Medication History Program at URMC: Empowering Technicians

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Conflict of interest statement

There are no financial disclosures or conflicts of interest regarding the content of this presentation

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Learning Objectives

- Describe an overall structure of the medication history program

- Summarize a recruiting and training process

- List methods used to measure medication history technicians' impact on patient care

- Describe goals for expanding technician-led initiative

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Medication History Program Overview

Incorporated into the Practice Advancement model

- aim to provide clinical recommendations that align with both patient goals of care and their ability to manage therapy

Critical first step: a thorough medication history

- offers an opportunity to discover what challenges the patient is facing in accessing and using their therapy

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Medication History Technician Program

Practice Advancement Team

- 6 units with an assigned internal medicine pharmacist specialist
- 3 medication history technician specialists (2 units or ~ 50 patients each)

Coverage

- Monday – Friday (days)
- If an internal medicine pharmacist has a scheduled day off, their medication histories are reviewed by clinical coordinator or cross-covering pharmacist
- When med history technicians have a scheduled day off, the other technicians will evenly divide the units (3 units per tech)

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Recruitment

Internal versus External Candidates

- Technician Career Ladder
  - Specialist position
    - Increased salary
    - Desirable schedule
- Consider key traits which enhance success
  - Inpatient and Ambulatory Care Experience
  - Compassionate
  - Personable
  - Detail-Oriented
  - Intrinsically Motivated
  - Humble

Recruitment

Increasing Awareness
- One of the greatest challenges

Take Advantage of Existing Programs

- Pharmacy Technician University
  - Technicians rotate through different areas of practice
  - Medication History rotation added 2021
    - Average ~ 36 students per year

Department of Pharmacy: Pharmacy Technician University

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Training

Core Requirements

- Certified Pharmacy Technician (CPhT)
- Institution/Healthcare Specific
  - Trained in electronic health record (EHR)
  - HIPPA
  - Infection precautions
  - Look-alike / Sound-alike and High-Risk Medications policy review
- Specific to Position
  - Competent in medication history technician workflow (consistently and accurately follows standard operating procedure)

Training (introduction to medication histories)

- MARQUIS training video "Taking a Good Medication History"

  https://www.hospitalmedicine.org/clinical-topics/clinical-topic-videos/taking-a-good-medication-history-video/

- MARQUIS pocket guide for "Best Possible Medication History Quick Tips"

  https://www.leapfroggroup.org/sites/default/files/Files/MARQUIS%20BPMH%20Tri%20Fold%20Pocket%20Guide_0_0.pdf

- Review presentation: Taking a "Best Possible Medication History" One of the most important things you can do to keep patients safe (by Jeffrey Schnipper, MD, MPH, FHM)

  https://slideplayer.com/slide/7071513/

- Review "Access to Care: Development of a Medication Access Framework for Quality Measurement" from PQA in March 2019

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Training (hands-on)

Training encompasses both observational and experiential activities:

- Observe a minimum of 5 patient interviews conducted by a trained medication history technician specialist
- Patients covered must include those from a skilled nursing facility, those presenting from home, and those in need of interpreter services (both Cyracom and Spanish or ASL)
- Submit a minimum of 10 patient medication history reviews (with oversight of trainer) for pharmacist review and feedback

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Assessments

Duration of training is dependent upon ability to complete the following:

- Score a minimum of 80% on written competency

- Independently work up and accurately document 5 medication history reviews for formal assessment

On-going assessments are performed every 6 months

- One patient interview and work-up is assessed by pharmacist or supervisor for accuracy and compliance with standard operating procedure

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Medication History Technician Written Competency

1) How should you approach a patient at their bedside?
   a. Introduce yourself
   b. Ask if this is a good time to talk
   c. Explain your role and how long this will take
   d. Follow hospital contact precautions (hand sanitizer, masks, eye protection) as required
   e. All of the above

2) Which of the following are sources of truths regarding a patient's prior to admission medication history?
   a. Inpatient medications that were ordered by doctors in the hospital
   b. Outpatient pharmacy insurance claims
   c. Fill history obtained via telephone from patient's home pharmacy
   d. B and C

