

# Geriatric Screening in Five Minutes or Less: Skills Stations

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# Disclaimer

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- No conflicts of interest
  - *All materials presented are freely available on the internet for public use*

# Objectives

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To demonstrate the administration and interpretation of the following geriatric screening tests:

- The Confusion Assessment Method (CAM)
- The Mini-Cog
- The Lawton-Brody IADL Scale

# Content

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- Value of Geriatric Assessment
  - Why do we screen?
- Role of PCP
  - Medicare Wellness Visit
- Tools for cognitive & functional assessment:
  - Confusion Assessment Method (CAM)
  - Mini-Cog
  - Lawton-Brody IADL scale

# Functional Disability is Epidemic

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- “If nothing changes the prevalence of chronic diseases, the number of functionally disabled adults will increase by 300% to 7.2 million by 2049”<sup>1</sup>
- “If the prevalence of geriatric disability could be reduced by 1.5% per year, Medicare Part A... might remain solvent through 2070”<sup>2</sup>

<sup>1</sup>Boult, et al Am J Public Health 1996;86:1388-1393.

<sup>2</sup>Singer, et al Proc Natl Acad Sci USA 1998;95:15618-15622

Boult, et al. JAGS 2001;49:351-359.

# How to Reduce Disability?

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- **MAINTAIN INDEPENDENCE**

- Identify and modify threats:

- Independent function
      - Instrumental Activities of Daily Living
      - Activities of Daily Living
    - Cognitive Issues
    - Emotional health
    - Mobility
      - Falls
    - Polypharmacy

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# “Geriatric Assessment”

- Comprehensive
  - Interdisciplinary
  - Diagnostic
  - Geriatric syndromes/Frail Elders
  - Plan
- Effective
  - Inpatient: less functional decline post-discharge, lower rates of institutionalization
  - Outpatient: less loss of functional ability; experience less increased health-related restrictions in ADL's; less possible depression; less use of home healthcare services



# “Geriatric Assessment”

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- Multiple models exist
  - Varying degree and length of specialist involvement
  - Hard to generalize findings
- Full assessments too long for effective use in primary care setting
  - Possible in-house geriatric consultation
- Access

# Solution = Primary Care

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- Primary care practitioners are in a unique position to detect cognitive and functional decline:
  - PCPs provide care for the majority of older adults<sup>1</sup>
  - PCPs are usually the first point of contact for patients/caregivers when there are memory concerns<sup>2</sup>
  - PCPs provide >80% of dementia care<sup>3</sup>

# Solution = Primary Care

- Medicare Annual Wellness Visit (AWV)
  - Established in 2010 as part of the Patient Protection and Affordable Care Act
  - Annual visit that focuses on establishing and maintaining a personalized prevention plan

Medical & family history	Accurate provider & medication List	Self-reported Health Risk Assessment
Detection of cognitive impairment	Depression risk assessment	Functional/Safety assessment
Establishment of a screening schedule (USPSTF)	Establish intervention plan for identified conditions/risk factors	Personalized Health Advice and referral as appropriate

# Prevention of Disability

## Threats to Independence

- Independent function
  - Instrumental Activities of Daily Living
  - Activities of Daily Living
- Cognitive Issues
- Emotional health
- Mobility
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## Medicare AWW

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**SCREENING TESTS**

## Medicare AWW

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Detection of cognitive impairment	Depression risk assessment	Functional/ Safety assessment
Establish a screening plan (USPSTF)	Establish intervention plan for conditions & risk factors	<u>Personal Health advice &amp; referral as appropriate</u>

# Candidates for Cognitive & Functional Assessment

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- **Medicare recipients (yearly)**
- Individuals with memory impairment or cognitive complaints, with or without functional impairment
- Informant reports of cognitive impairment, with or without patient concurrence
- Individual/informant reports (including self-observation) of functional decline
- Other possible triggers include personality change, depression, deterioration of chronic disease state without explanation

# Detection Tests

- COGNITION
  - *Confusion Assessment Method (CAM)*
  - *Mini-Cog*
- FUNCTION
  - *Lawton-Brody IADL Scale*



# COGNITION

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- Cognitive assessment is dependent on identifying whether a patient has delirium or dementia



