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Medication Reconciliation Guide for Health Care Professionals (HCPs)

Introduction

Medication reconciliation is an ongoing process that involves a systematic and comprehensive review of all medications a patient is taking. The goal of this process is to maintain an accurate list that is available to the patient, the family/caregiver, and all providers involved in the patient's health care management. During medication reconciliation the clinician evaluates any medications that were added, changed, or discontinued.[1] Medication reconciliation should be included within and across health care settings whenever a medication history is taken. This can help avoid medication errors such as omissions, duplications, dosing errors, and drug interactions.[2]

Studies have shown that a majority of medication errors are due to medication reconciliation failures,[3-5] which subsequently lead to increased costs, adverse drug events, and rehospitalization.[3,6] Health care professionals have the opportunity to limit or avoid these consequences by implementing a standardized medication reconciliation process and by engaging their patients in taking an active role in medication management.

About this Guide

This guide helps health care teams and HCPs* improve their medication management process in ambulatory care settings. It provides a medication reconciliation framework that addresses the development of standardized workflows, delineating team roles and responsibilities. Sample template forms are also included and, where applicable, other resources within the *Medication Reconciliation Toolkit* are described.

The Medication Reconciliation Process[2,7,8]

Optimizing medication reconciliation encourages a team-based approach using the skills of clinicians and nonclinical care extenders (eg, office staff and medical assistants). This team approach helps to better align the distribution of work, avoid duplication, and allow HCPs more time to focus on patients' clinical care needs. Wherever possible, medication reconciliation processes should be incorporated into existing workflows.

*An HCP can include physicians, physician assistants, nurse practitioners, pharmacists, and advanced practice nurses when performing medication reconciliation, depending on the organization's policies and procedures.

The key steps in the medication reconciliation process are:

Step 1. Remind patients to bring their medication and list to the appointment

Step 2. Screen to identify those at higher risk for medication reconciliation issues

Step 3. Obtain and review the patient's current medication list

Step 4. Compare that list to what is documented in the medical record

Step 5. Reconcile any discrepancies identified

Step 6. Communicate changes and check for understanding

Step 7. Document all changes

Step 8. Follow up on any outstanding issues

Each step is described in detail below.

Step 1. Remind patients to bring an up-to-date medication list and/or medicines to their appointment

Before the Appointment

Receptionist or front office staff sends a reminder via email or phone to remind patients to bring their medication list to their appointment, or to bring their medications if they do not have a list. (Sample email and telephone reminder scripts are included in the *Medication Reconciliation Toolkit.*) If the appointment is a follow-up posthospital discharge, ask patients to also bring any forms or instructions they were given.

When the Patient Checks In

Determine if the patient or caregiver brought medications or a current medication list. Also ascertain whether a new medication list is needed. The *My Medicines Form* is provided in the *Medication Reconciliation Toolkit* and can be used by patients to fill in their list of medications. If an electronic health record (EHR) is being used, print the patient's most current medicine list from the system.

- If the patient brought a list of medications to the appointment, place the form on the front of the patient's medical record so it can be reviewed
- If the patient did not bring a list, make a note in the patient's file to send a reminder to bring the list to the next appointment
- If the patient does not use a list, give the patient a blank form to use to create a list during the appointment

The *Medication Reconciliation Communication Tips* included in the *Medication Reconciliation Toolkit* include strategies for discussing the importance of maintaining an accurate medication list.

Next, ask the name of the patient's preferred pharmacy or pharmacies and record this information in the patient's chart or EHR. This information can be helpful when the HCP has a question or needs further clarification. It is also helpful when a patient requests a prescription refill. Also ask if the patient sees more than one doctor or specialist. If so, record this information. Ask if the patient brought any other forms or information (eg, laboratory tests or hospital discharge forms) for the HCP to review.

Step 2. Screen patients to identify those at higher risk for issues related to medication reconciliation or those who may need additional support

Risk factors to consider include a recent hospitalization, seeing more than one physician, taking multiple medications, or a new diagnosis. A screening form can be used to flag patients who may require further assessment. The form can be used when the patient checks in or it could be sent prior to the appointment. Initial screening can be performed by front office staff.

