VIEWPOINT – POINT/COUNTERPOINT

Quantity vs Quality in Experiential Education

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As Dr. Svensson articulated, experiential training of future pharmacists has changed significantly. The responsibility to manage these clinical experiences has transitioned from state boards of pharmacy to colleges and schools. My family experienced this change first hand with my grandfather in the 1940s, my father in the 1970s, and then my wife, brother, and I in the 1990s and 2000s as we each completed our respective pharmacy degree programs. These changes coupled with the debate over the future of pharmacy practice have been the topics of many dinner conversations. Dr. Svensson states the main reason regulation of experiential training was moved to schools of pharmacy was to assure that students were spending their time in activities that were preparing them to function as practicing pharmacists.

I agree with this statement but would take it one step further. I would speculate other valid reasons for this change was to improve the quality of the experiences by: (1) offering them in a diversity of practice settings, (2) having adequately trained preceptors, (3) establishing well defined activities, and (4) ensuring rotations were evaluated with appropriate assessments. Over the past few decades, I feel we have made strides to enhance the quality of practice experiences during professional programs, yet acknowledge there is still room for much improvement.

Dr. Svensson voices concerns over the success of advanced pharmacy practice experiences (APPEs) in training our students to be “practice-ready” at graduation. He suggests this may be a result of APPEs occurring in settings that do not provide students with the opportunities to learn skills that prepare them for future practice. He suggests that all APPEs should be limited to those in which students are engaged in the medication use system. Although I do agree that a majority of experiences should target these areas, I would argue that the concerns regarding graduates not being practice-ready may be overstated. If the practice-ready concern turned out to be warranted, mandating medication use system APPEs would only put a band aid on the situation and not truly address underlying issues.

Fundamental to the discussion is how we define practice-ready so we can outline strategies to improve it. I feel it depends on who you talk to, as everyone has his or her own opinion. The Accreditation Council for Pharmacy

Education (ACPE) defines it as “the readiness to provide direct patient care in a variety of settings.”¹ Two commentaries published in *Pharmacotherapy* also provide insight into the lack of a standardized definition. In one commentary, Murphy suggests the doctor of pharmacy (PharmD) program may not be enough to train students to be practice-ready and suggests postgraduate residencies and/or certification programs are also necessary.²

Robinson and Speedie take a different approach and feel strongly that PharmD programs can and are preparing practice-ready graduates. They acknowledge, however, that the lack of assessment of practice-ready skills makes it difficult to definitively claim this. They suggest the North American Pharmacy Licensure Exam (NAPLEX) is a minimal competency standard that doesn’t currently test the higher-level skills required of practice-ready graduates. They propose skill-based assessments be considered in addition to the NAPLEX prior to licensure.³ I agree with this suggestion and would also like to see the adoption of required Entrustable Professional Activities (EPAs) for graduates prior to completing their programs.⁴ These activities are successful in medicine and it is time for the pharmacy profession to develop its own. I am excited that the American Association of Colleges of Pharmacy (AACP) Academic Affairs Committee was charged by President Cynthia Boyle to do just that.⁵ To me, students are practice-ready once they have acquired the training to adapt to a diversity of pharmacy practice environments. These may or may not involve direct patient care settings.

I like the motto the Albany College of Pharmacy and Health Sciences has tagged: “beyond practice ready.”⁶ Students need to be ready for the future not just the practice of today, and we are in the midst of several changes that are redefining the role of pharmacists. Although there will be a lot of similarities, pharmacists roles are and will continue to change regarding interprofessional practice, preventative health, specialty pharmaceuticals, and provider status. Thus, I am more concerned about the attitudes, knowledge, skills, and abilities they learn and their understanding of the processes that underlie pharmacy practice than the environment in which they learn them, considering that in the future, they may need to apply them to new practice settings.

To those who think students are not practice-ready and support a mandate for more APPEs in the medication use setting, I would ask how many APPEs are needed? Some schools provide the minimum of 36 weeks of APPEs, while others require a full year, or 48 weeks. How long should each APPE be to maximize student exposure to each of these experiences—four weeks, five weeks, six weeks, longer? Again this varies greatly among schools around the country. The truth is we don't yet know the answers to these questions, but we do know that more doesn't always mean better. The suggestion that pharmacy graduates need to complete residencies and/or certification programs to be appropriately trained as clinical pharmacists is based on the premise that more training is better. I would suggest this is similar to the argument for requiring all APPEs to be offered in the medication use setting. In both cases, we don't necessarily need more training, we need better quality training.

