GLIN IPA

2024

# Clinical Care Pathway: Dementia

# Clinical Care Pathway: Dementia

## Purpose & Objective

Dementia is not a specific disease, but rather a term to indicate the impaired ability to remember, think or make decisions that interferes with doing everyday activities.

This protocol provides evidence-based care recommendations in the screening and treatment of dementia in the primary care setting for adults. The protocol seeks to assist in early diagnosis and effective treatment of dementia. The dementia protocol should provide primary care physicians, family nurse practitioners, and physician's assistants with a guide that is evidence-based and cost effective. This pathway was derived from the World Health Organization guidelines and American Academy of Neurology references.

## Goals of Care

Currently, the mainstay of treatment is symptomatic. In this regard, important management issues include treatment of behavioral disturbances, environmental manipulations to support patient functioning, and counseling with respect to safety issues. If clinically identified, it is important to manage and treat the underlying cause of dementia.

# Causes

Dementia may have more than one cause, particularly as the condition progresses and especially in the elderly. Non-neurodegenerative dementias may be reversible, or progression slowed or halted, if the underlying cause can be identified and adequately treated with the most common of these being vascular dementia. Comorbidities exacerbating poor cognition are common in older adult patients with dementia, such as congestive heart failure and renal insufficiency, as well as effects of antihistaminergic and anticholinergic medications. Less common etiologies include alcohol-related dementia, chronic traumatic encephalopathy, normal pressure hydrocephalus, chronic subdural hematoma, neurosyphilis, hypothyroidism and nutrient deficiencies (ie: B12).

## Neurodegenerative disorders

- Alzheimer's Disease
- Dementia with Lewy Bodies
- Frontotemporal dementia
- Parkinson's Disease associated dementia

## Vascular Dementia

- Generally due to multiple strokes in important areas, but can occur with a single CVA

## Reversible Causes of Dementia

- Normal Pressure Hydrocephalus
- Thyroid Disease
- Vitamin B12 Deficiency
- Wernicke-Korsakoff Syndrome
- Chronic subdural hematoma

## Pseudodementia of Depression

- Polypharmacy
- Iatrogenic
- Medication Side Effects
  - Antihistamines
  - Anticholinergic
- Medication Interactions
  - Serotonin Syndrome
- Rapidly Progressing Dementia
  - Prion Disease

## Creutzfeldt Jacob Disease

- Variant Creutzfeldt Jacob Disease
- Autoimmune/Paraneoplastic Encephalitis
- Typically, with other features, including:
  - Seizures
  - Movement Disorder
  - Psychosis
- Neoplastic
  - Leptomeningeal carcinomatosis

## Mixed Dementia

- Typically, AD and Vascular Dementia

# Screening

Screening asymptomatic patients is not recommended.

- The US Preventative Services Task Force has concluded that there is insufficient evidence to recommend for or against routine screening for dementia in older adults.
- The American Academy of Neurology and Canadian Task Force on Preventative Health Care either do not endorse screening or recommend against it in asymptomatic adults.

Assessment for patients with memory or cognitive complaints is appropriate.

# Diagnosis

Cognitive and behavioral assessments are designed to distinguish normal and abnormal performance arising across a range of different conditions. These tests help to quantify the types and severity of impairment, but the most important part of the diagnostic evaluation is a detailed history including the perspective of the informant. They can be divided into 3 levels of rigor:

- Screening tools such as the Mini-Mental State Examination (MMSE)/Montreal Cognitive Assessment Test (MoCA)
- Extended mental status examination
- Formal neuropsychological testing

**Diagnosis of dementia cannot be made solely on the basis of a low score on one of these assessments.**

# DSM-IV & DSM-5 Criteria for Dementia

| DSM-IV criteria for dementia | DSM-5 criteria for major neurocognitive disorder (previously dementia) |
|---|---|
| **A1.** Memory Impairment | **A.** Evidence of significant cognitive decline from a previous level of performance in one or more cognitive domains*:<br>• Learning and memory<br>• Language<br>• Executive function<br>• Complex attention<br>• Perceptual-motor<br>• Social cognition |
| **A2.** At least one of the following:<br>• Aphasia<br>• Apraxia<br>• Agnosia<br>• Disturbance in executive functioning | |
| **B.** The cognitive deficits in A1 and A2 each cause significant impairments in social or occupational functioning and represent a significant decline from a previous level of functioning. | **B.** The cognitive deficits interfere with independence in everyday activities. At a minimum, assitance should be required with complex instrumental activities of daily living, such as paying bills or managing medications. |
| **C.** The cognitive deficits do not occur exclusively during the course of delirium. | **C.** The cognitive deficits do not occur exclusively in the context of a delirium. |
| | **D.** The cognitive deficits are not better explained by another mental disorder (eg. major depressive disorder, schizophrenia). |

DSM: Diagnostic and Statistical Manual of Mental Disorders.

