PATIENT EDUCATION/SELF MANAGEMENT DECISION SUPPORT SUMMARY ALERTS GOALS Early identification of affected patients . Victimized patients . • Prevention of victimization • Increase in rules violation behaviors

- Worsening personal hygiene
- Reduce symptom severity Improve quality of life

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- Anxiety and agitation, especially at night . Complete Advance Directive-Durable Power of Attorney for . Health Care (DPAHC) early in course of disease
- Prison environment may mask symptoms •

DIAGNOSTIC CRITERIA/EVALUATION

	Mild Cognitive Impairment (MCI)	Dementia
Definition	 Cognitive decline greater than expected for age and education level without significantly interfering with activities of daily life. Evidence of memory impairment Preservation of general cognitive and functional abilities Absence of diagnosed dementia 	 Cognitive impairment with: significant decline from previous level of performance in one or more cognitive domains (complex attention, executive function, learning and memory, language, social cognition, perceptual motor) interference with independence in daily activities Not occurring exclusively with delirium Not better explained by another disorder Neurobehavioral abnormalities
History	 MCI and Dementia patients may have similar historical findings which contribute to the ultimate diagnosis: Poor adherence to rules and routines Personal hygiene problems Impaired comprehension History of head injury, substance abuse, or other medical contributors 	
Differential Diagnosis	 Medication effects Depression/other psychiatric disorders Brain lesion Hypothyroidism B12 deficiency 	 Medication effects Hypothyroidism B 12 deficiency Tertiary syphilis (extremely rare in US) Brain lesion Depression/other psychiatric disorder
Risk Factors	 > 50% of MCI patients progress to dementia within 5 years. Consider screening of MCI patients May consider screening for MCI/dementia in patients > 65 years 	 Age: Alzheimer's Disease (AD) incidence 1% age 70, increasing to about 50% in those > 85 years Family History: 10-30% AD risk in first degree relatives of AD patients Vascular Disease Risk Factors
Symptoms	 Anxiety over memory impairment Difficulty with decision-making Able to perform most tasks but these may be more difficult and require more time May be 'amnestic' when memory domain affected or 'nonamnestic' when impairment is in a nonmemory domain 	 Memory loss, neurobehavioral abnormalities: aggressive or inappropriate behavior, poor self control, anxiety, agitation, denial, confabulation AD is the most common form of dementia. Other types: Vascular, Lewy Body Dementia, Parkinson's Disease Dementia, etc. (see page 4) Symptoms often first noted by others: cellmate, custody staff, others Universal screening not recommended
Evaluation	 TSH, vitamin B12. Other screening labs show little evidence of benefit (CBC, CMP, HIV serology, lipids, ESR, RPR, drug screen) Cognitive assessment –Mini-Cog, MOCA, Clock Drawing Test, Mental Health evaluation to identify: Pseudodementia (depression) Underlying mental health diagnosis impairing cognition Cognitive impairment due to substance abuse Suicide risk 	 TSH, B12. Other screening labs show little evidence of benefit (CBC, CMP, HIV serology, lipids, ESR, RPR, drug screen) Imaging: Consider MRI w/o contrast (1st choice). [MRI with contrast if vascular or mixed dementia suspected] Consider CT w/o contrast to exclude structural causes of dementia (may be used to assess hippocampal atrophy to support AD diagnosis) Cognitive assessment with Mini-Cog, MOCA, Clock Drawing Test, Adaptive needs evaluation by DDP clinician for functional capacity or accommodation needs Mental Health evaluation to identify: Pseudodementia (depression) Underlying mental health diagnosis impairing cognition Cognitive impairment due to substance abuse Suicide risk

Information contained in the Care Guide is not a substitute for a health care professional's clinical judgment. Evaluation and treatment should be tailored to the individual patient and the clinical circumstances. Furthermore, using this information will not guarantee a specific outcome for each patient. Refer to "Disclaimer Regarding Care Guides" for further clarification.