There are many strategies that could be employed to enhance training rather than requiring more. We could consider expanding use of simulation activities, further integrate introductory pharmacy practice experiences (IPPEs) with APPEs, and enhance our current IPPEs. Each of these areas could target the medication use system outlined by Dr. Svensson. If our pre-APPE development of students is improved, it would better prepare students for their final year of the program and get them closer to being practice-ready. In the APPE year, we could also focus on improving the quality of practice sites by eliminating poor ones and expanding good ones. As an administrator in experiential education for the past decade, I recognize this is much easier said than done.

Experiential program offices face difficulty in finding a sufficient quantity of practice experiences—especially in the areas of hospital or health-system, acute care or medicine, and ambulatory care. In light of these challenges, the focus has unfortunately begun to shift to quantity instead of quality. Programs are just trying to survive. I would like to see the shift back to quality, but firmly believe for this to happen, other changes to the profession must occur. I advocate for more pharmacists being expected to meet the intent of the final phrase of the Oath of a Pharmacist: "I will utilize my knowledge, skills, experiences, and values to prepare the next generation of pharmacists."⁷ For this to be successful, pharmacy employers must place increased emphasis and value on the training of pharmacy students. Being a preceptor should be an expectation of the job. Preceptors should be provided protected time to educate students and be rewarded for their efforts. As it stands today, there are pockets of amazing preceptors and excellent practice sites that are covering the heavy load of experiential education. They need help.

The ACPE Standards put more emphasis on quality assurance and expect it will be a core component of all experiential programs. These programs must assess preceptors, sites, students, staff, and practice experience syllabi. Both individual and group analyses should be done to determine the effectiveness of each program. As programs attempt to enhance their practice experiences, they are somewhat limited by regulatory bodies, including state boards of pharmacy that place restrictions on what a student is allowed to do directly under and independent of a preceptor. Such restrictions may keep students from developing autonomy and consequently the ability to practice independently, which to me is the true essence of being practice-ready. Therefore, efforts should be focused on addressing these critical areas, rather than simply requiring students to take additional practice experiences in a defined setting.

I want to acknowledge the figure that Dr. Svensson provides for the medication use system. I think it provides an excellent overview of the general practice environment in which students should complete a majority of their practice experiences. Dr. Svensson further suggests that all APPEs should occur in sites within the medication use system and that elective APPEs in academia and/or administrative management do not contribute to the practice-ready mission.

In reviewing the 2013 Center for the Advancement of Pharmacy Education (CAPE) Outcomes,⁸ which have been adopted in ACPE Standards 1-4,¹ I noted knowledge, attitudes, skills, and abilities that could be taught outside of the medication use system. Four example APPEs I would consider outside the scope presented by Dr. Svensson are organizational, academic, administrative, and global health/mission trip practice experiences. I do not propose this as an all-inclusive list of practice experiences or that they should be required of all students, but I do want to highlight their potential benefit for student development.

Organizational practice experiences are offered at the local, state, and national levels. Students gain insight into what it takes to be a leader (ACPE Standard 4.2).¹ They also provide the opportunity for students to learn to be advocates for the profession (ACPE Standard 3.3).¹ Given the current status of the profession as we move toward having provider status, I argue that it is especially important for graduates to possess skills as leaders and advocates.

What constitutes an academic APPE varies greatly. One could argue they only focus on training students to be future faculty members. While I cannot dispute this claim, I would argue that if designed correctly, teaching skills to become an effective preceptor could be a focus. Many graduates become preceptors within the first couple of

years of graduation, yet only a small percentage of them will have actually been trained to teach. Being taught to be an educator also appears in ACPE Standard 3.2.¹ Moreover, ACPE Standards state that students must be “practice-ready” and “team ready.” I argue that graduates should also be “preceptor-ready.”

