Pharmacy Technicians and Interns: Charting New Territory

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Objectives

• Understand what “Pharmacist Extenders” are and why they are valuable
• Describe challenges associated with home medication admission reconciliation
• Describe a process by which home medication admission reconciliation may be performed with the assistance of pharmacy technicians and interns

Objectives

• Describe the scope of involvement that technicians and students may have with regard to home medication admission reconciliation
• List three ways that pharmacy students can assist the pharmacy department in achieving CMS Core Measure compliance
• Identify two roles that pharmacy technicians and interns can adopt that may positively impact HCAHPS medications scores

What is a “Pharmacist Extender”??

• Personnel whose function allows the pharmacist to broaden his or her scope of practice or work responsibilities
• Technicians
• Interns
• APPE Students

Why Do We Need Extenders?

• Regulatory agency mandates:
  – National Patient Safety Goal 03.06.01
  – Medication Reconciliation
  – CMS Core Measures
    • VTE 1-3, PN 6, STK 1, SCIP, etc
    • HCAHPS

Why Do We Need Extenders?

• Increased responsibility
  – Elevated census
  – Affordable Care Act
  – More Clinical Consults
    • FTE hours

• To further the practice of pharmacy
  – ASHP Pharmacy Practice Model Initiative
Why Do We Need Extenders?

- Pharmacy Practice Model Initiative (PPMI)
  - ASHP’s vision for the future of pharmacy practice
  - “The goal of this initiative is to significantly advance the health and well being of patients by developing and disseminating a futuristic practice model that supports the most effective use of pharmacists as direct patient care providers.”

PPMI Goals

- Extenders at Baptist Health NLR
  - Technicians and Interns
    - Home medication histories
  - P4 students
    - Core Measures review
      - SCIP-Inf-3, PN-6, VTE 1 and 2
    - Adverse Drug Reactions
      - Reviewing
      - Reporting
    - Patient counseling (HCAHPS)

What is Medication Reconciliation?

- CMS definition
  - The process of identifying the most accurate list of all medications that the patient is taking, including name, dosage, frequency, and route, by comparing the medical record to an external list of medications obtained from a patient, hospital, or other provider.
Who is involved in Medication Reconciliation?
- Physicians
- Nurses
- Pharmacists
- Pharmacy Technicians
- Pharmacy Students

Barriers to Medication Reconciliation
- Physician, nurse, and pharmacist workload
- Polypharmacy
- Difficulty retrieving necessary information
  - Patients
  - Altered mental status
  - No medication list
  - Family members
- Pharmacy and Physician office hours

Involving Interns and Technicians in Medication Reconciliation
- Multiple studies have evaluated the use of pharmacy students and technicians
- The studies show that ~60-80% of charts have at least one discrepancy
- There were an average of 1.5 to 3 discrepancies per patient discovered by the students/technicians

Effectiveness of a MedRec Project Conducted by PharmD Students
- Conducted at 3 hospitals in New York
- Objective: Evaluate effectiveness of a medication reconciliation program conducted by PharmD students during an APPE
- Methods: Eleven students interviewed patients to obtain a medication history, reconciled their list with the chart, and then identified discrepancies
- Results:
  - 330 patients over 10 months
  - 922 discrepancies
  - Median of 2 discrepancies per patient
  - At least one discrepancy found in 75% of patients
  - Patients in whom a discrepancy was identified had a significantly greater number of prescribed medications

BHMC-NLR Study
- Reduction in clinical relevant medication errors by use of Prior to Admission Medication Technicians (PTAMT)
- Purpose was to "analyze the accuracy of PTA medication histories obtained by certified pharmacy technicians and interns."
BHMC-NLR Study

• Objectives
  – Quantify the medication error rate differences between a Prior to Admission (PTA) medication list obtained by an RN and an APPE student and PtAMT.
  – Quantify the types of medication error rate differences between a PTA medication list obtained by a registered nurse and an APPE student and PtAMT.
  – Quantify the required time to obtain the most accurate home medication list when completed by an APPE and PtAMT.

• Methods
  – A senior pharmacy student received a list of patients admitted the previous day (inpatient and observation) Monday through Friday during the study period.
  – If professional assistance was required, a staff pharmacist was involved in the review.

BHMC-NLR Study

• Results
  – 22 PTA med histories completed
  – 26 med omission errors
  – 20 med inclusion errors
  – 45 errors due to incorrect med, dose, or frequency
  – Only 2 PTA med histories did not include discrepancies.
  – 91 discrepancies found (4.13 average per patient).

PtAMPT Comparison

![Graph showing medication errors]

PtAMPT Comparison

![Graph showing home medication adherence]
PtAMPT Comparison

Qualifications to be a PtAMPT

- Current technician license from the State Board of Pharmacy
- Currently employed by Baptist Health as a Pharmacy Technician
- Review and acknowledge understanding of the “Prior to Admission Medication List Collection and Review” Policy and Procedure

Qualifications to be a PtAMPT

- Review and acknowledge understanding of the Arkansas Board of Pharmacy Law Book – Section 03-00-0005
- Signed and dated copy of the above documents in the employee’s personnel file located within the office of the Pharmacy Administrative Assistant’s office
- Successfully pass (score > 75%) a Prescription Medication Matching Test

Qualifications to be a PtAMPT

- Successfully pass (score > 90%) a “Prior to Admission Medication List Collection and Review” Policy and Procedure Exam
- Successfully complete each practical skill on the Prior to Admission Medication Technician Validation Checklist. This must be completed by an active BHMC-NLR Pharmacy Supervisor or currently certified PTAMT.

PtAMPT Process

- PtAMPT interviews patient>family member>pharmacy>physician office.
- PtAMPT updates PTA med list, adding new meds and removing incorrect meds
- PtAMPT leaves an open “i-Vent” for the pharmacist to review.

PtAMPT Process

- Pharmacist reviews the PtAMPT’s work
- Pharmacist verbally contacts physician if immediate action is required
- Pharmacist leaves written communication to the physician in the EMR if immediate action is not required.
- Follow up is performed the next morning to ensure updated PTA list is addressed
What has worked well?
- Transition from paper chart to electronic medical record
- Nursing participation and “buy in”
- Increased efficiency
- ER demand for PtAMPT
- Cost savings

Cost Savings

Opportunities to improve
- Physician participation
- Better communication from the ER night shift staff to the PtAMPT
- Increased PtAMPT hours in the emergency room

Transforming APPE Student Experience
- Our old rotation structure
  - Students mostly “shadowed” clinical pharmacists in addition to having a CE presentation at the end of the month
  - Little direct patient interaction
  - Inconsistent learning plan

Transforming APPE Student Experience
- New rotation structure
  - Emphasis on active learning
  - Resident led journal club and patient case discussion
  - Daily patient counseling
  - Assist with “Core Measure Reports”
  - ADR investigation
  - Medication Reconciliation
Transforming APPE Student Experience

- Patient Counseling
  - Patients in two of our high census units are counseled upon discharge
  - A contact card is left with the patient

Transforming APPE Student Experience

- "CMS Reports"
  - Morning and afternoon PN-6 and SCIP-inf-3 reports.
  - VTE 1 and 2 reports

What has worked well?

- CMS reports
- Journal Club
- Patient case discussions
- Active learning approach

Opportunities to Improve

- Patient counseling process
  - Multiple changes to the process
  - Failure to improve HCAHPS thus far
- Communication
  - From preceptor to preceptor
  - From preceptor to student
  - From student to student

Future Initiatives

- PtAMPT collection of allergy and immunization histories?
- Additional Core Measure responsibilities?

References

Questions?