Medication Management…
Be Safe & Take
Clinician Enrichment Program

HHQI
Home Health Quality Improvement

Medication Management... "Be Safe & Take"
Clinician Enrichment Program

Purpose:
1. (1) To provide consistent instruction to home health clinicians in medication assessment and clinical interventions
2. (2) To improve management of medications in the home setting
3. (3) To improve quality of life for patients receiving home health services

Goal: To reduce avoidable hospitalizations by improving the home care patient's ability to **safely prepare and take** medications as prescribed

_____ **Enrichment Activity #1**
   Pre-test: Complete "Be Safe & Take" Medications Competency

_____ **Enrichment Activity #2**
   Review home health resources for:
   - ❖ Medication Assessment
   - ❖ Interventions to Improve Medication Management

_____ **Enrichment Activity #3**
   Identify five potential interventions for helping your patients **be safe and take** their medications as prescribed

_____ **Enrichment Activity #4**
   Post-test: Complete "Be Safe & Take" Medications Competency

Clinician: Assess & Intervene   **Patient: Be Safe & Take**

Directions: Choose the ONE BEST response to the following questions. Circle the letter that identifies the ONE BEST response.

1. When assessing management of oral medications to answer OASIS item M0780, the clinician is assessing:
   A. who sets up the medications most of the time
   B. the patient's ability to manage his/her oral medications
   C. the patient's knowledge about medication side effects
   D. the adverse effects that the patient is experiencing from medications

Reference: OASIS Chapter 8
Topic: Assessment

2. M0780 states, "Management of Oral Medications: Patient's ability to prepare and take <u>all</u> prescribed oral medications reliably and safely, including administration of the correct dosage at the appropriate times/intervals." The OASIS response selected should reflect the patient's ability to:
   A. always take every dose of medication correctly
   B. take all important medications correctly all of the time
   C. take all important medications correctly most of the time
   D. take a majority of daily doses correctly on the day of assessment

Reference: OASIS Implementation Manual 6/06
Topic: Assessment

3. You are admitting a patient into your home care program that was recently discharged from the hospital with asthma. She is on a tapering dose of prednisone for the next seven days. This is her only medication. Your assessment reveals that the patient does not understand how to take the prednisone correctly. Patient is agreeable to try a medication box, which you will bring on the next visit. How would you complete the SOC M0780?
   A. 0 - Able to independently take the correct oral medication(s) and proper dosage(s) at the correct times
   B. 1 – Able to take medication(s) at the correct times if:
      (a) individual dosages are prepared in advance by another person: OR
      (b) given daily reminders; OR
      (c) someone develops a drug diary or chart
   C. 2 – Unable to take medications unless administered by someone else
   D. UK – unknown

Reference: OASIS Implementation Manual 6/06
Topic: Assessment

4. In order to accurately assess the patient's ability to manage his/her oral medications, the clinician needs to use a combined approach of interview and _____.
   A. observation
   B. review of documentation from referral source
   C. discussion with caregiver only
   D. clinician's best judgment

Reference: OASIS Implementation Manual 6/06
Topic: Assessment

5. Medication reconciliation includes:
   A. creating the most accurate list of a patient's medications
   B. providing a patient form to record all medications
   C. resolving discrepancies
   D. documenting only physician prescribed medications
   E. All of the above
   F. All but D

Reference: Universal Medication Form
Topic: Intervention/Reconciliation

6. If maintained properly, a Universal Medication Form can:
   A. reduce confusion and save time
   B. improve communication between patient, family and healthcare providers
   C. improve medication safety
   D. All of the above

Reference: Universal Medication Form
Topic: Intervention/Reconciliation

7. Actions to resolve medication discrepancies include:
   A. advise to stop taking/start taking/change administration of medications
   B. discuss potential benefits and harm that may result from non-adherence
   C. talk to pharmacist about the problem
   D. address performance/knowledge deficit
   E. All of the above
   F. All but C

Reference: Medication Discrepancy Tool
Topic: Intervention/Reconciliation

8. Your new patient, Mrs. Frenzen, is being admitted into home care services. She is experiencing weakness in her dominant hand as a result of a stroke. She also has severe arthritis and was unable to demonstrate that she could open her medication box or remove the lid from a medication bottle. Which discipline would be the most appropriate to contact the physician for a referral?

