

PRECEPTOR SERIES:

A Health System's Experience with a Longitudinal Advanced Pharmacy Practice Experience

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Experiential rotations during the final year of pharmacy school are an invaluable foundation to a career in the profession of pharmacy. Precepting students during these rotations is both rewarding and challenging as pharmacists try to provide a good educational experience for the student, while balancing patient care responsibilities. The challenge of trying to give students the best rotation experiences possible with limited time for teaching has been a frustration for many preceptors. This, along with a need for more hospital-based rotations in our area, led us to implement a new approach for incorporating students. Working with Concordia University Wisconsin School of Pharmacy (CUW SOP), Hospital Sisters Health System Eastern Wisconsin Division (HSHS EWD) developed a Longitudinal Advanced Pharmacy Practice Experience (LAPPE) program. A LAPPE program is a series of Advanced Pharmacy Practice Experience (APPE) rotations within the same institution or health system, providing continuity throughout the rotations and opportunities for a longitudinal project. This article will highlight the pros and cons of LAPPE program implementation from the perspective of a health system with a new program.

HSHS EWD has four hospital campuses in northeast Wisconsin: St. Vincent Hospital (Green Bay), St. Mary's Hospital Medical Center (Green Bay), St. Clare Memorial Hospital (Oconto Falls) and St. Nicholas Hospital (Sheboygan). The four hospitals offer a wide variety of clinical practice settings, ranging from a critical access hospital to a level 2 trauma center. The inpatient pharmacies at each

hospital have the same dosing guidelines and protocols, the same formulary and P&T committee, the same monitoring standards and in some cases the same staff as many colleagues float between campuses. Yet, each hospital has its own culture, specialties, and patient population. Developing the LAPPE program was the first opportunity for HSHS EWD hospitals to collaborate on educational experiences.

HSHS EWD LAPPE Program Structure

The HSHS EWD LAPPE is a competitive, application-based program comprised of a minimum of three six-week APPE rotations; students may choose to complete up to five APPE rotations as part of the program. Students must complete their LAPPE rotations at a minimum of two different HSHS EWD hospitals and can choose from rotation offerings at each hospital (Table 1). The LAPPE program must include the required Hospital/Health System Pharmacy and Acute Care Medicine

APPEs, leaving room for 1-3 elective APPE rotations. The required Hospital/Health System Pharmacy APPE exposes students to all aspects of the medication use process in a central pharmacy setting, while the required Acute Care Medicine APPE gives students the chance to provide direct patient care, practice clinical skills, and implement evidence-based care in an inpatient setting. Elective APPE rotations are specialized experiences that develop students' knowledge and skills and deepen their understanding of a particular practice area. Students selected for the LAPPE program are given first choice of all available APPE rotations within HSHS EWD, with guidance from the CUW SOP Director of Experiential Education and HSHS EWD preceptors. The LAPPE program rotations are scheduled consecutively, based on each hospital's availability (Figure 1).

The final required component of the HSHS EWD LAPPE program is a longitudinal project. Students discuss their LAPPE program goals and areas for

TABLE 1. Available APPE Rotations at HSHS EWD Hospitals

HSHS St. Mary's Hospital (Green Bay, WI)	Required Hospital/Health System Pharmacy
HSHS St. Nicholas Hospital (Sheboygan, WI)	Required Acute Care Medicine Required Hospital/Health System Pharmacy Electives <ul style="list-style-type: none"> • General Surgery
HSHS St. Vincent Hospital (Green Bay, WI)	Required Acute Care Medicine Required Hospital/Health System Pharmacy Electives <ul style="list-style-type: none"> • Cardiology • Critical Care • Infectious Disease • Oncology • Pediatrics • Pharmacy Administration

FIGURE 1. Example of HSHS EWD LAPPE Program Rotation Schedule

	2016					2017		
	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8
HSHS St. Mary's Hospital								
Hospital/Health System		Student A		Student C				
HSHS St. Nicholas Hospital								
Acute Care	Student A			Student B				
HSHS St. Vincent Hospital								
Acute Care							Student C	
Hospital/Health System					Student B			
Infectious Disease			Student A			Student B		Student C
Pediatrics				Student A				
Oncology						Student C		

development with the HSHS preceptors, who also consider the needs of the pharmacy department and other health system initiatives. Once the LAPPE program project is selected, students work with a primary project preceptor to devise a plan and execute the final project deliverable.

