Geriatric Screening in Five Minutes or Less:

Skills Stations

Sarah Hallen, MD

Maureen Sauvage, DO ♦ Ann Magner, DO

Maine Medical Center – Geriatrics

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Disclaimer

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

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Objectives

- Demonstrate how to administer and interpret the Confusion Assessment Method (CAM)
- Demonstrate how to administer and interpret the Mini-Cog
- Demonstrate how to administer and interpret the Lawton-Brody IADL Scale

Content

- 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

- *"If nothing changes to the prevalence of chronic* diseases, the number of functionally disabled adults will increase by 300% to 7.2 million by *2049"*[1]
- *"If the prevalence of geriatric disability could be reduced by 1.5% per year, Medicare Part A… might remain solvent through 2070"*[2]

[1]Boult, et al Am J Public Health 1996;86:1388-1393.
[2]Singer, et al Proc Natl Acad Sci USA 1998;95:15618-15622
Boult, et al. JAGS 2001;49:351-359.

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How to Reduce Disability?

- 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

Boult, et al. JAGS 2001;49:351-359
Van Craen et al. 2010; 58;83-92. Review.

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"Geriatric Assessment"

- 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

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

[1]Ganguli et al. *J Am Geriatr Soc*. 2004;52:1668-1675. [2]Fortinsky RH. *Aging Ment Health*. 2001;5 Suppl 1:S35-48. [3]Borson S. *MedGenMed*. 2004;6:30.

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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
  - Falls
- Polypharmacy

Medicare AWV

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SCREENING TESTS

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Candidates for Cognitive & Functional Assessment