   A. Medical Social Worker
   B. Occupational Therapy
   C. Physical Therapy
   D. Speech Language Pathology

Topic: Intervention
Reference: Medication Non-Adherence Education Tool

9. Mr. Jones, your new admission with a new diagnosis of diabetes, tells you that he will only take the Diabenese once a day, instead of the ordered twice a day dosage. Upon further questioning he states that he does not have enough money to buy his pills, pay his rent, and buy groceries. His solution is to use half the amount as needed for his diabetes. Which discipline would be the most appropriate to contact the physician for a referral?
   A. Medical Social Worker
   B. Occupational Therapy
   C. Physical Therapy
   D. Speech Language Pathology

Topic: Intervention
Reference: Medication Non-Adherence Education Tool

10. When selecting a type of medication box, you need to consider all of the following EXCEPT:
   A. patient's ability to open the box
   B. number of pills the patient takes in a day
   C. size of the agency logo on the box
   D. patient's visual ability

Topic: Intervention
Reference: Q-MAP Best Practice Tools

11. Your agency is requiring all clinicians to use a new medication teaching tool as a guideline for patient education related to medications. You feel like you have always done a good job of patient education and feel resistant to use the new guideline. The purpose of having all clinicians use the same guideline for medication teaching is to:
    A. promote a consistent approach to assessing, teaching and evaluating patient's knowledge and abilities with medications
    B. provide you with an option to assist with your assessment and instruction regarding medication management
    C. control what you teach your patients about medication management
    D. give you one more piece of paper to carry along with you on your visits

Topic: Intervention
Reference: Q-MAP Best Practice Tools

12. Mrs. O'Neill is a new admission to your agency. As her primary nurse you are responsible to manage her care. She has a new diagnosis of heart failure, but has a history of diabetes and emphysema for the last ten years. With the addition of her new heart failure meds, she now takes 11 medications every day. To help simplify her complex medication regimen, you would:
    A. remove/discard old and expired medications (with her permission)
    B. ask the pharmacist to review her medications
    C. A only
    D. A and B

Topic: Intervention
Resource: Medication Simplification Protocol

13. The Beers Criteria is a:
    A. List of medications that most elders take
    B. List of potentially inappropriate medications for the elderly
    C. List of medications that the elderly should never take
    D. List of medications to help you determine what medications should be discarded

Topic: Intervention
Resource: Beers Criteria

14. Patient medication teaching must include components that can improve self-administration. This includes:
    A. visual recognition of each drug
    B. dose and time to take each medication
    C. all interactions and side effects
    D. expected duration
    E. All of the above
    F. All but C

Topic: Intervention
Reference: Q-MAP Best Practice Tools

15. The home health aide role in medication management includes:
    A. None - The aide should not be involved with medication management
    B. reporting changes such as difficulty swallowing or sudden depression
    C. observing and reporting if there may be financial issues preventing the patient from getting prescriptions filled in a timely, consistent manner
    D. reporting the discovery of pills in the bed
    E. All of the above
    F. All but A

Topic: Intervention
Reference: Medication Management Best Practice Intervention Package

16. The role of the physical therapist in medication management includes:
    A. complete medication profile at SOC for PT only patients
    B. assess problems that could affect medication management including pain, cognitive impairments, and dysphagia
    C. pursue physician order for skilled nursing if patient requires teaching of a complex medication regime
    D. All of the above

Topic: Intervention
Reference: Medication Non-Adherence Education Tool

17. The following information should be communicated to the physician with concerns related to medication simplification:
    A. name of agency and reason for visits
    B. patient name and date
    C. any physical or cognitive impairments that might effect medication regime and that potential relationship
    D. Nothing – the physician knows what his patient is taking
    E. All but D
    F. All of the above

Topic: Intervention
Resource: Medication Simplification Protocol

18. Patient selection criteria for medication management case conferences might include:
    A. patients that may require medication simplification
    B. patients that reside in an assisted living facility and are severely cognitively impaired
    C. patients that scored 0 on M0780
    D. patients that scored 1 or 2 on M0780 with good prognosis
    E. A and D
    F. All of the above

Topic: Intervention
Reference: Medication Non-Adherence Education Tool

19. Mr. Lyman has been admitted to a personal care assisted living facility status post right hip replacement. The paid caretaker is administering all of his medications. Home care is admitting patient. Select the most appropriate plan of care.
    A. Do not consider him for improvement interventions
    B. Instruct only the caretaker in his medication regime
    C. Observe his cognitive, physiological and physical abilities to evaluate potential for improvement in management of oral meds
    D. Begin medication management interventions when he returns to his own home

Topic: Intervention
Resource: Medication Assessment Protocol

20. Speech therapy may be referred for improvement in medication management when the following reasons for non-adherence are identified:
    A. knowledge deficit
    B. illiteracy
    C. memory deficits
    D. swallowing difficulty
    E. All of the above
    F. B, C, and D

Topic: Intervention
Reference: Medication Non-Adherence Education Tool

Enrichment Activity #2
Medication Management Clinician Education

Assessment:
Assess patient's ability to **safely prepare and take** medication

True identification of patient status and/or deficits related to medication management will be best achieved using combined observation and interview methods in a multifaceted assessment (Krulish, 2005). Accuracy of completion of the M0780, the OASIS item used to compute improvement in management of oral medications, is crucial. OASIS education is the role of the state OASIS Education Coordinator.