Sample screening questions include:[1,2,4,8-11]

1. Do you have any new allergies since your last visit?
2. Do you take 5 or more medicines?
3. Have you been in the hospital since the last time you were here? If yes, how long ago were you discharged?
4. Do you have any new medical problems and/or diagnoses?
5. Has another doctor given you any new medicines or changed your medicines?
6. Have you started any new medicines since the last time you were here?
7. How confident are you in filling out medical forms by yourself? (Extremely, quite a bit, somewhat, a little bit, or not at all)
8. How often do you have someone help you read medical forms? (Always, often, sometimes, occasionally, or never)

A sample *Medical History Update Form* can be found in the Appendix of this guide. For patients who answer "Yes" to questions 1 through 6, place the form on the front of the chart to notify the HCP that the patient is at a higher risk for medication reconciliation issues.[1,2,4,9] Similarly, charts should also be flagged for patients who answer "a little bit" or "not at all" for question 7 or "often" or always" to question 8 because they may require extra time and attention during medication reconciliation.[8,10,11]

Step 3. Obtain and review the most up-to-date medication list from the patient

In the Examination Room

If the patient brought a list of medications to the appointment:

- Begin by reviewing the list with the patient
- "Let's take a look at the medicines you brought with you today"

If the patient did not bring a medication list or medications to the appointment:

- "Tell me about any medicines you're taking"
- "Include medicines from your doctor, medicines you buy at a pharmacy or store without a prescription (like aspirin), vitamins, supplements, and herbals you take"

If the information is incomplete:

- Ask the patient open-ended questions about their medications to find out additional details
- You may need to use prompts to help the patient remember some of the information

Examples of conversation starters or lead-in questions you can ask to help the patient remember include:

- "Tell me about the things you do to control your blood pressure"
- "What medicines has your arthritis doctor prescribed for you?"
- "What types of vitamins, herbals, or supplements do you take?"

(Note: The *Medication Reconciliation Communication Tips* included in the *Medication Reconciliation Toolkit* offers additional conversation starters to help obtain medication information.)

For each medicine, ask the patient:

- The name of the medicine
- Why they are taking it
- The route by which they take it
- The dosage
- The frequency

This can be a lot of information for the patient to remember, especially if the patient is older or has a reduced ability to comprehend and understand basic health information. If patients are not able to provide you with accurate information, it may be necessary to confirm them by calling their pharmacy or the prescribing physician, or by involving the caregiver.

Review any new allergies to medications or nonmedications.

If the patient has new allergies to medications or nonmedications, ask:

- "What kind of reaction did you have?"
- "When was the first time you had the reaction?"
- "Have you ever been able to take this without a reaction?"

Review the *Medical History Update* form for any flagged items to gather additional information as needed.

If the patient was recently discharged from the hospital probe for additional information:

- "I see that you had to go to the hospital recently"
- "Can you tell me more about that?"

If the initial screening indicates that the patient has new medical problems or diagnoses:

- "I see that you've had some new health issues"
- "Can you tell me more about that?"

Step 4. Compare the patient's list to what is documented in the medical record

Once the current list of medications has been obtained, compare it to the list of medications in the medical record. Include any new medications prescribed during the appointment.

Step 5. Reconcile any discrepancies between the medication list and physician orders

Reconcile any discrepancies such as omissions, dose changes, and/or deletions. It is important to determine whether the discrepancies are intentional and consistent with the patient's current clinical status and desired treatment plan or whether they are unintentional.

Discovering an unintentional discrepancy is an opportunity to assess adherence barriers. You can do this by asking about any medications the patient is not taking as prescribed. Some of the common barriers to medication adherence include:

- Not knowing how to take medicine correctly[12]
- Not being motivated to take medicine because they are unsure of whether the medicine will work and unclear about whether it is needed[12]
- Not remembering to take medication[13]
- Lack of social support from family, caregivers, and friends[13]
- Poor relationship or communication between the health care professional and the patient[13]
- Low health literacy[13]
- Limited English proficiency[13]
- Cultural beliefs and attitudes[13]
- High cost of medicine[13]

Examples of open-ended questions to assess adherence barriers:

- "Do you sometimes forget to take your medicine?"
- "Tell me how you take this medicine at home"
- "What medicines have you started or stopped taking without your doctor knowing?"
- "How do you usually pay for your medicines?"

