

DENTAL PROVIDER PRACTICE TOOL

An evidence-based practice guideline for providing dementia friendly dental care

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DETECT COGNITIVE IMPAIRMENT*

Routinely observe and assess cognitive status

**Red Flags -
Observe, Listen & Engage**

- Clinical Indicators
- Behavior Triggers
- Family or Other Concerns
- Ask About Memory or Cognition
- Tool: 10 Signs

No

Yes

**Rapid, objective
screening with
MiniCog®**

Abnormal
Score 0-3

Normal
Score 4-5

1. Document findings in electronic health record (EHR).
2. Identify primary care partner and obtain authorizations (durable power of attorney, healthcare proxy, release of information).
3. Discuss concerns openly with patient/care partner(s).
4. Recommend work-up with primary care provider, send Mini-Cog® score and observational notes.

*Adaption to flow chart by Indian Health Service, 2022.

DETECT COGNITIVE IMPAIRMENT

Signs and symptoms of Alzheimer's disease and related dementias

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1. Memory loss that disrupts daily life
2. Challenges in planning or solving problems
3. Difficulty completing familiar tasks
4. Confusion with time or place
5. Trouble understanding visual images and spatial relationships
6. New problems with words in speaking or writing
7. Misplacing things and losing the ability to retrace steps
8. Decreased or poor judgment
9. Withdrawal from work or social activities
10. Changes in mood and personality

Mini-Cog® - a rapid cognitive screening tool for healthcare providers, including dentists

Use the tool to quickly and objectively assess memory/cognition during patient visits

A printable PDF of the tool with administration and scoring guidelines can be found at mini-cog.com



Watch the video tutorial on administration, scoring, interpretation at actonalz.org/video-tutorials

Sharing concerns about memory or thinking changes

1. Pick your moment

- Quiet time/place, limit interruptions

2. Choose your words carefully

- Be direct, specific and non-judgmental
- “_____ (patient name), do you have any concerns about your memory or thinking?”
- Be prepared for denial or defensive behavior, which is normal. Validate patient concerns while discussing your observations and recommendations.
- *“As your dentist, it’s important to me that you get the best care possible, whether that’s for your teeth or for something else. With that in mind, I’ve noticed you seem to be having some trouble with your memory lately. Have you noticed that too?”*

If yes:

- * *“How long have you noticed the problem?”*
- * *“Have you talked with anyone [your doctor] about it?”*

If no:

- * *“Has anyone else [family members, friends] expressed a concern about your memory or thinking?”*

3. Encourage a work-up with primary care provider

- Reassure that further assessment/diagnosis will help get support needed
“I would like you to consider talking with your doctor about your memory/brain health. There are many things that can cause memory or thinking changes and sometimes the problem can be reversed, or stabilized, if identified early (e.g., vitamin/hormone deficiencies, mood disorders, untreated sleep apnea, etc.). There may be treatments or recommendations that could really help you stay well.”

4. Don't worry if patient/care partner don't respond well

- Discuss concerns with primary care provider(s)

5. Referral

- Primary care provider



Watch the video tutorial on sharing concerns about memory or thinking changes at actonalz.org/video-tutorials

ASSESS DECISION MAKING CAPACITY

Elements of informed consent

Decision-making capacity means patient demonstrates all of the following:

1. Comprehension of relevant information
2. Ability to identify (state) risks and benefits of treatment
3. Rational manipulation of information in context (reasoning)
4. Communication of a choice



Alternative decision-making standards when patient lacks capacity:

“Substituted judgment” standard

- Decisions based upon what the patient might do if s/he could decide and tell us (preferred whenever possible)

“Best interest” standard

- Decisions based upon what a reasonable person might do in a similar situation

When capacity is uncertain:

- Involve patient to extent possible/remain sensitive to:
 - * Fluctuating capacity
 - * Relative risk and complexity of decisions
- Involve proxies and care partner(s) when available
- Solicit primary care provider input as needed
- Plan elective care via “substituted judgment”
- Provide care in “best interests” during serious emergencies
- Solicit input from ethics committees, courts or adult protection if lack of consensus exists on significant treatment needs