*Evidence of declineis based on concern of the individual, a knowledgeable informant , or the clinician that there has been a significant decline in congnitive function and a substantial impairment in cognitive performance, preferably documented by standardized neuropsychological testing or, in its absence, another quantified clinical assessment.

References:

1. American Psychiatric Association Diagnostic and Statistical Manual, Fourth Edition, APA Press, Washington, DC 1994.

2.American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), American Psychiatric Association, Arlington, VA 2013.

# Differential Diagnosis of Memory Loss

| Symptom | Usual Case | Examples |
|---|---|---|
| Gradual onset of short-term memory loss and functional impairment in more than one domain:<br>**I.** Executive function (finances, shopping, cooking, laundry, transportation)<br>**II.** Basic activities of daily living (feeding, dressing, bathing, toileting, transfers) | Dementia | Alzheimer's disease, Parkinson's dementia, Lewy body dementia, frontotemporal dementia, alcohol-related dementia, Creutzfeld-jacob disease |
| Stepwise, sudden deterioration in cognition; episodes of confusion, aphasia, slurred speech, focal weakness | Vascular Dementia | Multi-infarct dementia, Binswanger dementia (subcortical dementia) |
| Acute cognitive impairment with clouded sensorium; difficulty with attention; may have hypersomnolence | Delirium | Hypo- or hyperglycemia, hypo- or hypernatremia, hypoxemia, anemia, intermittent cerebral ischemia, thyrotoxicosis, myxedema, alcohol withdrawal, sepsis, drugs (especially cholinergics, benzodiazepines, etc) |
| Complains of memory loss, decreased concentration, impaired judgment, feels worse in morning and hopeless | Depression | Minor depression, dysthymic disorder, major depression, pathologic grief reaction |

# Clinical Features of Delirium Versus Dementia

| | Delirium | Dementia |
|---|---|---|
| **Onset** | More abrupt decline in cognitive function over hours to days, with waxing and waning course | Typically insidious, progressive decline in cognition over months to years |
| **Attention and orientation** | Impaired | Generally preserved; can be altered in later stages |
| **Level of consciousness** | Fluctuating, sometimes reduced | Normal |
| **Speech and language** | Incoherent, disorganized speech | Variable impairments in word retrieval, naming, fluency, and comprehension |
| **Memory for recent and past events** | Variable, fluctuating impairments | Often impaired for recent events; memory for remote events becomes impaired in later stages |

# Evaluation

- It is often a spouse or other informant who brings the problem of memory loss to the clinician's attention. Self-reported memory loss does not appear to correlate with subsequent development of dementia, while informant-reported memory loss is a much better predictor of development of dementia
- Mild cognitive impairment is an intermediate category in which the severity of cognitive changes appears worse than expected for normal aging, but does not meet the criteria for dementia
- When clinicians explain findings, it is important to make eye contact with and speak directly to the patient
- Patients with an established diagnosis of dementia should be seen by the primary care provider at a minimum of every six (6) months
- Cognitive screening should be performed at **EVERY** appointment in patients with an established diagnosis

| Recommendations for Comprehensive Assessments | | At Initial Appointment | At Follow-up Appointment (every 6 months) | At Annual Appointment |
|---|---|---|---|---|
| **History of cognitive and behavioral changes (family members or someone who knows the patient must be available to give an adequate history of cognitive and behavioral changes)**<br>• **MMSE**<br>• **MoCA** | Difficulty with:<br>• retaining new information<br>• handling complex tasks<br>• reasoning<br>• spatial ability and orientation<br>• language (ex. Word finding)<br>• behavior<br><br>Review of previous treatment regimens (if applicable) and response<br><br>Assess frequency/cause/severity of past hospitalizations | ✓ | | |
| **Driving Assessment** | | ✓ | ✓ | ✓ |

