

Medication Reconciliation in Home Health

Medication reconciliation refers to the process of creating the most accurate list possible of all medications a patient is taking, including drug name, dosage, frequency, and route, and comparing that list against the admission, transfer, and/or discharge orders, with the goal of providing a correct list of medications to the patient at all transition points. The comparison addresses duplications, omissions, and interactions, and the need to continue current medications.¹ According to the Agency for Health Care Research and Quality, more than half of patients have ≥ 1 unintended medication discrepancy at Hospital admission.² Medication discrepancies frequently occur during care transitions from hospital to home, with studies estimating that anywhere from 14.1% to 94% of patients experience at least one medication discrepancy. The discrepancies place patients at risk for adverse drug events (ADEs), which have been shown to be one of the most common types of adverse events after hospital discharge.³

Medication reconciliation is an important aspect of the initial and ongoing assessment for a patient receiving home health. It is also essential in managing adverse drug reactions and improving drug safety in older adults. A systematic review published in *Canadian Geriatrics Journal* summarized evidence from 14 randomized controlled studies to identify the effectiveness of medication review, either as a single intervention or combined in multifactorial fall prevention programs, on preventing fall-related injuries in older adults. Despite differences between included studies, medication review was found to be effective in preventing fall-related injuries and, specifically, fall-related fractures in community-dwelling older adults.⁴

Optimal medication reconciliation requires a complete understanding of what the patient was prescribed and what the patient is actually taking, as well as creating and maintaining an accurate medication list of current prescribed and over-the-counter medications, nutritional supplements, vitamins, and/or homeopathic and herbal products administered by any route from the time of admission to home health. It can be difficult to obtain a complete list of medications from a home health patient, and accuracy is dependent on the patient's or caregiver's ability and willingness to provide this information.

As part of the Impact Act of 2014, CMS developed and implemented standardized patient assessment data, which included medication reconciliation and drug regimen review across Post-Acute Care (PAC) settings. Drug Regimen Review (DRR) in PAC is generally considered to include medication reconciliation, a review of all medications a patient is currently using, and a review of the drug regimen to identify and, if possible, prevent potential clinically significant medication issues.⁵ The CMS Home Health Conditions of Participation also require the home health agency to prepare and provide to the patient and their caregiver (if any) written information regarding the patient's medication regimen based on the results of the medication review conducted at start of care, even if the patient is only receiving rehabilitation therapy services.⁶

New items in the Outcome Assessment Information Set Version E (OASIS-E) were added relating to identifying high-risk drug class use and indications (NO415); to ascertain whether the patient is taking any prescribed medications in the specified drug classes, such as anticoagulants, antiplatelets, antibiotics, opioids, hypoglycemics or antipsychotics, and to ensure that the indication was noted for all medications in the drug class. Other additions in OASIS-E include provision of a current reconciled medication list to a subsequent provider at transfer and discharge (A2120 and A2121), to identify if the home health agency provided a current reconciled medication list to the subsequent provider at the

time of discharge or transfer.⁷ Registered Nurses in home health are responsible for medication reconciliation, and should review a patient's medications per their home health agency policy to improve care coordination, quality of care, and mitigate adverse outcomes related to medications.

When to Reconcile Medications - The medication reconciliation process should be completed each visit to determine if any changes have occurred since the most recent visit. Registered nurses and licensed practical nurses should be aware of any new or discontinued medications after a physician's appointment. It is a regulatory requirement to complete medication reconciliations at the moment of transition of care, such as the start of care (SOC), resumption of care (ROC) and discharge.

Medication Reconciliation Challenges in Home Health:

1. The patient's list of medications from the inpatient facility discharge instructions do not match the medications the patient shows the clinician at the SOC/ROC assessment visit. Common discrepancies include⁸
 - Omission: a medication the patient is currently taking is not listed
 - Commission: a medication is listed that the patient is not currently taking
 - Duplication: a medication is listed more than once (e.g., once by its generic name and once by its brand name)
 - A different dose, route, or frequency is listed for a medication that the patient is taking
 - Overlooked potential drug interactions
2. Medication discrepancy in the home can be due to the patient's/caregiver's inability to understand the medication regimen. Home health patients may face barriers to medication management due to caregivers who work other jobs, or from task-intensive regimens that create adherence hurdles.⁸ Some of the common reasons why patients don't take their medications as prescribed include:
 - Forgetfulness
 - Inconvenience
 - Cognitive impairment
 - Negative beliefs about treatment (such as fear of side effects)
 - Fear of injections
 - Cost (patient may not be taking medication as prescribed because they are unable to afford it)
 - Lack of transportation
 - Lack of knowledge or understanding
3. Multiple prescribers and/or multiple pharmacies.
4. Time constraints in calling physician's office and difficulty getting a timely response from the physicians' offices.
5. Patients in home health can have many medications (e.g., >20, which causes added time to reconciling medications)

Breaking Barriers in Medication Reconciliation - Patients/caregivers are an integral part of medication reconciliation. Therefore, they should be instructed to bring their medication list to all appointments and have one readily available in the home. Strategies for improving medication reconciliation include creating multidisciplinary teams, keeping detailed records, and working with information technology to create appropriate electronic health record features.^{9,10,11} Multidisciplinary approaches and effective communication with a patient’s physicians, nurses, and therapists can improve the patient outcomes. Care coordination with the nurse case manager and physicians regarding non-adherence is important in resolving the medication reconciliation issues. Some medication adherence issues can be addressed by taking a patient-centered communication approach, communicating at the patient’s health literacy level, and addressing sensory deficits. The following tips can help when gathering medication information from patients/caregivers.

