



# Cognition and Dementia

## Part I

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# Goals and Objectives

Goal: Introduce topic of Dementia and garner basic skills for evaluation and treatment in primary care

Objectives:

Part I

- Identify who and how to screen for cognitive impairments
- Differentiate between normal aging, mild cognitive impairment, and dementia
- Recognize common dementia subtypes

Part II

- Summarize current pharmacologic treatment options for dementia and behavioral disturbances
- Describe the needs for caregiver support, housing, advanced care planning, and Hospice



# Mrs Smith

78 year old Female

Cc: left knee pain

## PMHx:

HTN

Hx of CVA, no residual deficits

Insomnia

Knee OA

Osteopenia

Prediabetes

Urinary incontinence

## Medications:

ASA 81mg

Amlodipine 10mg daily

Atorvastatin 40mg daily

Diclofenac gel 1%

HCTZ 25mg daily

Losartan 100mg daily

Metoprolol Succinate 100mg daily

Oxybutynin 5mg TID



CC: “My left knee hurts”

VS: AF, BP 174/98, HR 76, RR 14, 96%

HPI:

- Hurts when I walk on it
- No pain at rest
- What have you done for this?
  - “I haven’t done anything for it”

Chart review:

- Saw PCP for same issue 3 wks ago
- Knee injection 2 months ago
- Frequent visits for this issue
- Xrays 2018: b/l moderate DJD



## What are some f/u questions for Mrs Smith?

1. How did the injections help 2 months ago
2. Do you have any trouble with your meds
3. Do you need any help at home

VS

1. When was the last time you saw your PCP
2. Do you take any medications
3. What's your living situation

Real quick screens:

1. Whats todays date
2. Who's the president
3. If I give you \$10 and you buy two apples each \$3, how much money do you have left?



## **Yikes. (you've got 5 mins left)**

Get further information

- Medication refill history
- Permission to contact family member



## What next?

- What's your responsibility?
- Your patient vs acute visit
- Document cognitive concern on problem list
- Do you take this on or refer?
- Situations prompting further evaluation
  - Clinician suspicion (medication mgmt, ER visits, etc)
  - Family or patient concern
  - Abnormal screening on AWW (vs USPSTF recommendations <sup>1</sup>)



## How common is this ? <sup>2</sup>

- One in 10 people (10%) age 65 and older has Alzheimer's dementia.
  - By age
    - 65-74 = 3%
    - 75-84 = 17%
    - >85 yrs = 32%
- One in 3 Seniors dies with Alzheimer's or another dementia
- Alzheimer's is 6th leading cause of death in US (more than breast and prostate CA combined)



