The Layered Learning Practice Model: Toward a Consistent Model of Pharmacy Practice

ABSTRACT

The adoption of pharmacy practice models remains a significant challenge in hospitals and health systems nationwide. Although pharmacy departments in hospitals and health systems recognize the need for transformation, many barriers impede its broad deployment including uncertainty about the optimal practice model and resources to support practice changes. The University of North Carolina (UNC) Hospitals received the 2011 ASHP Best Practices Award for its development, implementation, and evaluation of a comprehensive, pharmacy practice model that maximizes pharmacists’ involvement in patient care. We have refined this model in both the acute and ambulatory care settings to include “layered learning”, which reframes the traditional clinical specialist model to establish service-based pharmacy teams that integrate with the interdisciplinary patient care team to coordinate care. Specifically, in the Layered Learning Practice Model (LLPM) at UNC Hospitals, the pharmacy team includes an attending pharmacist responsible for all aspects of the patient-centered care and a combination of clinical generalist, resident(s) (PGY1 and/or PGY2), student(s), and pharmacy technician(s) functioning as extenders who provide expanded clinical patient care services. Our initial experience finds considerable variability in how the LLPMs are implemented across practice settings and clinical specialty areas. The knowledge gained from our initial experiences and our aggregate research experiences in evaluating pharmacy practice models and programs will constitute the framework for the current application.

Our long-term goal is to integrate effective pharmacy practice models into hospitals and health systems nationwide that provide consistent high quality clinical patient care services and that increase commitment to the training of resident and student learners. The objectives of this project are to use rigorous qualitative methods to: (1) determine WHAT core elements consistently define the provision of clinical patient care services within LLPMs across practice settings and specialty areas, (2) describe HOW LLPMs are structured and HOW they function to provide clinical patient care services, (3) determine the perceived benefit and impact of the LLPM (WHY pharmacists believe LLPMs are important), and (4) identify facilitators and barriers to implement LLPMs. Eligible and willing attending pharmacists who have implemented a LLPM since July 2011 (n=20) will be asked to complete a 90-minute face-to-face semi-structured interview. Before the interview, participants will provide written informed consent and then complete a short, demographic survey. The study principal investigator, Dr. Pinelli, will conduct the interviews using a structured interview guide that was developed by the study team. Interviews will be digitally recorded and transcribed verbatim. Descriptive statistics will be used to characterize participating pharmacy practitioners. For data from the semi-structured interviews, transcripts will be imported into ATLAS.ti 6.2, a data management program. A codebook with operational definitions using the interview guide questions will be created. Inductive coding techniques and constant comparison methods will be applied to identify themes and domains in transcripts that are: (1) consistent throughout LLPMs across practice settings and clinical specialty areas and (2) unique to each setting and/or specialty. The elements (WHAT), structure (HOW), and perceived benefits (WHY) of LLPMs, as well as facilitators and barriers to implementation, will be summarized and submitted to peer-reviewed journals. Our anticipated results are (1) identify core elements of a LLPM that can serve as the basis for broad scale deployment in the provision of clinical patient care services, (2) provide valuable insights into strategies to support implementation in diverse settings, and (3) demonstrate the ability to build a template for broad scale practice model transformation using a shared decision-making approach with pharmacy practitioners. Our well-qualified interdisciplinary research team and supportive administration at UNC Hospitals make us well-suited to conduct this research. Ultimately, the proposed work could lead to the development of a consistent approach to practice using the LLPM and establish expectations and accountability in the provision of clinical patient care services.