SUMMARY

PATIENT EDUCATION/SELF MANAGEMENT

TREATMENT OPTIONS:

BEHAVIORAL INTERVENTIONS

- Exercise
- Social interaction
- Skills to promote good sleep hygiene
- Engagement in simple tasks
- Cognitive stimulation therapy (e.g. physical games, sound and word association)

DECISION SUPPORT

ENVIRONMENTAL / SOCIAL

- Safe Housing will be provided for patients with adaptive needs.
- Assistance with ADLs and for other activities as needed.
- Ensure timely completion of Advance Directive-DPAHC/POLST
 - Assess decision-making capacity (consult with Care Team, Medical Management, Mental Health, and/or institution or headquarters Ethics Committee).
 - Custody Counseling Staff may be of assistance in locating family or friends who may serve as surrogate decision-maker

PHARMACOLOGIC MANAGEMENT

- Review all prescribed medications to determine potential for medication-related cognitive impairment
- Dementia specific medication (donepezil, galantamine, rivastigmine, memantine) may delay progression of disease by several months, but providers must be aware of marginal benefit and potential adverse effects of these medications. Donepezil is preferred formulary agent (page 10).
- For behavior disturbances in dementia:
 - Attempt to minimize anticholinergic burden if clinically appropriate
 - Dementia specific agents (e.g., cholinesterase inhibitors, glutamate antagonists), SSRIs, oxcarbazepine, buspirone, or valproic acid may be effective for mild behavior disturbances associated with dementia
 - Antipsychotics may be indicated to manage more severe aggressive behavior or psychosis but may exacerbate cognitive deficit. Increased stroke risk is reported with any antipsychotic in the elderly. Used only with careful consideration of the risks and if no reasonable alternative behavioral management options are available.
- Cardiovascular risk reduction as indicated (low dose aspirin, lipid lowering agents, antihypertensives, etc.)

MONITORING:

- Assess status of cognitive function (MOCA or Mini-Cog or other tool)
- Medication monitoring
 - Ask patient and/or caregiver about medication effectiveness and side effects
 - Reassess 6–8 weeks after initiating any dementia-specific medications, and at least every 6 months
 - Reassess for continued need of every medication(s) and discontinue any medication without clear benefit to patient
- Evaluate mood and behavior with input from caregivers and observers.
- Reassess appropriateness of housing with consideration of behavior problems and safety concerns.
- Assess for sleep dysfunction.
- Follow-up frequency will vary. Well controlled patients may be seen by PCP at 90-180 day intervals.

MEDICATIONS WHICH MAY IMPAIR COGNITION*		
Anticholinergics	 Ipratropium, tiotropium, benztropine 	
Muscle relaxants	 Methocarbamol, cyclobenzaprine, carisoprodol 	
Antihistamines	 Diphenhydramine, chlorpheniramine, promethazine, hydroxyzine 	
Antimuscarinics	 Oxybutynin, tolterodine, darifenacin, trospium, fesoterodine (Used for urinary urge incontinence and overactive bladder) 	
Antidepressants	 Tricyclic antidepressants, mirtazepine, trazodone, bupropion, SSRIs, lithium, MAO inhibitors 	
Antiepileptic Drugs	 Valproate, phenytoin, carbamazepine, gabapentin, levetiracetam, topiramate, lamotrigine, pregabalin, clonazepam 	
Antipsychotics	• Chlorpromazine, haloperidol, prochlorperazine, fluphenazine, risperidone, quetiapine, aripiprazole, olanzapine, ziprasidone	
Sedatives	 Benzodiazepines, buspirone, barbiturates 	
Opiates	 Codeine (cough syrup), morphine, oxycodone, hydrocodone, methadone, etc. 	
Antiparkinson Meds	 L-dopa, bromocriptine, amantadine 	
Other	 Hyoscyamine, cimetidine, clonidine, azapirone 	

*Not a complete list.

See prescribing information for prescribed medications in individual patients to assess risk of cognitive impairment from medications.



