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Medication Reconciliation Guidance Document for Pharmacists

Published: July 2018

Summary: The purpose of this guidance document is to provide a general foundation for medication reconciliation performed by pharmacists, pharmacy learners, and pharmacy technicians in the outpatient setting. Thorough medication reconciliation can improve patient safety by identifying and reconciling discrepancies. This document can assist pharmacists in setting up a medication reconciliation process in their practice setting or may be used as a guide for an existing service.

Note: This document is meant to be a quick reference and is supplemental to the Medications at Transitions and Clinical Handoffs (MATCH) Toolkit for Medication Reconciliation and ASHP Statement on the Pharmacist's Role in Medication Reconciliation.

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Published on behalf of the ASHP Section Advisory Group on Medication Management Services

Introduction

According to the Medications at Transitions and Clinical Handoffs (MATCH) Toolkit for Medication Reconciliation, an effective medication reconciliation process may potentially decrease medication-related events and the associated costs of care.[1] The Joint Commission defines medication reconciliation as the process of comparing a patient's medication orders to all of the medications that the patient has been taking in order to identify and resolve medication discrepancies.[2] Medication reconciliation involves more than obtaining an accurate medication history - it is an active process that includes a number of steps. The Institutes of Healthcare Improvement defines medication reconciliation in three steps.[3] Verification: the first step is to obtain a medication history from the patient and other appropriate sources (e.g., caregivers, providers, dispensing pharmacy) that includes medications currently taking and those the patient should be taking. The compiled medication list should then be reviewed with the patient or caregiver. Clarification: the medications and doses listed should be assessed for appropriateness. Reconciliation: the home medication list should then be compared against any new medications ordered during transition periods of the hospital stay or clinic appointment, most notably during admission and discharge.

The main focus of this document will be in the outpatient or clinic setting; however, the medication reconciliation process is similar in the inpatient practice setting and is equally as important to the patient. Staff completing the different steps in the medication reconciliation process may vary depending on the setting, facility and health system. Due to their unique skills and knowledge, pharmacists, pharmacy technicians and pharmacy learners are ideal candidates to help ensure that medication reconciliation is successful.[4] Better understanding of the medication reconciliation process, staff involved, best practices and pitfalls helps to ensure optimal medication outcomes.

Ideal Medication Reconciliation Process

The ideal medication reconciliation process begins with conducting a thorough patient medication interview and obtaining an accurate list of all current medications from the patient and/or caregiver. Accessing additional sources of information including the patient's medication bottles, insurance filing claims, community pharmacies, past medical records or other providers' records may be necessary. According to the MATCH toolkit, "other sources should never be a substitute for a thorough patient medication interview for patients who are able to participate" but rather provide additional confirmation and clarification when needed.[1] If recommendations/plans regarding medications are identified in medical records but not implemented or documented on the medication list, the clinician should contact prescribers for clarification.

Products to inquire about	Medication components to collect
• Prescription • Over-the-counter (OTC) • Vitamins • Herbals • Nutraceuticals/Health supplements	• Medication name • Strength • Formulation (e.g. extended release, orally-disintegrating tablet, cream, aerosol, solution including injections, etc.) • Dose • Route (e.g. PO, inhalation, topical, IM, SQ, IV, etc.) • Frequency and time of administration • Duration, if applicable • Time of last dose, if applicable • Date of last prescription fill, if applicable

Additional suggestions and prompts to aid in completing a medication history interview[1]:

- Use open-ended questions when possible (ex. "What medications do you take for your diabetes?")
- Ask patients about routes of administration other than oral medicines. Patients often forget to mention creams, ointments, lotions, patches, eye drops, ear drops, nebulizers, and inhalers.
- Ask about medications prescribed by other providers or specialists (ex. "Does your cardiologist prescribe any medications for you?")
- Ask patients about adherence and how often they miss doses.
- Ask patients if their doctor recently started them on any new medicines, stopped medications they were taking, or made any changes to their medications.
- For inquiring about OTC drugs, additional prompts may include:
    - What do you take when you get a headache?
    - What do you take for allergies?
    - Do you take anything to help you fall asleep?
    - What do you take when you get a cold?
    - Do you take anything for heartburn?