# Evaluation (continued)

| Recommendations for Comprehensive Assessments | | At Initial Appointment | At Follow-up Appointment (every 6 months) | At Annual Appointment |
|---|---|---|---|---|
| **Assessment of daily activities (family member or someone who knows patient should be available to comment on these)** | • handling finances<br>• community/social activities<br>• driving<br>• other household tasks | ✓ | | ✓ |
| **Assessment of medications** | • review medication list for appropriateness (such as use of drugs that impair cognition) | ✓ | ✓ | ✓ |
| **Screening for other medical conditions** | • B12 deficiency<br>• hypothyroidism<br>• neurosyphilis (ONLY if high clinical suspicion based on sexual history or travel to areas where exposure may be more common) | ✓ | | ✓ |
| **Imaging*** | • head computed tomography (CT) or MRI scan | ✓ (ONLY if acute onset of cognitive impairment and/ or rapid neurologic deterioration) | | |
| **Other evaluation tests** | • lumbar puncture<br>• electroencephalography<br>• serologic tests | ✓ (ONLY if atypical syndrome is suspected [ex.younger patients <60 years old or those with rapidly progressive dementia]) | | |

*In most cases, MRI is preferred over CT because it is more sensitive for a broad range of potential pathologies while avoiding exposure to potentially harmful ionizing radiation. Serial imaging is NOT informative UNLESS there is an unexpected clinical change, such as abrupt mental status change without a readily identified cause, new focal findings or seizure

# Management

- Management of medical problems can be more complex in patients with dementia
  - Patients with dementia have decreased ability to make decisions, to adhere to treatment plans (including medication compliance) and to report adverse effects of therapy

- In terminal stages of dementia, patients and their caregivers are faced with a range of physical and psychosocial needs. Effective palliative care improves patients' symptoms, lessen caregiver burden, and help ensure that treatment decisions are well informed and weighed in the context of the patient and family goals and needs

- Drugs of particular concern in adults with dementia include anticholinergic drugs, benzodiazepines, opioids, antipsychotic drugs and antihypertensive drugs, especially in patients with Parkinson's disease and other disorders associated with autonomic dysfunction

# Management (continued)

| Disease-SpecificTreatments for Alzheimer's Disease | | | | | | |
|---|---|---|---|---|---|---|
| | **Treatment Considerations** | **Drug** | **Formulation** | **Starting Dose** | **Maintenance Dose** | **Clinical Pearls** |
| **Cholinesterase inhibitors** | • Degree of expected benefit is modest, therapy should not be continued indefinitely in patients who do not appear to be benefitting or who have significant side effects, this should be assessed every 6 months<br>• There is not convincing evidence that cholinesterase inhibitors are neuroprotective or have the ability to alter the underlying disease trajectory<br>• For patients with mild to moderate dementia, trial of cholinesterase inhibitor is suggested (relative effects appear to be similar for patients with more severe dementia)<br>• Decisions on long term use depend on patient's functional response to treatment and long term goals of care and should be made in consultation with caregivers and family | Donepezil (Aricept™, Adlarity™) | Tablet or disintegrating tablet | 5 mg orally, once daily | 10 mg daily (increased after 4 to 6 weeks)* | Long half life allows for oral once daily dosing versus other cholinesterase inhibitors. The patch is applied once weekly. Donepezil is associated with QTc prolongation. |
| | | | Transdermal patch | 5 mg/24 hours | 10 mg/24 hours (increased after 4 to 6 weeks) | |
| | | Galantamine (Razadyne™, Razadyne ER™, Reminyl™, Reminyl ER™) | Immediate release tablet or solution | 4 mg orally, twice daily | 12 mg twice daily (increased in monthly intervals by 4 mg twice-daily increments) | Slow titration recommended to limit GI side effects. Administration with food may be helpful to lessen GI side effects. If therapy has been interrupted for more than three (3) days, restart at lowest dosage and titrate. |
| | | | Extended-release capsule | 8 mg orally, once daily | 24 mg once daily (increased in monthly intervals by 8 mg once-daily increments) | |
| | | Rivastigmine (Exelon™, Exelon Patch™) | Capsule | 1.5 mg orally, twice daily | 6 mg twice daily (increased in 2- to 4-week intervals by 1.5 mg twice-daily increments) | Slow titration recommended to limit GI side effects. Administration with food increases tolerability. Patch is applied once daily |
| | | | Transdermal patch | 4.6 mg/24 hours | 9.5 to 13.3 mg/24 hours (increased in monthly intervals by 4.6 mg increments) | |