Sample questions to assess capacity

Understanding relevant information

1. *“In your own words, please tell me about:*
 - *the nature of your dental problem(s).”*
 - *the treatment or tests that have been recommended.”*
 - *the possible benefits of treatment.”*
 - *the possible risks (or discomforts) of treatment.”*
 - *any possible risks and benefits of no treatment at all.”*
2. *“If there is a [percentage] chance of [named risk] occurring with treatment, how likely, in your own words, do you think the occurrence of [named risk] might be?”*
3. *“Why have you been given this information?”*
4. *“What role do you think you should play in deciding whether you receive treatment?”*
5. *“What will happen if you decide not to go along with the dental treatment I have recommended?”*

Appreciating the situation and its consequences

1. *“Please explain to me what you believe is wrong with your oral health now.”*
2. *“Do you believe you need treatment?”*
“What is treatment likely to do for you?”
3. *“What do you believe will happen if you are not treated?”*
4. *“Why do you think [specific treatment] has been recommended for you?”*

Manipulating information rationally

1. *“Tell me how you reached the decision to accept/reject the recommended treatment.”*
2. *“What factors were important to you in reaching this decision?”*
3. *“How did you balance those factors?”*

Communicating choices

1. *“Have you made a decision about treatment?”*
2. *“Can you tell me what your decision about treatment is?”*
(Can be repeated to assess stability of choice)



Watch the video tutorial on decision making and assessing capacity at actonalz.org/video-tutorials

OPTIMIZE TREATMENT

Enhance scheduling

- Earlier and shorter appointments typically optimize cognitive functioning and behavioral symptoms.
- If problems arise, be flexible, and try another day/time.
- Seek care partner guidance (e.g., stressors to avoid, tips to elicit best mood/cooperation).
- Request that a care partner accompany the patient to appointments.

Maximize communication

Nonverbal

- Approach from front, same level as patient
- Direct eye contact and friendly smile
- Slow movements
- Gentle touch for reassurance
- Demonstrate procedures first
- Monitor facial expressions for discomfort, distress

Verbal

- Shorter words and phrases, simple sentences
- Repeat exactly or paraphrase slightly
- Calm, slow, clear speech in lower pitch
- One question at a time and wait for response
- Closed choice or yes/no questions (vs. open-ended)
- Do NOT correct or argue; validate feelings and redirect as needed

Create dementia friendly treatment plans

Overall

- Keep it simple!
- Emphasize early intervention; long-lasting and easy to maintain restorations and definitive treatment versus monitoring of potential problems
- Preserve natural teeth and avoid removable prostheses when feasible
- Simplify post-operative care as much as possible (e.g., extra attention to hemostasis, removal of gauze packs, etc.)
- Provide simple and clearly written care instructions

Prevention

- Keep it simple!
- Enlist care partner support when available
- Provide disposable mouth props if needed
- Use sponge swabs only for large debris, edentulous areas or application of therapeutic agents
- Employ prescription fluorides, fluoride varnish and antimicrobial mouth rinses to help combat caries and periodontal disease
- Remember to discuss diet (e.g., sugar) and xerogenic medications for caries prevention
- Provide a written preventive care plan

Operative treatment

- Employ evidence-based guidelines for non-restorative treatment of caries (e.g., silver diamine fluoride)
- Consider repair vs. replacement of defective restorations when possible to simplify care

- Consider Atraumatic Restorative Treatment (ART) to overcome obstacles to conventional restorative treatment
- Use whatever restorative material will work best (e.g., glass ionomer, composite, amalgam) depending upon restorative conditions at time of placement

Note: The U.S. FDA now advises against amalgam for people with pre-existing neurological diseases, including dementia, whenever possible and appropriate.