**FIGURE 5**<sup>2</sup>

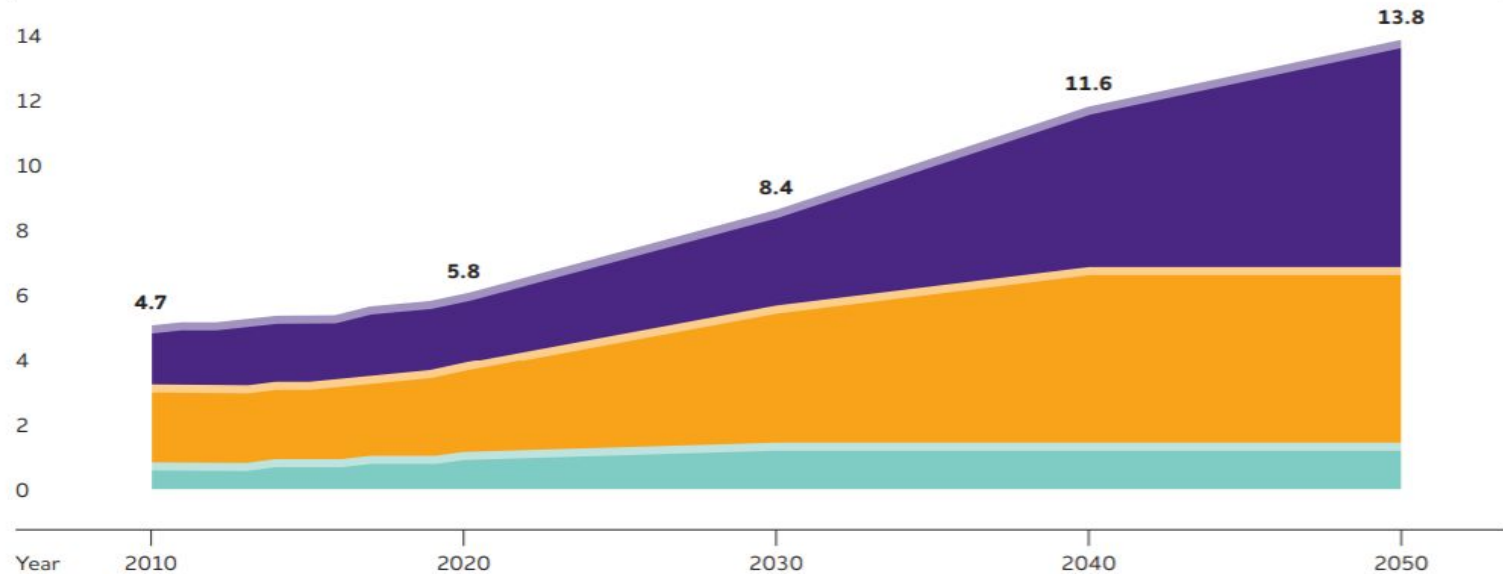
**Projected Number of People Age 65 and Older (Total and by Age) in the U.S. Population with Alzheimer's Dementia, 2010 to 2050**