# Delirium vs. Dementia

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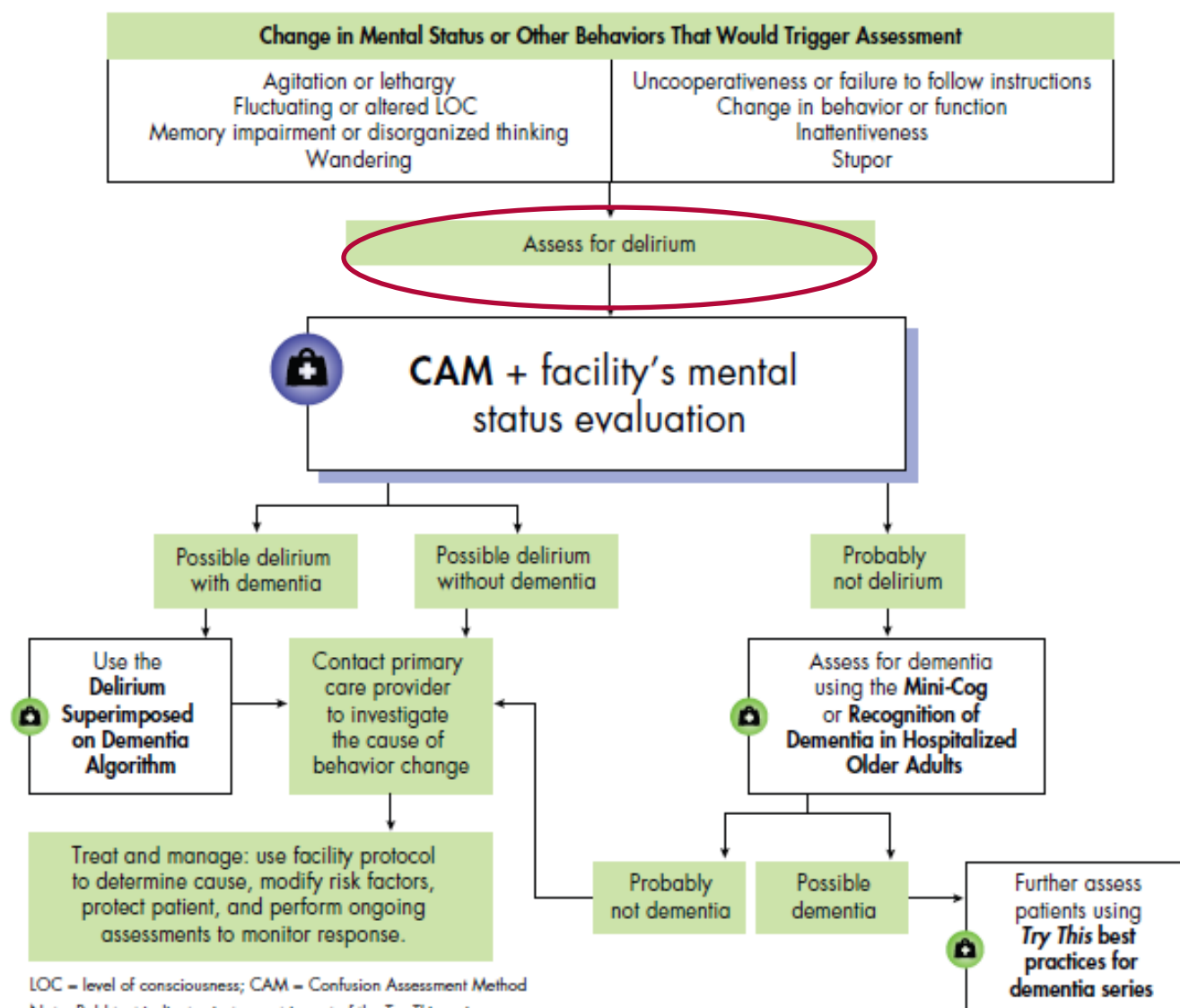
## Delirium

- A **sudden** change in cognition, characterized by fluctuation, inattention and which can feature disorganized thinking and/or changes in level of activity
- May be reversible, if underlying causes identified and treated

## Dementia

- An often **slow**, irreversible process that causes progressive loss of memory, problem solving and word finding, severe enough to impact daily function

## How to Use the *Try This* Series for Assessing Delirium and Dementia





# Confusion Assessment Method (CAM)

# Confusion Assessment Method

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- Commonly known as the “CAM”
  - Screening tool used to identify delirium
  - Sensitive, specific, and reliable
  - Takes less than 5 minutes to complete
- Two parts
  - Required elements
  - “Either/or” elements

# CAM

To perform the CAM, ask yourself:

- Are the changes new? Do they have an acute onset?
- Do they fluctuate? Or come and go?
- Does the person have difficulty paying attention?
- Is their thinking disorganized?
- Are they sleepy and unresponsive, agitated and active?

The answers to ALL these questions must be YES!

