THE GERIATRIC ASSESSMENT

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OBJECTIVES

• Identify geriatric-specific needs in primary care
• Learn how to do an out-patient geriatric assessment
• Review current recommendations for geriatric screening and prevention
OUTLINE

• We need more geriatricians
• Who is the geriatric patient?
• How to do a geriatric assessment
• Geriatric preventive medicine
GERIATRIC PROVIDER SHORTAGE

• In 2009, less than 1% of US medical graduates finishing IM/FP residencies chose to do a fellowship in geriatric medicine

• In 2009, there were 7,345 geriatricians in practice in the US, about half as many as are needed for the geriatric population

• The number of geriatric-trained physicians graduating annually does not keep up with the number retiring/leaving medicine
WHO IS THE GERIATRIC PATIENT?

• Chronological/Demographics
• Physiologic Aging
• Increased Prevalence of Chronic Diseases
• Functional Decline
• Presence of “Geriatric Syndromes”
CHRONOLOGIC AGING

- Peak Performance: 20-30
- Loss of reproductive ability: 45-55
- AARP: 50
- Medicare: 65
- Young Old: 66-75
- Old: 76-85
- Old Old: > 85
DEMOGRAPHICS:

Americans are living longer

• The number of older Americans is growing
  – From 3.1 million in 1900 to 34.6 million in 1999 to a projected 82 million in 2050

• The proportion of older Americans is growing
  – In 1950, 8.3% of the US population was older than 65. In 2000, it was 12.4%. It’s projected to reach 20.6% in 2050

Health, United States, 2005. Figure 2. http://www.cdc.gov/nchs/data/hus/hus05.pdf
PHYSIOLOGIC AGING

- Programmed aging – normal changes that occur with age in various systems including: cardiovascular, pulmonary, renal, body composition/musculoskeletal

- Genetic variability

- Environmental factors
INCREASED PREVALENCE OF CHRONIC DISEASES

• Cardiovascular (HTN, CVD, CAD, PVD, CHF)

• Neurological (Alzheimer’s, Parkinsonism)

• Degenerative (Osteopenia/osteoporosis, OA)

• Malignancies (Prostate, breast)
FUNCTIONAL DECLINE
Activities of Daily Living

- BASIC
- INSTRUMENTAL
- ADVANCED
GERIATRIC SYNDROMES

- DEMENTIA
- DELIRIUM
- INCONTINENCE
- FALLS
- IMMOBILITY
- OSTEOPOROSIS
- PRESSURE ULCERS
- MALNUTRITION, DYSPHAGIA
- SLEEP DISORDERS
- DEPRESSION
- DRUG INDUCED ILLNESS
- SENSORY IMPAREMENT
- DIZZINESS
- PAIN
- “FAILURE TO THRIVE”
- ABUSE, NEGLECT
- FRAILTY
WHY/HOW WE NEED GERIATRICIANS

• A study published in January 2013 in JAGS showed that for ACS patients with geriatric conditions, seeing a geriatrician at least annually reduced ED use by 11%

• The same study showed that co-management or consultation was as effective as primary care by a geriatrician in this population
PRINCIPLES OF THE GERIATRIC ASSESSMENT

Goal: promote wellness and independence
Focus: function and performance
Scope, approach: multidisciplinary – physical, cognitive, psychological, social
Efficiency: rapidly screen to identify target areas
Success: maintaining or improving quality of life
Complete physical assessment should include:
- Functional status
- Nutrition
- Vision
- Hearing
- Cognition
- Depression
FUNCTIONAL ASSESSMENT TOOLS

ACTIVITIES OF DAILY LIVING (ADLs)

- Bathing, dressing, transferring, toileting, grooming, feeding and mobility

INSTRUMENTAL ACTIVITIES OF DAILY LIVING (IADLs)

- Using telephone, preparing meals, managing finances, taking medications, doing laundry, doing housework, shopping, managing transportation

“GET UP AND GO” TEST

- Qualitative; timed; assesses gait, balance and transfers
Poor nutrition may reflect medical illness, depression, functional losses, financial hardship.

Screen for malnutrition

- Visual inspection
- Measure height, weight, BMI
  - Watch for BMI < 20 kg/m²
  - Watch for unintentional weight loss > 10 lb in 6 months
VISION ASSESSMENT

• Cataracts, glaucoma, macular degeneration, and abnormalities of accommodation worsen with age

• Assess for difficulty by asking about everyday tasks such as watching TV or reading

• Use performance-based screening
  – Snellen chart or Jaeger card

• Consider referral to get proper evaluation of vision loss and driver safety
HEARING ASSESSMENT

• Hearing loss is common among older adults
• Impaired hearing can lead to social withdrawal
• Senile hearing loss is usually bilateral and in the high frequency range
• Assess for cerumen impaction
• A hand-held Audioscope can detect hearing loss in most adults, but other screening test can include the whisper test, the watch tick test, or standardized questionnaires
COGNITIVE ASSESSMENT

• Most patients with dementia do not complain of memory loss. Prevalence increases with age
• Cognitively impaired older adults are at increased risk for accidents, delirium, medication non-adherence, and disability
• The mini-COG™ takes about 3 minutes to administer and looks at both short-term memory and executive dysfunction
Mini-COG™

• Three word delayed recall: apple, table, penny
• Clock drawing test: 11:10
• One point for each recalled word, two points for correct clock
• > 3 rules out dementia, > 4 unlikely MCI
• Sensitivity 76-99% and specificity 89-93% with 95% confidence interval
DEPRESSION ASSESSMENT

• The prevalence of major depression in older adults is the same as in the rest of the population (1-2%), but subclinical depression is common, up to 24% in nursing home residents

• Age, pain, functional limitations, negative life events, loneliness, and perceived inadequacy of care are risk factors for both depression and subclinical depression

J Affect Disord 2004
DEPRESSION SCREENING TOOLS

• PHQ-2 is a fast screen but should not be used to establish a diagnosis.