Millions of people

 Ages 65-74

 Ages 75-84

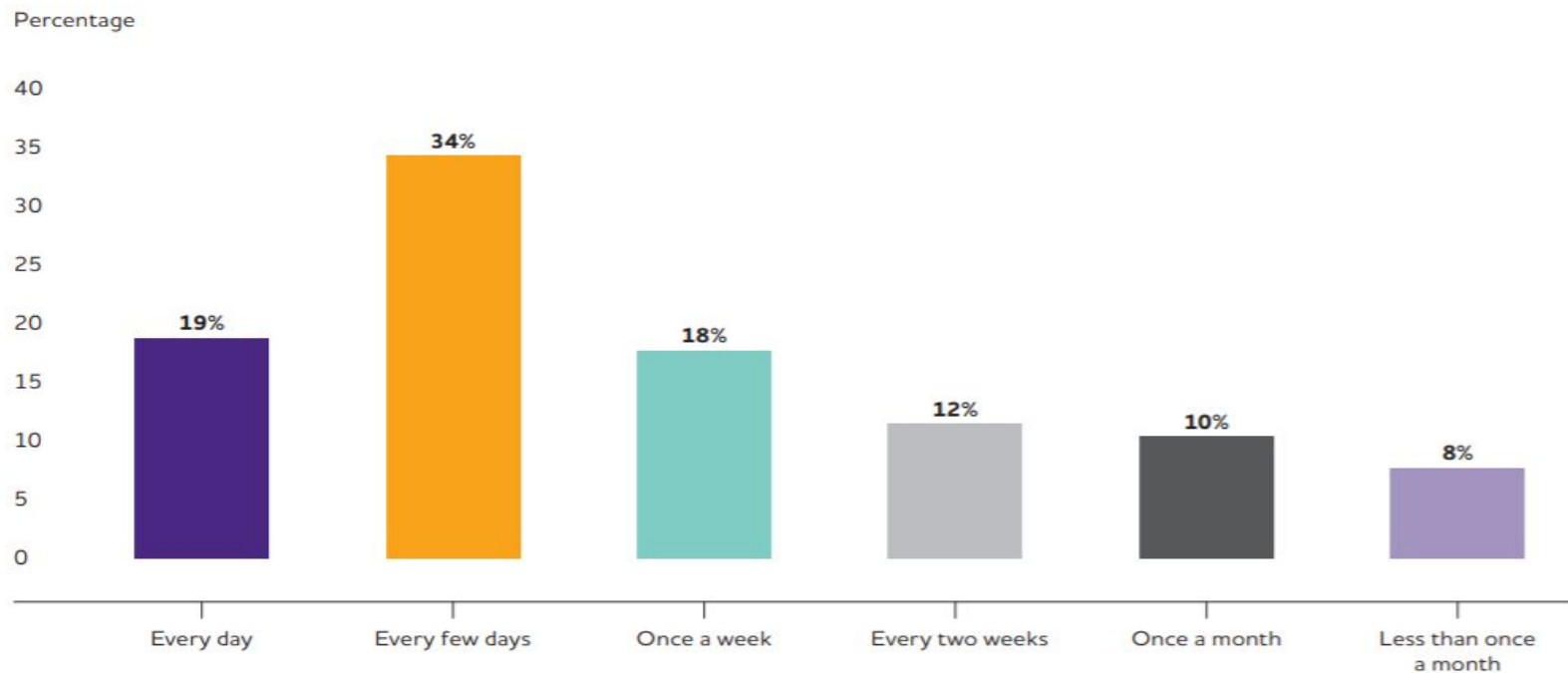
 Ages 85+



Created from data from Hebert et al.<sup>A9,62</sup>

**FIGURE 17** <sup>2</sup>

**Frequency of Primary Care Physicians Receiving Questions about Alzheimer's or Other Dementias from Patients Age 65 and Older**



Created from data from the Alzheimer's Association Primary Care Physician Dementia Training Survey.<sup>A20</sup>



## In Primary Care

Looking at >200,000 Medicare beneficiaries <sup>3</sup>:

- 85% of initial diagnoses made by non-specialist
- 1 year later <25% had seen a specialist
- At 5 yrs, it was 36%



## The Cat In The Hat On Aging

I cannot see  
I cannot pee  
I cannot chew  
I cannot screw  
Oh, my God, what can I do?  
My memory shrinks  
My hearing stinks  
No sense of smell  
I look like hell  
My mood is bad -- can you tell?  
My body's drooping  
Have trouble pooping  
The Golden Years have come at last  
The Golden Years can kiss my ass

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## Cognitive Evaluation <sup>4</sup>

- History
- Exam
- Labs/Imaging



# Cognitive Evaluation - History

## Key takeaways

- Get 3rd party corroboration!
- Duration (several years, several weeks), gradually progressive, waxing and waning
- Get concrete examples (missed appointments, repetitive conversations, etc)
- Vascular Hx (CVA, PAD, etc)
- Psychiatric Hx
- TBI Hx
- Alcohol, Alcohol, Alcohol
- Medications
- Hx of falls, gait issues, tremors, hallucinations
- Functional assessment (bADLs, i ADLs)



# Cognitive Evaluation - Exam

## Physical Exam

- Hearing, Hearing, Hearing
- Gait and Neuro

## Cognitive Testing

- Basic Screening - [MiniCog](#) (free), [GPCOG](#) (free)
- More in depth - [MMSE](#) (\$), [MOCA](#) (\$), [SLUMS](#) (free)
- Very in depth - Neuropsych testing

## Functional Evaluation - [bADLs](#), [iADLs](#)

+/- Mood - PHQ9 or [Geriatric Depression Scale](#)



# Cognitive Evaluation - Labs/Imaging <sup>5</sup>

## Labs

- Everyone - CBC, CMP, TSH, B12
- Think about - HIV, RPR

## Imaging

- General trend for MRI > CT. No contrast.
- What about FDG- PET, amyloid PET, SPECT scans?





## PRIMARY CARE BARRIERS

How can you practically do this evaluation?

1. 50 minute appt if you have availability
2. If not
  - a. Break it into History appt and a Cognitive exam appt
  - b. Outsource the Cognitive exam (Soc Work, Behav health, MA)
  - c. Have family member do ADL and dementia severity forms outside visit
3. Consider remote family member conference call in to physical visit
4. What if the patient is resistant to any further evaluation?



