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Prescribing for Late-Life Depression and Behavioral Symptoms in Dementia

Clinical Pitfalls and Rational Pharmacology

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Learning Objectives

01 **Objective 1**
Distinguish typical from atypical presentations of depression and anxiety in older adults — and explain how this alters diagnostic and prescribing decisions.

02 **Objective 2**
Compare first-line pharmacologic options for depression, anxiety, and BPSD in outpatient and nursing home settings, including expected benefits, time to effect, and risk tradeoffs.

03 **Objective 3**
Identify high-risk and potentially inappropriate medications (Beers, anticholinergics, sedative-hypnotics) and apply deprescribing principles to real-world cases.

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Why This Matters

90%
of persons with dementia experience BPSD at some point

15–20%
of nursing home residents have clinically significant depression

The Stakes

- Untreated late-life depression **doubles** dementia risk (Ownby et al., Arch Gen Psychiatry 2006)
- Polypharmacy amplifies fall risk, cognitive burden, and hospital readmissions

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Depression in Older Adults: Atypical and Masked Presentations

Classic Presentations (often ABSENT)

- Sustained sad mood
- Overt tearfulness
- Anhedonia reported by patient
- Suicidal ideation expressed verbally

What Geriatric Depression Often Looks Like

- Somatic complaints: pain, fatigue, constipation, dizziness
- Cognitive complaints or pseudodementia
- Increased anxiety, agitation, or irritability
- Withdrawal from activities or meals
- Weight loss, frailty acceleration, loss of mobility
- Passive death wish — 'I just want to go' (PDW)

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Diagnosing Depression in Dementia

Apathy

- Diminished motivation to initiate or complete tasks
- Flat or blunted affect — not dysphoric
- No guilt, hopelessness, or worthlessness
- No suicidal ideation
- Does not respond well to antidepressants
- More closely tied to executive dysfunction / frontal-subcortical circuits

Overlap

- Both can cause withdrawal from activities
- Both can present as reduced engagement with family
- Both worsen quality of life and caregiver burden
- Both are associated with cognitive decline progression
- Distinguishing them requires longitudinal observation and informant interview

Depression

- Dysphoric mood — sadness, tearfulness (care partner-reported in dementia)
- Guilt, worthlessness, or hopelessness when expressible
- Passive death wish or suicidal ideation
- Anxiety, agitation, irritability co-occurring
- More likely to respond to SSRIs
- Can worsen cognition acutely (pseudodementia pattern)

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Cornell Scale for Depression in Dementia (CSDD)

The gold-standard informant + observation tool for assessing depression when self-report is unreliable

Mood-Related Signs

- Anxiety: fearful, apprehensive
- Sadness: despondent, tearful
- Lack of reactivity to pleasant events
- Irritability: easily annoyed, short-tempered

Behavioral Disturbance

- Agitation: restlessness, hand-wringing
- Retardation: slowed speech, impaired mobility
- Multiple physical complaints
- Loss of interest in usual activities

Physical Signs

- Appetite loss vs. baseline
- Weight loss (based on observation)
- Lack of energy: easily fatigued

Cyclic Functions

- Diurnal variation in mood (worse AM)
- Difficulty falling asleep
- Multiple awakenings or early AM awakening

Ideational Disturbance

- Suicidal ideation — expressed or behavioral
- Poor self-esteem: self-blame, self-deprecation
- Pessimism: anticipating the worst
- Mood-congruent delusions

Score ≥8 suggests depression. Administered by clinician using informant interview + direct patient observation. Takes ~20 min. Does NOT require patient self-report — validated for use in moderate-severe dementia.