There is much variation in the type and scope of administrative practice experiences offered around the country. Most are offered in community, hospital, or health-system settings. Objectives often involve students learning personal management skills, financial planning, strategic planning, marketing, and identifying and designing medication use systems for the future (ACPE Standard 2.2).¹ We must be training students to be ready for today’s pharmacy practice environment, but we must also train them to be innovators and entrepreneurs (ACPE Standard 4.3)¹ who can redesign current systems to advance practice. Looking historically at the pharmacy practice, professional responsibilities began with the role of “pill makers.” In other words, pharmacists spent most their time compounding medications. The advent of large pharmaceutical companies transitioned the role from “pill maker” to “pill dispenser.” Next came the advent of pharmaceutical or direct patient care and pharmacist roles again changed and moved away from being “pill dispensers” to “pill talkers.” Pharmacists were becoming linked more to the patient than the product. Finally, I would suggest we are embarking on a new role as “pill managers.” Pharmacists must learn the skills to refine existing and develop new medication use systems that optimize patient care. Elective administrative practice experiences can help train students on these important skills.

Many schools offer practice experiences for which students travel to other states and/or countries to assist a population of patients in need. On these “global health/mission trip” experiences, students learn cultural sensitivity (ACPE Standard 3.5).¹ In addition, many of these practice experiences involve multiple health professions working as a team to accomplish a common goal. Collaborating with others in an interprofessional environment (ACPE Standard 3.4)¹ is another vital skill for the development of a pharmacy graduate.

In summary, I agree with both the accuracy and importance of the practice environment outlined in Dr. Svensson’s figure related to the medication use system. However, I also feel areas such as leadership, professionalism, cultural sensitivity, teaching, management, and interprofessionalism can be taught successfully in elective practice experiences not offered in the medication use system. Each of these skills is critical to the development of a practice-ready graduate. We need to move away from the idea that more is better. We moved to the PharmD degree for all programs in 2000 expecting that training a higher-level practitioner

would drastically change pharmacy practice. As we have witnessed over the past 15 years, the practice of pharmacy has advanced but at a relatively slow pace.

The ACPE Standards have also gradually expanded the practice experience requirements. They have become more prescriptive in the type and quantity of required IPPEs and APPEs, but only after the profession had begged for it. More practice experiences have not clearly led to change in pharmacy practice. I suggest the 300-hour IPPE requirement and 1440-hour APPE requirement (with focus in four core areas) in the 2016 ACPE Standards is arbitrary.¹ The focus should be on the quality of graduates based on competency achievement and not quantity of experiences they have completed. In spite of the hourly requirements, the new standards put increased emphasis on quality assurance/assessment and should be commended for this. I am confident the quality of experiential education will improve.

I predict the assumption that requiring more APPEs in the medication use system will make graduates better prepared for practice may be a limited perspective. I also don’t know the magic number of practice experience hours that should be required. As Dr. Svensson stated, other health professions programs don’t set hour requirements. Our first step in defining an hour requirement should be improved entry level licensure examinations that actually assess students’ practice-ready skills. Until this is known, the focus should be on enhancing the quality of what we currently offer, rather than trying to mandate more to fix the problem. The development of successful experiential quality assurance programs will require upper administration at schools of pharmacy to better recognize the roles of experiential offices. Greater resource allocation (eg, personnel, financial, protected time) will be critical to the success of a detailed quality assurance initiative.

A similar challenge faces the continuing education system for pharmacy. It does not adequately assess pharmacist competency, but simply “checks the box” that pharmacists have enough hours. I think the continuing education model must also change to focus more on the competency of pharmacists and documentation thereof. Many of you reading this editorial graduated at a time when the practice of pharmacy was different. Now, we must prepare graduates to be practice-ready by arming them with the knowledge, skills, abilities, and attitudes to be successful not only in today’s practice, but also in tomorrow’s.

Process and application are more important than the setting in which they are taught. Thus, APPEs should predominately occur within the medication use system; but multiple alternative sites could also prove successful. An acceptable APPE is one that contributes to the development of pharmacists ready to practice in any environment. No matter how refined pharmacy curricula become, we

will only be as successful as the quality of students we admit to our programs.

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