3) B.S. is a 40 year old female whose past medical history includes diabetes. Which medication would she likely be on?
   a. Simvastatin
   b. Metformin
   c. Augmentin
   d. Furosemide

4) S.F. is an 80 year old patient that you visit to obtain a medication history list. He is very confused and said he doesn't know why of his medications. How should you proceed?
   a. Assume the medication list is correct as is
   b. Ask if there is a friend or family member that helps with his medications and ask if it is ok to contact them
   c. Insist the patient review his medication list and to guess on the answers if he has to
   d. Remove all medications from the prior to admission medication list since the patient cannot confirm any of them.

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Standard Operating Procedure Assessment

- Provides consistency

- Objective measure of competency

- Framework for initial training as well as biannual assessments

- Protects technicians from pharmacist-specific requests

PATIENT INTERVIEW CHECKLIST			
Technician:			Date:
Reviewer:			

SKILLS	INCLUDED	FEEDBACK	
Assess where patient came from			
Review eRecord information (PTA med list, SureScripts/DrFirst/WAMB, progress notes, pharmacy contact information)			
Wash hands, wear gloves and face mask prior to entering room (don gown and goggles if indicated)			
Acknowledge patient and family and introduce self			
Explain role and purpose			
Assess allergies			
Determine home pharmacy(ies)			
Review home medications (use a minimum of 2 sources of truth)			
Ask probing, open-ended questions (what other medications are you taking, which medications do you take "as needed")			
Ask about OTC medications and herbal products			
If applicable, assess if patient has any barriers to medication use (need for pillbox, education, refill on medications at discharge, and adequate supplies (diabetes), etc.)			
If applicable, ask patient if they encounter any barriers to accessing their medications (cost, transportation, etc.)			
Thank patient for their time			
Wash hands			

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Measurable impact on patient care

One of the most notable barriers to a medication history program is justifying the cost of resources

- Capturing the impact is vital to support the program and drive expansion of services

- Improved accuracy of medication histories supports the following hospital-aligned goals:
  - Reduction in medication errors
  - Reduced risk for 30-day readmission
  - Patient satisfaction*

Reduction in medication errors

Metrics are captured in EPIC using a SmartForm which reports data to a Power BI server for review

