist of evaluative and outcome studies dealing with pharmaceutical education and pharmacy practice.

He is a past president of the American Association of Colleges of Pharmacy and the American College of Clinical Pharmacy (ACCP). He served on the ASHP Commission on Credentialing for 6 years and was its chair for 2 years.

Dr. Miller is a recipient of the ACCP Parker Medal.

determine the insurance copay and price without insurance. Pharmacists are available 24/7 to answer the

questions of patients who need advice. I assume that contracted pharmacists will virtually review pharmacy prescriptions, and fulfillment centers will use technicians and automated systems to count and bottle prescriptions. This drug fulfillment model should reduce the use of pharmacists and pharmacy technicians. The unknown question is whether consumers using Amazon Pharmacy (Amazon.com, Inc., Seattle, WA) will have adequate access to pharmacists for counseling services? This example reinforces the need for community pharmacies to provide clinical services rather than drug fulfillment services.

### How can we expand community-based pharmacy clinical services?

Community pharmacies are no longer only providing drug dispensing and patient care counseling services. Progressive community pharmacies in independent and chain pharmacy settings offer medication therapy management, immunization, and health and wellness services. Because community pharmacies are more readily available to the public than physician offices and clinics, community pharmacists are poised to provide healthcare services beyond drug dispensing and counseling. COVID-19 vaccinations have brought national attention to pharmacists as patient care providers. There is a tremendous national need for health and wellness services. Pharmacy organizations should advocate for pharmacists to be another healthcare provider of comprehensive medication management and health and wellness services (eg, screenings, wellness programs, disease prevention education, point-of-care services).

Corporate pharmacy chain leaders are cautiously investing in new patient care services within pharmacies. CVS Health Corporation and Walgreens currently employ nurse practitioners or physician assistants to provide urgent care in mini-clinics embedded in their pharmacy stores. Walgreens recently announced a plan to add physicians to offer chronic care in new pharmacy stores with expanded clinic space. One

must ask why pharmacists aren't involved in these clinics. The reasons are likely the lack of pharmacy provider status and payment systems for clinical service, as well as concerns because of differences in state pharmacy laws and regulations. Another factor that we must consider is the cost of pharmacists versus nurse practitioners and physician assistants providing these services. APhA should continue to partner with chain pharmacies and the National Association of Chain Drug Stores to eliminate these barriers in community pharmacies. At some point, these barriers will be minimized or eliminated and allow pharmacists to team with nurses, physician assistants, and physicians to provide patient care services in chain pharmacies. This change alone would transform community pharmacy practice.

#### How can we improve practice models in hospitals?

Hospital pharmacy practice models should be conducive to interdisciplinary team care. The best healthcare is provided by a team of physicians, nurses, pharmacists, and other health professionals. Each team member must be a clinician qualified and experienced in treating patients on a medical service (eg, oncology, transplant, psychiatry). Healthcare teams are most effective when the players trust each other and recognize each team member's value to improving patient care. Some hospital pharmacy departments use practice models that require pharmacists to provide distribution and clinical pharmacy services on a rotating basis or that rotate decentralized pharmacists across multiple medical services. These models often do not allow pharmacists to participate in healthcare teams that meet daily for huddles or rounds. Pharmacists must be essential interdisciplinary team members. During a residency accreditation survey, a telling way to know whether a pharmacist is a team member is to ask physicians and nurses an open-ended question on what pharmacists do that adds value to their patient care team. Suppose the response is something like "Pharmacists can provide information

to answer questions about drug dosing, allergies, medicine costs, or insurance issues when needed." In that case, although pharmacists are helpful when needed, they are not a core member of a patient care team member, but more of a consultant. When a physician responds by saying the name of the pharmacist(s) and indicates that pharmacists are needed to help determine drug therapy for patients, I know physicians value the contributions pharmacists add to patient care teams. An element of being essential is for pharmacists to participate in huddles or rounding teams daily. If physicians and nurse practitioners don't expect pharmacists to be there every day, a pharmacist is not a necessary patient care team member. Health-system pharmacy directors need to develop practice models that facilitate pharmacists' role as essential team members.

**What is the future of pharmacy specialization?** Precision medicine for disease treatment and prevention will drive the future of healthcare. Board certification should become an employment requirement for pharmacy specialists in health-system pharmacy departments and ambulatory clinics providing clinical services. Graduates of PharmD programs who want to be a specialist should complete a postgraduate year 2 (PGY2) residency program. Recognition of the value of pharmacy specialists by the federal government, payers, and the public is essential to the profession.

Graduates of all medical residency programs are all considered specialists, including residents in internal medicine and family medicine. Similarly, in pharmacy, residents completing PGY2 ambulatory care and pharmacotherapy residency programs are considered pharmacy specialists. As clinical services expand in all pharmacy settings, all pharmacy generalists and specialists will be board certified. As the clinical services provided by community and ambulatory care pharmacists converge, I expect one term (eg, "community pharmacists") will be used for pharmacy specialists who practice outside of hospital settings.