# Management (continued)

| Disease-SpecificTreatments for Alzheimer's Disease | | | | | | |
|---|---|---|---|---|---|---|
| | **Treatment Considerations** | **Drug** | **Formulation** | **Starting Dose** | **Maintenance Dose** | **Clinical Pearls** |
| **Memantine** | • NMDA receptor antagonist<br>• Shown to improve cognition and global assessment of dementia, but with small effects that are not of clear clinical significance<br>• For mild Alzheimer's dementia there is little evidence that patients benefit<br>• For moderate to severe Alzheimer's dementia, combination with a cholinersterase inhibitor is suggested<br>• Shown some efficacy in patients with vascular dementia | Memantine (Namenda™, Namenda XR™) | Immediate release tablet or solution | 5 mg orally, once daily | 10 mg twice daily (increased in weekly intervals by 5 mg once-daily increments) | Typically fewer side effects than cholinergic agents. Dizziness is most common adverse effect, confusion and hallucinations occur at a low frequency. Use may increase agitation and delusional behaviors in some patients with Alzheimer's disease |
| | | | Extended release capsule | 7 mg orally, once daily | 28 mg daily (increased in weekly intervals by 7 mg once-daily increments) | |
| **Lecanemab** | • Humanized IgG1 monoclonal antibody which binds to Aβ soluble protofibrils (blocks the formation of amyloid plaques in the brain)<br>• Full FDA approval granted 7/6/2023 for treatment of early Alzheimers disease with confirmation of elevated amyloid beta<br>• Limited release at select infusion centers | Lecanemab (Leqembi™) | Intravenous | 10 mg/kg IV infusion every two (2) weeks | Same as initial dosing | Use should be LIMITED to the follow patients: mild cognitive impairment or mild dementia, documented amyloid pathology and no contraindications/ precautions (cognitive decline attributed to non-Alzheimer disease pathology, use of antiacoagulant therapy, pregnancy/ breastfeeding). MRI's are required before the first, fifth, seventh and fourteenth infusions. |

*A 23 mg noncrushable tablet of donepezil is available, but evidence does not support a clinically important advantage to the higher dose and it is associated with increased side effects

# Management (continued)

| Disease-Specific Treatments for Dementia with Lewy bodies | | |
|---|---|---|
| **Non-pharmacologic Therapy** | • Medications may be poorly tolerated in dementia with Lewy bodies, non-pharmacologic behavioral strategies aimed at modifying stressors in the environment should be employed when possible | See Appendix 2 for recommended psychosocial interventions for management of behavioral and psychotic symptoms |
| **Cholinesterase Inhibitors** | • For most patients, treatment trial with cholinesterase inhibitors is suggested<br>• At least a six (6) month trial of the medication is generally recommended<br>• Lack of improvement alone is not a cause for discontinuation as there is some evidence that cholinesterase inhibitors may slow overall deterioration in dementia with Lewy bodies | See above table for dosing of medications |
| **Memantine** | • Whether memantine should be used as monotherapy or together with cholinesterase inhibitor remains unclear and requires further study<br>• Can be used as second-line therapy when patients are not tolerant to cholinesterase inhibitors | See above table regarding dosing of memantine |
| **Antipsychotic Drugs** | • Due to limited efficacy and significant safety concerns, antipsychotic medications are reserved for severe, refractory behavioral symptoms after other measures have been tried and other contributors have been excluded<br>• Antipsychotics are NOT FDA approved for treatment of behavioral problems associated with dementia and labeling contains a black box warning noting an increased risk of death in geriatric patients being treated for behavioral problems associated with dementia<br>• No clinical trials inform the use of antipsychotic agents in patients with dementia of Lewy bodies specifically<br>• In dementia with Lewy bodies, there is potential for severe sensitivity reactions, including exacerbations of parkinsonism, confusion or autonomic dysfunction, which can limit usefulness of antipsychotic medications in these patients | If antipsychotic therapy is required in patients with dementia of Lewy bodies, only atypical antipsychotic drugs, such as olanzapine or quetiapine should be used in very small doses in order to reduce risk of severe reactions<br>• Olanzapine: 2.5 to 5 mg orally once daily. Further dosage adjustments of no more than 2.5 to 5 mg/day, if indicated, should occur at weekly intervals<br>• Quetiapine: 25 mg orally once or twice daily. Further dose adjustments of 25 to 50 mg twice per day, if indicated, should occur at intervals of not less than 2 to 7 days. A maximum of 150 mg per day has been suggested<br>• Risperidone: 0.25 mg once or twice daily for an initial starting dose. Maximum recommended daily dose of 2 mg.<br><br>If typical antipsychotic is needed to help control aggressions, could consider use of:<br>• Haloperidol: 0.25 to 0.5 mg by mouth 1 to 2 times per day. Increase by no more than 0.5 mg every 4 to 7 days if needed. Sedative effects may be minimized by utilizing a single bedtime dose. Maximum recommended daily dose of 2 mg. |