- **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

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

Delirium vs. Dementia

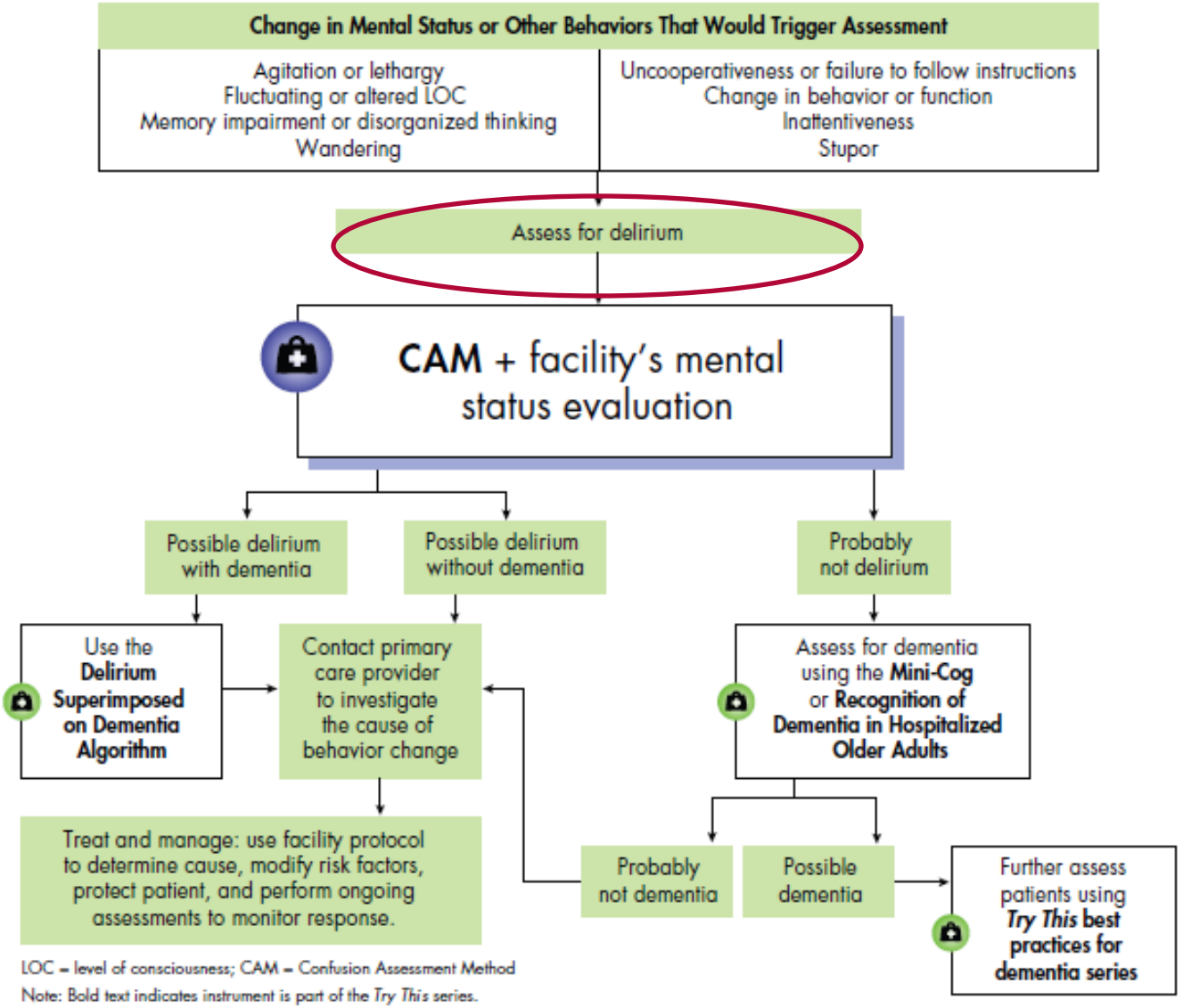
Delirium

- 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



LOC = level of consciousness; CAM = Confusion Assessment Method

Note: Bold text indicates instrument is part of the *Try This* series.

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Confusion Assessment Method (CAM)

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Confusion Assessment Method