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CCHCS Care Guide: Cognitive Impairment/Dementia

SUMMARY

DECISION SUPPORT

PATIENT EDUCATION/SELF MANAGEMENT

TYPES OF DEMENTIA:

ТҮРЕ	CHARACTERISTICS	
Alzheimer's Disease (AD)	 About 50% of dementia cases Gradual onset with continuing decline Difficulty remembering names, recent events, apathy & depression Progressive decline in cognition and functional ability which is not caused by identifiable medical, psychiatric, or neurological condition Late: Behavior problems, impaired judgment, orientation, confusion, difficulty walking, speaking, swallowing. 	
Vascular (multi-infarct) Dementia	 About 25% of dementia cases. Symptoms similar to those of AD but focal neurological signs or evidence of a cerebrovascular process severe enough to cause dementia are common. History of multiple TIAs or two or more ischemic strokes. In general, patients with vascular dementia have a more 'stepwise' decline, while patients with Alzheimer's have a more gradual decline in cognitive function. Patients have changes on brain imaging characterized by cortical infarcts, multiple lacunae and extensive white matter changes. Depression and atrophy are common. 	
Dementia with Lewy Bodies (DLB)	 15% of dementia cases History of fluctuating cognitive performance Gait and balance disorders, visuospatial function and attention affected more than memory Recurrent visual hallucinations and delusions (unrelated to dopaminergic therapy) Fluctuating confusion with variation in cognitive function over minutes, hours, days, or weeks Motor symptoms of Parkinsonism. Associated features: falls, disturbances of consciousness, autonomic dysfunction, REM sleep behavior disorder 	
Parkinson's Disease Dementia (PDD)	 5% of dementia cases Parkinson's-associated dementia is characterized by onset of Parkinson's disease symptoms before the onset of dementia. Usually develops in later stages of Parkinson's Disease Antiparkinson's agents (notably anticholinergics, L-Dopa, amantadine) can exacerbate symptoms 	
Other	 Evidence from history, physical exam, or laboratory findings of a specific medical condition causing cognitive deficits (Frontotemporal Dementia, Parkinson's disease, traumatic brain injury, substance/medication abuse, HIV infection, Huntington's Chorea, Pick's disease, Creutzfeldt-Jakob disease), or another medical condition (late syphilis, Lyme disease, tuberculosis, SLE, Sjogren's syndrome, depression, brain tumor, normal pressure hydrocephalus). Frontotemporal Dementia onset often at 55 to 60 years (younger than AD) and usually presents with language disturbance and/or behavioral difficulties such as disinhibition, difficulty with language and speech and abnormal social behavior Pick's disease is a subtype of frontotemporal dementia. Mixed Dementia very common in elderly (AD, vascular, and Lewy Bodies) 	

SUMMARY

DECISION SUPPORT

PATIENT EDUCATION/SELF MANAGEMENT

Mini-Cog™

Instructions for Administration of the Mini-Cog™

ADMINISTRATION	SPECIAL INSTRUCTIONS		
1. Three Word Recall	The following word lists have been used in one or more clinical studies: ¹⁻³		
Get patient's attention. Say: "I am going to say three words that I want you to remember. The words are (select from word list). "Please say them for me now." If patient is unable to repeat after 3 tries, then go to clock drawing test.	 Version 1 Banana Sunrise Chair Version 2 Daughter Heaven Mountain 	 Version 3 Village Kitchen Baby Version 4 River Nation Finger 	 Version 5 Captain Garden Picture Version 6 Leader Season Table
2. Clock Drawing Test (CDT) Say in order: "Please draw a clock. Start by drawing a large circle." (when done, say) "Put all the numbers in the circle." (when done, say) "Now set the hands to show 11:10 (10 past 11) OR 8:20 OR 1:45.	 A clock should not be visible to the patient during this task. Use either a blank piece of paper and have patient draw circle OR provide a preprinted circle – administration would then be to ask the patient to put in all the numbers like the face of a clock. Repeat instructions as needed. This is not a memory test. Move to next step if clock is not complete within 3 minutes. Inability or refusal to draw a clock is scored abnormal (0 points). 		
3. Say: "What were the three words I asked you to remember?	Ask the patient to recal	I the three words you state	ed in Step 1.