Other psychotropic medications – there have been no systemic studies of the use of antidepressants, anxiolytics, benzodiazepines or anticonvulsants in the treatment of the behavioral and psychiatric symptoms in dementia of Lewy bodies

- SSRIs and SNRIs are commonly used in the treatment of depression or anxiety, for some patients with dementia of Lewy bodies, these medications may affect sleep and potentially exacerbate REM sleep behavior disorder
- Benzodiazepines are generally **AVOIDED** (except for REM sleep disorder), especially for long term use, because of the potential for worsening confusion, gait disorder and paradoxic agitation
- Tricyclic agents are typically **AVOIDED** because of their anticholinergic properties

# Management (continued)

| Disease-Specific Treatments for Vascular Cognitive Impairment & Dementia | | |
|---|---|---|
| **Cholinesterase Inhibitors** | • Initiation is suggested in patients with vascular dementia who have progressive cognitive decline that cannot be directly attributed to a clinical stroke | See above table for dosing of medications |
| **Memenatine** | • A Cochrane review indicates that in vascular dementia, memantine probably provides a small benefit for thinking difficulties, behavior and mood and maybe less agitation | See above table for dosing of medications |

| Disease-Specific Treatments for Frontotemporal Dementia | | |
|---|---|---|
| **Serotonergic Medications** | • Treatment trial of an SSRI is suggested as initial pharmacotherapy for patients with troubling behavioral symptoms of frontotemporal dementia | See Appendix 3 for dosing ranges of SSRIs as well as degree of adverse effects |
| **Atypical Antipsychotic Medications** | • Can help with agitation and other neurobehavioral symptoms<br>• Due to adverse effects and increased risk of mortality, these should only be considered as a last resort only after trying behavioral modifications and SSRIs | See above for dosing recommendations of common atypical antipsychotics |

- Memantine is **NOT** recommended for use in patients with frontotemporal dementia
- Antiseizure medications (ex. carbamazepine, valproate, lamotrigine) have been used to manage neurobehavioral symptoms in other neurodegenerative dementias, but without convincing evidence of efficacy
- Benzodiazepines are generally **NOT** recommended because they have negative effects on cognition and can precipitate paradoxical agitation

# Lifestyle Modifications

### Physical Activity

- Recommend to adults with normal cognition to reduce the risk of cognitive decline
- May recommend to adults with mild cognitive impairment to reduce the risk of cognitive decline
- See Appendix 1 for specific recommendations on physical activity from the World Health Organization

### Tobacco Cessation

- Interventions for tobacco cessation should be offered to adults who use tobacco since they may reduce risk of cognitive decline and dementia

### Alcohol Restriction

- Interventions aimed at reducing or ceasing hazardous and harmful drinking of alcohol should be offered to adults with normal cognition and mild cognitive impairment to reduce risk of cognitive decline and/or dementia in addition to other health benefits

### Management of Co-morbidities

- Appropriately managing overweight and/or obesity, hypertension, diabetes, dyslipidemia reduces the risk of cognitive decline and/or dementia

# Supportive Care

### Nutrition
- Inadequate nutrition is associated with increased morbidity and mortality
- Interventions such as assisted feeding and oral nutritional supplements may improve weight

### Rehabilitation
- These approaches have a significant advantage in that there are no side effects that would significantly complicate drug treatments in this patient population. However, research is still needed to confirm benefits
- Cognitive rehabilitation
  - Aims to help patients in the early stages of dementia to maintain memory and higher cognitive function and to devise strategies to compensate for declining function
- Exercise programs
- Occupational therapy