- *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*

Inouye SK, van Dyck CH, Alessi CA et al, 1990

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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!

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Testing Attention

- 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 g
- 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!

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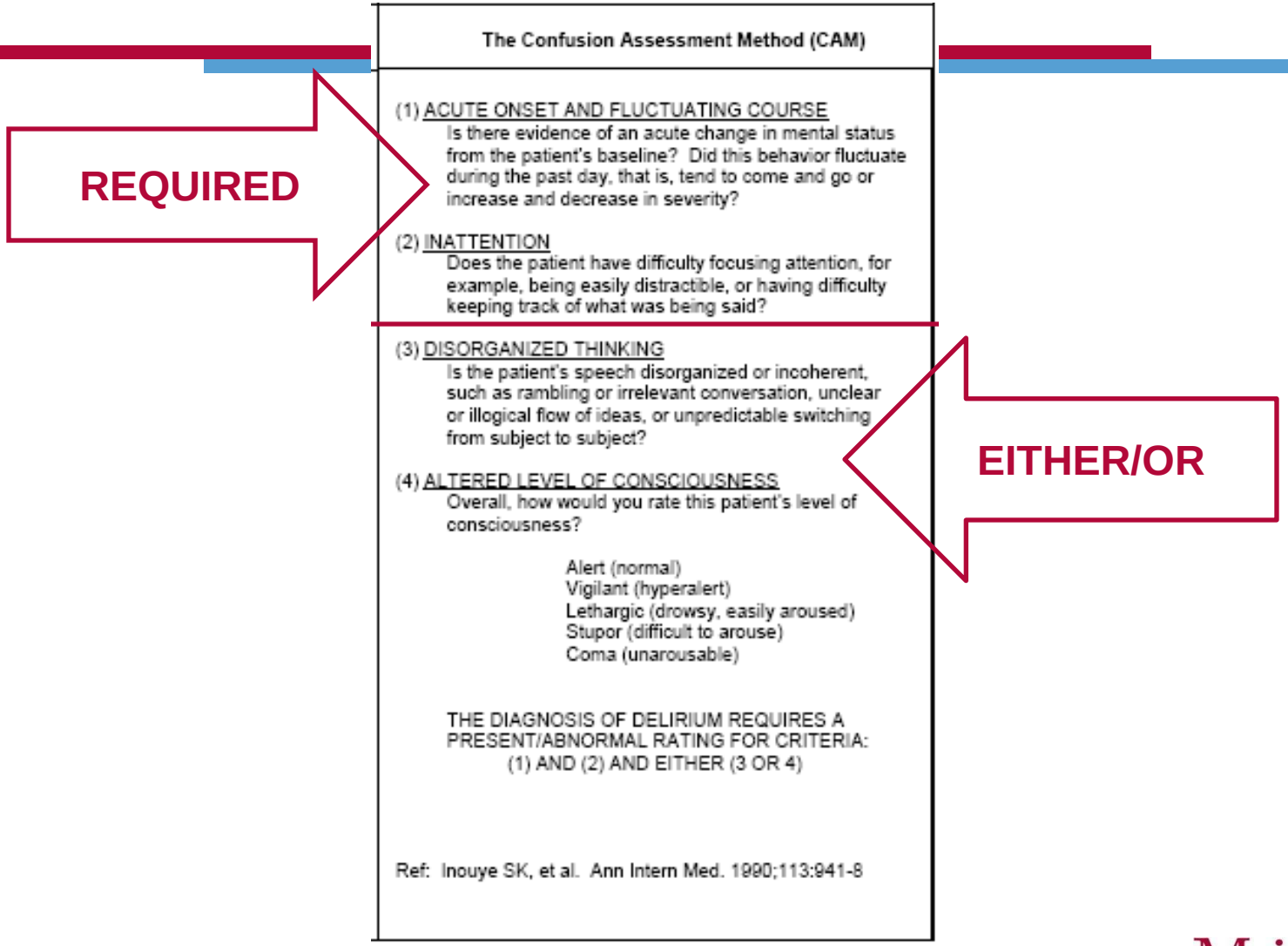
Disorganized Thinking

