Medication Reconciliation and Adherence

VNAA Best Practice for Home Health
Why is medication reconciliation so important?

• The number one problem in treating illnesses is patients’ failure to take prescribed medications correctly, regardless of age

• 10% of hospital admissions relate to taking meds properly, 23% of all nursing home admissions
Statistics

• In the U.S., 50% of patients do not take medications properly (WHO, 2003):
  – 33% - 66% (Brown, 2011) of medication-related hospitalizations in the US are the result of poor medication adherence
  – 50% - 80% (Brown, 2011) of patients treated for hypertension are non-adherent to their medications
  – Nearly 9 out of 10 adults have difficulty using the everyday health information possibly affecting their ability to read a medicine bottle (HHS, 2010)
Learning objectives

At the conclusion of this session the participant will be able to:

• Define medication reconciliation and adherence and the impact on patient outcomes
• Identify best practices for medication reconciliation/adherence in the home care setting
Definition of medication reconciliation

• “A process of identifying the most accurate list of all medications, including name, dosage, frequency, and route, that a patient is taking and using this list to provide care for a patient in whatever their health care setting.”

Source: IHI Medication Reconciliation Review (2011)
Medication adherence

• “...extent to which the patient and/or caregivers medication administration behavior coincides with medical advice.”

Best practice

Medication Reconciliation + Medication Adherence = Better Outcomes
Current best practices

• Guiding principles for designing a successful medication reconciliation process:
  – “One Source of Truth”
  – Defining roles and responsibilities for medication reconciliation
  – Integrating medication reconciliation into existing workflow
  – Flowcharting the design or redesign for medication reconciliation
  – Designing the process—considerations for various practice settings
Define roles and responsibilities

Three steps of medication reconciliation
1. Complete in first 1-2 visits
2. Identify patients with high risk medications or at high risk for non-adherence
3. Clarify discrepancies within 24 hours
Medication Reconciliation* is the process of identifying the most accurate list of all medications a patient is actually taking — including name, dosage, frequency, and route. The information is then used to determine which medications the patient should be taking per physician orders.

The Medication Reconciliation process for home care has three basic steps:
1. Verify: Collect an accurate medication list
2. Clarify: Clarify any questions about drug/dose/frequency
3. Reconcile: Communicate with physician about any identified medication questions or concerns

*Adapted from the Institute for Healthcare Improvement
Emergency hospitalization for adverse drug reactions: Top four categories of drugs

The following four categories of drugs account for 67% of hospitalizations:

- Warfarin
- Hypoglycemic agents (oral)
- Insulin (all types)
- Antiplatelet agents

Verify: One True Source

Collect a COMPLETE list of ALL medications that the patient is currently taking. This includes:

- Prescription medications
- OTC medications such as aspirin, acetaminophen, NSAIDs, Benadryl for sleep
- Culturally-based home remedies, such as:
  - Ginseng (for physical and mental performance, infection resistance)
  - Chamomile tea (for sleep/anxiety)
- OTC herbal products, such as:
  - St. John’s Wort (for depression, stress, anxiety)
  - Senna (for constipation)
  - Black Cohosh (for menopause symptoms)
- Dietary supplements such as Calcium (to prevent osteoporosis)
- Vitamins such as Niacin, Vitamin E, Vitamin D
- Create a medication list that includes all medications and is updated, as needed. (One True Source)
Verify: One True Source

• It is important to specifically ask about the use of non-prescription medications and preparations – patients often do not consider things such as vitamins “medications” and will not volunteer that they are taking them.

• Other tips for obtaining more complete medication lists at the start of home care:
  - Tell the patient/family BEFORE the first visit to collect all of the patient’s medications and have them ready for the nurse to see.
  - Ask the patient what help they think they might need in managing their medications.
  - Use principles of medication interviewing to elicit information.
Clarify

- Clarify any medication names, doses, frequencies, and to identify combinations that may be contraindicated or medications that seem to be inappropriate
- In the Clarify step, a key goal is to identify potentially serious drug-drug interactions or therapeutic duplication within the patient’s medication list
- Therapeutic duplication is present when the patient’s medications include two or more medications from the same chemical family or therapeutic class
- A possibility for drug-drug interaction (DDI) is present when the patient’s medications include two or more medications with the potential to interact negatively with one another
Besides looking for therapeutic duplication and drug-drug interactions, the reconciliation process should identify any potentially *inappropriate* medications. Certain medications should generally be avoided in older persons—although a physician may decide that their use for an individual patient’s specific clinical circumstance is appropriate. One such list of medications is called the Beers Criteria.
Identify patients with high risk medications or at high risk for non-adherence

High Risk Medications

- Antiplatelet Medications
- Oral hypoglycemics
- Insulin
- Warfarin

High Risk for Non-Adherence

- Low health literacy
- Co-morbidities
- Cognitive, visual or hearing deficits
- Taking “less-forgiving” drugs where non-adherence leads to adverse events or symptom exacerbations, i.e., cardio vascular meds, depression
Reconcile within 24 - 48 hours

The third step is to reconcile the medications with the physician:

• If the patient’s medication list is free from therapeutic duplication, potentially inappropriate medications, and no dose, route or frequency questions have been identified, the completed medication list can be entered in section 10 on the HCFA Form 485 and sent to the physician for verification and signature.