Removable prosthetic treatment

- If removable prostheses must be made:
 - * One or 2 abutments still worth keeping to avoid a complete mandibular denture, but not a complete maxillary denture
 - * Use easily repairable, adaptable partial denture designs
 - * Discontinue fabrication if behavior compromises outcome
 - * Presence of care partner can reassure patient and educate about potential difficulties
 - * Adhesives helpful if used properly
 - * Remember to include identification label
 - * Consider duplicating new dentures
- When in doubt, “therapeutic trial” of dentures okay if all parties understand/acknowledge questionable outcomes
- Include statement in treatment plan/consent: “Prognosis for successful use of denture(s) is uncertain due to cognitive status.”

OPTIMIZE TREATMENT

Manage behavioral symptoms

- Most behavioral symptoms are of little consequence
- Seek recommendations from care partners
- Reduce environmental stimuli (i.e., background noise, excess activity)
- Familiar faces (e.g., care partner, family), objects (e.g., favorite picture), and music can be comforting and a positive distraction
- Control of movement
 - * Go with the flow (move with the patient)
 - * Gentle holding of hands, cradling of head
 - * Weighted or x-ray blanket
 - * Soft, textured objects to occupy hands
 - * Mouth props as needed and tolerated (Molt preferred)
- Back off if agitation appears or increases and re-approach
- If pharmacologic intervention is necessary, use short-acting agents at the lowest possible dose in consultation with primary care provider

Optimize pharmacological interventions

Local anesthesia

- Consider option of no anesthetic for simpler procedures
- Minimize use of block and long-acting local anesthetics (e.g., bupivacaine)
- Vasoconstrictors okay in limited amounts per usual guidelines
- Careful technique with aspiration:
 - * Use wide enough needle to aspirate
 - * Gow-Gates (2%) is safer than inferior alveolar nerve block (10-20%) to avoid intravascular injections
- Maximum 2-3 x 1.8 cc carpules per visit for American Society of Anesthesiology (ASA) II, III or other medical risks including cognitive impairment
- Monitor facial expressions to assess efficacy
- Warn about potential lip and tongue chewing

Analgesics

- Acetaminophen is first line choice
- Caution with NSAIDs as in all older adults (e.g., gastrointestinal, renal, cerebrovascular risks)
- Caution with opioids (e.g., risk of confusion, falls)
- Take advantage of pain meds already in use
- Caution against using over-the-counter analgesics with diphenhydramine for sleep

N2O inhalation

- Thought to be generally safe and effective although there is less data for older, frail adults
- Possibly helpful to reduce cardiovascular stress
- Caution in chronic obstructive pulmonary disease
- Can be problematic in some cases (e.g., restlessness, excessive movement, inability to sustain nose breathing)

Medications to minimize or avoid

- Benzodiazepines (e.g., risk of falls, aspiration, increased confusion, agitation)
- Anticholinergics (e.g., diphenhydramine), hypnotics and other psychoactive drugs due to risk of increased confusion, sedation, drowsiness

RESOURCES

Report suspected abuse/neglect and at-risk drivers

Reporting suspected abuse or neglect

mn.gov/dhs/people-we-serve/seniors/services/adult-protection

Reporting at-risk drivers

Minnesota: dps.mn.gov/divisions/dvs/forms-documents/Documents/MedicalConditions_and_YourLicense.pdf

Wisconsin: wisconsin.gov/Pages/dmv/license-drvs/mdcl-cncrns/reportingunsafedriver.aspx

Refer patient and care partners to supportive services

Oral health care partner guides (National Institute of Health) catalog.nidcr.nih.gov

Alzheimer's Association 1-800-272-3900 alz.org

Senior LinkAge Line 1-800-333-2433 minnesotahelp.info

NeuroWell Guide for Brain Health and Living Well with Mild Cognitive Impairment and Dementia myneurosciencecenter.com/MyNeuroscienceCenter/neurowell/10041

Healthcare directives

Honoring Choices Minnesota honoringchoices.org

Healthcare directive toolkit extension.umn.edu/health-care/minnesota-health-care-directive-planning-toolkit

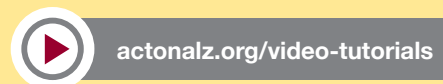
Dementia friendly clinical practice resources

