

Best Practice Tools

“Best Practices for Improvement in Management of Oral Medications”

-Teleconference Supplement-

Medication List and Log

Name: _____

Purpose: "Independent Patient" Monitoring

Allergies: _____

Physician: _____

Pharmacy: _____

Medication	For What?	How Much?	How Often?	How? (ie, with meals)	For how long?	Enter date and time as you take each drug									

Existing Barriers to Independent Medication Management

Purpose: to encourage a comprehensive and standardized approach to identification of factors affecting patient independence in medication management

Cognitive/Emotional/Behavioral:

- knowledge deficit
- illiterate
- memory deficit
- disorientation/confusion
- impaired judgment
- depression

Functional/Sensory-Motor:

- dependent mobility
- strength deficit
- fine motor deficit
- visual deficit
- swallowing dysfunction

Medication Regimen:

- Complex Regimen
 - multiple medications (>8)
 - frequent administrations (> 2x/day)
 - changing dosage and/or frequency

Environmental:

- Medication storage location inconvenient/inaccessible
- Lack of organization
- Physical risks/barriers in home environment

Other:

- _____
- _____
- _____

References for tool development:

Cook, PF. Psychosocial Interventions to Improve Medication Compliance: A Meta-Analysis (2000), www.scriptassistllc.com, accessed 02/03/04.

Guerette, P, Nakai, R., The Right Prescription. TeamRehab Report, Page 21-23, (1993), www.wheelchairnet.org, accessed 02/03.04.

Park, D., Morrell, R, Frieske, D, and Blackburn, B., Cognitive Factors and the use of Over-the-Counter Medication Organizers by Arthritis Patients. Human Factors, 33, 57-67, 1991.

Noncompliance Risk Tool

Purpose: To assess a patient's risk for noncompliance with treatment regimen

	YES	NO
Does the patient or caregiver...		
understand the prescribing instructions?		+1
show an inability to distinguish colors or identifying markings on the medications?	+1	
have difficulty in reading or comprehension in written instructions?	+1	
feel anger about this illness?	+1	
had little education about the illness or the need for the medication?	+1	
think that medication is causing one or more adverse side effects?	+1	
express little faith in the effectiveness of the medication?	+1	
express overconcern about the safety of the medication or express fear of becoming addicted?	+1	
notice a reduction or disappearance in bothersome disease symptoms?	+1	
have more than 1 healthcare provider prescribing medications?	+1	
have little confidence in health care providers?	+1	
show signs of forgetfulness or confusion?	+1	
show denial of the illness or its significance?	+1	
show signs of apathy or significant depression?	+1	
have financial problems making it difficult to afford medication?	+1	
have physical difficulties limiting access to the medication?	+1	
have physical difficulties in taking the medication?	+1	
have a history of noncompliance with regimens in the past?	+1	
have problems with required assistance in the home environment?	+1	
have problems with concurrent substance abuse?	+1	
have no or little family or social support?	+1	
feel under a great deal of stress?	+1	
Does the therapeutic regimen...		
seem complex for the patient, with multiple drugs and/or frequent administrations?	+1	
require an unpleasant means of administration, such as injections?	+1	
involve drugs with similar appearances or names?	+1	
involve drugs with unpleasant taste or smell?	+1	
involve inconvenient or restrictive precautions?	+1	
involve small or difficult to handle medications?	+1	
Have there been frequent changes made to the patient's drug regimen?	+1	

Total number of possible risks to compliance

The risk for noncompliance is:

LOW (0)
 PRESENT (1)
 INCREASED (2)
 HIGH (3-4)
 VERY HIGH (>4)

References:

Beers MH, Berkow R et al (editors). The Merck Manual of Diagnosis and Therapy- 17th edition. Merck Research Laboratories. (1999). Chapter 301: Factors Affecting Drug Response. Pages 2586-2587. Table 301-3.

Vestal RE, Montamat SC, Nielson CP. Chapter 31. Drugs in Special Patient Populations: The Elderly. Pages 851-874 (854-856). IN: Melmon KL, Morrelli HF et al (editors). Melmon and Morrelli's Clinical Pharmacology Basic Principles in Therapeutics. Third Edition. McGraw-Hill Inc. 1992.

Young LY, Koda-Kimble MA et al. Handbook of Applied Therapeutics- 6th Edition. Applied Therapeutics Inc. 1996. Tables 97.9, 97.1, 97.11 and 97.12. Pages 97.5-97.7.