• If a question or potential problem has been identified, the nurse (or therapist) is responsible for ensuring that these are reported to the physician, and for obtaining clarification or revised orders.
Barriers encountered

• Patient resistance--non-adherence
• Lack of development of process across continuum
• Staff resistance
Medication adherence

• Once “one true source” medication list is compiled, must be ongoing assessment of patient adherence
• Medication list is not static, physician controlled, patient friendly
• Motivational Interviewing is key to assessing patient adherence and resolving issues
Resolve discrepancies within 24 - 48 hours

• Initial discrepancies may be provider based:
  – Duplicate medications
  – Dosage discrepancies

• May be patient/significant other adherence based:
  – Confusion regarding prior medications ordered
  – Unpleasant side effects
  – Adherence issues due non-acceptance of recommendations
Morisky Medication Adherence

![Image of Morisky Medication Adherence questionnaire]

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Factors affecting adherence

- Demographic: Age, sex, occupation, educational level
- Medical: Types, severity and duration, number of comorbidities
- Medication: Number, type and dosing regime, drug delivery system, use of adherence aides, therapeutic regime and adverse effects
- Behavior: Physician-patient interaction, patient/caregiver knowledge, understanding and beliefs
- Economic: Socioeconomic status, insurance coverage, medication and medical costs
Guiding patients toward medication adherence

Access

• How do you get your medications filled?
• How do you know when to get your medications refilled and how do you do it?
• How do you pay for your medicines?
• How do you decide which medications to fill if you can't afford to get all the medications filled when needed?
• What is your total cost of monthly co-pays?
• If possible, would you like to look for some options for reducing your out-of-pocket medication costs?
• How would you feel if we organize all your medications in one area of your home to make it easier for you?

Source: MacLaughlin, et al. (2005) and Swanlund, Scherck, Metcalfe, and Jesek-Hale (2008)
Guiding patients toward medication adherence

Schedule

• How do you take your medications every day?
• How do you plan your medication times with your meals?
• Are there any medications that you have a hard time remembering to take?
• What do you think would help you remember to take your medications?
• If it was possible for the doctor to simplify your medication schedule, how would that help you in taking your medications?
• Use teach-back techniques to validate medication schedule instructions are understood

MacLaughlin, et al. (2005)
Guiding patients toward medication adherence

Administration

• Do you use a pill box or organizer to help you take your medicines?
• Do you use a calendar or paper to track if you took your medications?
• Show me how you take your medications
• Show me how you take your inhaler
• How would you feel about trying a pill box or a medication list? What do you do to remember your medications on days that your routine is different (e.g., doctor's appointments, fasting for blood work)?
Guiding patients toward medication adherence

Behavioral Modifications

• How do you feel when you take your medications?
• How do you feel when you miss taking medications?
• What concerns do you have with your meds?
• What are some activities that would be easier if you would take your medications regularly?
• How would it work if you picked activities you do every day and take your medications at that time (e.g. read paper, eat meals)?
• Directly link a patient goal to medication adherence
• On every visit discuss progress of medication management and barriers, asking patients what might be helpful

MacLaughlin, et al. (2005)
## Patient-friendly medication record

<table>
<thead>
<tr>
<th>Medicine name, strength</th>
<th>Morning dose</th>
<th>Noon dose</th>
<th>Evening dose</th>
<th>Bedtime dose</th>
<th>As needed dose</th>
<th>Notes</th>
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Schedule was last updated on __________________                    Page _____ of _____

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Lack of a medication reconciliation process in your agency

- Select a QI process: PDSA
  - Measure where you are Coleman Medication Discrepancy Tool
- Map the process now and after revision
  - Define roles and responsibilities
  - Make it easy to “do the right thing”
  - Integrate prompts into the MR process
  - Educate families and patients to process
  - Incorporate motivational interviewing
  - Incorporate teach-back into process
- Tie successful integration of process into measurable outcomes
Where to start in your agency?

• Collect data on medication reconciliation
  – Use established tools
• Identify area of greatest concern (high frequency, high cost, patient safety)
• Assure consistent staff adherence, w/e, rehab admissions
• PDSA: Plan, Do, Study, Act
  – Establish a process
  – Plan small tests of the change.
  – Revise, test, revise
  – Spread to full agency
Medication Discrepancy Tool (MDT)

MDT is designed to facilitate reconciliation of medication regimens across settings and prescribers.