ACT on Alzheimer's actonalz.org

Dental training actonalz.org/dementia-person-training

Dental care guide actonalz.org/dental-care

Video tutorials



Legal designations for responsible parties

Guardian

- Court-appointed decision-maker for persons unable to make personal decisions
- Authority determined by court and may include health care and other personal decisions

Power of Attorney (POA)

- Can act on patient's behalf for financial or other matters as granted (e.g., Health Care or HC-POA)
- No court involvement
- Effective when document completed and remains in effect after person is incapacitated if designated (i.e., Durable Power of Attorney or DPOA)

Health Care Agent

- Person appointed in Health Care Directive by person with capacity to do so
- No court involvement and authority effective upon attending physician or nurse practitioner determination of incapacity
- Allows decisions according to pre-set patient wishes

Guarantor (Financial Responsible Party)

- Responsible for financial obligations if patient unable to fulfill
- Initiated at any time without court involvement

Conservator

- Court-appointed substitute decision-maker for persons who are found to be incapacitated to manage assets
- Authority determined by court and may include paying bills and debts, managing estate, collecting income, etc.

REFERENCES

1. Alzheimer's Association, alz.org, 2020
2. Alzheimer's Association. (2018). 2018 Alzheimer's disease facts and figures. *Alzheimer's & Dementia*, 14(3), 367-429.
3. Borson S, Scanlan J, Brush M, Vitaliano P, Dokmak A. (2000). The mini-cog: a cognitive "vital signs" measure for dementia screening in multi-lingual elderly. *Int J Geriatr Psychiatry*, 15(11):1021-1027, 2000.
4. Borson S, Scanlan JM, Watanabe J, et al. Improving identification of cognitive impairment in primary care. *Int J Geriatr Psychiatry* 21(4):349-55, 2006.
5. Mini-Cog®: mini-cog.com, 2021.
6. Cooper C, Selwood A, et al. Abuse of people with dementia by family carers: representative cross sectional survey. *BMJ* 22;338, 2009.
7. Wiseman M. The role of the dentist in recognizing elder abuse. *J Can Dent Assoc* 74(8):715-20, 2008.
8. MN Adult Abuse Reporting Center, <https://mn.gov/dhs/people-we-serve/adults/services/adult-protection>, 2020.
9. Minnesota Senior LinkAge Line, <https://mn.gov/senior-linkage-line>, 2020.
10. Shuman SK, Owen MK. Ethical Issues in Oral Health Care for Older Adults. *Generations: J Amer Soc on Aging*, 40(3):70-78, 2016.
11. Shuman, SK, Bebeau, MJ. Ethical Issues in Nursing Home Care: Practice Guidelines for Difficult Situations. *Spec Care Dent*, 16(4):170-176, 1996.
12. Sessums LL, Zembrzuska H, Jackson JL. Does this patient have medical decision-making capacity? *JAMA*, 306(4):420-7, 2011.
13. AARP, Legal Counsel for the Elderly, The Differences Between Guardianship and Powers of Attorney. <https://www.aarp.org/content/dam/aarp/lce/resources/dc-guardianship-vs-powers-of-attorney.pdf>, 2020.
14. Gerontological Society of America, Communicating with Older Adults. https://secure.geron.org/cvweb/cgi-bin/msascartdll.dll/ProductInfo?productcd=1947_Comm-Adults, 2012.
15. National Institute on Aging, Tips for Communicating with a Confused Patient, www.nia.nih.gov/health/tips-communicating-confused-patient, 2017.
16. Chalmers JM. Behavior management and communication strategies for dental professionals when caring for patients with dementia. *Spec Care Dentist* 2000;20(4):147-54.
17. Hsu KT, Shuman SK, Hamamoto DT, et al. The application of facial expressions to the assessment of orofacial pain in cognitively impaired older adults. *J Am Dent Assoc* 2007;138(7):963-9.