MedTake Test

Purpose: To encourage a comprehensive and standardized approach to evaluating a patient's knowledge of their medication regimen

For <i>each</i> medication, evaluate level of patient's knowledge of:	Totally Incorrect	Mostly Incorrect	Somewhat Incorrect	Somewhat Correct	Mostly Correct	Perfectly Correct
• Dose of medication	+0	+5	+10	+15	+20	+25
• Indication(s) for taking drug	+0	+5	+10	+15	+20	+25
• Coingestion of drug with food or water	+0	+5	+10	+15	+20	+25
• Drug regimen and schedule	+0	+5	+10	+15	+20	+25
Sum of points (0-100) is knowledge score for individual drug:						

Method:

- 1) The level of patient's knowledge is evaluated for each medication
- 2) Each drug is scored separately, assigning points based on level of knowledge
- 3) Add up points for individual drug score (0-100)
- 4) The mean score for all medications is the composite score.

Individual score could be used to identify specific medication teaching need.

Individual score(s) or composite score could be used to identify need for nursing referral for therapy-only cases.

Reference for tool development (home health application added):

Raehl CL, Bond CA et al. Individual Drug Use Assessment in the Elderly. *Pharmacotherapy*. 2002; 22(10):1239-1248. (Appendix 1 page 3).

Drug Education Checklist

Purpose: To encourage a comprehensive and standardized approach to medication teaching

WHEN A KNOWLEDGE DEFICIT IS IDENTIFIED, OR FOR NEW MEDICATION(S), TEACHING WILL INCLUDE:	YES	NO
GENERAL INFORMATION ABOUT THE DRUG:		
• Purpose of the drug *		
• Expected duration of therapy *		
• Brand and Generic names *		
• Visual recognition of drug and tablet strength *		
• Cost		
MECHANICS:		
• Dosing and administration *		
• When to take the medication relative to meals, sleep, etc.*		
• What to do in case a dose is missed *		
• What to do if the condition being treated becomes/remains a problem (ineffective drug therapy)		
INFORMATION ABOUT ADVERSE EFFECTS:		
• Recognition of minor side effects		
• Recognition of major/significant side effects **		
• What to do if a serious complication occurs **		
FACTORS THAT MAY INTERFERE WITH THE MEDICATION OR CAUSE PROBLEMS:		
• Potential for drug interactions with other prescription drugs		
• Potential for drug interactions with over-the-counter medications		
• Special diet considerations *		
FUTURE/FOLLOW-UP CARE:		
• Follow-up with Medicines: Where, when, and with whom		
• The importance of monitoring		
• Importance of notifying other health care professionals about the current or changing drug regimen		

* Education content items that have highest potential to affect M0780 scoring, and therefore impact the OBQI measure “Improvement in Management of Oral Medications”

** Although CMS guidance has suggested that M0780 does not report the patient’s *knowledge* about a medication, and that a patient’s *knowledge* of side effects and adverse reactions is not relevant to the “Improvement in Management of Oral Medications” outcome measure, authors of this tool suggest clinicians exercise professional judgment on a case-by-case basis, to determine if an identified knowledge deficit impacts a patient’s ability to take a medication “reliably and safely” as reported on M0780.

Tool Developed by Linda Krulish, MHS, PT & Stephanie Mello Gaskell, MS, MBA, RN

References for tool development:

Humphrey, CJ. Home Care Nursing Handbook – 3rd Edition (1998) Aspen Publishers, Inc.

Marrelli TM, Home Care & Hospice Drug Handbook (1999) Mosby

Young LY, Koda-Kimble MA et al. Handbook of Applied Therapeutics – 6th Edition. Applied Therapeutics Inc. 1996. Table 10.9 page 10.12.

Drug Education Checklist WORKSHEET

For each MEDICATION → Check if education in specific teaching area was provided ↓	MEDICATION								
GENERAL INFORMATION ABOUT THE DRUG:									
• Purpose of the drug *									
• Expected duration of therapy *									
• Brand and Generic names *									
• Visual recognition of drug and tablet strength *									
• Cost									
MECHANICS:									
• Dosing and administration *									
• When to take the medication relative to meals, sleep, etc.*									
• What to do in case a dose is missed *									
• What to do if the condition being treated becomes/remains a problem (ineffective drug therapy)									
INFORMATION ABOUT ADVERSE EFFECTS:									
• Recognition of minor side effects									
• Recognition of major/significant side effects **									
• What to do if a serious complication occurs **									
FACTORS THAT MAY INTERFERE WITH THE MEDICATION OR CAUSE PROBLEMS:									
• Potential for drug interactions with other prescription drugs									
• Potential for drug interactions with over-the-counter medications									
• Special diet considerations *									
FUTURE/FOLLOW-UP CARE:									
• Follow-up with Medicines: Where, when, and with whom									
• The importance of monitoring									
• Importance of notifying other health care professionals about the current or changing drug regimen									