# Return to Mrs Smith

## History

- Gradual progression
- Hx of CVA, medications (oxybutynin, turns out taking 2 tabs benadryl every night)
- Functional - Not leaving house as much, still driving, medication mgmt, a few missed bills

## Exam

- Physical exam is unremarkable
- SLUMS 17/30

## Labs/Imaging

- Labs normal
- MRI - “old lacunar infarct, age consistent volume loss, white matter changes consistent with chronic microvascular disease”

## **NORMAL AGING**

- Making a bad decision once in a while
- Missing a monthly payment
- Forgetting which day it is and remembering later
- Sometimes forgetting which word to use
- Losing things from time to time

## **ALZHEIMER'S DISEASE**

- Making poor judgments and decisions a lot of the time
- Problems taking care of monthly bills
- Losing track of the date or time of year
- Trouble having a conversation
- Misplacing things often and being unable to find them



# Making the Diagnosis

Normal -> Mild Cognitive Impairment <sup>7</sup> -> Dementia <sup>8</sup>

## MCI

1. Cognitive concern
2. Impaired testing
3. \*Preservation of Function\*
4. Not otherwise explained

## Dementia

1. Cognitive impairment
  - a. History and cognitive testing in 2 domains
2. Progressive
3. Leading to Functional Impairment
4. Not otherwise explained

Red flags- rapid onset, motor symptoms

**YOU HAVE TIME !!!!!!!**



## How severe is it?

- [Dementia Severity Rating Scale](#)
- [Neuropsychiatric Index](#)
- [FAST](#) staging



# Dementia (Major Neurocognitive Disorder)

## Subtypes <sup>2</sup>

- Alzheimer's Disease - 60-80% of cases.
- Vascular Dementia - classically stepwise decline, in practice more based on history/risk factors
- Dementia with Lewy Body - sleep disturbance, visual hallucinations, parkinsonism
- Frontotemporal Dementia - personality changes and language comprehension, typically younger
  - subtypes: FTLD, primary progressive aphasia, progressive supranuclear palsy
- Parkinson's Dementia - onset generally following Parkinson's symptoms
- OTHER - HIV, alcohol, normal pressure hydrocephalus, thyroid, b12, prion disease, Huntington's



# Conclusions

- Commonly unrecognized
- Document concern in problem list
- Going to be prevalent in your primary care practice
- Develop strategies to try to begin addressing in your practice
- Try to standardize approach with a few tools
- Involve family members or loved ones



# Resources

[AAFP Cognitive Care Tool Kit](#)

[Washington state Clinical Provider Practice Tool](#)

[NIH Resources](#)

[Basic ADLs form](#)

[Instrumental ADLs form](#)

[Geriatric Depression Scale](#)

Short cognitive screens: [GPCOG](#), [MiniCog](#)

Longer cognitive tests: [SLUMS](#), [MOCA](#), [MMSE](#)

Dementia severity: Dementia Severity Scale ([DSRS](#)), [Neuropsychiatric Index](#), [FAST staging](#)





# References

- 1 *JAMA*. 2020;323(8):757-763. doi:10.1001/jama.2020.0435. **Screening for Cognitive Impairment in Older Adults** US Preventive Services Task Force Recommendation Statement
- 2 Alzheimer's Association. 2020 Alzheimer's Disease Facts and Figures. *Alzheimers Dement* 2020;16(3):391+
- 3 Drabo EF, Barthold D, Joyce G, Ferido P, Chui HC, Zissimopoulos J. Longitudinal analysis of dementia diagnosis and specialty care among racially diverse Medicare beneficiaries. *Alzheimers Dement* 2019;15:1402-11
- 4 <https://www.alz.org/aaic/downloads2018/sun-clinical-practice-guidelines.pdf>
- 5 <https://www.alz.org/national/documents/LabEvaluDementiaTable.pdf>
- 6 <https://www.nia.nih.gov/health/assessing-cognitive-impairment-older-patients>
- 7 Albert et al.. The diagnosis of mild cognitive impairment due to Alzheimer's disease: Recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease. [\*Alzheimers Dement\*. 2011 May; 7\(3\): 270–279.](#)
- 8 McKhann et al.The diagnosis of dementia due to Alzheimer's disease: recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease. *Alzheimers Dement*. 2011 May;7(3):263-9. doi: 10.1016/j.jalz.2011.03.005. Epub 2011 Apr 21.