Interested students must apply to the HSHS EWD LAPPE program during the fall semester of their P3 year. A representative from the LAPPE program visits CUW SOP in fall to introduce the program and discuss the structure and offerings. Applicants submit a curriculum vitae and letter of interest to the HSHS EWD precepting team for review. Acceptable candidates are interviewed in conjunction with the CUW SOP Pharmacy Days career fair event. The final step is for CUW SOP to run a “match” process based on student and health system preferences.

Benefits to the Health System

There are several benefits of LAPPE programs for the health system. When HSHS implemented the LAPPE program, we believed it would help decrease the time and energy it took to orient new students to our facility, staff, processes,

and computer system. This has definitely proven to be an asset of having LAPPE students. After an initial orientation to HSHS systems and policies, subsequent preceptors no longer need to focus the early days of a rotation on computer access, dosing guidelines, and monitoring expectations. They can quickly get the student involved in patient care and clinical learning. Students are better equipped to be contributing members of the healthcare team earlier in the rotation and can be more helpful to their preceptor.

With our increased focus on students as we started our LAPPE program, we recruited additional preceptors. Having a larger pool of preceptors is beneficial in promoting new ideas, while also keeping our pharmacists learning as they work to keep up to date with students. With multiple HSHS campuses, we are able to accommodate a larger volume of students than we would if all the students were at a single hospital. The implementation of the LAPPE program has not resulted in additional rotation offerings, but yet we feel we are making better use of our precepting resources.

Additionally, LAPPE program students have the time to do more in-depth longitudinal projects. This can be

beneficial to create and/or implement new clinical pharmacy services, revamp existing processes, or collect data to justify pharmacy department resources. One of the HSHS LAPPE students worked on a project to improve the medication reconciliation process in our pediatric hospital. She engaged nursing personnel to establish the pharmacist role, set up a template, and define the barriers to changing this process. She tracked the number of medication histories and pharmacist interventions and used this data to create a poster presentation for the American Society of Health-System Pharmacists Midyear Clinical Meeting. This project was well received by both nursing staff and physicians and initiated positive conversations about pharmacists’ abilities to help decrease time and frustration surrounding medication reconciliation.

One final benefit for the health system is that students must apply and interview for LAPPE programs, which allows the health system to find students that are a good fit for the organization. Students who take the time to apply for a LAPPE program typically have a particular interest in hospital pharmacy and, in our experience, are highly motivated,

FIGURE 2. Student Perspective of HSHS LAPPE Program (Kayla Phillips, CUW SOP Class of 2017)

I feel as though participating in the LAPPE program gave me opportunities to go above and beyond the activities experienced within a general 6 week APPE rotation. By completing a LAPPE program you get a taste of what to expect from a residency, for example, completing a long term project along with multiple presentations and every day projects. Your transition is seamless between rotations as you don't have to re-orientate yourself to each site allowing for more time spent on clinical pharmacy rather than rotation details, and you get opportunities to network and create lasting professional relationships. I believe that the LAPPE program allowed me to capitalize on my clinical and interprofessional skills, keeping me on track to attain my career goals.

competent, and have been a huge asset to our pharmacies. Having these students familiar with the health system can also be a great recruitment tool for future employment.

There have been a few studies looking at longitudinal experiential programs and the perceptions of students and preceptors.^{1,2} In a study by Taylor et al, students and preceptors surveyed responded positively to sequential APPE programs of 4-5 months duration and reported a gain of 19 hours per month of orientation time, which can then be used to gain more clinical experiences.¹ In another study with all rotations at the same practice site, students and preceptors found benefit in being able to complete longer and more complex projects and more efficient use of teaching resources.² These conclusions support HSHS observations about the benefits of a LAPPE program.

Benefits to the Student

Students also experience many benefits from LAPPE programs (Figure 2). One obvious benefit is the ability to stay in one geographic location for multiple rotations. Since students participating in a LAPPE program are at one site or health system for an extended period of time, they can complete one orientation and training period. With orientation out of the way, there is more time that can be dedicated to learning clinically relevant information and practicing patient care skills as their rotations progress. Preceptors can tailor the learning experience to meet the student's

goals, while still ensuring they are meeting school requirements and being exposed to many topic areas. If the preceptor and student identify an area for improvement, the LAPPE program allows more time to work on building that skill, thereby enhancing the confidence of the student moving forward.