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Anxiety in Older Adults: Presentations and Diagnostic Pitfalls

How Anxiety Presents in Older Adults

- Somatic focus: cardiac, respiratory, GI complaints
- Avoidance behaviors — fear of falling → reduced mobility
- Nighttime restlessness, sleep-onset insomnia
- Reassurance-seeking in dementia → labeled 'behavioral' when anxiety-driven
- Hypervigilance, clinging behavior (NH residents)
- PTSD re-experiencing — often missed in oldest old
- GAD underdiagnosed: chronic worry misattributed to 'personality'

Medical and Medication Causes to Rule Out First

- Hyperthyroidism, hypoglycemia, cardiac arrhythmia
- COPD, CHF, pulmonary embolism — dyspnea mimics anxiety
- Pain (uncontrolled) — especially in non-verbal dementia patients
- Caffeine, decongestants (pseudoephedrine), stimulants
- Benzodiazepine or anticholinergic withdrawal
- Akathisia (antipsychotic-induced) — mimics severe anxiety
- SSRI activation side effect early in treatment; bupropion

GAD-7 is validated in older adults. Anxiety disorders are the most common mental health condition in older adults — yet 70–80% go untreated. Long-term first-line treatment: SSRIs, SNRIs, and buspirone (not benzodiazepines).

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Dementia Subtype Matters: Behavioral Profiles

Alzheimer's Disease

- Anxiety and agitation — common in moderate stage
- Depression: ~30–50%, often early or mid-course
- Apathy: most prevalent neuropsychiatric symptom overall
- Psychosis (paranoid delusions, misidentification) — moderate to severe stage
- SSRIs generally well tolerated; first-line for depression
- Antipsychotics: limited evidence, modest effect on agitation

Vascular Dementia

- Depression very common — subcortical circuit disruption
- Emotional incontinence (pseudobulbar affect): laughing/crying disproportionate to stimulus
- Apathy prominent, often misdiagnosed as depression
- Stepwise decline; stroke events may acutely worsen BPSD
- Executive dysfunction → poor insight, safety judgment
- SSRIs first-line for depression

LBD / Parkinson's Disease Dementia

- Hallucinations early — often formed, visual, initially non-threatening
- REM sleep behavior disorder (RBD): very common, often precedes diagnosis
- Depression, anxiety, AND apathy all very common
- NEUROLEPTIC HYPERSENSITIVITY: huge risk — avoid dopamine antagonists
- Rivastigmine: some evidence for behavioral symptoms

⚠ NEVER use haloperidol, risperidone, olanzapine, or other D2-blocking antipsychotics in LBD/PDD — risk of irreversible parkinsonism, neuroleptic malignant syndrome, and death.

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Behavioral and Psychological Symptoms of Dementia (BPSD)

BPSD Spectrum

Affective Symptoms

- Depression, anxiety, apathy
- Emotional lability, dysphoria

Psychotic Symptoms

- Delusions (paranoid, misidentification)
- Hallucinations (visual most common in LBD)

Hyperactive/Agitated Symptoms

- Agitation, aggression, wandering
- Disinhibition, sexually inappropriate behavior
- Vocalization, sundowning

The DICE Approach — Non-Pharm First

D — Describe	Characterize precisely: frequency, antecedents, who is distressed? What changed?
I — Investigate	Medical causes (UTI, pain, delirium, constipation), medication side effects, unmet needs, environment
C — Create	Tailored care plan: activity programming, communication strategies, caregiver coaching, environmental modification
E — Evaluate	Did it work? Measure response objectively. Cycle through again if not.

CMS Guidance: SNFs must document non-pharmacologic attempts BEFORE initiating or continuing antipsychotics. Failure to comply = survey citation and potential civil monetary penalty.

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Non-Pharmacologic Interventions: The Evidence-Based Foundation

Exercise

Blumenthal et al. (JAMA, 1999): aerobic exercise equivalent to sertraline for major depression in older adults. Structured exercise programs in dementia reduce BPSD (Teri et al., JAMA 2003). Aim: 150 min/wk moderate-intensity aerobic + strength training 2×/wk.

Sleep

Bidirectional: poor sleep worsens depression, anxiety, agitation. CBT-I is superior to sleep medications in older adults. Bright light therapy (2500+ lux AM) reduces agitation in NH, improves sleep architecture. Avoid benzos, Z-drugs, and diphenhydramine.

Socialization

Social isolation is an independent risk factor for depression and cognitive decline. Activity-based programming (music, reminiscence therapy, pet therapy) reduces BPSD in RCTs. Person-centered care model reduces antipsychotic use in NH (Cohen-Mansfield et al.).