18. Holst A, Skär L. Formal caregivers' experiences of aggressive behaviour in older people living with dementia in nursing homes: A systematic review. *Int J Older People Nurs*. 2017;12(4).
19. Donaldson M, Gizzarelli G, Chanpong B. Oral sedation: a primer on anxiolysis for the adult patient. *Anesth Prog* 2007;54(3):118-28.
20. American Dental Association, CDT 2022: Dental procedure Codes by ADA. <https://www.medicalcodingbooks.com/product/cdt-2022/>
21. American Geriatrics Society Panel on Pharmacological Management of Persistent Pain in Older Persons. Pharmacological management of persistent pain in older persons. *J Am Geriatr Soc* 2009 Aug;57(8):1331-46.
22. Donaldson M, Gizzarelli G, Chanpong B. Oral sedation: a primer on anxiolysis for the adult patient. *Anesth Prog* 2007;54(3):118-28.
23. Sprung J, Abcejo A, Knopman D, et al. Anesthesia with and without nitrous oxide and long-term cognitive trajectories in older adults. *Anesth Analg* 2020 Aug;131(2):594-604.
24. Chen X, Shuman SK, et al. Patterns of tooth loss in older adults with and without dementia: a retrospective study based on a Minnesota cohort. *J Am Geriatr Soc* 2010;58(12):2300-7.
25. Brennan LJ, Strauss J. Cognitive impairment in older adults and oral health considerations: treatment and management. *Dent Clin North Am* 2014; 58(4):815-28.
26. Marchini L, Ettinger R, et. al. Oral health care for patients with Alzheimer's disease: An update. *Spec Care Dentist* 2019;39(3):262-273.
27. Geddis-Regan A, Walton G. A guide to treatment planning in complex older adults. *Br Dent J* 14;225(5):395-399, 2018.
28. Pretty IA, Ellwood RP, Lo ECM, et al. The Seattle Care Pathway for securing oral health in older patients. *Gerodontology* 31 Suppl 1:77-87, 2014.
29. Slayton RL, Urquhart O, Araujo MWB, Fontana M, et al. Evidence-based clinical practice guideline on nonrestorative treatments for carious lesions: A report from the American Dental Association. *J Am Dent Assoc* 149(10):837-849, 2018.
30. Li R, Lo ECM, et al. Randomized clinical trial on arresting dental root caries through silver diamine fluoride applications in community-dwelling elders. *J Dent* 2016;51:15-20.
31. Horst JA, Ellenikotis H, Milgrom PL. UCSF Protocol for Caries Arrest Using Silver Diamine Fluoride: Rationale, Indications and Consent. *J Calif Dent Assoc* 2016;44(1):16-28.
32. FDA Recommendations for Certain High-Risk Groups Regarding Mercury-Containing Dental Amalgam, 9/24/2020. <https://www.fda.gov/news-events/press-announcements/fda-issues-recommendations-certain-high-risk-groups-regarding-mercury-containing-dental-amalgam>.
33. Gordan, VV, Riley JL, et al. Repair or replacement of restorations: A prospective cohort study by dentists in The National Dental Practice-Based Research Network. *J Am Dent Assoc* 2015;146(12):895-903.
34. Da Mata C, McKenna G, et al. An RCT of atraumatic restorative treatment for older adults: 5 year results. *J Dent* 2019;83:95-99.
35. Specialized Care Co., Inc. Open Wide Mouth Support™, <https://specializedcare.com/collections/open-wide-mouth-supports>, 2020.
36. Collis Curve™ Toothbrush, colliscurve.com, 2020.
37. Pearson LS, Hutton JL. A controlled trial to compare the ability of foam swabs and toothbrushes to remove dental plaque. *J Adv Nurs* 2002; 39(5):480-9.
38. National Institute on Aging, Taking Care of Your Teeth & Mouth, <https://www.nia.nih.gov/health/taking-care-your-teeth-and-mouth>, 2020
39. Minnesota ACT on Alzheimer's®, actonalz.org, 2020
40. Watson JE, Gow-Gates GA. Incidence of positive aspiration in the Gow-Gates mandibular block. *Anesth Pain Control Dent* 1992;1(2):73-6.

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