

The following is an excerpt from “Reducing Adverse Drug Events” by DeAnne Zwicker, MS, APRN, BC, and Terry Fulmer, Ph.D., R.N., FAAN. In E. Capezuti, D. Zwicker, M. Mezey, & T. Fulmer (Eds.) Evidence-based geriatric nursing protocols for best practice (3rd ed.) (pp. 257-308). New York: Springer Publishing Company, Inc.

Assessment Tools

Assessment tools are used to evaluate an older adult's ability to self-administer medications (i.e., functional capacity assessment) and the clinician's assessment for potential inappropriate medications, drug-drug interactions, drug-disease interactions, and assessment of renal function. Commonly used tools include the following:

- *2002 Criteria for Potentially Inappropriate Medication Use in Older Adults: Independent of Diagnoses or Condition.* Also known as the Beers Criteria. (Fick et al., 2003 [Level VI]) (Table 12.1). Used to assess medication list for medications that should generally be avoided in older adults.
- *2002 Criteria for Potentially Inappropriate Medication Use in Older Adults: Considering Diagnoses or Condition.* Also known as the Beers Criteria. (Fick et al., 2003 [Level VII]) (Table 12.2) . Used to assess for the presence of medications that may interact adversely with a disease or condition a person has.
- *Drug-Drug Interactions* (Table 12.3) List of *some common* medications known to interact with other medications. This is most accurately determined by a computer/PDA program, such as the *Facts and Comparisons* PDA program to identify drug-drug and drug-disease interactions (see Resources in this chapter).
- *Cockcroft-Gault Formula* (Figure 12.1) Useful for estimating creatinine clearance based on age, weight, and serum creatinine levels (Terrell, Heard, & Miller, 2006 [Level VJ]) . A creatinine clearance of less than 50 ml/min places an older adult at risk for ADEs (Fouts, Hanlon, Pierper, Perfetto, & Feinberg, 1997J) and virtually all people older than 70 have a creatinine clearance of less than 50.
- *Functional Capacity (ADL, IADL, Mini-Cog/MMSE).* Used to assess physical and cognitive ability to self-administer medications. See chapter 3, *Assessment of Function*, and chapter 6, *Dementia*, respectively; or www.ConsultGeriRN.org .
- *Brown Bag Method* (Nathan, Goodyer, Lovejoy, & Rahid, 1999 [Level IV]). Method used to assess all medications an older adult has at home including prescriptions from all providers, OTC medications, and herbal remedies. Should be used in conjunction with a complete medication history (See Interventions and Nursing Care Strategies in this chapter for details on taking a complete medication history and Table 12.4, which outlines medication history questions.)
- *Drugs Regimen Unassisted Grading Scale (DRUGS) Tool.* Standardized method for assessing potential medication-adherence problems. Used at transfer to other levels of care (Edelberg, Shallenberger, & Wei, 1999; Hutchinson, Jones, West, & Wei, 2006 [both Level IV]) . (See the Resources section in this chapter.)

Complete Medication History*

Date performed: _____

Patient Name: _____

Medication allergies and type of reaction (e.g., PCN: hives)

Prescription medications -list all including dose, frequency, and route administered

Specifically ask about eye drops. topical creams. B12 injections or other injections (if given at home or at medical office. how often).

Over-the-Counter Medications (OTCs) - How often do you exceed the recommended dose on package? Do you read the labels? Why or why not? Do you ask a pharmacist or your provider about interactions with your prescriptions?

Ask specifically about:

Pain relievers - What have you tried. what works what does not? What pain do you take it for? How often?

Allergy medications - when do you take them year round? What season? Or When symptoms develop?

Sinus congestion/cold or cough medications (combined products with more than one ingredient? If so. list ingredients)

Heart burn medications. how often?

Diarrhea or constipation treatments. how often?

Sleeping medications - Ask specifically diphenhydramine (Benadryl/)

Eye drops - how often what do you take them for?

Herbal remedies (orally or as a tea): ginkgo biloba, ginseng, glucosamine, St. John's Wart, Echinacea

Nutritional Supplements - Ask how often? Ask specifically about: Calcium with Vitamin D. Vitamin E, C, or B's; Mega Vitamins; Protein supplements such as Ensure, Boost; Vitamin Drinks

Medications that have been stopped and why? (Did you discontinue or did provider? Why?)

Alcohol (Ask about type/amount per day)

Smoking (what smokes and how much. e.g .. cigarettes #packs per day. how many years)

Past or Annual Immunizations. date last received each

Pneumonia vaccine

Flu Vaccine

Other

Regular lab tests - performed to evaluate medications or medication side effects.

e.g .. potassium level. INR. digoxin level. liver toxicity. renal function. blood counts etc.

Use of Memory Aides - reminders to take medications. e.g .. pill dispenser box

*Use Brown Bag Method in conjunction with Medication history.