Scoring

Word recall (0-3 points)	1 point for each word spontaneously recalled without cueing.
Clock draw (0 or 2 points)	 Normal clock = 2 points. A normal clock has all numbers placed in the correct sequence and approximately correct position (eg, with 12, 3, 6, and 9 in anchor positions) with no missing or duplicate numbers. Hands are pointing to the 11 and 2 (11:10) or the 8 and 4 (8:20) or 1 and 9 (1:45). (Length of hands less important). Abnormal clock = 0 points.
Total = (0- 5 points)	Total score = word recall score + clock score Negative screen for cognitive impairment: Mini-Cog [™] 4-5 score Positive screen for cognitive impairment: Mini-Cog [™] 0-3 score

References/Copyright Information

1. Borson S, Scanlan J, Brush M, Vitaliano P, Dokmak A. The mini-cog: a cognitive "vital signs" measure for dementia screening in multi-lingual elderly. Int J Geriatr Psychiatry. 2000;15(11):1021-1027. 2. Borson S, Scanlan JM, Chen P, Ganguli M. The Mini-Cog. as a screen for dementia: validation in a population-based sample. J Am Geriatr Soc. 2003;51(10):1451-1454. 3. McCarten JR, Anderson P, Kuskowski MA, et al. Finding dementia in primary care: the results of a clinical demonstration project. J Am Geriatr Soc. 2012;60(2):210-217.

Mini-Cog™ Copyright 5. Borson. All rights reserved. Used with permission of the author in educational and clinical materials developed by the Alzheimer's Association.

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Borson S, Scanlan J, Brush M, Vitaliano P, Dokmak A. The mini-cog: a cognitive "vital signs" measure. CCHCS reprinted with permission of the author (soob@uw.edu) http://www.alz.org

Clock Drawing Test: Useful to screen for mild cognitive impairment (very short but not reliable or accurate enough for routine clinical use alone) Mini-Cog (includes Clock Drawing Test)— useful to screen for dementia, compares well with longer screening tests in helping detect dementia (76-99% sensitivity, 89-93% specificity).



Montreal Cognitive Assessment (MOCA):Developed as a rapid screening instrument for detection of mild cognitive impairment MoCA© may be used, reproduced, and distributed without permission by Hospitals/Clinics. Copyright© Dr Z. Nasreddine 2003 to 2014 - The Montreal Cognitive Assessment - MoCA© - All rights reserved.

December 2014 CCHCS Care Guide: Cognitive Impairment/Dementia

SUMMARY

DECISION SUPPORT

PATIENT EDUCATION/SELF MANAGEMENT

MEDICATIONS USED TO TREAT DEMENTIA:

Literature suggests that dementia specific medications are of limited benefit and they are associated with significant toxicity. It is very important for prescribers to consider benefits and risks before starting one of these agents and to regularly assess the patient and to discontinue the medication when there is no evidence of benefit or with disease progression.

