On Dec. 5, 2023, ASHP convened the annual meeting of the deans during the ASHP Midyear Clinical Meeting & Exhibition in Anaheim, California. Invited attendees for this meeting included deans of accredited schools and colleges of pharmacy (SCOP) and pharmacy leaders from large health systems across the United States.

The meeting focused on three domains:

- **EXPERIENTIAL EDUCATION**
- **HEALTHCARE TECHNOLOGY AND ANALYTICS**
- **WORKFORCE PIPELINE AND PHARMACY TECHNICIAN SHORTAGES**

The meeting was facilitated by ASHP president Nish Kasbekar and invited an open discussion to address issues and opportunities for harmonization and collaboration between health-system practice and academia, to better serve the pharmacy profession.

This report is intended as a general overview of the discussion among participants under each of the three key domains. The report does not represent the official position of either ASHP or any of the individuals or organizations involved.
EXPERIENTIAL EDUCATION

Attendees were asked to reflect on the challenges and opportunities their organizations face with placing students in experiential education, as well as with providing and facilitating those placements. They were encouraged to share how they recruit, evaluate, and reward high-quality preceptors, and to explore how SCOP and health systems can work together to measure the effectiveness of their experiential education and training models. Below is a summary of the discussion.

Representatives from both groups considered whether the traditional business model for experiential pharmacy education was sustainable.

Examples of the challenges and opportunities brought forth included:

- Some health systems find it challenging to fulfill the desired number of Introductory Pharmacy Practice Experience (IPPE) and Advanced Pharmacy Practice Experience (APPE) slots for their SCOP partners. Participants discussed a few possible solutions for this, including:
  - Consider allowing pharmacy residents to precept IPPE students.
  - When budget is an issue, consider cost-sharing for preceptor time between partners; this model exists in experiential education but is not universal.
  - Consider combining internships and apprenticeships with a pathway to full-time employment, which could make experiential training more enticing for both the students and employers.
  - Consider expanding elective rotation options to additional and diverse learning experiences beyond health systems, such as managed care.

- Variability was noted between SCOP required assignments for IPPE and APPE learners. Attendees discussed that it can be time-consuming for preceptors to provide sufficient and meaningful feedback when expectations between organizations vary and their time is limited.
  - Health-system leaders suggested making these assignments optional or leaving them more open-ended.

- Health-system and SCOP leaders alike remarked that the current accreditation standards create ambiguity and stress on experiential education program expectations.
  - The expected ACPE PharmD Curriculum standard update in 2025 could present an “opportunity for us to look back at our partnerships and make sure that both the academic institution and the health-system leaders are benefitting from all the work that goes into training our students,” one attendee shared.

- Health-system and SCOP leaders discussed challenges in recruiting enough preceptors to meet the demand and effectively measuring precepting outcomes. The discussion highlighted a few key items:
  - Incentives:
    - The reward for preceptors is not one-size-fits-all. Offering continuing education (CE) credits for preceptor training and making it an overt part of the health system’s career ladder, was discussed as a plausible incentive to generate more preceptor interest.
    - Preceptor recognition can play a significant role in praising preceptors. Participants recommended high-quality preceptors be recognized through state-level award programs, plaques, and other incentives to increase pharmacist engagement.
    - Participants discussed the possibility of devoting a portion of experiential education funding to professional development, so frontline staff can become more effective preceptors.
  - Measuring Outcomes:
    - SCOP typically evaluate the efficacy of experiential education through student exams at the end of each rotation — a strategy that only works if the partners are closely aligned on the curriculum and standards.
    - Many SCOP also issue qualitative/quantitative surveys to pharmacy students. However, some of the most valuable feedback comes from students’ offhand or “off the record” remarks.
    - Another suggested strategy was increasing documentation of the value students contribute to the pharmacy site while on rotations.
Participants also discussed challenges regarding the logistics of experiential education programs.

» Schedule: Many health-system leaders discussed a preference for a semester-long schedule with weekly eight-hour shifts over a concentrated schedule, which typically would last two to four straight weeks.

» Proximity: Some health systems felt they were at a disadvantage if they were more than a couple of hours away from a SCOP, and if they didn’t have many housing options nearby for student interns.

» Professionalism: Many attendees remarked on challenges for faculty and preceptors to adapt to students’ increasingly diverse learning and working styles, due in part to generational differences. Several participants suggested that experiential education programs expand standards and expectations for professionalism in the workplace at the start of each rotation.
HEALTHCARE TECHNOLOGY AND DATA ANALYTICS

SCOP and health-system leaders were asked to share how their didactic and experiential curricula were integrating — and how their faculty keep up with — innovative technology and data analytics such as machine learning, clinical decision-making algorithms, and generative artificial intelligence (AI). Below is a summary of the discussion.

- Participants commented on how such technologies are shaping the future of pharmacy training and practice, and that both academic and health-system leaders need to embrace it.
  - Healthcare technology is seen as equal parts threat and opportunity for pharmacy. AI and machine learning, for example, can help create more efficient processes and workflows — but it is incapable of reasoning and should not replace a pharmacist’s experience or judgment.
  - One pharmacy dean likened AI to a calculator: “It’s a tool students should learn how to use appropriately to support their work. Anything generated by AI should be backed with fact-checking using trusted sources. Also, AI is only as good as the data that goes into it.”
  - There was general agreement that SCOP faculty must continue to consider the value of the technology relative to emphasis on concerns about plagiarism.