Tips for Medication Information Gathering

- Use both open-ended questions (e.g., “Can you tell me how you take this medication?”) and closed-ended questions, (e.g., “Do you take medication for your diabetes?”)
- Consider patient adherence with prescribed medication regimen (e.g., “Has the medication been recently filled?”)
- Ask patients:
 - What routes of administration they take medications other than oral (e.g., “Do you put any medications on your skin?” or “Do you use any eye drops?”) Patients often forget to mention creams, ointments, lotions, patches, eye drops, ear drops, nebulizers, and inhalers.
 - What medications do they take for medical conditions (e.g., “What do you take for your diabetes?”)
 - Which types of physicians prescribe medications for them (e.g., “Does your ‘heart doctor’ prescribe any medications for you?”)
 - When they take their medications (e.g., time of day, week, month, as needed). Patients often forget to mention infrequent dosing regimens, such as monthly.
 - If their doctor recently started them on any new medicines, stopped medications they were taking, or made any changes to their medications.
 - To describe their medication by color, size, shape, etc. This practice may help to determine the dosage strength and formulation. Calling the patient’s caregiver or their community pharmacist can also help to determine an exact medication, dosage strength, and/or directions for use.
- For inquiring about over the counter (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?

Adapted from 8,15

Use the Teach-Back Method - This well-established method helps ensure patients understand what the clinician has discussed with them. Use the teach-back process when medications are added, changed or discontinued. Use plain language and ask patients to explain the information back to you in their own words to ensure they understand. If they miss any of the points, re-explain and have them tell you again until you're sure they comprehend.⁸

Medication Adherence Tools - Medication adherence tools can help patients eliminate complexity from daily routines and eliminate the stress and confusion of medication management.^{10, 11,}

Some common and helpful medication adherence tools include:

1. **Reminder chart**- List of medications with start and end dates for each of the medications to include when to take, what quantity to take, how to take (with food etc.), what medication looks like, and the reason for why medication is prescribed.
2. **Pill Card**- The Agency for Healthcare Research and Quality (AHRQ) has a "My Medicines" List" tool to create a "Pill Card"¹²
3. **Pill Organizer**
4. **Digital dispenser** for medication delivery and reminders
5. **Multi-dose adherence packaging**
6. **Medication synchronization**- A medication management strategy that aligns the refill dates for two or more prescriptions
7. **Mobile Apps**- For patients with a smartphone, there are several good medication management apps to improve quality and safety of care.

Staff Training - Registered Nurses have a responsibility to acquaint themselves with their agency's policy and process for medication reconciliation. Home health agencies should provide training at the time of orientation and have competency testing and continuous staff retraining as needed to prevent adverse drug events for their patients. Training can take the form of simulation and hands-on education and include techniques for interviewing patients to collect a medication list.

Time Constraints - Registered Nurses in home health should anticipate multiple medications in the home that may lead to more time spent on medication reconciliation. However, time spent reviewing medications is time well spent if it helps to prevent ADEs.

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- Match the patient’s medications including drug name, dosage, frequency, and route with the medication prescriptions or bottles in the home. Ask for all over-the-counter medications taken by the patient, even if taken infrequently.
- Create a list of current prescribed and over-the-counter medications, nutritional supplements, vitamins, and/or homeopathic and herbal products administered by any route in the home for the patient to use and enter all medications in the patient’s medical record.
- Communicate the reconciled medication list to the patient and appropriate caregivers.
- Match the medication list in the patient’s home with the medication list in the medical record every visit during home health care.

Prior to Appointment	During Home Visits	Follow up After the Visit
<ul style="list-style-type: none"> • Ask the patient to have all their medications including current prescribed and over-the-counter medications, nutritional supplements, vitamins, and/or homeopathic and herbal products readily available for the home health visits. 	<ul style="list-style-type: none"> • Gather resources such as hospital discharge paperwork, provider records, and the patient’s home medication list if available. • Compare each prescription bottle to the medication list from the hospital or physician’s office. • Ask the patient if medication is taken as prescribed; if not, ask what barriers the patient is encountering. • Look for all over-the-counter medications, nutritional supplements, vitamins, and/or homeopathic and herbal products and ask how frequently the patient is using them. • Assess for any medication duplication and drug-to-drug interactions. • Assess dexterity to determine if the patient is able to open and close medication bottles. • Assess the patient’s ambulatory status, where medications are stored in the home, and if the patient is able to reach the medications safely. • Assess if the patient can access water to take their medications. • Leave a written medication list consisting of prescribed and non-prescribed (over-the-counter) medications in the patient’s home. • Instruct patient to always carry the medication list to their physician’s appointment. 	<ul style="list-style-type: none"> • Follow up with physician's office regarding any discrepancies in the prescribed medications, duplication, or drug-drug interactions per home health agency policy. • Make nursing referral as needed for medication management. • Refer to social work for community resources if patient is unable to afford the medication

Provide a reconciled medication list to the provider:

1. At start of care
2. Within 2 days of knowledge of transfer to the hospital, Skilled Nursing Facility, or Assisted Living Facility
3. Within 5 days of discharge

Provide a reconciled medication list to the patient:

1. At start of care
2. When there is a change in patient’s medication
3. At discharge

Reference 5, 6, 7, 9, 10

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