LAPPE programs serve as a great segway into residency programs and employment. LAPPE program students have had the experience of applying and interviewing for the program and participating in long-term projects, making these residency experiences less intimidating. Having students at HSHS EWD hospitals for multiple rotations has led to greater relationship-building between our staff and the students. Students can receive stronger references from preceptors for residency or job applications since the preceptor can speak more accurately to their strengths and areas for improvement. Students also feel the advantages of these enhanced relationships. They seem more comfortable asking questions or making suggestions, which has led to more discussion and a greater trust in the student's clinical and patient care skills.

Disadvantages of LAPPE Programs

There are potential drawbacks to LAPPE programs too. The final year of clinical rotations can be a great time for students to see and participate in many different areas of practice, at many different locations. Students in a LAPPE program at HSHS institutions will see many types

of patients; however, all HSHS hospitals follow the same policies, procedures and processes. This may limit the students' opportunity to see diversity in institutional practice and how others tackle challenges. If a student is not a good fit with the health system, the extended time within the LAPPE program could be a source of frustration for both the student and the health system. One additional challenge for our LAPPE program is communicating between sites. With students moving between sites and completing an overarching LAPPE project, the student may be separated from their project coordinator for a number of weeks. Since they are still expected to keep moving their LAPPE project forward, it is important to find ways to communicate regularly with the project coordinator.

Conclusions and Future Directions

Overall, after completing one full year and embarking on our second, we have found the LAPPE program to fit well with the HSHS hospitals and staff. We have become increasingly interconnected as a division and this has flowed over to our precepting practices. Journal clubs are now something that we invite all the hospitals to join via conference call, projects ideas are discussed across multiple campuses, and we are working on ways to communicate what a student has already spent time reviewing so that we can build on what they already know and expand to new topics. We hope to start a residency program in the future and the LAPPE program is a great way to promote precepting and training of the next generation of pharmacists. There may also be opportunities to partner with ambulatory and community pharmacy practices to expand the scope of our LAPPE program. HSHS EWD plans to continue optimizing our LAPPE program to improve the student and preceptor experience, but we are happy with our decision to pursue this type of program. •

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Acknowledgements: Special thanks to Kayla Phillips, PharmD (HSHS EWD LAPPE program participant and CUW SOP Class of 2017 alumnus), Adam Post, PharmD, BCPS (HSHS EWD pharmacist), and Robert Wolf, PharmD

(CUW SOP Class of 2017 alumnus) for their contributions to the development of this article. Disclaimer: The authors declare no real or potential conflicts or financial interest in any product or service mentioned in the manuscript, including grants, equipment, medications, employment, gifts, and honoraria.

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Calling all WPQC pharmacists and those interested in Community Innovations!

At this year's PSW Annual Meeting in La Crosse, we will be offering a Community Innovation track geared towards community and ambulatory pharmacy services.

Sessions included in the track will highlight patient care, medication therapy management, and service expansion at your pharmacy site.

Working in Wisconsin to Prevent Diabetes and its Complications: The Pharmacist's Opportunity with the National Diabetes Prevention Program

Pamela Geis, BA

Health Promotion Specialist, Chronic Disease Prevention Program, DPH, Wisconsin DHS

This session will provide knowledge about the history, development, and characteristics of the National Diabetes Prevention Program and opportunities for pharmacists to become involved with the program.

Developing a Culturally Competent Practitioner

Ashely Lorenzen, PharmD, BCPS

Assistant Professor, Concordia University Wisconsin School of Pharmacy

This session will provide tools for pharmacists to relate to and provide services for patients of different cultures and traditions, and to understand the role that culture and ethnicity play in health behaviors.

Transforming Your Practice: Learning from 10 Years of WPQC

Michelle Farrell, PharmD, BCACP

Boscobel Pharmacy

This session will focus on understanding the history of WPQC development and implementation, identifying progress in WPQC quality-based best practices and service provision, hearing from high-performing pharmacists who have maximized their role in WPQC, and discussing the future directions of the program.

Cold Turkey, E-cigarettes, Meds and More: Developing the Urge to Quit

Amy Skora, BS, CHES

Southern Outreach Specialist, Center for Tobacco Research and Intervention (CTRI), University of Wisconsin School of Medicine and Public Health

This session will help launch PSW's Tobacco Cessation Initiative and provide pharmacists with ideas and tools to work with patients interested in tobacco cessation.

Tools to Tackle Asthma Control: Prescribing Protocols and Collaborative Practice Agreements

Dimmy Sokhal, PharmD

Hayat Pharmacy

This session will highlight how pharmacists are developing and implementing collaborative practice agreements with physicians in order to provide patients with better asthma control.