# Testing Attention

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- 5 Digit span forward or 3 backward
- Days of the week backwards
  - Easier with hearing impairment

# Detecting Delirium...

To perform the CAM, ask yourself:

- Are the changes new? Do they have an acute onset?
- Do they fluctuate? Or come and go?
- Does the person have difficulty paying attention?
- Is their thinking disorganized?
- Are they **sleepy and unresponsive**? Are they agitated and active?

AND the answer to ONE of these questions must be a YES!

# Disorganized Thinking

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- You often know it when you see it
- If you aren't sure, you need to test:
  - Will a stone float on water?
  - Are there fish in the sea?
  - Does 1 lb weigh more than 2 lbs?
  - Can you use a hammer to pound a nail?



**REQUIRED**

### The Confusion Assessment Method (CAM)

(1) ACUTE ONSET AND FLUCTUATING COURSE

Is there evidence of an acute change in mental status from the patient's baseline? Did this behavior fluctuate during the past day, that is, tend to come and go or increase and decrease in severity?

(2) INATTENTION

Does the patient have difficulty focusing attention, for example, being easily distractible, or having difficulty keeping track of what was being said?

(3) DISORGANIZED THINKING

Is the patient's speech disorganized or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?

(4) ALTERED LEVEL OF CONSCIOUSNESS

Overall, how would you rate this patient's level of consciousness?

Alert (normal)  
Vigilant (hyperalert)  
Lethargic (drowsy, easily aroused)  
Stupor (difficult to arouse)  
Coma (unarousable)

THE DIAGNOSIS OF DELIRIUM REQUIRES A  
PRESENT/ABNORMAL RATING FOR CRITERIA:  
(1) AND (2) AND EITHER (3 OR 4)

Ref: Inouye SK, et al. Ann Intern Med. 1990;113:941-8

**EITHER/OR**

# The CAM is Positive.

## You Need to **ACT**

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- Reduce/Remove/Modify any risk factors
- Treat reversible causes of delirium identified within your scope of practice
- Communicate concerns to other team members



# Mini-Cog

# Mini-Cog

- Cognitive impairment screening test for primary care settings
- The tool can be administered in three minutes
- Does not require any special equipment
- Sensitivity reported from 76-99% with specificity from 89-93%
- Effectively used in multilingual populations with diverse socioeconomic status and education level

# Mini-Cog

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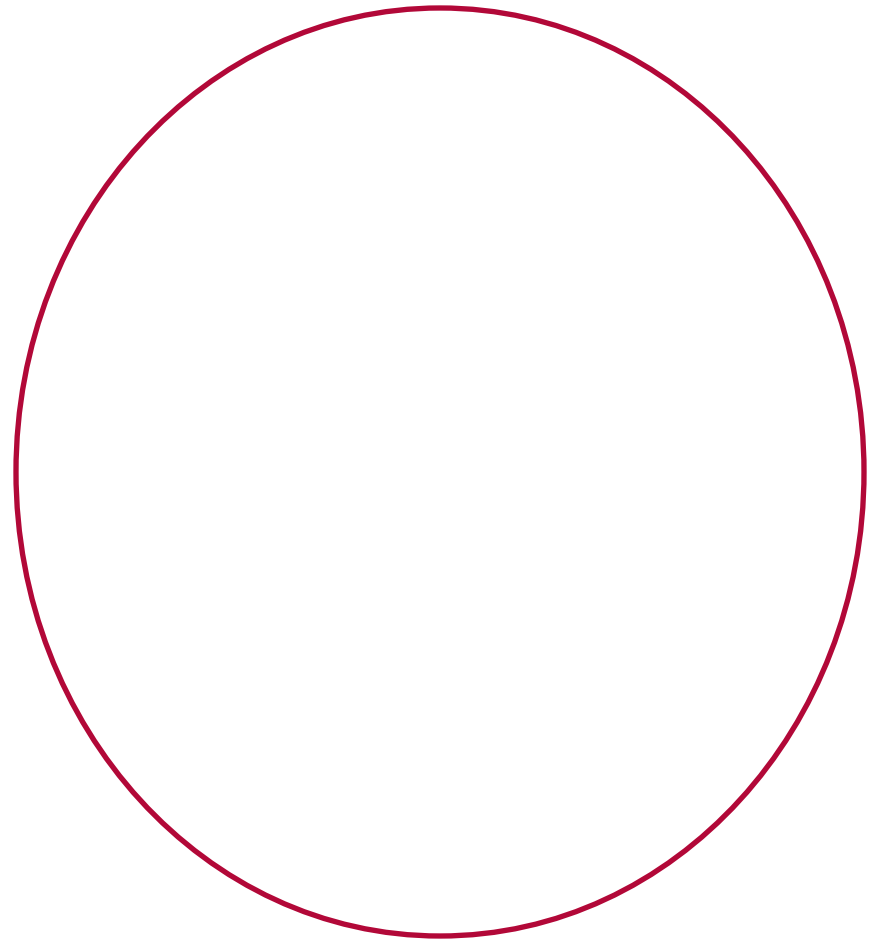
- 1) Registration
- 2) Clock draw test
- 3) Three word recall

