

Supplementary Material

Article Title: Targeted Treatment of Agitation in Alzheimer's Dementia: Prioritizing Function and Safety Over Sedation and Other Serious Harms

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Supplementary Table 1. Clinical Scenario Comparison: Pharmacological-First vs Evidence-Based Pathways in Agitation Management Across Care Settings

DISCLAIMER

This Supplementary Material has been provided by the author(s) as an enhancement to the published article. It has been approved by peer review; however, it has undergone neither editing nor formatting by in-house editorial staff. The material is presented in the manner supplied by the author.

Supplementary Material

Supplementary Table 1. Clinical Scenario Comparison: Pharmacological-First vs Evidence-Based Pathways in Agitation Management Across Care Settings

Pathway A: Pharmacological-First		Pathway B: Evidence-Based
Case 1: Urgent/Institutional Setting		
Clinical Scenario An 81-year-old man with moderate Alzheimer's dementia is a resident in a skilled nursing facility. At 2:00 AM, the patient is striking out at staff, shouting, and has disrupted two neighboring residents.		
Clinical response	Immediate response: On-call clinician contacted, with a request for "something to calm him down." Haloperidol 0.5 mg IM ordered by phone without bedside assessment.	Immediate response, per facility standing protocol: -Night nurse conducts rapid structured assessment (for delirium, UTI, pain, constipation) and notifies on-call clinician with assessment findings. -Verbal de-escalation using calm, low-stimulation approach. Familiar staff member engaged. - Medication may be appropriate for imminent danger, but should be paired with assessment, lowest effective dose, documentation, and reassessment. - If a plan is not yet in place to decrease the frequency and severity of agitation behaviors moving forward, such a plan should be considered.
Outcome	• Patient sedated and unable to participate in morning care. • Aspiration risk elevated; fall risk increased. • Behaviors likely to recur; no plan in place.	• Precipitant condition identified and treated (constipation). • Agitation resolves within 45 minutes; patient returns to bed. • Patient alert, ate breakfast, participated in morning care.
Case 2: Ambulatory/Primary Care Setting		
Clinical Scenario A 76-year-old woman with early-to-moderate Alzheimer's dementia is brought to a primary care visit by her husband, who is her sole caregiver. He is visibly exhausted and states: "She's impossible to manage at home — I need something to calm her down." He describes daily episodes of pushing, yelling, and refusing to allow him to help her dress. He has not slept more than 4 hours in the past week.		
Clinical response	Visit response: Quetiapine 25 mg at bedtime prescribed. No target symptom defined. No monitoring plan established. Three weeks later: Caregiver returns: same pushing and refusal behaviors continue. Patient now sleeps until noon, misses breakfast, appears more confused. Caregiver burden and distress increased. Prior authorization for a different agent later denied. No baseline documentation available.	Visit response: -PAS administered. -Target symptom/behavior defined collaboratively with caregiver: "She pushes me away and shouts when I try to help her dress in the morning." - FDA-approved agent initiated. - Caregiver referred to Alzheimer's Association 24/7 helpline and local support group.
Outcome	• No objective baseline; improvement unmeasurable. • Caregiver concerns persist. • Over-sedation produced new symptoms (late sleep, increased confusion).	• 56% reduction in PAS score at 2 weeks — objective, documentable improvement. • Caregiver burden and distress reduced; patient re-engaged in morning routine. • Patient alert and participating in care; no sedation-related adverse events.

Case 3: Long-Term Care Setting

Clinical Scenario

An 83-year-old woman with advanced Alzheimer's dementia in a skilled nursing facility is currently prescribed quetiapine 25 mg QHS, trazodone 50 mg QHS, and lorazepam 0.5 mg PRN (administered 4–5 times per week). Over the past three weeks, verbal outbursts and resistance to care have escalated. Staff report one incident of hitting staff. Facility documentation is incomplete; no behavioral plan is on file and the rationale for PRN use is undocumented.

Clinical response	Response: Quetiapine increased to 50 mg. Trazodone continued. Lorazepam PRN continued without documentation as to rationale. No behavioral assessment performed; no precipitant etiologies identified. <i>Note: In LTC, psychotropic use for sleep or sedation alone, or without a documented indication and monitoring, violates CMS F-Tag 605.</i>	Response: • DICE assessment performed. Precipitant conditions identified: new staff member assigned to morning care (interpersonal trigger); untreated low back pain (expressed discomfort during transfers). • FDA-approved agent initiated. • Off-label medications gradually tapered after individualized risk-benefit review, with monitoring for withdrawal and rebound.
Outcome	• Escalating polypharmacy without documented rationale. • Two unwitnessed falls; increased sedation. • Behaviors unchanged — precipitant etiologies never identified. • Regulatory violation under CMS F-Tag 605 (42 CFR §483.45).	• Simplified regimen: three agents replaced by one evidence-based agent. • Precipitants (new staff, pain) identified and addressed. • PAS score decreased 60% at 4-week follow-up. • No falls; patient alert and engaged in activity programming.

Abbreviations: DICE = Describe, Investigate, Create, Evaluate; FDA = Food and Drug Administration; IM = intramuscular; PRN = as needed; QHS = every bedtime at hour of sleep.