Medication Discrepancy Event Description: Complete one form for each discrepancy.

Causes and Contributing Factors: Check all that apply.

Italicized text suggests patient's perspective and/or intended meaning.

**Patient Level**
- Adverse Drug Reaction or side effects
- Intolerance
- Didn't fill prescription
- Didn't need prescription
- Money/financial barriers
- Intentional non-adherence
  - "I was told to take this but I choose not to."
- Non-intentional non-adherence (e.g., Knowledge deficit)
  - "I don't understand how to take this medication."
- Performance deficit
  - "Maybe someone showed me, but I can't demonstrate to you that I can."

**System Level**
- Prescribed with known allergies/intolerances
- Conflicting information from different informational sources. For example, discharge instructions indicate one thing and pill bottle says another
- Confusion between brand & generic names
- Discharge instructions incomplete/incorrect/inaccurate/irrelevant
  - Either the patient cannot make out the handwritten or the information is not written in lay terms.
- Duplication
  - Taking multiple drugs with the same action without any rationale.
- Incorrect dosage
- Incorrect quantity
- Incorrect label
- Cognitive Impairment not recognized
- No caregiver/nurse for assistance not recognized
- Sight/dexterity limitations not recognized

**Resolution**: Check all that apply.

- Discussed potential benefits and harm that may result from non-adherence
- Encouraged patient to call PCP/specialist about problem
- Encouraged patient to schedule an appointment with PCP/specialist to discuss problem at next visit
- Encouraged patient to talk to pharmacist about problem
- Addressed performance/knowledge deficit
- Provided resource information to facilitate adherence
- Other

Source: Based on the Care Transitions Intervention SM developed by Eric Coleman MD. MPH
Staff resistance

• Lack of knowledge:
  – Provide current medication educational programs
  – Provide education on reconciliation process
    • every patient, every visit, every time
• Lack of current resources:
  – Up to date medication information
  – Programs to analyze medication interactions
  – Access to a pharmacist for complex medication issues
Ongoing education

• Medication reconciliation competency part of orientation
• Reviewed annually as part of competency program
• Provision of inservice programs
Roles of pharmacist as resource

- Staff education
- Provide consultation on medication-related policies and procedures
- Medication reviews
- Clinical advice on specific patient issues
How do you measure success?

- OASIS process outcomes/clinical outcomes
- HHCAHPS
- Employee feedback
OASIS MR process questions

(M2000) Drug Regimen Review: Does a complete drug regimen review indicate potential clinically significant medication issues, e.g., drug reactions, ineffective drug therapy, side effects, drug interactions, duplicate therapy, omissions, dosage errors, or noncompliance?

0 - Not assessed/reviewed [ Go to M2010 ]
1 - No problems found during review [ Go to M2010 ]
2 - Problems found during review
NA - Patient is not taking any medications [ Go to M2040 ]

(M2002) Medication Follow-up: Was a physician or the physician-designee contacted within one calendar day to resolve clinically significant medication issues, including reconciliation?

0 - No
1 - Yes
OASIS process measures

(M2010) Patient/Caregiver High Risk Drug Education: Has the patient/caregiver received instruction on special precautions for all high-risk medications (such as hypoglycemics, anticoagulants, etc.) and how and when to report problems that may occur?

0 - No
1 - Yes
NA - Patient not taking any high risk drugs OR patient/caregiver fully knowledgeable about special precautions associated with all high-risk medications
**OASIS process measure**

(M2020) Management of Oral Medications: Patient's current ability to prepare and take all oral medications reliably and safely, including administration of the correct dosage at the appropriate times/intervals. Excludes injectable and IV medications. (NOTE: This refers to ability, not compliance or willingness.)

0 - Able to independently take the correct oral medication(s) and proper dosage(s) at the correct times.

1 - Able to take medication(s) at the correct times if:

(a) individual dosages are prepared in advance by another person; OR
(b) another person develops a drug diary or chart.

2 - Able to take medication(s) at the correct times if given reminders by another person at the appropriate times.

3 - Unable to take medication unless administered by another person.

NA - No oral medications prescribed.
Patient experience measures

HHCAHPS  5 specific care questions

Question 4
Did home health care staff talk with you about all the prescription and over-the-counter medicines you were taking?

Question 5
Did home health care staff ask to see all prescription and over-the-counter medicines?

Question 12
Did providers talk about purpose for new/changed prescription medicines?

Question 13
Did you and a home health provider talk about when to take medications?

Question 14
Did providers talk about side effects of these medicines?
Outcomes

• What are your Home Health Compare Scores for ACH or hospitalization?
• Scores for Improvement of Oral Medications
• What are your HHCAHPS scores:
  – Overall rating
  – Scores on (5) Specific Care Questions