Enrichment Activity: Review-
Medication Assessment Protocol
Additional OASIS Resources (optional)

Consider: "How can I incorporate this information into my daily practices?"

Medication Assessment Protocol
The Medication Assessment Protocol provides a standardized approach to evaluating patient ability to administer medications. It promotes a combination of interview and observation to evaluate the patient's true ability to **be safe** and **take** his/her medications as prescribed.

(M0780) Management of Oral Medications: <u>Patient's ability</u> to prepare and take <u>all</u> prescribed oral medications reliably and safely, including administration of the correct dosage at the appropriate times/intervals. **<u>Excludes</u> injectable and IV medications. (NOTE: This refers to ability, not compliance or willingness.)**

<u>Prior</u> <u>Current</u>

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

❑ ❑   2. Able to take medication(s) at the correct times if:
  (a) individual dosages are prepared in advance by another person; <u>OR</u>
  (b) given daily reminders; <u>OR</u>
  (c) someone develops a drug diary or chart

❑ ❑   3. <u>Unable</u> to take medication unless administered by someone else

❑ ❑   4. NA – No oral medications prescribed

❑ ❑   5. UK – Unknown

MEDICATION ASSESSMENT PROTOCOL

Purpose: To provide a standardized approach to evaluating patient ability to administer medications.

	Instructions	Clinician Observation/Assessment
1	✓ Ask patient to demonstrate how he/she takes his/her medication. ✓ Ask if the patient has any help to prepare or select the appropriate medications.	· Observe the patient performing preparatory activity (e.g., gathering medication supplies or moving to area where medications are routinely stored/organized). · Is the process organized? · Identify compliance aids used. · If the patient does have assistance, determine (through observation and interview) if the assistance is *necessary*.
2	Once the medication supplies are assembled (or accessed): ✓ Ask the patient to describe how he or she would proceed with taking his or her medicines (i.e., ask specifically, "What would you do first? Second?" etc.)	· Is the process appropriate as described? · Correct dosage, time, and frequency? · Check the patient's response against the directions for his or her specific medications.
3	If ability to sequence the multi-step medication administration task is not evident: ✓ Ask the patient to demonstrate a multi-step medication administration task (i.e., "Please show me how you would open your medicine bottles and take your medication.")	· Does the patient demonstrate ability to appropriately complete all steps in the task? 　· Selects the appropriate bottles 　· Opens each one and selects the correct dosage prior to closing lid(s) 　· Takes medication as directed 　· Closes lid(s) and returns bottles to storage area.
4	Check adherence: ✓ As part of the comprehensive assessments AND ✓ On an ongoing basis.	· Review calendar, diary, list, pillbox, etc. to determine compliance. · Select one medication with known start date and count pills to verify compliance. · Does patient have any established daily routines which are, or could be, tied-in to medication administration?

Quality Insights

Quality Insights of Pennsylvania

"Partnering to achieve health care excellence"

The Medicare Quality Improvement Organization for Pennsylvania

Additional OASIS Resources (optional)

OASIS Web-Based Training
OASIS Web-Based Training at www.oasistraining.org is an online self-study
program that provides CMS-sponsored training using interesting audio & visual
features to capture the details of the OASIS data set for assessing patients.

**Department of Health and Human Services, Centers for Medicare &
Medicaid Services, OASIS Users Manual, Chapter 8**
Chapter 8: OASIS in detail provides item-by-item tips including MO item
definition, time points for collection, specific response instructions and
assessment strategies.

OASIS Q & As
OASIS Questions and Answers can be found at the OASIS download page at
https://www.qtso.com/hhadownload.html. The list of state OASIS Education
Coordinators can also be located there.

Certificate & Competency Board, Inc. (OCCB)
OCCB offers Center for Medicare & Medicaid Services (CMS) OASIS Questions &
Answers at one location. Access at www.oasiscertificate.org.

OASIS Strategies for Accuracy WebEx
This twenty minute pre-recorded WebEx presentation by Linda Krulish,
President of OASIS Answers, was created for the Quality Medication
Administration Project to support accurate completion of M0780. Access at
www.medqic.org.

Interventions to Improve Medication Management

If the patient is unable to safely prepare and take medication, identify possible underlying causes and intervene appropriately.

Key: Patient and caregiver education has been the hallmark of improving medication management. This medication management program moves beyond traditional education to include reconciliation, simplification and a distinctive interdisciplinary approach that takes full advantage of all home health care providers, including therapy, social workers and home health aides.

Reconciliation: Process of identifying 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 physician and/or hospital discharge orders, with the goal of providing correct medications.

Medication reconciliation is also one of the 2006 National Patient Safety Goals set by the Joint Commission on Accreditation of Healthcare Organizations. All accredited facilities must have protocols in place for documenting and reconciling medications across the continuum of care.

