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Medication Reconciliation - A Much Needed in the Each Hospital

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Medication reconciliation

Medication reconciliation is a process of screening of patient prescription, obtaining accurate list of previous medication and comparing it with prescription after transition of care (on admission, after transfer to another clinical unit, and at discharge) [1]. Medication reconciliation is a safety strategy used to prevent the discrepancies, has been adopted by many healthcare organizations. It was first implemented in 2005 as a National Patient Safety Goal (NPSG) by the Joint Commission and later the WHO collaborators involved themselves in endorsing this strategy across many countries [2]. The accurate medication history was one of the patient safety solutions disseminated in 2007 by the WHO [3].

Steps to be followed during medication reconciliation

Medication reconciliation process includes:

- Best possible medication history (BPMH): Obtaining the complete patient medications list, taken by the patient for all medical conditions [4].
- Verifying: the medications and dosages ordered at admission / internal transfer to check for its adequacy.
- Reconciliation: newly prescribed and previous medications are compared and documented.
- Transmission: an updated and verified medication list is communicated to the next healthcare provider by Best Possible Medication Discharge Plan (BPMDP) [5].

Best possible medication history

Up to 60% of hospitalized patients contain at least one discrepancy in their admission medication history [3].

The BPMH is the basis for medication reconciliation. It is different from the routine medication history, which involves (1) a systematic process for interviewing the patient, (2) a review of at least one other reliable source of information (database/community pharmacy) to obtain and verify the patient medications [4].

This can be a direct patient interview and/or care taker to obtain the information about the medications taken by the patient, medical history, duration of treatment, drug allergies present if any. BPMH is a part of medication management and pharmaceutical care for a purposeful evaluation and resolution of drug therapy related problems [5].

Drug related problems

Medication reconciliation is a tool used to tackle the medication discrepancies happening at various treatment transitions of care to ensure patient safety. Several drug related problems can be identified during this process, including:

1. Medication Discrepancies: Discrepancies between the patient's current medications, what was prescribed, and what is actually being taken can lead to dosage errors or missed medications.
2. Allergies and Adverse Reactions: Identifying allergies and adverse reactions to medications is crucial to prevent potential harm when prescribing or administering new drugs.
3. Dosing Errors: Incorrect dosages, whether too high or too low, can lead to treatment inefficacy or adverse effects.
4. Drug Interactions: Recognizing potential drug interactions is vital to avoid harmful effects when multiple medications are taken simultaneously.
5. Omissions: Missing essential medications or therapies in the patient's regimen can compromise their health.
6. Duplicate Therapy: Identifying duplicate medications or therapies can prevent unnecessary side effects and costs.
7. Incomplete Medication Records: Ensuring the patient's complete medication history when documented helps in providing appropriate care.
8. Non-Adherence: establishing patient non-adherence issues is critical to address the root causes and helps improve patient compliance.
9. Inappropriate Medications: Identifying medications that may not be suitable for the patient's condition or age is essential for patient safety.
10. Complex Regimens: Recognizing overly complex medication regimens can lead to patient confusion and non-compliance.

Challenges faced by the geriatric patients

Geriatric patients, due to their age and often complex health conditions, can face several challenges related to drug-related problems. These challenges would be like managing multiple medications for comorbid conditions and medication adherence to it, cognitive impairment decreases ability to manage medications properly, reduced kidney and/ or liver function can lead to drug accumulation and toxicity, being more prone to cause adverse drug reactions, and lack of medication review can result in persistence of inappropriate or unnecessary drug regime.

To address these challenges, healthcare providers often need to take a patient-centered approach, conduct comprehensive medication reviews, provide clear instructions, and closely monitor medication use in geriatric patients to ensure their safety and well-being.

How medication reconciliation can encounter the drug related problems

Medication reconciliation is a process designed to identify and address drug-related problems, during transitions of care. Medication reconciliation can encounter and help mitigate these issues by:

1. Identification of Discrepancies.
2. Allergy and Adverse Reaction Assessment.
3. Reviewing Dosages.
4. Detecting Drug Interactions.
5. Addressing Omissions.
6. Poly pharmacy Management.
7. Assessing Appropriateness.
8. Simplifying Regimens.
9. Education and Counseling.
10. Regular Medication Reviews.

Medication reconciliation is a valuable tool for identifying and addressing drug-related problems, which is particularly important for geriatric patients due to their higher susceptibility to medication-related issues. It ensures that medications are appropriate, safe, and effective for this vulnerable population.

Role of clinical pharmacist in medication reconciliation process

Clinical pharmacists play a significant role in medication reconciliation to prevent drug related problems by ensuring the accuracy and safety of a patient's medication regimen during transitions of care. Their specific roles in this process includes, medication review, identification of discrepancies, drug interaction evaluation, dosage assessment, omissions idenfication, poly pharmacy management, communication with the hethcare prescibers and patient & caregiver education.

By fulfilling these roles, clinical pharmacists contribute significantly to preventing drug-related problems during medication reconciliation, ultimately enhancing patient safety and the effectiveness of their treatment.

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