CHOLINESTERASE INHIBITORS : Donepezil, galantamine, and rivastigmine appear to have similar efficacy, donepezil appears to have fewer side effects			
MEDICATION	USAGE	SIDE EFFECTS*	CONTRAINDICATIONS */ COMMENTS
donepezil (Aricept [®]) Tabs: 5 mg 10 mg, 23 mg Oral dispersible tablet (ODT) 5 mg, 10 mg Tablet: 23 mg (not to be crushed or chewed) \$	Indication: mild to moderate Alzheimer's Disease Initial dose: 5 mg/day at bedtime. May increase to 10 mg/day after 4- 6 weeks. Moderate to severe AD: Initial dose: 5 mg/day. May increase to 10 mg/day after 4- 6 weeks. May consider increase to 23 mg/day after 3 months	Serious Reactions: AV Block, syncope, seizures Common Reactions: Diarrhea, nausea, vomiting, dyspepsia, weight loss,insomnia, fatigue, dizziness, headache	 Caution in bradycardia or conduction abnormalities (sick sinus syndrome, left bundle branch block) Avoid in patients with uncontrolled asthma/COPD or active peptic ulcer disease (PUD) Minimize side effects by waiting 6 weeks to increase dose Caution in patient < 55 kg, severe GI side effects and weight loss possible Caution in BPH or bladder outlet obstruction
galantamine (Razadyne) IR & ER Tablets; 8 mg, 16 mg, 24 mg oral solution 4 mg/ml \$\$	Initial Dose: IR tablet: 4 mg orally twice daily with food ER tablet: 8 mg once daily. After 4 weeks at initial dose, may increase dose at 4 week intervals to 16-24 mg per day in 2 divided doses (IR) or once daily (ER). If therapy interrupted three or more days, restart at lowest dose.	Serious Reactions: AV Block, bradycardia, syncope, seizures, urinary obstruction, Common Reactions: Nausea, anorexia, vomiting, and diarrhea, weight loss, dizziness, headache, insomnia	 Caution in bradycardia or conduction abnormalities (sick sinus syndrome, left bundle branch block) Avoid in patients with uncontrolled asthma/COPD or active PUD Caution in mild or moderate renal or hepatic impairment, avoid with severe renal or hepatic disease Caution in BPH or bladder outlet obstruction or seizure disorder
rivastigmine (Exelon [®]) Capsules: 1.5 mg, 3 mg, 4.5 mg, 6 mg Transdermal patches 4.6 mg/24 hour 9.5 mg/24 hour, 13.3 mg/24 hr \$\$\$	Initial Dose: 1.5 mg orally twice daily with food May increase by 3 mg/day every two weeks [‡] to maximum 6 mg twice daily. Usual dose 9-12 mg divided twice daily. If therapy interrupted three or more days, restart at lowest dose. Patch: 4.6mg/24 hr, increase after 4 weeks to 9.5mg/24 hr, consider increase after 4 more weeks to 13.3mg/24 hr If therapy interrupted three or more days, restart at same or lower strength patch. [‡] for Parkinson's associated dementia increase dose at 4 week intervals.	Serious Reactions: Stevens-Johnson Sydrome, bradycardia, hypotension, Adams-Stokes syndrome, CNS depression may im- pair alertness Common Reactions: syncope, dizziness, falling, headache, agitation, nausea, vomiting (sometimes severe), diarrhea, weight loss, abdominal pain, tremor, Insomnia, somnolence	 Take with food Swallow capsule whole Caution in bradycardia or conduction abnormalities (sick sinus syndrome, left bundle branch block) Avoid in patients with uncontrolled asthma/COPD or active peptic ulcer disease Caution in patient <50 kg, may have more severe nausea and vomiting Caution in mild or moderate renal or hepatic impairment, avoid with severe renal or hepatic impairment Caution in BPH or bladder outlet obstruction or seizure disorder
NMDA (N-ME memantine (Namenda [®]) IR tablets: 5 mg, 10 mg, ER capsules: 7 mg, 14 mg, 21 mg, 28 mg \$\$\$	THYL-D-ASPARTATE) GLUTAM Initial dose: IR tablet: 5 mg orally daily. Increase at weekly intervals by 5 mg/day to max dose 20 mg/day. Give doses > 5 mg/day in 2 divided doses. ER capsule: 7 mg once daily up to target of 28 mg once daily. Wait at least 1 week between dose changes.	ATE ANTAGONIST Serious Reactions: Stevens-Johnson Syn- drome Common Reactions: Dizziness, headache, confusion, constipation, diarrhea HTN, fatigue, syncope	 Caution with severe renal or hepatic impairment Caution in patients with history of seizures or cardiovascular disease

* For complete lists of side effects, drug interactions, and contraindications consult prescribing information.