Patient Tool: Universal Medication Form

"My other doctor ordered that. Oh, and I was taking that before I went to the hospital. I have been on that blue one for years."

The **key** to the reconciliation process is an accurate medication list carried by the patient. The two-page Universal Medication Form from the Institute for Healthcare Improvement (IHI) can be used by patients to register information about their medication use, allergies, and immunization records. The form can also help prevent adverse drug events (ADEs) and improve communication between health care providers, patients and families. (*McLeod Health Florence, South Carolina,* www.ihi.org).

Healthcare Provider Tool: Medication Discrepancy Tool

Nurse

Therapist

"The prescriptions the patient received do not match the discharge med list from the hospital."

The Medication Discrepancy Tool (MDT$_©$) facilitates reconciliation of the medication regime across settings and prescribers. The MDT$_©$ is a tool for identifying and characterizing medication discrepancies that arise when patients are making the transition between sites of care. Specific MDT$_©$ items are designed to be actionable and ideally able to recognize problems before patients experience harm. It was found that clinicians using the MDT$_©$ were able to capture a wide range of transition-related medication problems.

The MDT$_©$ was developed to fill the gap in the identification and categorization of transition-related medication problems, to facilitate resolution of these problems by describing appropriate action steps at either the patient or system level, and to lead to a single reconciled list of medications, irrespective of the number of prescribers involved. (The Care Transitions Program$_©$)

Even if your agency is not currently using these specific tools, a general knowledge of these two tools, created by these recognized organizations, is valuable.

Enrichment Activity: **Review**-
Universal Medication Form
Medication Discrepancy Tool

Consider: "How can I incorporate this information into my daily practices?"

UNIVERSAL MEDICATION FORM

* Fold this form and keep it in your wallet.

Name:	**Address:**
Phone Number:	
Birthdate:	

Allergic To/Describe Reaction:	**Allergic To/Describe Reaction:**

List all prescription and over-the-counter (non-prescription) medications such as vitamins, Aspirin, Tylenol, and herbals (ex: Ginseng, Gingko Biloba, St. John's Wort) Include prescription meds taken as needed, (ex. Viagra, Nitroglycerin.)

DATE	NAME OF MEDICATION / DOSE	DIRECTIONS: USE PATIENT FRIENDLY DIRECTIONS. DO NOT USE MEDICAL ABBREVIATIONS	DATE STOPPED:	REASON FOR TAKING/MD NAME

Refer to the next page for directions.

UNIVERSAL MEDICATION FORM

IMMUNIZATION RECORD (Record the last dose taken)	
TETANUS	
PNEUMONIA VACCINE	
FLU VACCINE	
HEPATITIS VACCINE	

Comments

Patients:

1. Always keep this form with you.

2. Take this form to ALL doctor visits and ALL medical testing (lab, x-ray, MRI, CT, etc). Take this form to ALL preassessment visits for admission or surgery and ALL hospital visits (ER, in-patient admission, out-patient visits).

3. Update this form as changes are made to your medications. If a medication is stopped, draw a line through it and record the date it was stopped. If help is needed ask Physician, Nurse or Pharmacist to help you fill out this form.

4. In the COMMENTS column, record things like the name of doctor who told you to take this medication. You may also add the reason for taking the medication (high blood pressure, high blood sugar, high cholesterol). **Always keep this form with you.**

5. Tell your family, friends and neighbors about the benefits of using this form.

6. When you are discharged from the hospital, you will get an updated form. This will be reviewed with you and you will be given a copy. When you return to your doctor, take your updated form with you. **Always keep this form with you.** This will keep everyone up-to-date on your medications.

How does this form help you?

By using this form, it

1. **Reduces confusion and saves time.** You do not have to remember all the medications you are taking, the form does this for you.

2. **Improves communication.** Provides doctors, health care providers and institutions with a current list of ALL of your medications. Let's the patient and/or family member know exactly what medications are to be taken and when.

3. **Improves MEDICATION SAFETY.** Medication interactions and duplications can be detected and corrected.

This resource was originally created by McLeod Health, Florence, South Carolina and is made available as a resource by the Institute for Healthcare Improvement (IHI) at www.ihi.org.

MEDICATION DISCREPANCY TOOL (MDT)

MDT is designed to facilitate reconciliation of medication regimen 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 (ie: 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/inaccurate/illegible.
   Either the patient cannot make out the hand- writing 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/need for assistance not recognized

☐ Sight/dexterity limitations not recognized

✓ **Resolution :: check all that apply**

☐ Advised to stop taking/start taking/change administration of medications

☐ 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 _____

Medication Non-Adherence Staff Education Tool

Nurse

Therapist

"I have never made a referral to occupational therapy for medication management before!"