### Alcohol Use
- Can exacerbate cognitive dysfunction and behavioral disturbance in patients with dementia

### Advanced Care Planning
- Critical to management of patients with advanced dementia and should occur throughout the disease process
- In patients with dementia, the following is emphasized:
  - Start early
  - Talk about what is to come
  - As the disease progresses, referral for a palliative care consult can be helpful for families and caregivers
- Advanced care planning should be reviewed by the provider annually at minimum
  - Review MOLST form, health care proxy forms, advanced directives, etc.

### Support for Caregivers
- Counseling and participation in support groups can be beneficial
- Respite care and elder daycare may also be of benefit in providing a period of relief for caregivers

# Referrals

**Consider Referral to Neurology for**

- Uncertain diagnosis (especially if considering non-Alzheimer's dementia)
- Onset in patients <65 years old
- Those patients with a strong family history of dementia
- In the setting of rapidly progressing disease, or
- Notable patient-specific decline with loss of ADL
- For assistance with complex pharmacological management

**Consider consulting GLIN IPA Pharmacy team for a polypharmacy evaluation if medications are suspected to be contributing to cognitive decline**

# References


1. Risk reduction of cognitive decline and dementia: WHO guidelines. https://www.who.int/publications/i/item/risk-reduction-of-cognitive-decline-and-dementia. https://www.who.int/publications/i/item/risk-reduction-of-cognitive-decline-and-dementia. Published January 1, 2019.

2. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), American Psychiatric Association, 2013

3. Larson EB. Evaluation of cognitive impairment and dementia. UpToDate. https://www.uptodate.com/contents/evaluation-of-cognitive-impairment-and-dementia?search=treatment+of+dementia&topicRef=5080&source=see_link. Published 2022. Accessed January 10, 2023.

4. Practice parameter: Diagnosis of dementia (an evidence-based review). Report of the Quality Standards Subcommittee of the American Academy of Neurology

5. D. S. Knopman, S. T. DeKosky, J. L. Cummings, H. Chui, J. Corey–Bloom, N. Relkin, G. W. Small, B. Miller, J. C. Stevens, Neurology May 2001, 56 (9) 1143-1153; DOI: 10.1212/WNL.56.9.1143

6. Press D, Buss S. Treatment of Alzheimer disease. UpToDate. https://www.uptodate.com/contents/treatment-of-alzheimer-disease?search=treatment%20of%20dementia&topicRef=5080&source=see_link#. Published 2022. Accessed January 11, 2023.

7. Press D. Management of the patient with dementia. UpToDate. https://www.uptodate.com/contents/management-of-the-patient-with-dementia?search=treatment+of+dementia&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1#H540485179. Published 2022. Accessed January 11, 2023.

8. McFarland N. Prognosis and treatment of dementia with Lewy bodies. UpToDate. https://www.uptodate.com/contents/prognosis-and-treatment-of-dementia-with-lewy-bodies?search=treatment+of+dementia&topicRef=5080&source=see_link#H434745431. Published 2022. Accessed January 11, 2023.

9. Smith EE, Wright CB. Treatment of vascular cognitive impairment and dementia. UpToDate. https://www.uptodate.com/contents/treatment-of-vascular-cognitive-impairment-and-dementia?search=treatment+of+dementia&topicRef=5080&source=see_link#H9. Published 2022. Accessed January 11, 2023.

10. Lee SE. Frontotemporal dementia: Treatment. UpToDate. https://www.uptodate.com/contents/frontotemporal-dementia-treatment?search=treatment+of+dementia&topicRef=5080&source=see_link. Published 2022. Accessed January 11, 2023.

# Appendix

## Appendix 1

**WHO's Global recommendations on physical activity for health** (2010)
*(http://www.who.int/dietphysicalactivity/publications/9789241599979/en/)*

*Below is an extract from these recommendations for adults 65 years and above:*

For adults 65 years and above, physical activity includes recreational or leisure-time physical activity, transportation (e.g. walking or cycling), occupational (if the person is still engaged in work), household chores, play, games, sports or planned exercise, in the context of daily, family, and community activities. In order to improve cardiorespiratory and muscular fitness, bone and functional health, and reduce the risk of NCDs, depression and cognitive decline, the following are recommended:

1. Adults aged 65 years and above should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week, or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity.

