

Medication Reconciliation

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Medication reconciliation produces a very articulate list of all the patient's medications and compares it with the physician's admission, transfer of care, and order for discharge (Bartzak, 2022). Investing in this process needs to be done more thoroughly to prevent continuing medication errors and to cause harm to the patient. Evidence shows that implementing different medication reconciliation methods, educating staff and patients on correctly identifying discrepancies, and ensuring effective communication during transition periods will decrease errors significantly.

Literature Review

Impact of an Integrated Medication Reconciliation Model

Patient safety is essential and a priority in the healthcare system (Marinovic et al., 2021). Avoid medication errors to improve patient safety (Marinovic et al., 2021). When transferring a patient, more than half of medication errors occur (Marinovic et al., 2021). This issue contributes to medication discrepancies due to a lack of coordination from the pharmacotherapy part in health care (Marinovic et al., 2021). According to a review paper, medication incidences ranged from 14%-93.5% (Marinovic et al., 2021). Medication reconciliation is vital in specific populations like the elderly. Older adults have more mental and physical impairments, making it challenging to notice medication discrepancies (Marinovic et al., 2021). The integrated medication reconciliation model displayed six different parts, including medication reconciliation on admission, review of pharmacotherapy during the patient's time at the hospital, education to the patient and counseling, medication reconciliation at discharge, at the community health center, and involving community pharmacist (Marinovic et al., 2021). The hospital pharmacist obtained the group's medication history and solved discrepancies on admission. A questionnaire to help understand pharmacotherapy (Marinovic et al., 2021). During the patient's

education session, the clinical pharmacist scheduled a meeting to review all their medications and any changes made during their hospitalization to the patient and caregivers (Marinovic et al., 2021). At discharge, the clinical pharmacist collaborates with the physician to ensure the patients leave with the best medication plan (Marinovic et al., 2021). This plan includes the continuation of the medications, what the patient began when in the hospital, discontinuation of medications during hospitalization, and medications that needed to be brought up or discontinued upon discharge (Marinovic et al., 2021). Medication reconciliation at the Community Health Centre happens after discharge one month from the hospital (Marinovic et al., 2021). A physician compares the discharge summary medications from the first list provided to the center after discharge (Marinovic et al., 2021). The main issue is the incidence and type of medication discrepancies after discharge, including incorrect dose, route, substitution, or drug omission (Marinovic et al., 2021). After reviewing the data of each group, the model showed a significant decrease in medication errors upon discharge (Marinovic et al., 2021). Each part of the healthcare team is essential, but the clinical pharmacist is the leading player. Evidence shows that clinical pharmacists should be in control of transfers of care to ensure medication discrepancies are minimal or nonexistent post-discharge (Marinovic et al., 2021).

Task Sharing in an Interprofessional Medication Management Program – A Survey of General Practitioners and Community Pharmacists

Medication reconciliation, also known as medication reviews, serves the vital purpose of keeping clients safe from unintended medication discrepancies. This article examines the use of an interprofessional medication management program which consists of general practitioners and community pharmacists working together through collaboration to ensure patients' medication reconciliations are accurate and up to date. Interprofessional collaboration between general

practitioners and community pharmacists has positively affected blood pressure, HbA1c values, LDL-cholesterol levels, and appropriate medication use (Moecker et al., 2022). After observing how beneficial interprofessional teams can be for these medical concerns, this article seeks to determine how community pharmacists can be more involved in medication reconciliation. Medication management tasks, such as checking drug-drug interactions, duplicate medications, or guideline adherence, are shared between general practitioners and community pharmacists (Moecker et al., 2022). Sharing of tasks leads to drug management tasks being completed once by the general practitioner and again by the community pharmacist. However, it also leaves a gray area if communication is inefficient between the two. If task allocation is not transparent, this may lead to tasks either not being carried out adequately or twice (Moecker et al., 2022). Medication discrepancies can occur when a client's medications need to be updated or updated. Promoting interprofessional communication between general practitioners and community pharmacists can help close the gaps in patient care and ensure accurate medication reviews.