Non-adherence: This term is applied to patients when they are not following the prescribed treatment. There may be many factors that are affecting the patient/caregiver's ability to take their medications, which need assessed and addressed. Typically clinicians look at the primary physical or cognitive impairments, but a more detailed assessment is needed, related to the complex process of medication management.

The Medication Non-Adherence Tool promotes a comprehensive and standardized approach to evaluating the presence and possible underlying causes of medication non-adherence. Use when general assessment findings suggest patient is not taking oral medications as prescribed. Potential non-adherence issues are addressed with assessment strategies. The referral triggers promote an interdisciplinary approach to medication management.

Interdisciplinary case conferencing of potential issues that may impact medication management is essential in developing possible interventions. The success of improving medication management will be the inclusion of the patient and caregiver in the decision making process and assisting with overcoming any barriers.

Medication Simplification Protocol

Nurse

Therapist

"Mr. Jones is never going to be able to keep 14 medications straight."

The Medication Simplification Protocol encourages a standardized approach to simplifying complex medication regimens. Polypharmacy is increasingly recognized as an important issue for older people, and there are approaches to simplification of medication regimes (Madigan, 2007). This seven step protocol encourages collaboration between the home health agency clinician and the pharmacist and physician to meet the goals, including using the fewest medications possible in the simplest form to achieve the desired treatment goal.

Beers Criteria
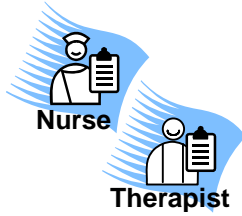
"Doctor Gonzales, Mrs. Allen has had several near falls recently. She is currently prescribed Ativan 3.0 mg twice daily."

The Beers Criteria is a list of potentially inappropriate medication for use in older adults independent of diagnoses or conditions. It indicates specific concerns and assigns a high or low severity rating.

The Beers Criteria is based on a consensus derived from an expert panel that reviewed scientific literature. The list is intended to assist clinicians in adopting evidence-based prescribing practices. The Beers Criteria is not intended to supersede clinical judgment of the prescriber. When you encounter a patient receiving a potentially inappropriate medication, refer to the Beers Criteria, clearly articulate your concerns with a description of assessment findings to the prescriber (Neafsey, 2005).

Enrichment Activity: **Review**-
Medication Non-Adherence Staff Education Tool
Medication Simplification Protocol
Beers Criteria

Consider: "How can I incorporate this information into my daily practices?"

MEDICATION NON-ADHERENCE (staff education tool)

Purpose: To promote a comprehensive and standardized approach to evaluating the presence and possible underlying causes of medication non-adherence.

When general assessment findings suggest patient is not taking oral medications as prescribed, assess further:

Potential Non-Adherence Issues	Assessment Strategies	Referral Triggers?
Knowledge Deficit	Is there evidence to support/suggest that patient/caregiver does not understand medication regimen? · "I'm not having (symptom) anymore, so I'm not sure whether to keep taking this." · "That makes my stomach upset, so I try not to take it."	RN
Illiteracy	Is there evidence to support/suggest that patient's/caregiver's inability to read is affecting medication compliance? · Unable to read medication name, frequency, dose, other instructions	RN, SLP, OT
Financial Concerns*	Is there evidence to support/suggest that patient is limiting medication use to save drug (i.e. to save money)? · "I take it when I really need it." · "I sometimes only take half the ordered amount."	RN, MSW
Fear of Addiction*	Is there evidence to support/suggest that patient is limiting medication use due to concerns he or she will become addicted? · "I want to get off that stuff." · "I only take it when I can't stand it anymore."	RN, MSW
Drug Diversion or Over-Medicating*	Is there evidence to support/suggest that patient is taking too much medication? · "I need a refill; the bottle spilled in the sink." · "Even doubling the prescribed amount does not <u>touch</u> the pain." (do not assume intentional over-medicating without evaluating for true ineffectiveness of current meds, need for adjuvant therapy, etc.)	RN, MSW
Health Belief/ Expectations*	Is there evidence to support/suggest that the patient's medication non-compliance may be due to general beliefs or expectations about health and illness? · "If he is meant to get better, it will happen." · "If I take the pills, it will show a lack of faith."	RN, MSW

Memory Deficits	Is there evidence to support/suggest that the patient is forgetting to take medications, or forgetting that medications have already been taken – resulting in non-compliance? · "I usually take one after lunch, but my daughter called, and I can't remember if I took it." · pills found in chair, on table by cup, etc. · incorrect pill counts · signs of ineffective drug therapy	RN, OT, SLP
Functional Deficits	Is there evidence to support/suggest that patient/caregiver non-adherence is due to functional deficits? · fine motor/gross motor/mobility · vision · swallowing	OT, SLP, PT
Disorganization	Is there evidence to support/suggest that the patient's medication administration methods lack organization? · bottles/pills in multiple locations · unable to locate all medications · reported administration methods vary from day to day (inconsistent) · lack of established or predictable routines (sleep, meals, ADLs, etc.)	RN, OT, SLP, MSW

*May not affect patient's ability to take medications, therefore may not impact M0780 scoring

Referrals should be made based on patient need, state practice acts, and agency policy.