Nutrition & Diet

Mediterranean diet associated with lower depression risk and slower cognitive decline (PREDIMED). Nutritional deficiencies (B12, folate, D, omega-3) must be corrected before attributing mood changes to primary psychiatric illness. Weight loss in NH: rule out depression, pain, dysphagia, and medication side effects first.

Clinical Principle: For BPSD, non-pharmacologic interventions should always be attempted before or alongside medications. Document the attempt — it is a CMS regulatory requirement in SNFs.

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First-Line Pharmacotherapy for Late-Life Depression

Agent	Start / Target Dose	Strengths	Key Cautions (Geriatric)
Sertraline	12.5–25 mg / 50–100 mg	Best tolerability data in older adults; SADHART, STOP-PD evidence base	Hyponatremia; GI side effects; modest QTc effect
Escitalopram	5 mg / 10–20 mg	EFFICAD (good efficacy data); least CYP interactions of any SSRI	QTc prolongation (dose-dependent) — caution at 20 mg in elderly
Citalopram	10 mg / 20 mg*	Widely used; simple dosing	QTc warning — FDA max 20 mg in >60 yo; check ECG if cardiac disease
Venlafaxine	37.5 mg / 75–150 mg	Useful in neuropathic pain + vascular depression; SNRI coverage	BP elevation; discontinuation syndrome; falls risk at higher doses
Duloxetine	20–30 mg / 60 mg	Dual benefit in pain + depression (DM, OA, fibromyalgia)	Hepatic caution; modest anticholinergic burden; avoid in heavy EtOH use
Mirtazapine	7.5–15 mg / 15–30 mg	Useful in insomnia + anorexia; no QTc concern; sedating at low doses	Weight gain; sedation → falls; antihistamine burden increases at higher doses
Bupropion	37.5 mg SR / 150–300 mg XR	Activating; useful in apathy; no sexual side effects; no QTc	Lowers seizure threshold; avoid in poor PO intake or AUD

Time to effect: minimum 4 weeks for partial response; 8–12 weeks for full trial.

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Beers Criteria Pitfalls: Mood Agents

Tricyclic Antidepressants (amitriptyline, nortriptyline, doxepin)	High anticholinergic burden → delirium, urinary retention, cognitive impairment, falls. Cardiac conduction toxicity. **Doxepin ≤6 mg is the ONLY TCA with a Beers exception (insomnia at very low dose).**	AVOID
Paroxetine	Only SSRI on Beers list — substantial anticholinergic burden unique among SSRIs. Strong CYP2D6 inhibitor → drug interactions. Worst discontinuation syndrome of any SSRI. Avoid in all older adults.	AVOID
Mirtazapine (higher doses)	7.5–15 mg acceptable in selected patients (sedation helps insomnia/anorexia). At 30–45 mg, antihistamine burden increases along with weight gain and falls risk. Falls risk is real at any dose.	USE WITH CAUTION
Trazodone	Not on Beers but widely used for sleep in dementia. Orthostatic hypotension + falls risk is significant. Modest evidence for insomnia in dementia. Better than Z-drugs but still requires monitoring. Do not increae past 100 mg qhs.	USE WITH CAUTION
Benzodiazepines	Beers: STRONGLY recommend against in older adults for any chronic indication. All benzos associated with falls, cognitive impairment, MVAs, delirium, and physical dependence. No benefit for chronic anxiety vs. alternatives.	STRONGLY AVOID
Z-drugs (zolpidem, eszopiclone, zaleplon)	Beers explicit: avoid for insomnia in older adults. Cognitive and psychomotor effects similar to benzos. Zolpidem associated with complex sleep behaviors (FDA warning 2019). No long-term benefit.	AVOID

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Choosing Antidepressants by Dementia Subtype