Reduction in medication errors

Reduction in Medication Errors

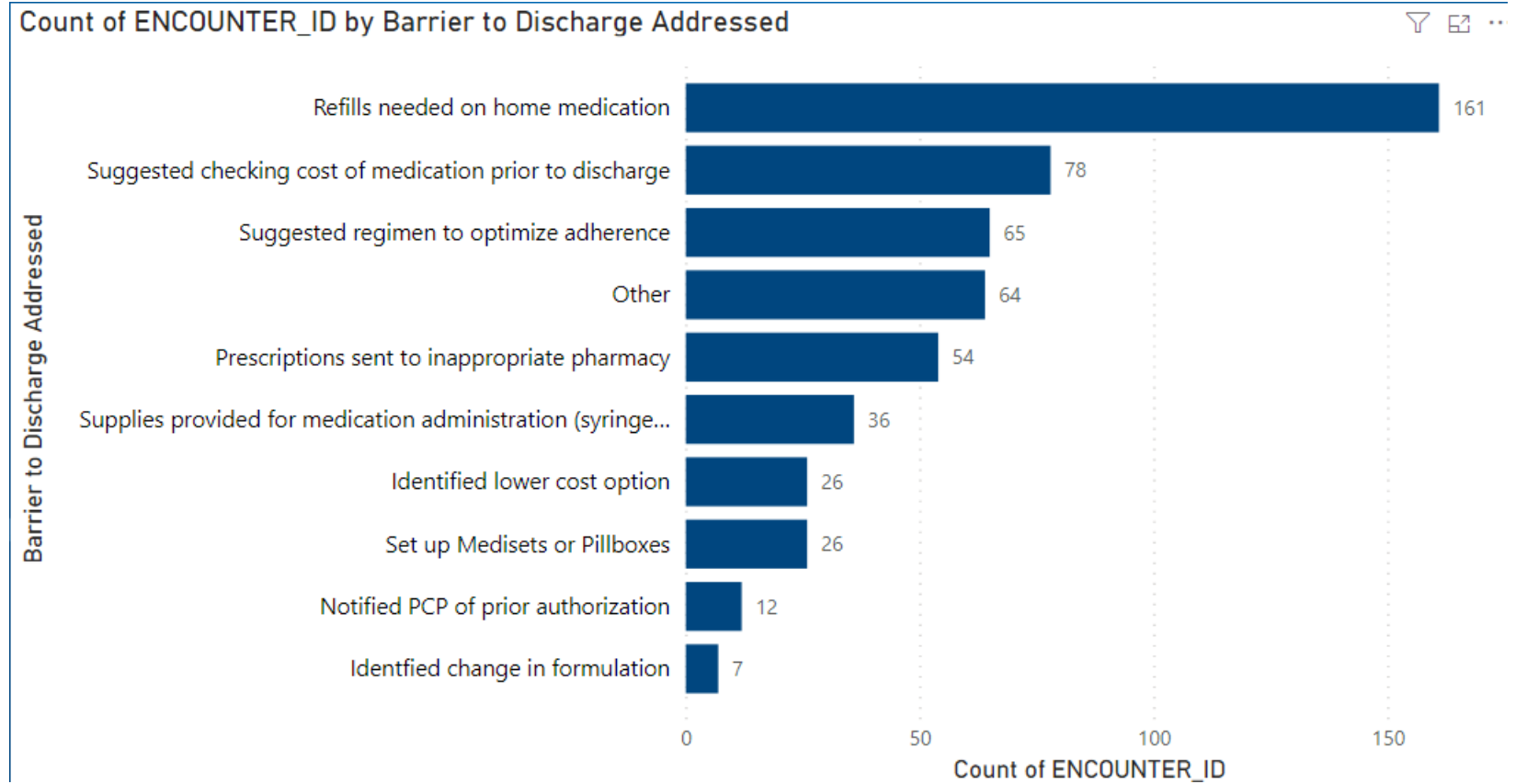|		
0.07 Average Number of Dosage Form Changes per Encounter	**0.55** Average Number of Doses/Frequencies Decreased per Encounter	**0.24** Average Number of Tablet/Capsule Strength Changes per Encounter
1.75 Average Number of Meds Added per Encounter	**0.45** Average Number of Doses/Frequencies Increased per Encounter	
1.66 Average Number of Meds Removed per Encounter	**1.95** Average Number of Meds with Missing Information updated per Encounter	**6.72** Average # of tallied interventions per encounter
0.03 Average Number of Non-Compliant Meds per Encounter	**0.02** Average Number of Route Changes per Encounter	

Driving Comprehensive Patient Care

Pharmacists use the information obtained from the medication history to drive the highest quality patient care

- Provide patient education regarding disease state, medication indications, and administration technique
- Address barriers to medication use and access
- Align therapy recommendations to patient-specific goals