MEDICATION SIMPLIFICATION PROTOCOL:

Purpose: To encourage a standardized and collaborative approach to simplifying complex medication regimens.

Use: Add triggers to comprehensive assessment to target patients for medication reduction/simplification strategies:

| *Is patient taking > 8 medications?* | YES ⟹ | *Is there opportunity to simplify the patient's drug regimen?* |
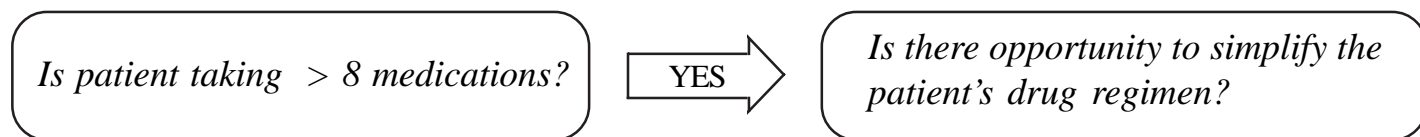
Goals:
1) Use the <u>fewest medications</u> possible in the <u>simplest form</u> to achieve the desired treatment goal.
2) <u>Eliminate preventable</u> drug-related <u>adverse events.</u>
3) Use <u>non-pharmacological therapies</u> in place of medications when possible.
4) Improve patient medication regimen <u>adherence</u> and <u>independence</u>.

Process: Agency staff will work collaboratively with the organization or community-based pharmacist and/or physician to apply criteria and meet goals.

Medication Simplification Steps:
1) Remove/discard unnecessary or expired drugs to prevent confusion.
2) Encourage use of a single pharmacy to enhance regimen review and collaboration with pharmacist.
3) Consider non-pharmacologic alternatives.
4) Coordinate administration times with established sleep and activity patterns/routines.
5) Decrease administration frequency, using sustained-release or long acting products.
6) Reduce multiple medications to treat a single condition, unless combination therapy is intentional.
7) Discontinue/substitute cautionary medications known to be problematic for geriatric patients (e.g., "Beers Criteria").

References for Protocol Development:
"Medication Regimen Simplification" QMWeb – accessed 02/03/04
http://mqa.dhs.state.tx.us/qmweb/MedSim.htm
Fick, DM, Cooper, JW, Wade, WE, Waller, JL, Maclean, JR, and Beers, MH. (2003) Updating the Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. Arch Intern Med; 163: 2716-2724. (including correction note published Arch Intern Med 164:298.)
Beers, MH. (1997) Explicit criteria for determining potentially inappropriate medication use by the elderly: an update. Arch Intern Med; 157:1531-6.
Texas Health Care Association Website, Best Practices http://www.txhca.org/BestPractices/MedMgmt/medbeer1.pdf
Accessed 02/03/04
Ugalino, JA. (2001) Understanding the Pharmacology of Aging. *Hospital Physician Medical Practice for Staff & Residents*, Geriatric Medicine Board Review Manual, April; 1(4).

STEPS to MEDICATION SIMPLIFICATION

Discontinue/Substitute
Cautionary Meds
(MD, Pharm, RN)

Multiple Meds for Single
Condition
(MD, Pharm, RN)

Long-Acting/Sustained-Release
Alternatives
(MD, Pharm, RN, Patient/Caregiver)

Coordinate Doses with
Established Daily Routines
(MD, Pharm, RN, PT, OT, SLP, Aide, Patient/Caregiver)

Non-Drug Alternatives
(MD, RN, PT, OT, Aide, Patient/Caregiver)

Single Pharmacy
(MD, Pharm, RN, PT, OT, SLP, Patient/Caregiver)

Remove/Discard
Old/Expired Drugs
(RN, PT, OT, SLP, Patient/Caregiver)