Alzheimer's Disease	Sertraline, escitalopram first line. DIADS-2: modest effect, but still standard of care for clinical depression. Avoid TCAs. Address underlying behavioral drivers before assuming primary depression.
Vascular Dementia	SSRIs and SNRIs for co-occurring depression. Venlafaxine may address vascular headache/pain comorbidity. Rule out and treat vascular risk factors (HTN, DM, dyslipidemia). Nuedexta for pseudobulbar affect: FDA-approved but significant concerns.*
LBD / PDD	SSRIs are first line. Avoid mirtazapine (anticholinergic burden worsens cognition). Avoid all TCAs and paroxetine. SNRIs acceptable with monitoring. For RBD: melatonin (3–12 mg) highly recommended.
Frontotemporal Dementia (bvFTD)	SSRIs may reduce disinhibition and impulsivity (open-label evidence). Avoid antipsychotics if possible — poor evidence, high side-effect burden in FTD. No FDA-approved agent.
General Pharmacokinetic Principle	Hepatic/renal clearance declines with age; increased Vd for lipophilic drugs; reduced protein binding. Start at 25–50% of "adult" dose. Monitor for hyponatremia (SIADH) with any SSRI/SNRI within 2–4 weeks of initiation.

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Benzodiazepine Use in Older Adults: What the Evidence Says

Epidemiology and Harms

- ~8–10% of community-dwelling older adults use benzos regularly; higher in NH
- ~50% of users remain on benzos >1 year despite guidelines
- Associated with: falls and fractures (OR 1.5–2.0), MVAs, delirium, pneumonia
- Cognitive effects may be persistent — Billioti de Gage et al. (BMJ 2014): 51% increased dementia risk with prolonged benzo use
- All benzos Class C on Beers — avoid in older adults regardless of indication
- Especially dangerous in LBD/PDD: sedation, respiratory depression, falls

When Benzos Are and Aren't Appropriate

Potentially Acceptable (short-term only)

- Alcohol withdrawal (CIWA protocol)
- Acute seizures
- Palliative/comfort care settings
- Procedural anxiolysis (one-time use)

Not Appropriate Long-Term

- GAD, panic disorder → SSRIs/SNRIs/buspirone preferred
- Chronic insomnia → CBT-I preferred; benzos worsen sleep architecture
- PTSD → SSRIs/SNRIs; benzos may worsen re-experiencing

Stopping benzodiazepines abruptly in long-term users risks seizures and delirium. Always taper — next slide.

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Benzodiazepine Tapering: A Practical Framework

Pre-Taper Assessment

- Confirm original indication — was it ever appropriate? Is it still active?
- Assess current use: frequency, dose, duration. Daily use >4 weeks = physiologic dependence likely.
- Convert to diazepam equivalents; switch to long-acting benzo (diazepam or clonazepam) for smoother taper if on short-acting agent

Step 1 Convert	Step 2 Taper	Step 3 Pause if needed	Step 4 Adjuncts	Step 5 Finish
Convert to equivalent diazepam or clonazepam dose. Split into twice-daily dosing to smooth blood levels and reduce peak-trough variability.	Reduce by 10% of ORIGINAL dose every 2 weeks. This is slower than standard adult tapering — intentionally. Do not use percentage of current dose.	If withdrawal symptoms emerge (tremor, diaphoresis, HR elevation, anxiety surge) — hold, do NOT accelerate. Resume when symptoms resolve.	Start buspirone or an SSRI before taper is complete to address underlying anxiety. These take 2–4 weeks to work — plan ahead.	Final 25% of the taper is hardest. Longer hold times at each step. Counsel: normal to feel worse briefly. Most patients feel better 4–8 weeks post-taper.

Evidence: Structured tapering achieves abstinence in 40–80% of long-term benzo users. Brief physician advice alone increases successful cessation (Darker et al., Cochrane 2015). Patient motivation is the strongest predictor of success.