- 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?



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The CAM is Positive. You Need to **ACT**

- 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

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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

Borson S. et al. Int J of Geriatr Psychiat 2000; 15:1021-1027. Borson S et al. J Am Geriatr Soc 2003; 51:1451-1454. Borson S et al. J Am Geriatr Soc. 2005; 53:871-4. Scanlan JM, Borson S. Int J of Geriatr Psychiat. 2001; 16:216-222.

Mini-Cog

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

Registration

- Ask the patient to remember 3 words:

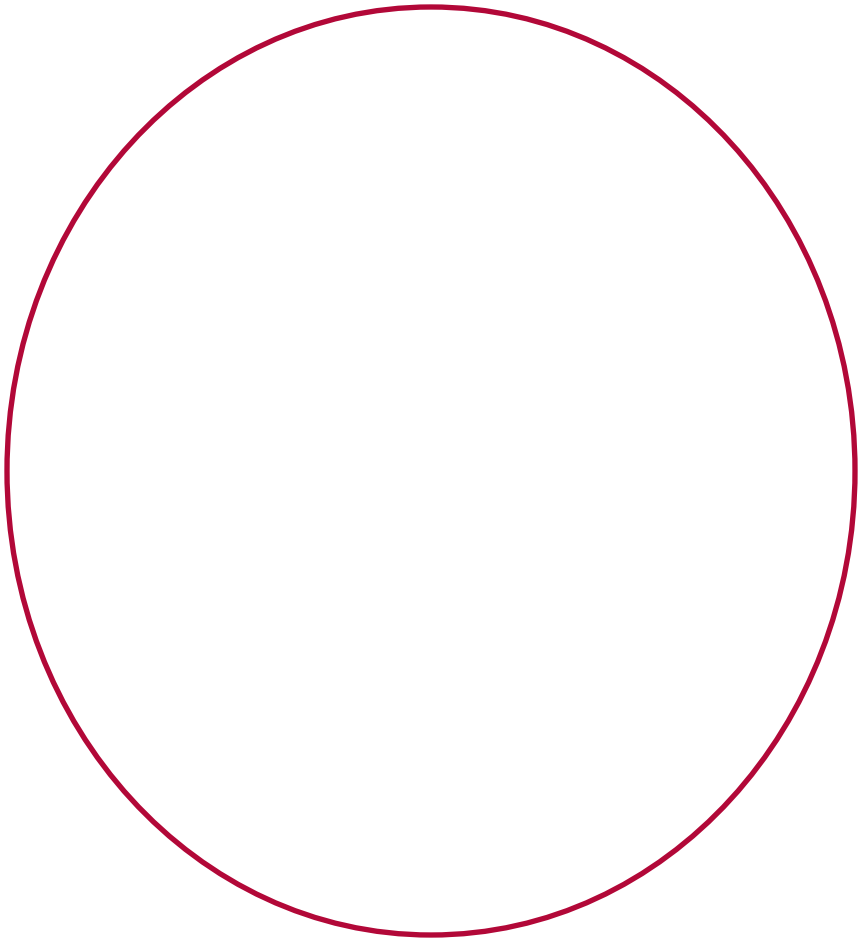
  APPLE, TABLE, PENNY

- 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”**



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Three Word Recall

- 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

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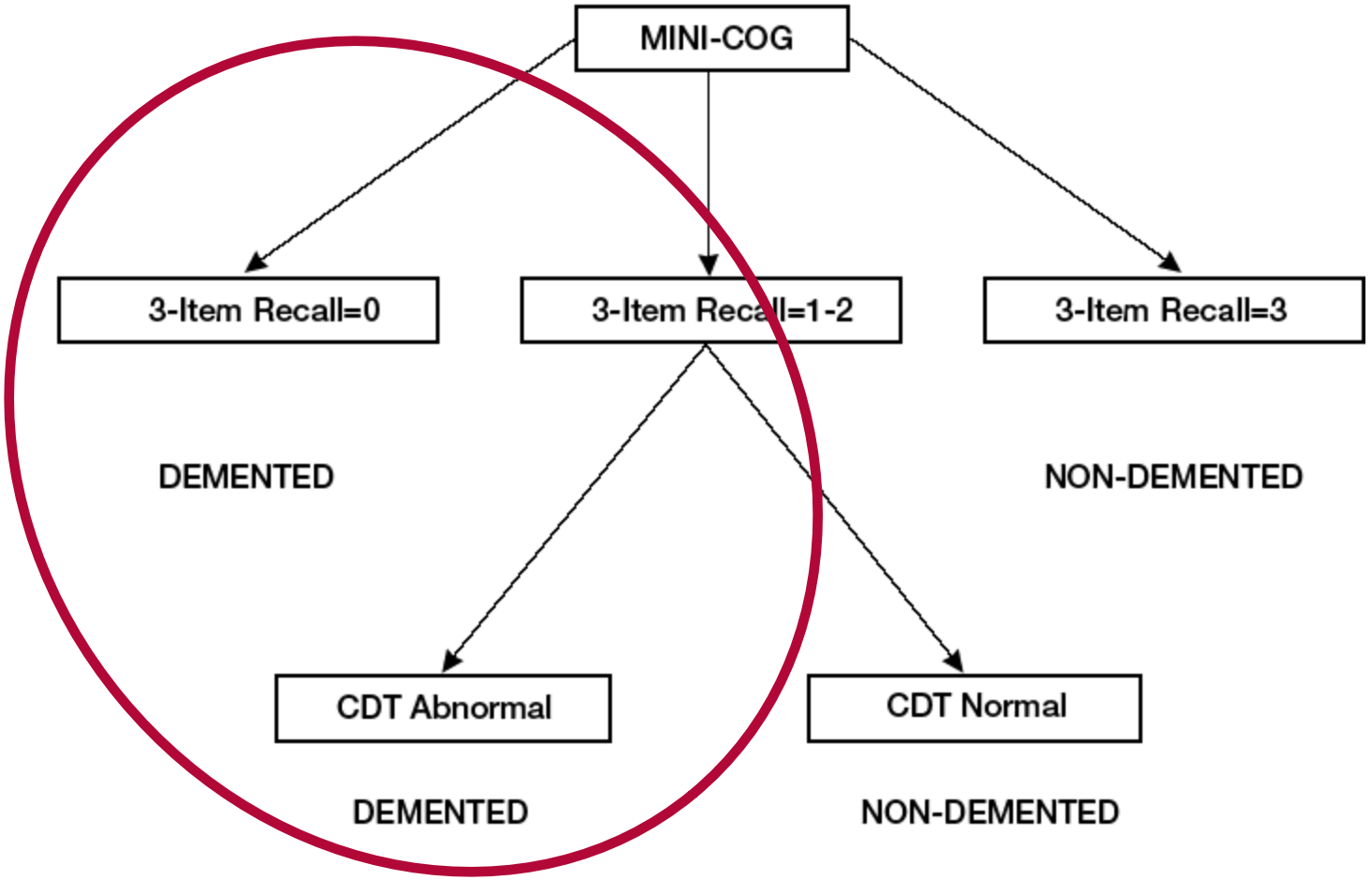
Scoring



Borson et al. Int J. Geriatr Psychiatry 2000

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CAVEAT

- 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**

- 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

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Lawton IADL Scale

- 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).

Lawton, M.P., & Brody, E.M. (1969). Assessment of older people: Self-maintaining and instrumental activities of daily living. *The Gerontologist, 9*(3), 179-186.

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Scoring

- 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**

- 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!

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

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