**Continuum of pharmacy education.** I view pharmacy education as a continuum that includes the PharmD, PGY1, and PGY2 educational programs. Educational outcomes should be more cognitively focused and more specialized as students progress from a PharmD to a PGY1 and then a PGY2 educational program. Patient care competencies for PharmD, PGY1, and PGY2 programs are now similar, making it more challenging to distinguish the progression of outcomes in the continuum of pharmacy education.

Accreditation Council for Pharmacy Education (ACPE) standards state that the graduate of a PharmD program can provide patient-centered care.<sup>3</sup> ACPE requires that pharmacy curricula include advanced pharmacy practice experiences (APPEs) in community pharmacy, ambulatory patient care, hospital/health-system pharmacy, and inpatient general medicine patient care. Student experiences vary based upon the services provided by preceptors for each required APPE. A preceptor for a community pharmacy APPE may focus on drug dispensing and counseling services. An ambulatory care preceptor may focus on diabetes education only. Are all students prepared upon graduation to provide patient-centered care in community, ambulatory, health-system pharmacy, and general internal medicine settings? During interviews for PGY1 residency programs, students often state that they are pursuing a PGY1 residency program to develop further their confidence in providing clinical services. Many students pursuing a PGY1 program have identified an area of pharmacy practice that they are interested in practicing—for example, hospital, ambulatory care, or community practice. These students choose PGY1 programs in the area of their interest. Other students have identified a specialized area of pharmacy practice and plan to complete both a PGY1 program and a PGY2 program. The growing rate at which students complete a PGY1 residency program suggests that current PharmD programs alone will not prepare

graduates to provide comprehensive medication management services.

I suggest that the curricula for PharmD, PGY1, and PGY2 programs should be planned together by representatives of organizations involved in pharmacy education (ie, ACPE, AACP, ASHP, ACCP, APhA, and the Board of Pharmacy Specialties [BPS]). AACP and ACPE should consider hosting a discussion to optimize the outcomes of the continuum of pharmacy education.

To become a pharmacy expert, you must stay knowledgeable and have extensive experience providing pharmacy services. Pharmacy students and residents develop expertise by repeatedly providing various types of pharmacy services (eg, dispensing, patient counseling, wellness, education, comprehensive medication management). ACPE should consider requiring more experiential learning in the new PharmD standard by reducing didactic education to 2 years out of a 4-year program. This change would allow students to further their patient care knowledge, practice skills, and confidence in providing entry-level pharmacy services. More experiential learning would also enable students to identify an area of pharmacy practice they would like to pursue by completing a PGY1 residency program. Some faculty might argue that reducing didactic learning would reduce graduates' knowledge of health sciences. Faculty like me would say that students acquire knowledge best while completing an APPE in a particular area of pharmacy practice.

PGY1 programs should be designed and labeled explicitly as programs in health-system pharmacy, community-based pharmacy, long-term care, managed care, specialty pharmacy programs, etc. Standards for each type of PGY1 residency should include core competencies and patient care learning experiences

specific to the type of PGY1 program. Standards should also require sufficient experience in core patient care services to enable residents to provide services upon graduation independently.

PGY2 programs should be 2 years in length and include experiences in managing common disease states (eg, diabetes, hypertension, asthma) and diseases pertinent to the PGY2 specialty. This will allow PGY2 residents to be able to manage the overall drug therapy needed by patients. PGY2 specialty curricula should align with BPS requirements for each specialty area. The ASHP sections, ACCP Practice and Research Networks, and other pharmacy specialty organizations (eg, College of Psychiatric and Neurologic Pharmacists, Hematology/Oncology Pharmacy Association) should participate in the development of standards and CAGOs (competency areas, goals, and objectives) pertinent to PGY2 programs.

In closing, I remain optimistic about the future of pharmacy practice. As a profession, we are close to a tipping point for all pharmacists to be recognized as healthcare providers. Working together, pharmacy organizations, colleges of pharmacy, and pharmacy leaders in healthcare systems, chain pharmacies, and specialty pharmacy and independent pharmacy settings can lead the way to transform the profession.

**Recognition.** I want first to thank previous Whitney award recipients who supported my receipt of the Whitney award. My receipt of the Harvey A. K. Whitney Lecture Award is humbling and a perfect capstone for my professional life.

I am so thankful to have had two exceptional mentors, Cliff Latiolais and Paul Parker, both Whitney award recipients. Over the years, I have learned from friendships with Harold Godwin, Diane Baker, Roger Anderson, Bill Evans, Jean

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As a pharmacy or college department leader, I used one primary strategy to pursue pharmacy service and educational excellence. I selected, recruited, and surrounded myself with outstanding people that I supported and tried to stay out of their way. So, I thank and applaud my colleagues at Ohio State, University of Kentucky, University of Tennessee Center for Health Sciences, Medical University of South Carolina, and the University of Iowa who made pharmacy service and education better.

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## Disclosures

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