- Participants agreed that SCOP and health systems need to develop strategies and guidelines for incorporating technologies into education and practice — but they are in the early stages of readiness.
  - Participants agreed that guidelines need to be put in writing, sooner rather than later. Most SCOP have established committees for this purpose.

- Attendees spent time discussing how SCOP and health systems should prepare students in building digital literacy skills.
  - Some participants favored dedicated courses on the subject, while others thought it should be woven into existing curricula on informatics.
  - Another potential model is to create degree concentrations in Digital Health, Data Analysis, Health IT, or Health AI. These are all valuable skills for pharmacists to have.
  - The extent to which students learn about emerging technology could depend on their career aspirations. As one academic leader put it, “What are the requisite skills that every pharmacy student needs to be effective in the workplace, vs. what is needed at the specialist level?”
  - This is an area where pharmacy students can take the lead. One SCOP leader mentioned his school has a Pharmacists for Digital Health group for students interested in this subject.
  - Health systems are generally more likely than SCOP to use emerging technology in their organizations. Deans encouraged health-system leaders to share this information with their academic partners, so they can explore ways the technology can be integrated into experiential education.

- The conversation also brought up the proliferation of electronic health record (EHR) platforms.
  - Health-system leaders indicated it would be useful for pharmacy students to have early exposure to enterprise EHR systems as part of their didactic education, so they are more ready for rotations and ultimately the workforce. Software availability for academic use was noted as a potential challenge by academic counterparts.
WORKFORCE PIPELINE AND PHARMACY TECHNICIAN SHORTAGES

In the final portion of the meeting, participants discussed the impact of ongoing pharmacy workforce shortages, and how SCOP and health systems can jointly educate and promote pharmacy as a profession. Below is a summary of the discussion.

SCOP leaders acknowledged the enormous pressure placed on SCOP to graduate more pharmacists and pharmacy technicians to fill current shortages — “although, of course it takes six years to evolve a pharmacy professional, as one attendee noted.” The group expressed concern that a decrease in SCOP enrollment would ultimately harm areas such as rural pharmacy sites the most.

The leaders also drew connections between the shortages and the rise of AI, fearful new technology could replace all or parts of some pharmacy jobs in the interim.

- In a post-pandemic landscape, SCOP and health system leaders discussed the crucial importance of appropriately articulating pharmacy as a valuable, viable career option.
  - As work-from-home jobs become more common, one suggestion was to emphasize the opportunity to work as a pharmacist part-time and/or through telehealth. “You can positively impact patient care and still live the life you want to live,” said one academic leader.

- Participants agreed that pharmacy needs to get creative about recruitment.
  - Various pharmacy schools have been successful in implementing resources and outreach for underrepresented minorities to encourage going into the profession of pharmacy.
  - An item for consideration was the possibility of employers within health systems to offer scholarships or loan repayment programs for the pharmacists they hire, a similar mode to retail pharmacy companies.
  - Attendees posed the idea of recruiting from middle schools and even elementary schools to help build up the workforce pipeline. ASHP has a Career Day toolkit for engaging with young students.
  - With regard to pharmacy technician recruitment, attendees discussed the ongoing need for pharmacy technician ladders and professional development opportunities supported by employers. They expressed excitement about ASHP’s new Pharmacy Technician Society for this reason.
  - One participant expressed interest in a nationwide marketing audit and business strategy to ensure the United States has the right number of accredited SCOP to meet the healthcare demand in the future. This would help the profession avoid inadvertently flooding the market, only to end up with a shortage years later.

- Pharmacy’s reputation was a major point of discussion. Attendees pointed out how media coverage of recent pharmacist strikes, plus some pharmacists’ personal use of social media, was negatively affecting students’ perceptions of what it’s like to work in the field. The general public doesn’t understand the difference in pharmacy settings. They observed that other healthcare professions don’t appear to struggle with this as much, even if they suffer from job dissatisfaction and burnout.
  - Amid this “crisis,” attendees called for more positive storytelling and strategic public relations. ASHP’s new national public awareness campaign, announced Dec. 4 at the Midyear Opening General Session, is designed to help meet this need.
  - Health-system leaders acknowledged that being more present with patients and families will help bolster consumers’ perceptions of pharmacists.

- Attendees also touched on the fact that recruitment and retention efforts will only succeed if we simultaneously foster resilience and well-being for pharmacy students and the workforce.
  - One representative said she was focused on “creating health system work environments people don’t want to leave. … We have to make the health system environment so attractive that even when we have few resources, those resources pick us.”
In concluding the conversation around workforce, attendees discussed their growing concerns regarding the Centers for Medicare & Medicaid Services (CMS) unclear residency program audits. When pharmacy preceptors are paid by a health system and not the SCOP, a Postgraduate Year 1 (PGY1) residency program can be deemed ineligible for passthrough CMS funding.

- **ASHP leaders confirmed this is a top advocacy priority** and shared that a new toolkit is coming out soon, based on the organization’s experience helping many sites navigate this challenge.
- It was generally agreed that the profession needs clearer rules and guidelines to follow, so they can design contracts accordingly and protect their residency faculty.
- **ASHP will continue its advocacy efforts with CMS as it is a critical issue to sustain and grow postgraduate training.**

### CONCLUSION

The group recommended that ASHP continue to facilitate open dialogue between leaders of health systems and SCOP in the future.

The meeting was adjourned by ASHP President Nishaminy (Nish) Kasbekar at 9:30 a.m. The next ASHP meeting of the Deans will be convened in the spring, virtually.