Summary

DECISION SUPPORT

PATIENT EDUCATION/SELF MANAGEMENT

ABOUT DEMENTIA

What is dementia? Dementia is a disease that destroys brain cells and brain function. It can affect your memory and the way you think. There are different kinds of dementia and every case is different. Your doctor will help keep track of your symptoms and your needs.

What symptoms does dementia cause? Symptoms of dementia often start off very mild and get worse slowly. Symptoms can include:

- Forgetting all sorts of things
- Confusion
- Trouble with language (for example, not being able to find the right words for things)
- Trouble concentrating and reasoning
- Problems with tasks such as paying bills or balancing a checkbook
- Getting lost in familiar places

As dementia gets worse, it can cause:

- Anger or aggression
- A person to see things that aren't there or believe things that aren't true
- Impair ability to eat, bathe, dress, or do other everyday tasks
- Loss of bladder and bowel control

How is dementia treated? That depends on what your needs are and the type of dementia you have.

- Medical staff will watch your symptoms and work with you to find solutions to the problems that might come up.
- ✓ You will be taught new skills to help you remember things and organize your day better.
- \checkmark If you have Alzheimer's Disease, there are medicines that might help.
- ✓ If you have dementia related to your blood circulation, your doctor will work on keeping your blood pressure and cholesterol as close to normal as possible to reduce further injury to your brain.
- ✓ If you get anxious or depressed your doctor may prescribe medication.

Can dementia be prevented? — There are no proven ways to prevent dementia. But here are some things that seem to help keep the brain healthy:

- Physical activity
- Social interaction
- Keeping the brain busy, for example by reading or doing puzzles

SUMMARY	DECISION SUPPORT	PATIENT EDUCATION/SELF MANAGEMENT
WHAT YOU SHOULD KNOW		
Patients with dementia often have so much trouble with thinking and memory that they are not able to tell the doctor their wishes for medical treatment. This is especially true when it comes to wishes about end of life treatment including being on machines or having a feeding tube. Writing down your wishes now will help be sure they are followed later.		
What is advance careThinking and place	are planning? lanning ahead about what kir	nd of medical care you want as you get sicker.
The kind of me	dical treatment you want usu	ally depends on what is important to you.
 Talking about y help make sure 	your wishes with loved ones a that your wishes are followe	and your doctors and nurses and writing them down will d.
What is an Advanc	e Directive?	
Advance Direct	tives are papers used to write	e down your wishes for end of life care.
 They allow you what you want 	i to say what you want so that if you can no longer speak fo	at family, friends, doctors, and nurses will know for sure or yourself.
 An Advance Di no longer make 	rective allows you to choose e them.	someone to make medical decisions for you if you can
 In CDCR we us 	se CDCR Form 7421 Advanc	e Directive for Health Care.
Listed below are some of the things to consider regarding your end of life wishes. You may wish to circle the items that are most important to you to discuss with your provider when you complete your Advance Directive.		
Physical of a second seco	comfort	
Keller of p To die nat	turally	
 To live as 	long as possible no matter w	vhat
To be able	e to care for my physical nee	ds
To be able	e to recognize family & friend	S
To be able To receive	e palliative (comfort) care & h	ospice
Would you	u want to have CPR done?	
Would you	u want a feeding tube?	
Would you	u want to be kept alive by ma	achines (ventilator) in the following cases?:
• If n	ny brain's thinking functions v	vere destroyed?
 Is there a 	person you want to help atte	nd to your spiritual needs as death nears?
Is there s rogate or	omeone you wish to have magent) when/if you are no lor	ake medical decisions for you (called a health care sur- nger able to speak for yourself?
 If you are to called? 	very sick and near the end o	f your life is there a family member/friend you would like
Is there see	omeone different to call after	your death?
Q: What if I change my mind?		
You may complete a new Advance Directive (CDCR Form 7421) at any time as your Wisnes change. You may complete an Advance Directive even when you are young and perfectly healthy.		
		

TALK TO YOUR DOCTOR OR ANY MEMBER OF YOUR HEALTH CARE TEAM TO COMPLETE OR UPDATE YOUR ADVANCE DIRECTIVE.