BEERS CRITERIA

2002 Criteria for Potentially Inappropriate Medication Use in Older Adults: Independent of Diagnoses or Conditions

Drug	Concern	Severity Rating (High or Low)
Propoxyphene (**Darvon**) and combination products (**Darvon with ASA**, **Darvon-N**, and **Darvocet-N**)	Offers few analgesic advantages over acetaminophen, yet has the adverse effects of other narcotic drugs.	Low
Indomethacin (**Indocin** and **Indocin SR**)	Of all available nonsteroidal anti-inflammatory drugs, this drug produces the most CNS adverse effects.	High
Pentazocine (**Talwin**)	Narcotic analgesic that causes more CNS adverse effects, including confusion and hallucinations, more commonly than other narcotic drugs. Additionally, it is a mixed agonist and antagonist.	High
Trimethobenzamide (**Tigan**)	One of the least effective antiemetic drugs, yet it can cause extrapyramidal adverse effects.	High
Muscle relaxants and antispasmodics: methocarbamol (**Robaxin**), carisoprodol (**Soma**), chlorzoxazone (**Paraflex**), metaxalone (**Skelaxin**), cyclobenzaprine (**Flexeril**), and oxybutynin (**Ditropan**). Do not consider the extended-release **Ditropan XL**.	Most muscle relaxants and antispasmodic drugs are poorly tolerated by elderly patients, since these cause anticholinergic adverse effects, sedation, and weakness. Additionally, their effectiveness at doses tolerated by elderly patients is questionable.	High
Flurazepam (**Dalmane**)	This benzodiazepine hypnotic has an extremely long half-life in elderly patients (often days), producing prolonged sedation and increasing the incidence of falls and fracture. Medium- or short-acting benzodiazepines are preferable.	High
Amitriptyline (**Elavil**), chlordiazepoxide-amitriptyline (**Limbitrol**), and perphenazine-amitriptyline (**Triavil**)	Because of its strong anticholinergic and sedation properties, amitriptyline is rarely the antidepressant of choice for elderly patients.	High
Doxepin (**Sinequan**)	Because of its strong anticholinergic and sedating properties, doxepin is rarely the antidepressant of choice for elderly patients.	High
Meprobamate (**Miltown** and **Equanil**)	This is a highly addictive and sedating anxiolytic. Those using meprobamate for prolonged periods may become addicted and may need to be withdrawn slowly.	High
Doses of short-acting benzodiazepines: doses greater than lorazepam (**Ativan**), 3 mg; oxazepam (**Serax**), 60 mg; alprazolam (**Xanax**), 2 mg; temazepam (**Restoril**), 15 mg; and triazolam (**Halcion**), 0.25 mg	Because of increased sensitivity to benzoadiazepines in elderly patients, smaller doses may be effective, as well as safer. Total daily doses should rarely exceed the suggested maximums.	High
Long-acting benzodiazepines: chlordiazepoxide (**Librium**), chlordiazepoxide-amitriptyline (**Limbitrol**) clidinium-chlordiazepoxide (**Librax**), diazepam (**Valium**), quazepam (**Doral**), halazepam (**Paxipam**), and chlorazepate (**Tranxene**)	These drugs have a long half-life in elderly patients (often several days), producing prolonged sedation and increasing the risk of falls and fractures. Short- and intermediate-acting benzodiazepines are preferred if a benzodiazepine is required.	High
Disopyramide (**Norpace** and **Norpace CR**)	Of all antiarrhythmic drugs, this is the most potent negative inotrope and therefore may induce heart failure in elderly patients. It is also strongly anticholinergic. Other antiarrhythmic drugs should be used.	High
Digoxin (**Lanoxin**) (should not exceed 0.125 mg/d except when treating atrial arrhythmias)	Decreased renal clearance may lead to increased risk of toxic effects.	Low
Short-acting dipyridamole (**Persantine**)	Do not consider the long-acting dipyridamole (which has better properties than the short-acting in older adults) except with patients with artificial heart valves. May cause orthostatic hypotension.	Low
Methyldopa (**Aldomet**) and methyldopa-hydrochlorothiazide (**Aldoril**)	May cause bradycardia and exacerbate depression in elderly patients.	High

