Evaluating Functional Status in Hospitalized Geriatric Patients

UCLA-Santa Monica Geriatric Medicine Didactic Lecture Series

Case

• 88 y.o. woman was admitted for a fall onto her hip. She is having trouble walking. The x-rays in the ED showed no hip fracture, an MRI was significant only for contusion. Now she is asking to go home.

Next Steps

Physical therapy evaluation has been ordered. If she is "cleared" then she can go home. What is the SINGLE most important piece of information that would aid in disposition planning?

- A. Depressed mood
- B. Urinary incontinence
- C. Living alone
- D. Advanced age
- E. Functional impairment

The answer is "E"

The presence of impairments in activities of daily living (ADLs) or instrumental activities of daily living (IADLs) in this patient is most likely to predict hospitalization in the next 30 days.

What does functional status predict in geriatric inpatients?

- Length of Stay
- Mortality
- Discharge Destination (e.g., rehab or long term care)
- Readmission (bounce-backs!)

Campbell et al and the ACMEPLUS Project. A systematic literature review of factors affecting outcome in older medical patients admitted to hospital. Age Ageing. 2004 Mar;33(2):110-5

Geriatric hospital patients are high risk for functional decline

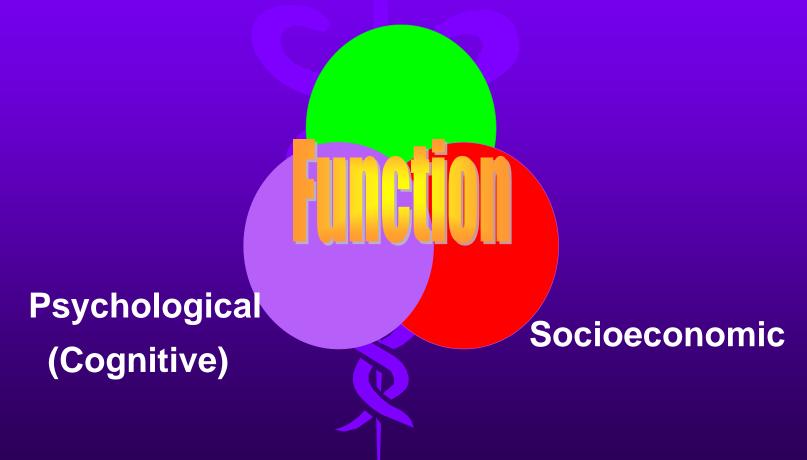
- 25% decline during hospitalization in ADL's
- 20% are discharged without recovering prehospitalization abilities
- 15% go to nursing homes

Benefits of focusing on functional status

- Guide medical treatment
- Improve your ability provide prognosis
- Provide foundation for setting goals of care
- Allow for individualization of care
- Improving ability to monitor quality of life
- Identify need for services

Domains of Geriatric Evaluation

Physical (Medical)



Rapid functional assessment

- 1. ADLs
- 2. Physical challenge
- 3. Cognitive screening
- 4. Social support
- 5. Consider use of adaptive equipment
- 6. Consider need for rehab services

Functional Impairment Screening

- Observation/interview
- Activities of Daily Living
 - Basic
 - Instrumental

Observation

- What details are given in the history?
- Did the patient indicate any need for help from nursing or yourself when doing exam?
- Can the patient hear and see?
- How does the patient move: in bed and if possible observe the patient walk
- How would you judge the patient's affect?
- Does he or she "look" put together?

Basic Activities of Daily Living (BADLs)

- Bathing
- Dressing
- Going to the toilet
- Transferring
- Ambulation
- Feeding

Instrumental Activities of Daily Living (IADLs)

- Using telephone
- Shopping
- Preparing meals
- Housekeeping
- Doing laundry
- Using public transportation or driving
- Taking medication
- Handling finances

Advanced Activities of Daily Living (AADLs)

- Patient-specific functional activities (e.g., recreational, occupational, volunteer activities)
- Recent difficulty of the activity may identify early functional loss

5-item Short Functional Status Survey

Do you have difficulty with...

- Shopping
- Finances
- Walking across room
- Bathing/showering
- Light housework
- See pocket card for exact wording
- This tool effectively screens for 93% of elders with any IADL/ADL disability

Quick Cognitive Testing (see pocket card!)

