Training Pharmacy Learners for Telehealth Practice: A Preceptor Model for Remote Patient Monitoring

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INTRODUCTION

- Clinical involvement by pharmacists in chronic disease management, including medication therapy management and collaborative practice roles, contributes significantly to improved patient outcomes.[1,2]
- Rapid expansion of telehealth and remote patient monitoring (RPM) has created a need for pharmacy learners to develop virtual care competencies; however, standardized training models remain limited.[3]

APPROACH

A structured telehealth rotation and preceptor model was developed to integrate student pharmacists and residents into an established RPM program for hypertension and diabetes at the University of Mississippi Medical Center (UMMC), enhancing learner skills while supporting care delivery.

METHODS

PROGRAM DESIGN:

- A telehealth experiential rotation was developed through partnerships with the Mississippi Department of Health's American Society of Health-System Pharmacists (ASHP)-accredited PGY1 residency program and the University of Mississippi School of Pharmacy.

LEARNERS AND STRUCTURE:

- PGY1 residents participated longitudinally (1 day/week for 12 months OR 2 days/week for 6 months), while student pharmacists completed a 1-month, 40 hour/week rotation.

TRAINING AND CLINICAL ACTIVITIES:

- Learners received standardized orientation in telehealth communication, documentation, biometric interpretation, and medication management protocols.
- After orientation, learners reviewed RPM biometric data, developed care plans, conducted telephone encounters, and completed documentation for preceptor co-signature.

SUPERVISION MODEL:

- A dedicated preceptor provided oversight, feedback, and progressive autonomy to support safe and effective patient care.

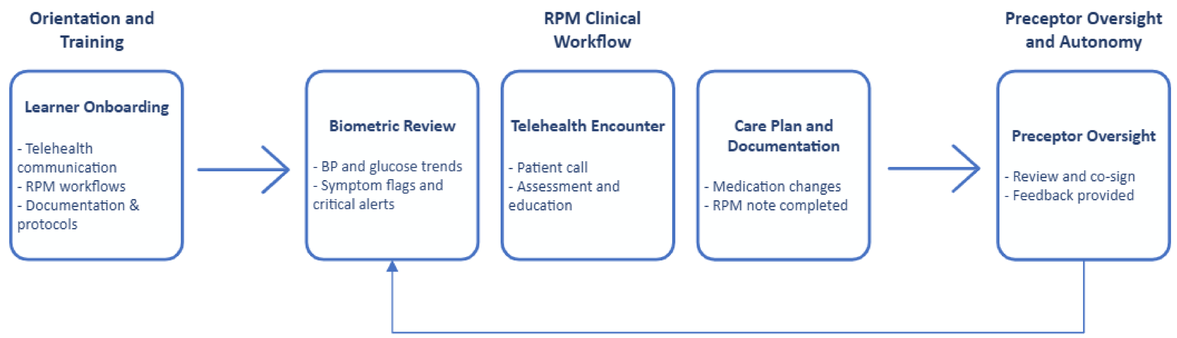
EVALUATION:

- Outcomes were assessed using ASHP learning-experience evaluations along with site evaluations and preceptor assessments from student pharmacists focused on clinical and communication skills.

RESULTS

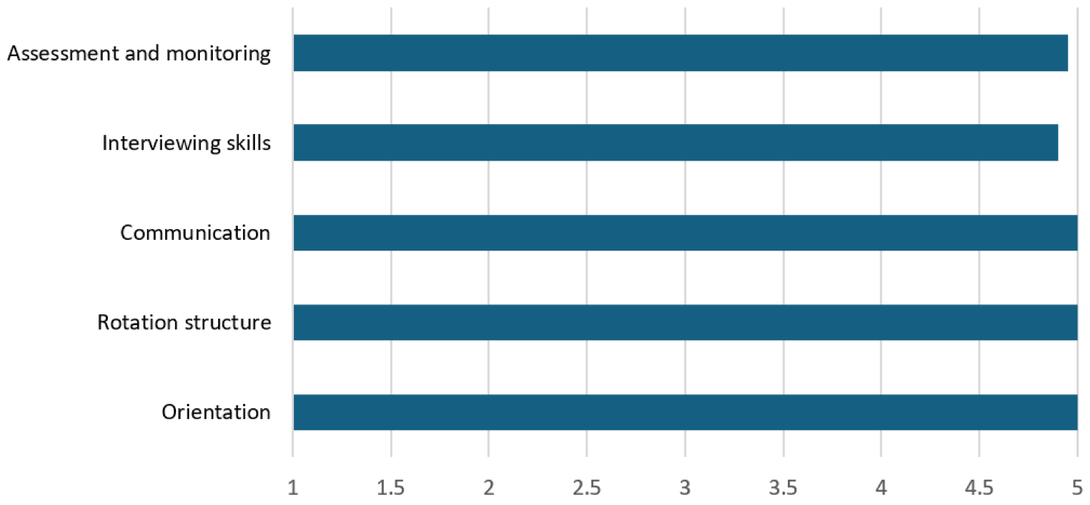
- Pharmacy learners were integrated into existing RPM workflows and progressed from observation to independent telehealth encounters within approximately two weeks, without reported disruptions to patient care or safety.
- From 2021–2025, the program trained 12 PGY1 residents and 22 APPE students, contributing over 8,000 learner hours to RPM service delivery.

Figure 1: Telehealth Preceptor Model for RPM Learner Integration



- APPE evaluation outcomes: Learners reported high satisfaction and strong skill development in telehealth communication, assessment and monitoring, and therapeutic planning, with APPE evaluations averaging 4.7-5.0/5.0 across all domains.
- Resident experience: Residents rated all ASHP core learning elements as "Consistently True," highlighting continuity of care, rapport-building, clinical independence, and a supportive learning environment.

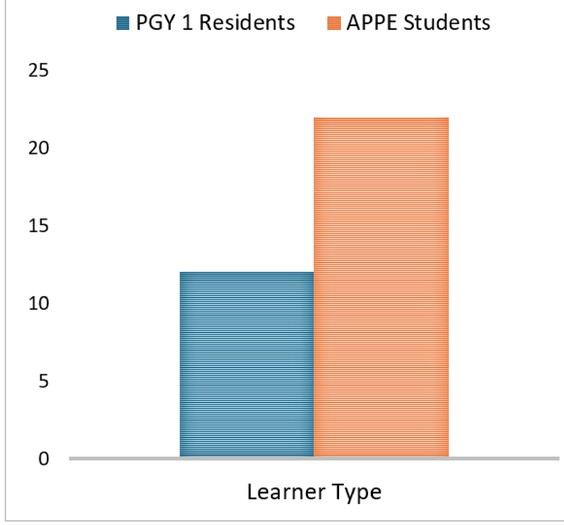
Figure 2: Learner Evaluation Outcomes



	Orientation	Rotation structure	Communication	Interviewing skills	Assessment and monitoring
APPE Evaluation Responses	5	5	5	4.9	4.95

RESULTS

Figure 3: Learner Participation



DISCUSSION

- This learning model successfully integrated learners into an RPM program while maintaining patient safety and workflow efficiency.
- Early training in motivational interviewing and strategies for navigating visual limitations and diverse home environments enhances learner readiness.
- Learners progressed to independent telehealth encounters, showing strong gains in communication, assessment, and treatment plan development.
- Future efforts will focus on broadening telehealth training opportunities, including increasing rotation availability for student pharmacists and integrating additional telehealth services beyond RPM to enhance workforce readiness.

REFERENCES

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