BEERS CRITERIA

Reserpine at doses 0.25 mg	May induce depression, impotence, sedation, and orthostatic hypotension.	Low
Chlorpropamide (**Diabinese**)	It has a prolonged half-life in elderly patients and could cause prolonged hypoglycemia. Additionally, it is the only oral hypoglycemic agent that causes SIADH.	High
Gastrointestinal antispasmodic drugs: dicyclomine (**Bentyl**), hyoscyamine (**Levsin** and **Levsinex**), propantheline (**Pro-Banthine**), belladonna alkaloids (**Donnatal** and others), and clidinium-chlordiazepoxide (**Librax**)	GI antispasmodic drugs are highly anticholinergic and have uncertain effectiveness. These drugs should be avoided (especially for long-term use).	High
Anticholinergics and antihistamines: chlorpheniramine (**Chlor-Trimeton**), diphenhydramine (**Benadryl**), hydroxyzine (**Vistaril** and **Atarax**), cyproheptadine (**Periactin**), promethazine (**Phenergan**), tripelennamine, dexchlorpheniramine (**Polaramine**)	All nonprescription and many prescription antihistamines may have potent anticholinergic properties. Nonanticholinergic antihistamines are preferred in elderly patients when treating allergic reactions.	High
Diphenhydramine (**Benadryl**)	May cause confusion and sedation. Should not be used as a hypnotic, and when used to treat emergency allergic reactions, it should be used in the smallest possible dose.	High
Ergot mesyloids (**Hydergine**) and cyclandelate (**Cyclospasmol**)	Have not been shown to be effective in the doses studied.	Low
Ferrous sulfate 325 mg/d	Doses 325 mg/d do not dramatically increase the amount absorbed but greatly increase the incidence of constipation.	Low
All barbiturates (except phenobarbital) except when used to control seizures	Are highly addictive and cause more adverse effects than most sedative or hypnotic drugs in elderly patients.	High
Meperidine (**Demerol**)	Not an effective oral analgesic in doses commonly used. May cause confusion and has many disadvantages to other narcotic drugs.	High
Ticlopidine (**Ticlid**)	Has been shown to be no better than aspirin in preventing clotting and may be considerably more toxic. Safer, more effective alternatives exist.	High
Ketorolac (**Toradol**)	Immediate and long-term use should be avoided in older persons, since a significant number have asymptomatic GI pathologic conditions.	High
Amphetamines and anorexic agents	These drugs have potential for causing dependence, hypertension, angina, and myocardial infarction.	High
Long-term use of full-dosage, longer half-life, Non-COX-selective NSAIDs: naproxen (**Naprosyn**, **Avaprox**, and **Aleve**), oxaprozin (**Daypro**), and piroxicam (**Feldene**)	Have the potential to produce GI bleeding, renal failure, high blood pressure, and heart failure.	High
Daily fluoxetine (**Prozac**)	Long half-life of drug and risk of producing excessive CNS stimulation, sleep disturbances, and increasing agitation. Safer alternatives exist.	High
Long-term use of stimulant laxatives: bisacodyl (**Dulcolax**), cascara sagrada, and Neoloid except in the presence of opiate analgesic use	May exacerbate bowel dysfunction.	High
Amiodarone (**Cordarone**)	Associated with QT interval problems and risk of provoking torsades de pointes. Lack of efficacy in older adults.	High
Orphenadrine (**Norflex**)	Causes more sedation and anticholinergic adverse effects than safer alternatives.	High
Guanethidine (**Ismelin**)	May cause orthostatic hypotension. Safer alternatives exist.	High
Guanadrel (**Hylorel**)	May cause orthostatic hypotension.	High
Cyclandelate (**Cyclospasmol**)	Lack of efficacy.	Low
Isoxsurpine (**Vasodilan**)	Lack of efficacy.	Low
Nitrofurantoin (**Macrodantin**)	Potential for renal impairment. Safer alternatives available.	High
Doxazosin (**Cardura**)	Potential for hypotension, dry mouth, and urinary problems.	Low

BEERS CRITERIA

Methyltestosterone (**Android**, **Virilon**, and **Testrad**)	Potential for prostatic hypertrophy and cardiac problems.	High
Thioridazine (**Mellaril**)	Greater potential for CNS and extrapyramidal adverse effects.	High
Mesoridazine (**Serentil**)	CNS and extrapyramidal adverse effects.	High
Short acting nifedipine (**Procardia** and **Adalat**)	Potential for hypotension and constipation.	High
Clonidine (**Catapres**)	Potential for orthostatic hypotension and CNS adverse effects.	Low
Mineral oil	Potential for aspiration and adverse effects. Safer alternatives available.	High
Cimetidine (**Tagamet**)	CNS adverse effects including confusion.	Low
Ethacrynic acid (**Edecrin**)	Potential for hypertension and fluid imbalances. Safer alternatives available.	Low
Desiccated thyroid	Concerns about cardiac effects. Safer alternatives available.	High
Amphetamines (excluding methylphenidate hydrochloride and anorexics)	CNS stimulant adverse effects.	High
Estrogens only (oral)	Evidence of the carcinogenic (breast and endometrial cancer) potential of these agents and lack of cardioprotective effect in older women.	Low

Abbreviations: CNS, central nervous system; COX, cyclooxygenase; GI, gastrointestinal; NSAIDs, nonsteroidal anti-inflammatory drugs; SIADH, syndrome of inappropriate antidiuretic hormone secretion

Used with Permission

References:

Fick, DM, Cooper, JW, Wade, WE, Waller, JL, Maclean, JR, and Beers, MH. (2003) Updating the Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. Arch Intern Med; 163: 2716-2724. (including correction note published Arch Intern Med 164:298.)

Enrichment Activity #3

Identify five potential discipline specific clinical interventions for helping your patients to **be safe and take** their medications as prescribed.

1. _____

   _____

2. _____

   _____

3. _____

   _____

4. _____

   _____

5. _____

   _____

Enrichment Activity #4

Complete "**Be Safe & Take**" Medications Competency Post-test.

Congratulations!

**You have just completed the Medication Management
"Be Safe & Take" Clinician Enrichment Program.**