Community Pharmacist Engagement in Medication Reconciliation Processes for Recently Discharged Patients: A Grounded Theory Study

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Background

Medication Reconciliation

- Medication discrepancies between patients' medication lists across different health care sites are common for patients transitioning from hospital to community care
- Medication reconciliation has been recognized by The Joint Commission as a critical process to decrease medication discrepancies across health care sites
- Previous research has focused on reconciliation processes between hospitals and community physicians, ***but not with community pharmacies*** despite the fact that patients most commonly fill their medications at community pharmacies after discharge

Community Pharmacies & Coordination of Care

- In 2013, nearly 4 *BILLION* prescriptions were filled at community pharmacies; however, community pharmacies are not typically included in traditional transitional care programs

Objective

The objective of this study was to examine community pharmacists' perspectives and factors influencing medication reconciliation processes in the community pharmacy for recently discharged patients.

Methods: Research Design, Settings, and Sample

- **Grounded Theory** was used as the foundation for data collection and analyses
- **Settings:**
  - Community pharmacy was defined as any licensed outpatient pharmacy providing pharmaceutical services
  - Three main types of community pharmacies were included in the analyses: 1) Larger retail community pharmacies, 2) smaller independent community pharmacies, and 3) outpatient long-term care pharmacies
- **Sample:**
  - Licensed pharmacists throughout Wisconsin and employed >1 year in a community pharmacy

Results: Study Participants Characteristics (N=21 Pharmacists)

Characteristics	Values
Years of practice experience, median (range)	10 years (3.5-31)
Daily prescription volume, mean (SD, range)	302 (±119, 150-600)
Pharmacist practice setting, n (%)	
Larger Retail (>20 stores same ownership)	8 (38%)
Smaller Independent (≤20 stores same ownership)	8 (38%)
Long-Term Care	5 (24%)

Results: Engagement in Medication Reconciliation Process

Pharmacists (N=21) described either complete, some, or no engagement in medication reconciliation processes for recently discharged patients

Of the 16 pharmacists citing ideal medication reconciliation:

- ✓ 6 pharmacists had complete engagement and were able to practice in alignment with their perceived ideals
- ✓ 10 pharmacists had some engagement but were not in alignment with their perceived ideals, citing multiple major barriers to reconciling medications

Model of the Medication Reconciliation Process and Outcomes from Community Pharmacists' Perspectives for Recently Discharged Patients

Medical Hierarchy

Conditions
(Barriers and Facilitators)

Community
- Size
- Relationships
- Community involvement

Hospital Factors
- EMR
- Providers
- Culture, structure

Pharmacy Factors
- Access to EMR
- Volume
- Culture

Healthcare professionals

Patient factors
- Familiarity
- Severity of illness
- ***Caregiver involvement***

Patient Discharged from Hospital
Prescription to pharmacy
- Faxed
- Phone
- Electronic prescription
- Hard-copy (Patient/ Caregiver)

Extent of Medication Reconciliation
- New prescription only
- Narcotics
- All medications
- None

Strategies and actions to overcome barriers and facilitators
- Cognitive (e.g., clinical judgment)
- Behavioral (e.g., checkbox on prescription)
- Policy (e.g., quality measures)

Consequences

Medication reconciliation complete
- Negative (e.g., time consuming)
- Positive (e.g., patient safety)

Medication reconciliation incomplete
- Negative (e.g., ADE)
- Positive (e.g., more time for other activities)

- ✓ Medical hierarchy was a recurrent barrier
- ✓ Access to EMR streamlined and empowered pharmacists
- ✓ Despite valuing reconciling medications, pharmacists cited multiple barriers

Methods: Data Collection & Analyses

- This study was conducted in three phases (Phase 1, II, III) during which data sampling, collection, and analyses occurred in a cyclical process (Table 1)

Table 1. Data collection and data analysis evolution over the course of this grounded theory study

Phase	Purpose	Sampling	Interview Questions	Analysis
I	Examine how community pharmacists think about medication reconciliation processes and factors that influence the process.	***Open sampling*** Similar to convenience sampling. Community pharmacists were initially selected from PEARL-RX. Eight community pharmacists were interviewed.	**Open and general**: unstructured questions	***Open coding***. Words and phrases become "concepts." Dimensions and properties of concepts were categorized.
II	Identify dimensions within categories that were discovered in Phase I. Saturate categories.	***Theoretical sampling*** Based on categories identified in Phase I. Similar to purposive sampling. Eight community pharmacists were interviewed.	**Open but becoming specific and focused**: unstructured and structured questions	***Axial coding***. Categories and codes were related to each other and then arranged in conceptual order.
III	Integrate categories and dimensions into conceptual model.	***Theoretical sampling*** to integrate categories and validate conceptual model. Five new community pharmacists and seven previously interviewed pharmacists were interviewed .		***Selective coding***. Categories were integrated into conceptual model.

Conclusions

- Community pharmacists noted wide variation in medication reconciliation practices for recently discharged patients
- Findings illustrate significant gaps and opportunities for researchers, policymakers, and pharmacists to develop interventions and guidelines to streamline medication reconciliation processes in community pharmacies

Funding

The research was graciously supported by an AHRQ Health Services Research Dissertation Grant R36HS021984; William S. Middleton Veterans Hospital, Madison, WI. The contents do not represent views of the Dept. of Veterans Affairs or the US Government; UW- Madison School of Pharmacy Sonderegger Research Center; and The Community Pharmacy Foundation.