# Registration

- Ask the patient to remember 3 words:  
**APPLE, WATCH, PENNY**
- Say each word with a one second pause between them
- If they can't repeat all 3 – say them all again
  - Repeat them up to 5 times
  - The patient should not be given any help or cues to remember
- Then instruct the patient:  
**Remember these three words - I will ask you to repeat them later**

# Clock Draw

- Give the patient a pre-drawn circle
- Ask them to place the numbers so they **“look like the face of a clock”**
- After the patient has completed placing the numbers, ask them to **“draw the hands of the clock so it reads ten after eleven”**



# Three Word Recall

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- Ask the patient to recall the three words
  - Do not give any hints or cues



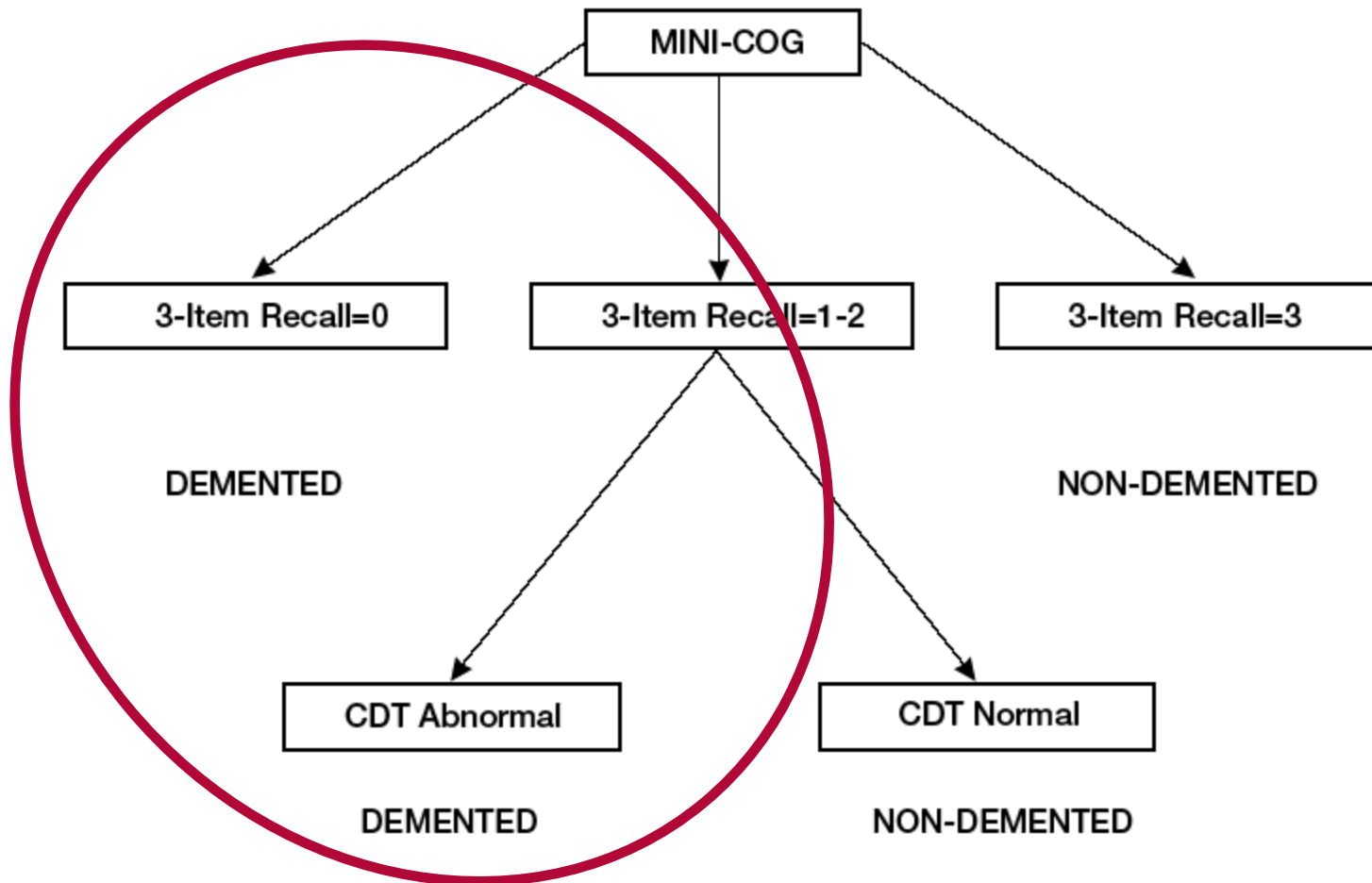
# Scoring

- Clock must be correct
  - All numbers present and in the right sequence
  - Two hands joining in the center of the clock
    - Long hand must point to the 10
    - Short hand pointing to the 11
- Patient must get remember all 3 words correctly