2. Aerobic activity should be performed in bouts of at least 10 minutes' duration.

3. For additional health benefits, adults aged 65 years and above should increase their moderate-intensity aerobic physical activity to 300 minutes per week, or engage in 150 minutes of vigorous-intensity aerobic physical activity per week, or an equivalent combination of moderate- and vigorous-intensity activity.

4. Adults of this age group with poor mobility should perform physical activity to enhance balance and prevent falls on 3 or more days per week.

5. Muscle-strengthening activities should be done involving major muscle groups, on 2 or more days per week.

6. When adults of this age group cannot do the recommended amounts of physical activity due to health conditions, they should be as physically active as their abilities and conditions allow.

Overall, across all the age groups, the benefits of implementing the above recommendations, and of being physically active, outweigh the harms. At the recommended level of 150 minutes per week of moderate-intensity activity, musculoskeletal injury rates appear to be uncommon. In a population-based approach, in order to decrease the risks of musculoskeletal injuries, it would be appropriate to encourage a moderate start with gradual progress to higher levels of physical activity.

# Appendix 2

### Psychosocial interventions for management of behavioral and psychotic symptoms in patients with dementia

| |
|---|
| ▪ Routine activity. |
| ▪ Separate the person from what seems to be upsetting them. |
| ▪ Assess for the presence of pain, constipation, or other physical problem. |
| ▪ Review medications, especially new medications. |
| ▪ Travel with them to where they are in time. |
| ▪ Don't disagree; respect the person's thoughts even if incorrect. |
| ▪ Physical interaction: Maintain eye contact, get to their height level, and allow space. |
| ▪ Speak slowly and calmly in a normal tone of voice. The person may not understand the words spoken, but they may pick up the tone of the voice behind the words and respond to that. |
| ▪ Avoid finger-pointing, scolding, or threatening. |
| ▪ Redirect the person to participate in an enjoyable activity or offer comfort food they may recognize and like. |
| ▪ If you appear to be the cause of the problem, leave the room for a while. |
| ▪ Validate that the person seems to be upset over something. Reassure the person that you want to help and that you love them. |
| ▪ Avoid asking the person to do what appears to trigger an agitated or aggressive response. |



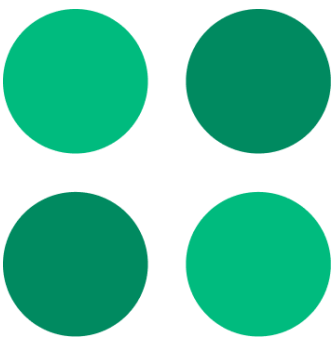
UpToDate®

# Appendix 3
## Common SSRIs with Typical Dosing & Degree of Adverse Effects

| Drug<br><br>Typical Dosing Range | Anticholinergic | Drowsiness | Insomnia/Agitation | Orthostatic Hypotension | QTc Prolongation | GI Toxicity | Weight Gain | Sexual Dysfunction |
|---|---|---|---|---|---|---|---|---|
| **Citalopram (Celexa™)**<br><br>**20 to 40 mg per day** | 0 | 0 | 1+ | 1+ | 3+ | 1+ | 1+ | 3+ |
| **Escitalopram (Lexapro™)**<br><br>**10 to 20 mg per day** | 0 | 0 | 1+ | 1+ | 2+ | 1+ | 1+ | 3+ |
| **Fluoxetine (Prozac™)**<br><br>**20 to 80 mg per day** | 0 | 0 | 2+ | 1+ | 1+ | 1+ | 1+ | 3+ |
| **Paroxetine (Paxil™, Paxil CR™)**<br><br>**20 to 50 mg per day (CR: 25 to 62.5 mg per day)** | 1+ | 1+ | 1+ | 2+ | 0 to 1+ | 1+ | 2+ | 4+ |
| **Sertraline (Zoloft™)**<br><br>**50 to 200 mg per day** | 0 | 0 | 2+ | 1+ | 1 to 2+ | 2+ | 1+ | 3+ |

Scale: 0 = none, 1+ = slight, 2+ = low, 3+ = moderate, 4+ = high

GLIN.COM



For additional questions, please reach out to your assigned Practice Transformation Consultant.