Residents’ Roles in an Integrated Practice Model

Primary Intended Outcome
Expand clinical pharmacy services offered by incorporating pharmacy residents into an integrated practice model.

Relevant PPMI Recommendations
B4. In the next 5-10 years, there will be an increasing demand among new pharmacy graduates for residency training.

E1. The staffs of pharmacy departments in hospitals and health systems are looking for guidance on how to most effectively establish an optimal practice model.

E4o. Increased number of residency-trained pharmacists.

Situation Analysis
Froedtert Hospital, a 500-bed academic medical center located in Milwaukee, Wisconsin, provides 24/7 clinical pharmacy services through a longstanding integrated practice model. We are a Level 1 Trauma Center and major referral center for 37 specialties and subspecialties. We have 20 clinical pharmacy teams covering inpatient care areas 16 hours daily and third-shift pharmacy coverage overnight. In addition, pharmacists provide care in our emergency department, operating room, day hospital infusion center, and numerous ambulatory clinics. Each de-central pharmacist has a responsibility to provide direct patient care and manage each patient’s pharmacotherapy plan through rounding with an interdisciplinary team, managing pharmacokinetics, obtaining medication histories, performing medication reconciliation at admission and discharge, and teaching patients at discharge about their medication regimens.

We strongly believe that residency training should involve residents taking an active role in performing clinical pharmacy duties on a daily basis instead of just performing an “observing role.” At Froedtert Hospital, patient care is our top priority, and residents help to assist facilitating this care for the patient by direct participation. The advantages of this role include teaching the residents accountability, follow-through, and how to balance and prioritize patient care responsibilities. The role of our residents in our integrated practice model has helped to advance our practice by allowing for more clinical patient care duties such as medication reconciliation and discharge counseling.

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Service Description

The PGY1 Pharmacy Residency Program at Froedtert Hospital was founded in 1993. Since that time, residents have been incorporated into our practice model. Our staffing model is unique in that residents work one-week stretches on one of our medicine or surgical inpatient teams. The intent is to emphasize continuity of care as well as provide a learning experience for the resident.

Clinical rotations also allow the residents to incorporate themselves into our integrated practice model. Similar to the medical model, clinical rotations follow a hierarchy with the lead preceptor overseeing the residents’ work while the residents assume primary responsibility for managing patient care and for precepting students. This team approach facilitates comprehensive care for our patients while allowing the resident to integrate within the health care teams and assume an active role in patient care.

Residents have been pleased with their role in proving direct patient care. By midpoint in the year, most residents tell us that they would feel comfortable taking on a pharmacist role in an integrated practice model like the one we have at Froedtert. As we recruit for residents, we look for candidates who are interested in the independence and direct patient care experiences that a program like ours can offer. We have specific metrics set for patient care initiatives, and our well-trained residents help to reach these targets along with our pharmacy inpatient teams.

Key Elements for Success

1. Clear and concise training plan for PGY1 residents
2. Structured schedule of staffing and rotations for PGY1 residents
3. Engaged pharmacy team willing to train a new PGY1 class every year
4. Ongoing feedback sessions with PGY1 residents
5. Engaged group of preceptors

Resource Utilization

Personnel: Preceptors spend from four to 12 hours a week precepting PGY1 residents.

Return on Investment: Each resident contributes 0.38 FTE of staffing for our institution. For PGY1 residents, Centers for Medicare and Medicaid Services funding is available to offset the cost of residency training.

Recognized Intangible Benefits

1. Enhancement of patient care
2. Recruitment for future staff pharmacists
3. Program and department notoriety and name recognition
4. Department project development and implementation
5. Challenging current staff and preceptors
Outcome Measures
1. Metrics for patient care initiatives such as medication histories, medication reconciliation, and discharge education
2. Successful expansion of PGY1 Pharmacy Residency program

Lessons Learned
1. When planning to incorporate residents into the staffing model, it is important to consider gaps in coverage so that services can be provided consistently.
2. Input from our preceptor group was very important in helping us to gauge the capacity to expand our program. We created a survey to gather feedback on both capacity and ratios of learners to preceptors.
3. With program expansion, additional pharmacists will be involved in precepting. It is important to plan preceptor development opportunities for both new and existing preceptors.

Other Considerations
With any new services or changes in practice model, there can be bumps along the way. Luckily, we did not have any challenges regarding the role our residents play at Froedtert Hospital. We closely monitor our program and make minor adjustments when necessary to avoid any significant challenges. In addition, it is important to consider working space and computer resources for an expanding residency class.

During the course of the year, we have challenges when residents are not on site, such as during ASHP’s Midyear Clinical Meeting and the Great Lakes Pharmacy Residency Conference. During those times, we often have to look to our pharmacists to help cover shifts that were otherwise staffed by residents.

One of the most significant challenges with a program such as ours is the transition between residency classes, both in terms of training large groups and covering patient care needs. Key components include shifting responsibilities of non-traditional PGY1 residents and PGY2 residents during the summer months as well as staggered start dates for incoming PGY1 residents to ease the training burden. We are challenged to provide the same level of care regardless. Over the course of the year, it is important to balance the incorporation of residents into the practice model with their roles as learners and new practitioners.

Suggestions for Other Hospitals/Health Systems
We believe that our integrated model with residents could be implemented at other institutions, and we believe it can be incorporated into any size institution or setting. If the institution is looking to facilitate expansion of clinical services and to provide more extensive comprehensive services, a similar model such as ours can be implemented. Many of our services today were initially pilot programs, which may have included residents, and the success of the pilots helped to form new services hospital-wide.