<http://www.theagepage.co.uk/.a/6a00d83443d1b053ef0176166513f2970c-pi>

# Scoring



# CAVEAT

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- If CAM is positive, it will likely impact the results of the Mini-Cog
  - Attention, disorganized thinking
- Interpret results with caution

# The Mini-Cog is Positive.

## You Need to **ACT**

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- A positive screen does **NOT** mean the patient has dementia – only that further evaluation is necessary
- Communicate concerns to other team members
- Consider any safety concerns that you may be able to address
  - Evidence of poor self-care or unsafe behaviors



# Lawton-Brody IADL Scale

# Lawton IADL Scale

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- Developed in 1960
- Assesses independent living skills
  - Not appropriate for institutionalized patients
  - Useful as an adjunct to cognitive testing
    - May be more sensitive in early impairment
- Uses self-reported information
  - May need a second opinion
- Takes 10-15 minutes to administer depending on technique

## The Lawton Instrumental Activities of Daily Living Scale

### A. Ability to Use Telephone

1. Operates telephone on own initiative; looks up and dials numbers ..... 1
2. Dials a few well-known numbers ..... 1
3. Answers telephone, but does not dial ..... 1
4. Does not use telephone at all ..... 0

### B. Shopping

1. Takes care of all shopping needs independently ..... 1
2. Shops independently for small purchases ..... 0
3. Needs to be accompanied on any shopping trip ..... 0
4. Completely unable to shop ..... 0

### C. Food Preparation

1. Plans, prepares, and serves adequate meals independently ..... 1
2. Prepares adequate meals if supplied with ingredients ..... 0
3. Heats and serves prepared meals or prepares meals but does not maintain adequate diet ..... 0
4. Needs to have meals prepared and served ..... 0

### D. Housekeeping

1. Maintains house alone with occasion assistance (heavy work) ..... 1
2. Performs light daily tasks such as dishwashing, bed making ..... 1
3. Performs light daily tasks, but cannot maintain acceptable level of cleanliness ..... 1
4. Needs help with all home maintenance tasks ..... 1
5. Does not participate in any housekeeping tasks ..... 0

### E. Laundry

1. Does personal laundry completely ..... 1
2. Launders small items, rinses socks, stockings, etc. .... 1
3. All laundry must be done by others ..... 0

### F. Mode of Transportation

1. Travels independently on public transportation or drives own car ..... 1
2. Arranges own travel via taxi, but does not otherwise use public transportation ..... 1
3. Travels on public transportation when assisted or accompanied by another ..... 1
4. Travel limited to taxi or automobile with assistance of another ..... 0
5. Does not travel at all ..... 0

### G. Responsibility for Own Medications

1. Is responsible for taking medication in correct dosages at correct time ..... 1
2. Takes responsibility if medication is prepared in advance in separate dosages ..... 0
3. Is not capable of dispensing own medication ..... 0

### H. Ability to Handle Finances

1. Manages financial matters independently (budgets, writes checks, pays rent and bills, goes to bank); collects and keeps track of income ..... 1
2. Manages day-to-day purchases, but needs help with banking, major purchases, etc ..... 1
3. Incapable of handling money ..... 0

**Scoring:** For each category, circle the item description that most closely resembles the client's highest functional level (either 0 or 1).

# Scoring

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- Scored using highest level of functioning in that category
- Scores range from 0 to 8
  - Fully dependent to fully independent
- Traditionally, men not scored on domains of food preparation, housekeeping or laundering (max score = 5)



# The Lawton IADL scale indicates functional impairment

## You Need to **ACT**

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- A positive screen does **NOT** mean the patient has dementia or can no longer live independently – only that further evaluation is necessary
- May affect discharge planning
- Communicate concerns to other team members
- Consider any safety concerns that you may be able to address
  - Evidence of poor self-care or unsafe behaviors

# Now it's your turn!

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- Time to practice your new skills!
  - Divide into three groups
  - 10 – 15 minutes per station