Once an accurate medication list is obtained and verified, it should be documented and easily visible within the patient's medical record. All disciplines providing care for the patient should reference the same medication list, regardless of the format (electronic or paper-based). Additionally, each discipline should have the ability to update the medication list as new or more reliable information becomes available. The list can then serve as a reference during prescribing (new or altering current medications) to assess for interactions

or contraindications and transitions of care. The existing list should then be compared to any new orders and plans and edited to reflect any changes to determine the patient's medication regimen at discharge (of clinic or hospital).[1]

Common discrepancies identified during medication reconciliation include[1]:

- Omission: a medication the patient is currently taking is not listed
- Commission: a medication is listed but patient is not currently taking
- Different dose, route, or frequency is listed of a medication that the patient is taking
- Therapy lacking indication
- Therapeutic duplication

The clinician should utilize critical thinking to distinguish between intended and unintended discrepancies and resolve any discrepancies that require clarification (refer to reference 1; p46 for additional information). The prescriber should be consulted for resolution and the resulting changes should be clearly documented.[1]

Role of Pharmacy Learners and Technicians in the Medication Reconciliation Process

Utilizing pharmacy technicians and pharmacy learners to complete appropriate activities related to medication reconciliation not only helps them to remain challenged and engaged in the process, but also helps to leverage available resources and free up the pharmacist to work at the top of their license. For example, pharmacy students and technicians have proven to be helpful in the medication reconciliation process through tasks such as obtaining a medication history under the direction of the pharmacist.[5-6] However, in order to avoid the potential for over-reaching their scope of practice, board of pharmacy state laws and health system policies need to be reviewed prior to assigning of roles and tasks. The most successful programs have well-defined and comprehensive training and competency verification, along with specific role expectations for the technician or learner. Lastly, an ongoing quality assurance plan is essential in order to measure success and identify potential areas for improvement.

Note: Certain steps in this section may not be applicable in every healthcare facility. Flowcharts can be modified to fit the resources available and processes performed at your facility.

Outpatient appointment

Prior to appointment

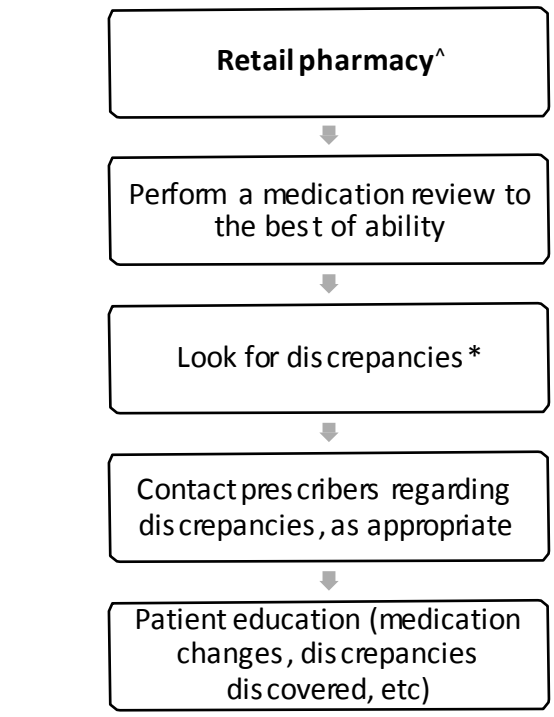
- Perform a thorough medication history to the best of ability (utilize available records, request chart notes from prescribers, contact patient's pharmacies, etc)
- Obtain an initial impression by looking for discrepancies*