Exploring the Value of a Multidisciplinary-led Medication Review for Elderly Individuals at a Long-term Care Facility Performed by Four Different Health-care Professions in an Equal and Closely Integrated Collaboration

Elderly individuals in long-term care facilities are especially at risk for polypharmacy-related adverse drug reactions. These individuals are more likely to take multiple medications simultaneously due to more health concerns needing addressing. Living in long-term care facilities also means that caregiving staff have much knowledge of the client and are familiar with their needs. This article studied the value of equally involving different healthcare professions in medication reviews, including physical meetings for elderly individuals at a long-term care facility to do a medication reconciliation for each (Frandsen et al., 2022). This group of

healthcare workers would include a general practitioner and pharmacist. However, it would also include nursing staff and staff helpers who regularly performed daily care for elderly individuals. The article states that caregiving staff were very knowledgeable about each resident and could describe their medication preferences, the severity of symptoms, adverse events, actual use of over the counter and as-needed drugs, and food and toilet habits (Frandsen et al., 2022). An interprofessional team-based approach is helpful in the medication reconciliation process of elderly individuals in long-term care facilities because the staff can address the patient's needs, bringing to attention more specific personalized patient needs. This case study was carried out in a nursing home with forty-nine residents. This group had over 573 prescriptions, and the interprofessional team recommended 150 changes (Frandsen et al., 2022). The two most significant medication review changes involved discontinuation and dose reduction. All professions involved in the medication review also benefited from this collaboration. The general practitioner reported that the staff's observations and knowledge about residents provided valuable information that she had missed in similar projects. The nurse in the study mentioned that workflow became more efficient as the interprofessional team became more accustomed to working together (Frandsen et al., 2022). In conclusion, interprofessional collaboration using around four team members, a general practitioner, a nurse, staff helpers, and a pharmacist, improves medication reconciliation quality and helps form a complete picture of clients' specific needs.

A Prospective Assessment of the Medicaid Web Portal for Admission Medication Reconciliation at a Community Hospital in Montana

Medication reconciliation can be a challenging process. These challenges include patients' poor knowledge of medications, altered mental status, low health literacy, or psychiatric

conditions (Parks et al., 2021). When a patient cannot help with a medication review, this can leave gaps in care. The article also writes that interviews of patients or family members can be unreliable and that pharmacy operation hours open can make contact and communication problematic (Parks et al., 2021). This issue leads to healthcare workers using multiple resources, at least two, to figure out what medications a patient is taking. The article states that standard methods to gather a patient's medication history include a review of medical records, electronic pharmaceutical claims data, and a patient or caregiver interview (Parks et al., 2021). In this article, researchers sought to launch a quality improvement initiative that evaluated 100 patient medication lists. However, instead of just using the standard methods, they implemented electronic, pharmaceutical claims data from the state Medicaid Web portal to gain a more accurate medication reconciliation. The Medicaid Web portal, after completion of the 100 medication reconciliation lists, found that there was a total of 46 discrepancies, of which the two significant discrepancies were drug omission (46%) and wrong dose (33%) (Parks et al., 2021). Researchers suggest adding the Medicaid Web portal if available for the patient. However, it is essential to use clinical judgment while using the portal because adding additional sources to a medication review may cause unintentional discrepancies. The article also included that using the Medicaid Web portal took an average of 10-30 minutes for a pharmacist to identify and correct these discrepancies identified (Parks et al., 2021). Implementing the Medicaid Web portal method for medication reconciliation makes this process significantly faster than other sources, such as interviews or electronic pharmaceutical claims data.

Unintended Medication Discrepancies and Associated Factors upon Patient Admission to the Internal Medicine Wards: Identified through Medication Reconciliation

Unintended medication discrepancies are prevalent on admission to internal medicine wards. Medication reconciliation or identifying medications a patient is taking and comparing them with discharge medications, is a highly valued undertaking for protecting patients from these unintended medication discrepancies. The article states that older age, polypharmacy, low adherence, increased comorbidities, and increased information sources used for medication reconciliation are significantly associated with unintended medication discrepancies (Moges et al., 2022). Medication reconciliation is crucial for these patients listed with additional risk factors for unintended medication discrepancies. The risk posed for individuals with polypharmacy makes them 5.47 times more likely to have unintended medication discrepancies than those without (Moges et al., 2022). This article examines the evidence of using pharmacists-led structured medication reconciliation that utilizes the best possible medication history (BPMH). The BPMH includes using at least two sources of information (Moges et al., 2022). However, the article mentioned that using more than one available source is also essential, but clinical judgment must be considered because multiple sources can lead to errors. Of a total of 442 interventions recommended by the pharmacists, the majority (75.3%) were fully accepted (Moges et al., 2022). The high acceptance rate of pharmacist-recommended interventions indicates that a team approach between healthcare workers and pharmacists could help identify and fix unintended medication discrepancies in patients' medication reviews.