_____ patient

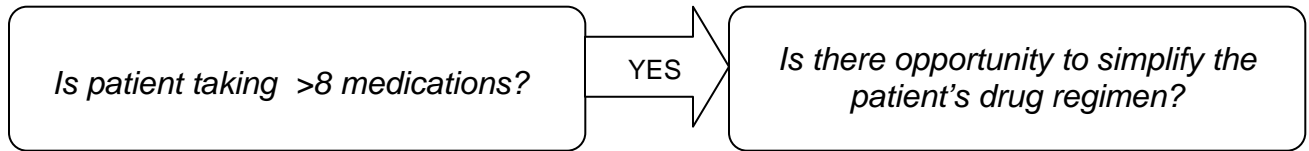
_____ clinician / date

* & ** (see **Drug Education Tool** developed by Krulish & Gaskell for discussion of OBQI impact issues)

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:



Goals:

- 1) use the fewest medications possible in the simplest form to achieve the desired treatment goal
- 2) eliminate preventable drug-related adverse events,
- 3) use non-pharmacological therapies in place of medications when possible
- 4) improve patient medication regimen adherence and independence

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").

Tool Developed by Linda Krulish, PT, MHS & Stephanie Mello Gaskell, MS, MBA, RN, COS-C

References for protocol development:

"Medication Regimen Simplification" QMWeb – accessed 020304
<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 020304

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)

Tool Developed by Linda Krulish, PT, MHS & Stephanie Mello Gaskell, MS, MBA, RN, COS-C

Medication Simplification Protocol – QMAP
“Best Practices for Improvement in Management of Oral Medications”
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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 benzodiazepines 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
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), tripeleminamine, 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
Isoxsuprine (Vasodilan)	Lack of efficacy.	Low
Nitrofurantoin (Macrochantin)	Potential for renal impairment. Safer alternatives available.	High
Doxazosin (Cardura)	Potential for hypotension, dry mouth, and urinary problems.	Low
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.)


Mini-Mental State Examination (MMSE)

Purpose: Provides a brief, standardized measure of cognitive function

Patient's Name: _____

Date: _____

Instructions: Score one point for each correct response within each question or activity.

Maximum Score	Patient's Score	Questions
5		"What is the year? Season? Date? Day? Month?"
5		"Where are we now? State? County? Town/city? Hospital? Floor?"
3		The examiner names three unrelated objects clearly and slowly, then the instructor asks the patient to name all three of them. The patient's response is used for scoring. The examiner repeats them until patient learns all of them, if possible.
5		"I would like you to count backward from 100 by sevens." (93, 86, 79, 72, 65, ...) Alternative: "Spell WORLD backwards." (D-L-R-O-W)
3		"Earlier I told you the names of three things. Can you tell me what those were?"
2		Show the patient two simple objects, such as a wristwatch and a pencil, and ask the patient to name them.
1		"Repeat the phrase: 'No ifs, ands, or buts.'"
3		"Take the paper in your right hand, fold it in half, and put it on the floor." (The examiner gives the patient a piece of blank paper.)
1		"Please read this and do what it says." (Written instruction is "Close your eyes.")
1		"Make up and write a sentence about anything." (This sentence must contain a noun and a verb.)
1		"Please copy this picture." (The examiner gives the patient a blank piece of paper and asks him/her to draw the symbol below. All 10 angles must be present and two must intersect.) 
30		TOTAL

SCORING:	24-30	Uncertain Cognitive Impairment ("normal")
	18-23	Mild to Moderate Cognitive Impairment
	0-17	Severe Cognitive Impairment

References:

Folstein MF, Folstein SE, McHugh PR: "Mini-Mental State: A Practical Method for Grading the Cognitive State of Patients for the Clinician." *Journal of Psychiatric Research* 12:189-198, 1975.

www.minimental.com, last accessed 020404

Crum RM, et al: "Population-Based Norms for the Mini-Mental State Examination by age and educational level." *Journal of the American Medical Association* 269:2386-2391, 1993.