- Mini-cog
 - 3 or more points = pass
 - Perfect clock drawing (2 points)
 - 3 item recall (1 point each)
 - If fail then do MMSE
- Tests for attention (delirium)
 - Serial sevens, WORLD backwords
 - Digit span
 - Confusion Assessment Method

Quick physical function testing

- The hospital physical function stress test:
 - Roll over in bed
 - Get up to side of bed
 - Rise to stand
 - Walk down the hall
- Outpatient "Get up and go" test
 - Rise from chair
 - Walk 10 feet
 - Normal time = 10 seconds

Gait and Balance

- See pocket card for elements of a Gait and Balance Examination
- You can evaluate a patient on all these elements if you get them up out of bed and have them walk down the hallway!
- Scoring is not as important as the narrative (and excellent gait exam dictations!)

Quick test for depression

- Patient Health Questionnaire (PHQ-9)
 - Bedside or pen and paper testing
 - Performs well in older patients
 - See pocket card and PHQ-9 full handout
 - Step 1: (Screen) Ask 1st two questions
 - Step 2: (Symptom count) Ask items 2-9
 - Step 3: (Functional status) Ask last item

What do next

- Coordination of multidisciplinary team
 - Case management
 - Rehabilitation (PT & OT)
- Transitions in care
 - Accepting physicians (NH, PMD)
 - Careful transfer orders

Back to the Case

- 88 y.o. woman was admitted for a fall onto her hip. She is having trouble walking. The x-rays in the ED showed no hip fracture, an MRI was significant only for contusion. Now she is asking to go home RIGHT NOW.
- PT evaluation was ordered but they can't come right away. Can she go home?

 What are the functional domains that will help you make your decision?

• Hint: remember the Venn diagram?

More information for each domain:

- Cognitive: She has a history of mild dementia but no behavioral issues. Her MMSE was 25.
- Social: She lives alone but her daughter lives nearby.
- •Physical: Before she fell, she was independent of all her ADLs and IADLs. Today, she requires assistance with bathing and transferring.

Please discuss:

- 1.) What does her decline in function mean for her overall prognosis?
- 2.) How would you approach discharge planning for her?

What are the pros and cons for the these choices:

- SNF for post-acute rehab then home
- Home with Medicare HH benefit
- Home with HH & paid caregiver
- Home with HH & informal care (daughter)

Bonus slide: Costs

Your patient has only Medicare A and B. What would the out-of-pocket costs be for the following?

- A) Her current hospital stay (\$3000 bill)
- B) SNF for 15 days (\$2500 bill)
- C) Home Health PT/OT for 12 weeks (\$160 per week)
- D) A month's supply of Vicodin for pain for 3 months (\$120/month)

Summary

- Functional status impacts length of stay, discharge planning, readmission and mortality in older adults.
- Its assessment is important in coordinating care for older adults

Further Reading

- 1. Carey et al. Development and validation of a functional morbidity index to predict mortality in community-dwelling elders. J Gen Intern Med. 2004
- 2. Inouye SK,J Importance of functional measures in predicting mortality among older hospitalized patients. JAMA. 1998;279:1187–93.
- 3. Campbell et al and the ACMEPLUS Project. A systematic literature review of factors affecting outcome in older medical patients admitted to hospital. Age Ageing. 2004 Mar;33(2):110-5
- 4. Saliba D, Elliott M, Rubenstein LZ et al. The Vulnerable Elders Survey: a tool for identifying vulnerable older people in the community. J Am Geriatr Soc 2001;49:1691-1699.
- 5. Kane 2004 Clinical Geriatrics 5th edition. Pgs 51-52.
- 6. AGS Core curriculum 2004 and 2005
- 7. Fried LP, Guralnik JM. Disability in older adults: evidence regarding significance, etiology, and risk. *J Am Geriatr Soc.* 1997;45:92–100.
- 8. Covinsky KE, Justice AC, Rosenthal GE, et al. Measuring prognosis and case mix in hospitalized elders. The importance of functional status. *J Gen Intern Med*. 1997;12:203–208.
- 9. Mor V, Wilcox V, Rakowski W, et al. Functional transitions among the elderly: patterns, predictors, and related hospital use. *Am J Public Health*. 1994;84:1274 –1280.