Case Study

Medication reconciliation is essential to view among the geriatric population. As you increase in age and polypharmacy can put an individual at risk for urinary incontinence, people living in aged care facilities (Deeks et al., 2017). Due to the extensive risk of urinary incontinence, a medication review is necessary to address the issue. The *urinary incontinence* —

the role of a pharmacist in an aged care Residential Medication Management Review study, focused on a 76-year-old female in an aged living facility with multiple comorbidities to see if medication review management would help her worsening urinary incontinence (Deeks et al., 2017). The case study began its research with the patient's admission to the hospital. It appears medication reconciliation during admission was done poorly due to the duplication of some medications for treatment (Deeks et al., 2017). This study aimed to understand the cause of her urinary incontinence worsening and reduce her Drug Burden Index with a residential medication management review (Deeks et al., 2017). After the pharmacist reviewed the patient's chart and medication list, multiple errors from the aged living medication chart were revealed (Deeks et al., 2017). After careful review, medication errors were brought to the general practitioner's attention by the pharmacist, which improved the patient's symptoms (Deeks et al., 2017). The study proved that including a pharmacist in the multidisciplinary team would benefit the aged population for medication reconciliation (Deeks et al., 2017).

Synthesis

Practice:

Communication is a crucial component involving medication reconciliation. If there is not thorough communication during the transition period, inconsistencies will occur (Bartzak, 2022). The increase in effective communication with the interprofessional healthcare team will decrease the adverse effects of medication errors and bring harm to patients (Bartzak, 2022). Medication reconciliation is vital for admission, discharge, and the continuation of the changes in staffing and care to the patient (Bartzak, 2022). Effective communication will reduce omissions, reduce duplication of medications, and the decision if the current medications should remain in use (Bartzak, 2022). If a patient has been on warfarin for the past couple of days, but after reviewing the patient's chart for their current shift, the medication is no longer on the list

(Bartzak, 2022). The list does not indicate that warfarin should not be renewed (Bartzak, 2022).

The nurse could communicate directly to the provider about the possibilities of this issue, but this action can miss other important information the interprofessional team could be aware of (Bartzak, 2022). It is crucial to consult everyone on the interprofessional healthcare team to gain proper communication for the patient's best interest (Bartzak, 2022). The ongoing communication throughout the transition periods will minimize medication errors (Bartzak, 2022).

Education:

It is essential to provide education on the importance of communication with patients and staff with interprofessional healthcare team members, especially during transition times. The benefits of educating staff and patients on the importance of medication reconciliation and communication will eliminate patient adversities and reduce hospital financial exposure (Bartzak, 2022). They are also educating on the different populations that are more prone to errors in medication reconciliation, like older polypharmacy, the geriatric population of patients 65 and older, and emergency department admissions (Bartzak, 2022). Much of the education for medication reconciliation is towards the patients and their success.

Research:

For further study on medication reconciliation, nursing professionals need to discuss with EHR vendors to create easy-to-use templates for medication reconciliation and have easier communication flow during transition periods (Bartzak, 2022). Developing a transition care team made up of primary nurses to view charting for medication inconsistencies can potentially prevent the risk of errors (Bartzak, 2022). Also, inputting the pharmacy to lead medication reconciliation has decreased errors from 57% to 33% (Bartzak, 2022). The influence of the

healthcare team coming together to input these different interventions to reduce medication errors will benefit the patients and the institution as a whole.

Conclusion

Medication reconciliation is an essential aspect of the safety of patients in the healthcare system. Evidence-based practice prevention strategies show the positive effect they can have by reducing the number of medication errors before, during, and after patient care. Communication and implementation of the interprofessional healthcare team, significantly the pharmacist, will help increase patient outcomes.

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