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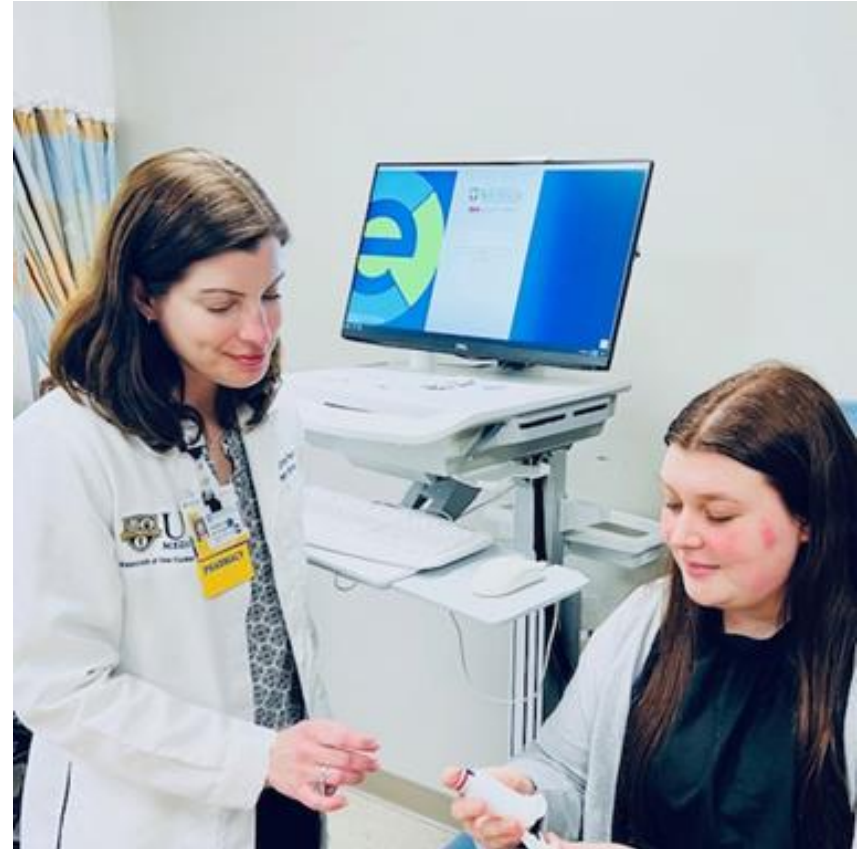
Improved Patient Care and Satisfaction

Count of ENCOUNTER_ID by Barrier to Discharge Addressed

Measuring Outcomes

Reducing 30-day readmissions not only enhances the patient's health, but it reduces CMS financial penalties for the hospital:

Data from 1/1/24 – 11/16/24 for Practice Advancement Units

No Involvement

209	1623
Distinct Count of Encounters with Readmissions	Distinct Count of Encounters

Readmission <30 Days?
No
Yes

12.88%
Readmission Rate

With Involvement

228	1999
Distinct Count of Encounters with Readmissions	Distinct Count of Encounters

Readmission <30 Days?
No
Yes

11.41%
Readmission Rate

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Expansion of technician-led initiatives

Encourage Medication History Technician Specialists!
- Allow them to create performance goals
  - Identify patients in need of delivery, med-packing
  - Assess diabetes supplies during interview
  - Communicate patients requesting education

- Incorporate them into all team activities
  - Involved in Wellbeing and Resilience Committee
  - Part of the nursing/provider teams

- Empower them to teach and mentor
  - Pharmacy technicians
  - Pharmacists and Interns
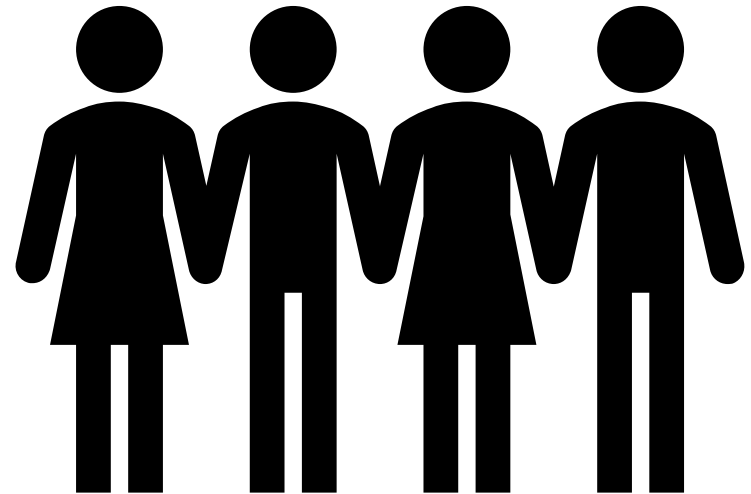
We don't succeed if our technicians don't succeed

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