An immersive training model to build and grow a specialty pharmacy in an academic health system

RETZKY COLLEGE OF PHARMACY
The Department of Pharmacy Practice

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Background

- Pharmacy workforce shortages continue to challenge health systems nationwide.
- Pharmacies can bridge this gap by developing a robust training program for students and residents.
- Academic health systems are uniquely positioned to train future specialty pharmacy practitioners through immersive educational experiences.
- Since 2013, the University of Illinois Chicago has integrated education and practice to develop the next generation of specialty pharmacy practitioners while simultaneously expanding specialty pharmacy services.

Objectives

- To describe how a health system–based specialty pharmacy and affiliated college of pharmacy built an immersive training program for students and residents.
- To demonstrate how the program supported specialty pharmacy growth while preparing the next generation of specialty pharmacy practitioners and leaders.

Program Development

Independent Study, Externships, IPPE/APPE

- Independent study supported medication access, prior authorizations, and quality improvement
- Paid student externships provided technician-level operational experience
- IPPE and APPE rotations provided clinical and operational specialty pharmacy training

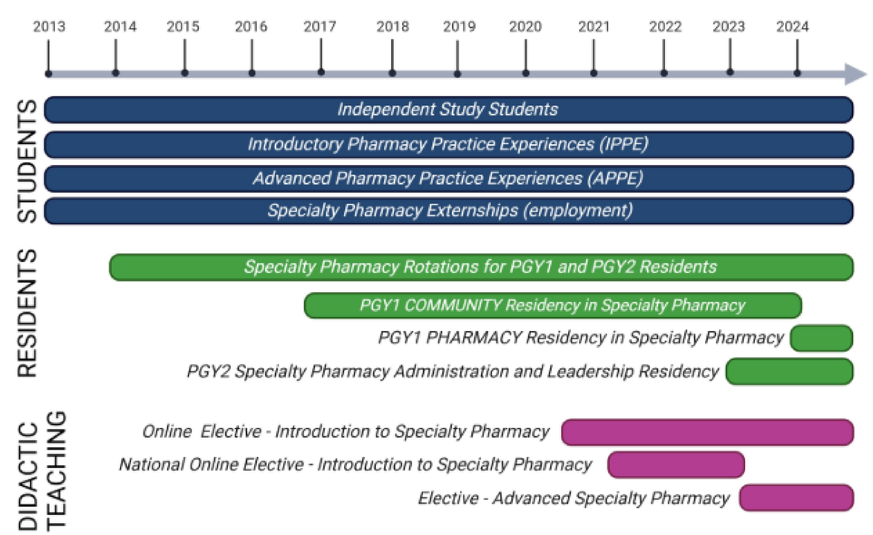
Residency Programs

- PGY1 and PGY2 specialty pharmacy training integrated into multiple residency programs
- Activities included clinical care, EHR documentation, and quality improvement
- PGY2 Specialty Pharmacy Administration & Leadership program focused on operations and leadership

Didactic Teaching

- Specialty pharmacy elective courses developed within the Retzky College of Pharmacy
- Content included disease states, operations, outcomes, and regulatory concepts
- Advanced course added business and administrative training

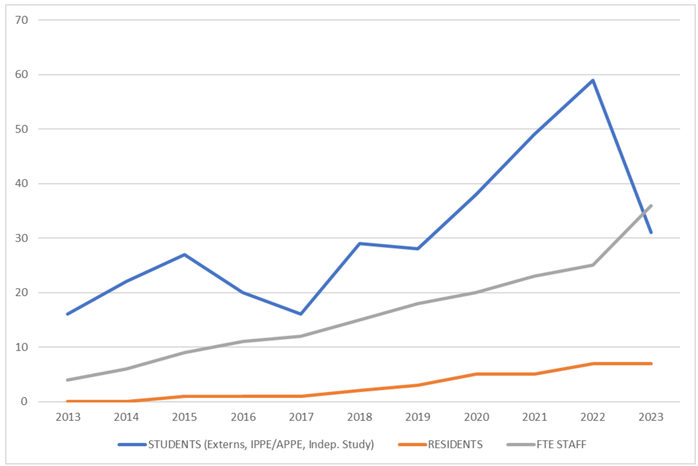
Figure 1. Specialty Pharmacy Training Program Timeline



Results

- **490 pharmacy learners** completed specialty pharmacy training between 2013 and 2023
- **8-fold** increase in prescription volume
- **65%** of student externs pursued specialty pharmacy residency or fellowship training
- **100%** of specialty pharmacy residents secured positions in health-system specialty pharmacy
- **67** first-author publications and presentations produced by learners
- Student familiarity with specialty pharmacy topics **increased from 6% to 88%** after participation in the didactic course

Figure 2. Number of Students, Residents, and FTEs, 2013-2023.



Conclusion

- Students and residents represent an important resource for health system-based specialty pharmacies.
- Exposure to specialty pharmacy through independent study, externships, IPPEs, APPEs, residency training, and didactic courses introduces learners to the practice model and career opportunities.
- This training model can serve as a framework for other health systems seeking to develop or enhance specialty pharmacy education programs.

Abbreviations

APPE: Advanced Pharmacy Practice Experience
IPPE: Introductory Pharmacy Practice Experience
EHR: Electronic Health Record
FTE: Full-Time Equivalent
PGY1: Post-Graduate Year 1
PGY2: Post-Graduate Year 2

References

Kumor LM, Thomas KC, Khamo N, Bush F, Stubbings J. An immersive training model to build and grow a specialty pharmacy in an academic health system. *Am J Health Syst Pharm*. 2026;83(4):157-164. doi:10.1093/ajhp/zxaf178