During appointment

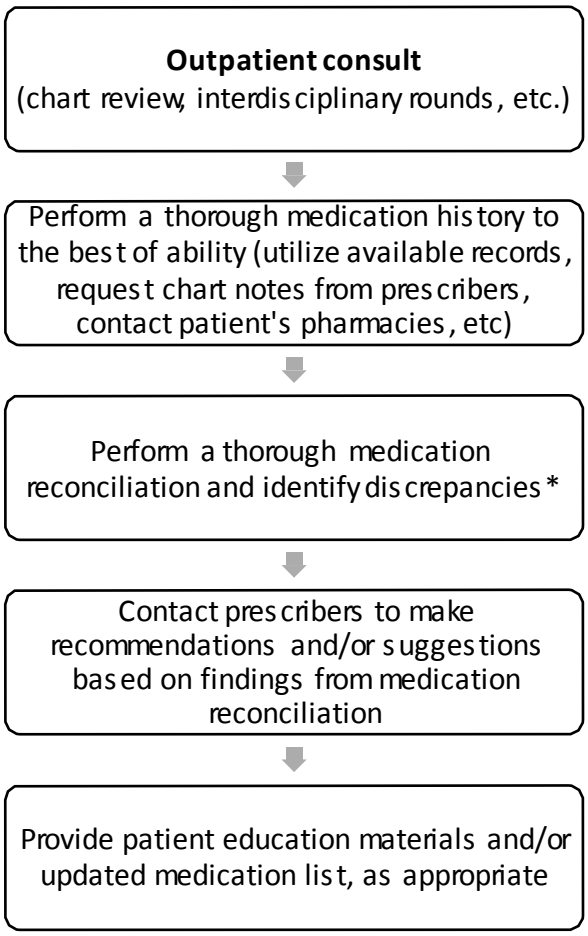
- Perform a thorough medication history using patient report, medication bottles, and additional records brought in with patient
- Obtain and/or verify all prescribers
- Obtain names of all pharmacies used by patient
- Perform a thorough medication reconciliation and identify discrepancies*
- Patient education (medication changes, discrepancies discovered, etc)
- Provide patient with an updated medication list (if able to)

After appointment

- Complete medication reconciliation (if not done during appointment)
- Complete chart notes/documentation
- Contact prescribers to make recommendations and/or suggestions based on findings from medication reconciliation
- Contact patient's pharmacies to notify of any discontinued medications, if appropriate
- Update patient's medication list and provide a new one to patient (if not done during appointment)



^ If pharmacy participates in Medication Therapy Management (MTM)/clinical services, follow "Outpatient appointment" flowchart, as appropriate



*Discrepancies

- Duplicate therapy
- Therapy lacking indication
- Modifications:
  - Dose or formulation changes
  - Therapeutic interchange
- Commissions
- Omissions
- Gaps in fill history

Best Practices

When preparing to complete medication reconciliations where multiple opportunities exist, it may be best to target high risk patients. This may include the elderly population, those on high risk medications (e.g., warfarin, insulin), and polypharmacy. Regardless of the patient population, it is pertinent to include the patient and/or caregiver in the medication reconciliation process. Patients should be encouraged to always carry a complete medication list with them and to update it after each change. Patients should be asked to bring all medication bottles (i.e. prescription, OTC, vitamins, herbal medications, nutraceuticals/health supplements) to each appointment, if applicable. Empower the patient by asking them what they hope to get out of the medication reconciliation encounter and address their related questions. The pharmacist should recommend that the patient write down future questions as they come up and discuss with their provider or pharmacist.

Lessons Learned

Keep in mind that not all electronic health records (EHR) or paper chart medication lists will look the same or include the same information. Some medical facilities include durable medical equipment, oxygen, and other miscellaneous items on their medication list. Be sure to review what is included in your healthcare facility's charts. Although this article is focused on a pharmacist-driven medication reconciliation process, it is a good idea to familiarize yourself with the various medication reconciliation processes of other providers and healthcare personnel within your health-system or practice setting and integrate into their workflow when possible. For example, the medication reconciliation and/or medication list may look different when logged into your EHR from a nursing point-of-view or provider point-of-view. If this is the case, it will be important to utilize a similar medication reconciliation process and documentation system as other providers. Pharmacist documentation should be transparent in the workflow for other personnel. Lastly, medication reconciliation processes often differ with each discipline. Being aware of the process for each of these disciplines in your practice setting is helpful to ensure consistent medication reconciliation and documentation.

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