• PHQ-9 is rapid and can be completed as a questionnaire by the patient or done by office or nursing staff. GDS-15 takes 5-7 minutes and is more specific and sensitive than PHQ-9.

• For dementia patients with suspected depression, use the CSDD.

Medical Care 2003
JAMA 1999
JAGS 1988
Biol Psychiatry 1988
## RAPID SCREEN STRATEGIES

<table>
<thead>
<tr>
<th>Domain</th>
<th>Rapid Screen</th>
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<tbody>
<tr>
<td>Functional Status</td>
<td>Difficulty with the following?</td>
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<tr>
<td></td>
<td>1. Shop</td>
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<td></td>
<td>2. Do light housework</td>
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<tr>
<td></td>
<td>3. Walk across room</td>
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<td></td>
<td>4. Take bath or shower</td>
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<td></td>
<td>5. Manage finances</td>
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<tr>
<td>Mobility</td>
<td>Timed “Get Up and Go” Test &gt;20s</td>
</tr>
<tr>
<td>Nutrition</td>
<td>BMI &lt; 20 or 10 lb weight loss in 6 months</td>
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<tr>
<td>Vision</td>
<td>Snellen worse than 20/40 or self-described inability to read newspaper</td>
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<tr>
<td>Hearing</td>
<td>Whisper test 2 feet from ear</td>
</tr>
<tr>
<td>Cognition</td>
<td>Mini-COG &lt; 4/5</td>
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<tr>
<td>Depression</td>
<td>“Are you feeling sad or depressed?”</td>
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</tbody>
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Geriatrics Review Syllabus, 7th edition
POLYPHARMACY

• Use of multiple, concurrent medications or medications that are clinically unwarranted
• 40% elderly patients take $\geq 5$ drugs/week
• Polypharmacy leads to increased
  – Prescribing errors
  – Cost
  – Incidence of adverse drug reactions and drug-drug interactions

Pharmacotherapy 2005
J Am Board Fam Pract 1998
MEDICATIONS TO AVOID

- Beer’s Criteria lists potentially inappropriate medications for geriatric use
- Some commonly-used medications are on the list, including: diphenhydramine, benzodiazepines, desiccated thyroid, TCAs, NSAIDs, and bladder anticholinergic medications
SOCIAL ASSESSMENT

- Availability of a personal support system
- Caregiver burden
- Safety of the home environment
- Elder mistreatment
- Advance directives
THE OLDER DRIVER

- Drivers over the age of 75 make up 6.5% of licensed drivers but represent 7.9% of the fatal accidents. Their accident rate is higher than all groups except the 16-24 yo group.
- Risk factors include: reduced vision, cognitive impairment, musculoskeletal limitations, poor motor coordination, polypharmacy

U.S. Census Bureau, Statistical Abstract of the United States, 2012
IF YOU SUSPECT UNSAFE DRIVING

• Assess risk
  – Discuss driving safety with patient and family
  – Refer for driving safety evaluation

• Reduce risks
  – Avoid driving in rush hour, nighttime, bad weather
  – Encourage use of other modes of transportation
  – Learn and follow state laws for reporting

• Follow-up
  – Look for signs of decreased activity, mood
GERIATRIC-SPECIFIC TREATMENT CONSIDERATIONS

• Depression – consider screening patients on SSRIs for hyponatremia, possibly lower max dose of citalopram/escitalopram

• Diabetes mellitus – AGS recommends Hgb A1c 7-7.5% in healthy geriatric adults, 8-9% in patients with multiple morbidities and lower life expectancy

• Hypertension – orthostatic symptoms are more common in the elderly

• Insomnia – most commonly prescribed sleep aids are on Beer’s List. Sleep hygiene is best. Trazodone and ramelteon are safer prescription options
WHAT ABOUT PREVENTION?

• Vaccinations
• Screening
VACCINE RECOMMENDATIONS

- Annual influenza vaccine
- Td booster every 10 years
- Pneumococcal polysaccharide x 1
- Herpes zoster x 1 (after age 60)
RECOMMENDED SCREENING

• Screen all adults for high blood pressure, smoking, alcohol misuse, obesity, fall risk
• Screen all adults born between 1945-1965 one time for hepatitis C
• Patients with BP \( \geq 135/80 \) should be screened for type 2 Diabetes Mellitus
• High risk patients should be screened for STDs, HIV, and syphilis
• Geriatric patients should be screened for colorectal cancer until age 75

USPSTF 2013
<table>
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<tr>
<th>Women</th>
<th>Men</th>
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<tr>
<td>Lipid panel if identified increased CHD risk</td>
<td>Lipid panel for men over 35</td>
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<tr>
<td>Osteoporosis screening for women over 65 or at high risk</td>
<td>AAA screening for smokers between age 65-75</td>
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<tr>
<td>Breast cancer screening until age 75</td>
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USPSTF 2013
WHAT ABOUT PREVENTIVE MEDICINE?

• Vitamin D supplementation is advised for geriatric patients at increased risk for fall
• Baby aspirin is heart-protective for men age 45-79 and stroke-preventive for women age 55-79

USPSTF 2013
• We need more geriatricians, but in the meanwhile, anyone can add aspects of the geriatric assessment to clinical practice
• Geriatric assessment should include screening of vision, hearing, function, depression, cognition
• The goal of geriatric care is to assess and promote functional independence
• Once patients are in their mid-70s to 80s, consider backing off of common preventive medications and screenings
Questions?