Medication Compliance Aids – Selection Criteria
"Best Practices for Improvement in Management of Oral Medications"
 Home Therapy Services - 2004

Medication Compliance Aids- Assessment Criteria

Purpose: Identify impairments/factors which may be minimized (or compensated for) through selection of appropriate medication compliance aids.	No	Yes, comments on finding and impact on compliance aid selection
Does patient have impaired vision even with glasses?		
Does patient have impaired hearing even with hearing aids?		
Does patient have difficulty reading single words?		
Does patient have difficulty reading short phrases/sentences <5 words?		
Does patient have difficulty reading sentence ≥5 words?		
Does patient have difficulty recognizing spoken word?		
Does patient have difficulty monitoring time?		
Does patient have difficulty counting?		
Does patient have difficulty matching object to object?		
Does patient have difficulty matching picture to object?		
Does patient have difficulty matching written word to object and time?		
Does patient have difficulty matching spoken word to object?		
Does patient have difficulty carrying out multi-step commands?		
Does patient have difficulty matching ≥5 word auditory command to task?		
Does patient have difficulty matching <5 word auditory command to task?		
Does patient have impaired fine motor function?		
Does patient have impaired gross mobility (limiting access to medication location, etc.)?		
Does patient demonstrate Impaired judgment / impulsivity which may increase risk for overdosing?		
Are any factors identified indicating possible drug diversion?		

Tool developed by Linda Krulish, PT MHS and Rebecca Skrine, MS, SLP-CCC **References for tool development :**

Atkin, PA, Ogle, SJ. Issues of Medication Compliance and the Elderly. *Adverse Drug Reactions & Toxicology Review*, (1996) 15, 109-118.

Cook, PF. Methods for Assessing Medication Compliance: Research Summary (2001), www.scriptassistllc.com, last accessed 02/04/04

Guerette, P, Nakai, R., The Right Prescription. TeamRehab Report, Page 21-23, (1993), www.wheelchairnet.org, last accessed 02/03.04.

www.epill.com last accessed 020504

www.lifeclinic.com last accessed 020504

Medication Compliance Aids – Assessment Criteria
“Best Practices for Improvement in Management of Oral Medications”
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Medication Compliance Aids– Selection Criteria

**Purpose: To assist in appropriate selection of medication compliance aids,
based on identified patient skills and/or deficits.**

Candidates for independent medication management with compliance aids should be able to physically access medications (in their specific environment), sequence a 2-3 step process, and physically take (i.e., swallow) the medication.

Compliance Aid/Feature:	Skills patient must have to use aid effectively	Level of drug access	Compliance monitoring
Medication list (text only)	<ul style="list-style-type: none"> ▪ Adequate vision ▪ Able to read ▪ Able to recognize and monitor time ▪ Able to match written word to time, drug and task 	All drugs will be accessible, therefore if patient is at risk for overdosing or in situations of possible drug diversion – consider methods of timed access	Medication log/diary can be incorporated with aid to monitor compliance over time. Pill counting, or monitoring of pill box compartments and pill paks can indicate compliance. Aids, such as MEMS Smart Cap electronically records and stores time that cap is removed to allow compliance monitoring.
Medication schedule (illustrated drug + time)	<ul style="list-style-type: none"> ▪ Adequate vision ▪ Able to read OR ▪ Able to match word, picture, or pill to actual drug ▪ Able to match written word or picture to # of pills and time of day and task ▪ Able to monitor time 		
Pill Box	<ul style="list-style-type: none"> ▪ Adequate vision and fine motor ▪ Able to read ▪ OR able to match word or picture on box to day of week, time of day, etc ▪ Able to monitor time of day 		
Compliance Packaging: (i.e. blister packs)	<ul style="list-style-type: none"> ▪ Adequate vision and fine motor ▪ Able to read ▪ OR able to match word or picture on pack to # of pills and time of day ▪ Able to monitor time 		
Medication Alarm	<ul style="list-style-type: none"> ▪ Adequate hearing to recognize auditory alarm ▪ Or adequate vision and access to recognize visual cue ▪ Able to match alarm to drug and task ▪ Able to access and take drugs once reminded 		
Recorded Message	<ul style="list-style-type: none"> ▪ May require patient to initiate message playback ▪ Adequate hearing to detect auditory message. ▪ Able to match spoken word to object/task. ▪ Message length/complexity must be within patient’s processing capacity (< 5 words, >5 words, 2-step command, etc.) ▪ Able to access and take drug once reminded 		
Telephone reminder	<ul style="list-style-type: none"> ▪ Adequate phone access & use (auditory or adapted means) ▪ Able to match spoken word to drug and task ▪ Message length/complexity must be within patient’s processing capacity ▪ Able to access and take drug once reminded 		
Automated dispensing	<ul style="list-style-type: none"> ▪ Adequate hearing to recognize auditory alarm ▪ Or adequate vision and access to recognize visual cue ▪ Able to match alarm to task ▪ Able to access and take drugs once reminded 	Most products are tamperproof/locked with key access. Only current dose is available.	Option for interactivity. Connects with land or cell phone to report noncompliance, or online status available on web.

Tool developed by Linda Krulish, PT MHS & Rebecca Skrine, MS, SLP-CCC

References:

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