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Antipsychotics for BPSD: Evidence, Black Box, and Honest Tradeoffs

What the Evidence Actually Shows

CATIE-AD (Schneider et al., NEJM 2006)

- Olanzapine, quetiapine, risperidone vs. placebo for BPSD in AD
- No significant difference in primary outcome (time to all-cause discontinuation)
- Side effects — metabolic, sedation, EPS — were common and dose-dependent
  - Risperidone showed modest benefit for aggression and psychosis in post-hoc analyses

Best evidence by agent:

- Risperidone: most RCT data; modest effect for agitation/psychosis
- Aripiprazole: better metabolic profile; FDA-approved Rexulti (brexpiprazole) for AD agitation 2023
- Quetiapine: widely used, sedating, weaker evidence; preferred in LBD/PDD
- Haloperidol: avoid unless acute crisis with no alternative; highest EPS risk

The FDA Black Box

- 1.6–1.7× increased risk of death vs. placebo in elderly dementia patients
- Cause: pneumonia, cardiovascular events, sudden cardiac death
- Applies to ALL antipsychotics — first and second generation equally
- Not FDA-approved for dementia-related behavioral symptoms (except brexpiprazole)
- Documentation required: informed consent, quarterly reassessment, annual GDR attempt
- NNT for benefit vs. NNH for harm — have this conversation with families explicitly

Brexpiprazole (Rexulti): FDA approved May 2023 for agitation associated with AD. First and only approved indication. NNT ~9. Consider when documented non-pharm attempts have failed and informed consent is in place.

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Long-Term Antipsychotic Use in Nursing Homes

When Continuation May Be Justified

- Documented trial of dose reduction that resulted in significant behavioral deterioration
- Severe psychosis or aggression causing harm, unresponsive to non-pharm + alternatives
- **Underlying psychiatric illness (schizophrenia, schizoaffective) predating dementia — strongest evidence base for long-term use**
- Informed decision-making with patient or surrogate with explicit discussion of black box warning
- CMS requires: quarterly reassessment + dose reduction attempt at least annually — document every attempt

Monitoring and Gradual Dose Reduction (GDR)

Ongoing Monitoring

- Weight, BMI, fasting glucose/lipids — metabolic syndrome screening
- AIMS scale at baseline + q6 months — screen for tardive dyskinesia
- QTc if on QTc-prolonging agents (haloperidol, ziprasidone)
- Orthostatic BP: fall risk assessment

GDR Protocol

- Reduce by 25–33% every 1–2 weeks
- Monitor for 4 weeks at each level before further reduction
- Behaviors recur at lower dose: hold, manage acutely, re-attempt GDR at 3 months

Tardive dyskinesia: cumulative, potentially irreversible. Highest risk with first-generation antipsychotics and high-dose long-duration use. Screen with AIMS. If TD develops: valbenazine (Ingrezza) or deutetrabenazine (Austedo).

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LBD / PDD: Managing Psychosis and Agitation Without Harm

Quick reminder: Neuroleptic hypersensitivity affects ~50% of LBD/PDD patients — haloperidol, risperidone, olanzapine, aripiprazole, and most antipsychotics are contraindicated.

Quetiapine

Lowest D2 receptor binding among atypical antipsychotics. Best-tolerated option in LBD. Consensus recommendation (no strong RCT in LBD specifically). Start: 12.5–25 mg QHS. Titrate slowly. Monitor for orthostatic hypotension.

Clozapine

Strongest evidence for LBD/PDD psychosis. Requires mandatory REMS enrollment — weekly CBC for 6 months (agranulocytosis risk), then biweekly, then monthly. Start 6.25 mg; target 25–75 mg. Not practical for most SNF settings.

Pimavanserin (Nuplazid)

FDA-approved for psychosis in Parkinson's disease. 5-HT2A inverse agonist — no D2 blockade, no EPS risk. Dose: 34 mg daily. Evidence: HARMONY trial and pivotal RCT. QTc prolongation concern; drug interactions (CYP3A4). Not FDA-approved for LBD specifically — off-label use.

Rivastigmine (Exelon) — First Consider This

Emre et al. (NEJM 2004): rivastigmine improved both cognitive and behavioral symptoms in PDD in a landmark RCT. Reduces hallucinations and agitation. Cholinesterase inhibitor — the mechanism makes biological sense given ACh deficiency in LBD/PDD. Preferred first-line for behavioral symptoms BEFORE considering any antipsychotic. Patch formulation reduces GI side effects.