The *Medication Reconciliation Communication Tips* included in the *Medication Reconciliation Toolkit* provides additional communication strategies and conversation starters for assessing adherence barriers.

Reconciliation is not only about identifying discrepancies, but also about determining whether any new prescriptions potentially conflict with any the patient is currently taking. Consultation with the corresponding prescriber may be necessary.

Step 6. Communicate changes and check understanding with the patient and/or caregiver

If a new medication is being prescribed or medication changes are necessary, check for patient (and/or caregiver) understanding. Provide clear instructions to the patient about the new medication, including why the medications are being prescribed, and how they should be taken. In addition, discuss information about potential adverse effects.

Assessing whether the patient (and/or caregiver) understands the information that was discussed is very important. Ask if the patient understands the new medication/treatment plan and if they have any questions.

"Teach-back" is an effective method of determining whether you have communicated information effectively. This method asks patients to restate what they have been told in their own words. It is an important tool, when describing changes in care, medicines, diagnoses, or when explaining instructions upon discharge.[7]

An example lead-in question to using the teach-back method is:

- "We've gone over a lot of information about your new medicine(s). In your own words, would you please review for me how you will take this medicine at home?"

Step 7. Document changes on the patient's reconciliation form, medical record, or EHR

After patient understanding has been verified, and all of the patient's questions have been answered, review, sign, and date the medication list or tracker form. Place documentation of the medication review in the patient's medical record by either keeping a copy of the patient's signed list in the office, or writing documentation in the patient's medical record.

Step 8. Follow up on any outstanding issues

When the Patient Checks Out

At the end of the appointment, review any follow-up action items with the patient, such as calling the office with his or her medication list. Ask if the patient has any questions before leaving and provide the number to call if the patient has additional questions after leaving the office.

Medical History Update Form

Patient Name:_____ Date of Birth:_____

Office Location:_____ Date of Office Visit: _____

Thank you for taking the time to complete this form. Our goal is to provide you with the best care possible. This information will help your health care team know about any changes since your last visit. If you need help filling out the form, please let the receptionist know.

Instructions: For check boxes: Check ☑ the answer of your choice
For write-in answers: Please print as neatly as possible

1. Do you have any new allergies since your last visit?	❑ Yes ❑ No
2. Do you take 5 or more medicines? (Include prescription and over-the-counter medicine, vitamins, herbals, and dietary supplements.)	❑ Yes ❑ No
3. Have you been in the hospital since the last time you were here?	❑ Yes ❑ No
If yes, how long ago were you discharged?	
Why were you in the hospital?	
4. Do you have any new medical problems or diagnoses?	❑ Yes ❑ No
5. Has another doctor given you any new medicines or changed your medicines?	❑ Yes ❑ No
6. Have you started any new medicines since the last time you were here? If yes,	❑ Yes ❑ No
What is the name of the medicine?	
How much do you take?	
How often do you take it?	
7. How confident do you feel about filling out medical forms by yourself?	
❑ Extremely ❑ Quite a bit ❑ Somewhat ❑ A little bit ❑ Not at all	
8. How often do you have someone help you read medical forms?	
❑ Always ❑ Often ❑ Sometimes ❑ Occasionally ❑ Never	

Additional comments: _____

_____

Your signature: _____ Date: _____

Medication Reconciliation Summary of Key Steps In the Ambulatory Care Setting

Step	Description	Responsibility[a, b, c]
1	Remind patient to bring list of medications (via phone or email)	Front office staff
2	Screen patients for those at high risk for medication reconciliation	Front office staff
3	Obtain list of medications from patient upon arrival at appointment or give patient blank form to use	Front office staff
	Determine contact information for pharmacies and other physicians	
	Review or build medication list	Health care professional
4	Compare current medication list to new list	Health care professional
5	Identify and resolve any discrepancies	Health care professional
6	Communicate changes to patient/caregiver	Health care professional
	Assess patient understanding	
7	Document reconciliation	Health care professional
8	Follow-up prior to leaving the office	Front office staff

[a]The individual assigned to a given process step will vary based on the organization's policies and procedures.

[b]Front office staff could include receptionists, medical assistants, and support staff.

[c]Health care professionals could include physicians, physician assistants, nurse practitioners, pharmacists, advanced and practice nurses.

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