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Mood Stabilizers in Geriatric Psychiatry: Valproate

Valproate (Divalproex Sodium): Evidence Summary

In BPSD / Agitation:

- CATIE-AD substudy and multiple small RCTs: inconsistent, often negative results
- Tariot et al. (2001): modest agitation reduction vs. placebo in moderate AD, but significant sedation
- Lonergan et al. (Cochrane 2009): insufficient evidence to recommend for agitation in dementia
- AGS and APA guidelines do NOT recommend as first-line for BPSD

May be appropriate when:

- Co-occurring bipolar disorder with dementia (continuing established therapy)
- Epilepsy comorbidity — therapeutic overlap

Geriatric Monitoring Concerns

- Thrombocytopenia — check CBC
- Hyperammonemic encephalopathy (VHE): can occur with normal LFTs and normal valproate levels — check ammonia if acutely confused
- Hepatotoxicity: LFTs at baseline, 6 months, annually
- Carbapenem antibiotics reduce valproate levels to near-zero — major interaction
- NSAIDs, phenytoin, carbamazepine interactions
- Target therapeutic level: 50–100 mcg/mL; start 125 mg BID in older adults

Bottom line: Valproate has a narrow role in BPSD — primarily where bipolar disorder is a confirmed prior diagnosis, or when first- and second-line options have genuinely failed with documented trial.

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Lithium in Late Life: Risks, Monitoring, and Emerging Science

Standard Use: Bipolar Disorder Continuation

- Patients with well-controlled bipolar disorder should not be automatically switched off lithium in late life
- Strongest evidence for relapse prevention among mood stabilizers

Pharmacokinetic changes in older adults:

- Renal clearance declines → lithium accumulates → toxicity at 'normal' doses
- Narrow therapeutic index becomes even narrower — target 0.4–0.8 mEq/L in elderly (vs. 0.8–1.2 standard)
- Starting doses: 150 mg BID — very low
- Critical drug interactions: NSAIDs, ACE-I/ARBs, thiazides all significantly increase lithium levels

Emerging Neuroprotective Signal

Mechanistic / Observational:

- Lithium inhibits GSK-3β → reduces tau phosphorylation and amyloid production
- Bipolar patients on long-term lithium have lower dementia rates than those on other mood stabilizers (Nunes et al., BJP 2007)
- Trace lithium in drinking water inversely associated with dementia rates in ecological studies

Prospective Trials:

- Forlenza et al. (BJP 2011): low-dose lithium slowed cognitive decline in amnestic MCI (small RCT)
- LATTICE and NOBLE (nmicrodose) trials: ongoing RCTs in MCI/AD — results pending

Clinical take:

- Interesting signal — not ready for routine use in dementia. Monitor literature.

Monitoring: lithium level, SCr/eGFR, TSH every 3–6 months. Signs of toxicity: tremor, polyuria, nausea. Neurotoxicity can occur at 'therapeutic' levels in elderly. Any acute illness → hold lithium and recheck level.

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Deprescribing Psychotropics: A Practical Framework

1 — Full Medication Reconciliation

Every medication, every dose, every route — including OTC, supplements, and PRN medications. Know who prescribed what, and when. Identify the full psychotropic burden at once, not piecemeal.

2 — Review All Indications

Is each psychotropic's indication still active and valid? Many were started during an acute episode or hospitalization and were never intended to be long-term. 'Legacy prescriptions' are extremely common.

3 — Assess All CNS Medications Holistically

Apply Beers and STOPP criteria. Calculate anticholinergic burden score. Identify cascade prescribing (drug prescribed to treat the side effect of another drug). Weigh cumulative CNS sedation, fall risk, and cognitive burden.

4 — Taper and Monitor

Never stop psychotropics abruptly — benzos, antidepressants, and antipsychotics all require structured tapering. Monitor for withdrawal AND for recurrence of the underlying condition. Document every attempt.

Cascade prescribing example: antipsychotic → akathisia/EPS → benzodiazepine prescribed → sedation + falls → zolpidem added → delirium → antipsychotic dose increased. Unwind the cascade.

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Case Discussion 1: The Nursing Home Polypharmacy Challenge

Case: Mrs. R., 84F with moderate Alzheimer's dementia (MMSE 14/30), nursing home resident × 2 years.

Current psychotropic regimen: sertraline 50 mg daily (anxiety/depression, started 3 years ago), lorazepam 0.5 mg BID PRN (started during hospitalization 18 months ago, now taken daily), quetiapine 50 mg QHS (started for 'sundowning' 6 months ago). She falls 2–3×/month and has had 2 fractures. Staff report she is 'always confused after medications.'

Q1: Medication Review

What is the most dangerous medication in her current regimen given her presentation? How do you communicate this to the care team?

Q2: Deprescribing Priority

Construct a deprescribing sequence. What do you taper first, how fast, and what do you monitor?

Q3: Non-Pharm

What behavioral interventions should be added or enhanced before or during any medication taper?

Q4: Antipsychotic

Is the quetiapine justified? How would you document a GDR attempt per CMS requirements?

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Case Discussion 2: Visual Hallucinations in a Memory Clinic Patient

Case: Mr. T., 76M, referred to memory clinic for 6-month history of visual hallucinations (dogs in his living room), acting out dreams, progressive cognitive decline, and fluctuating alertness.

His PCP started risperidone 0.5 mg daily × 2 weeks ago for the 'agitation and hallucinations.' He now presents with severe rigidity, falls × 2, confusion worse than baseline. Wife reports he can barely walk. BP 92/58 on standing.

Q1: Diagnosis

What is the most likely diagnosis? What core and suggestive features support it?

Q2: Immediate Management

What do you do right now in clinic? Is this a medical emergency? What supportive care is needed?

Q3: Alternative Management

He still has disturbing hallucinations. What are evidence-based alternatives? How do you counsel the family?

Q4: Systems Change

What systems-level intervention would have prevented this?

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Key Takeaways

- **Presentations differ.** Late-life depression and anxiety rarely look textbook. Watch for changes in behaviors.
- **Subtype shapes treatment.** LBD/PDD is a pharmacologic minefield. Most antipsychotics are contraindicated.
- **Non-pharm is the foundation.** Exercise, sleep hygiene, social engagement, and nutrition have RCT evidence. DICE before drugs.
- **Benzos have a short lease.** No long-term role in older adults for anxiety or insomnia. Start adjuncts and taper.
- **Beers is a starting point.** Review every medication list for CNS-active medications.
- **Mood stabilizers are niche.** Valproate: limited BPSD evidence, real geriatric risks. Lithium: continue if working; monitor carefully
- **Document. Taper. Reassess.** Every psychotropic should have a deprescribing plan.

Thank you | Questions welcome

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Supplements and Late-Life Mood/Cognition

Omega-3 (EPA/DHA)	Meta-analyses: modest antidepressant effect with high-EPA formulations (>60% EPA). VITAL-DEP (NEJM Evid 2022): no depression prevention in well-nourished older adults. Drug interaction: anticoagulants.	*Conditional adjunct; reasonable in partial antidepressant responders*
Vitamin D	VITAL trial (2019): no reduction in depression or cognitive decline. Deficiency is common and should be corrected. Toxicity risk at >4000 IU/day. Check 25-OH level.	*Correct deficiency; do NOT use mega-doses for mood*
B12 / Folate	Deficiency causes cognitive and mood disorders — always correct. B12 deficiency often subclinical; check methylmalonic acid if borderline. No RCT evidence for supplementation beyond deficiency correction.	*Screen and correct; do not supplement if replete*
Ginkgo biloba	GEMS (JAMA 2009): no prevention of dementia or cognitive decline. Drug interactions: anticoagulants, antiplatelet agents. No evidence for depression or BPSD. Bleeding risk.	*Do NOT recommend — advise discontinuation*

PRICE Framework: Proof (evidence grade) | Risks (interactions, toxicity) | Interactions (drug-supplement) | Cost/Commitment | Expectations (are patient's goals realistic?) — use this scaffold in any supplement discussion.

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