Defining the Challenge: Managing Behavioral and Psychiatric Symptoms of Dementia

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Objectives

Describe	Describe the current data related to rates of dementia and antipsychotic use in nursing homes.
Identify	Identify the non-pharmacological strategies for mitigating disruptive and aggressive behaviors of residents with moderately advanced dementia.
Define	Define the risks of antipsychotic medications for dementia behaviors.

Conflicts of Interest

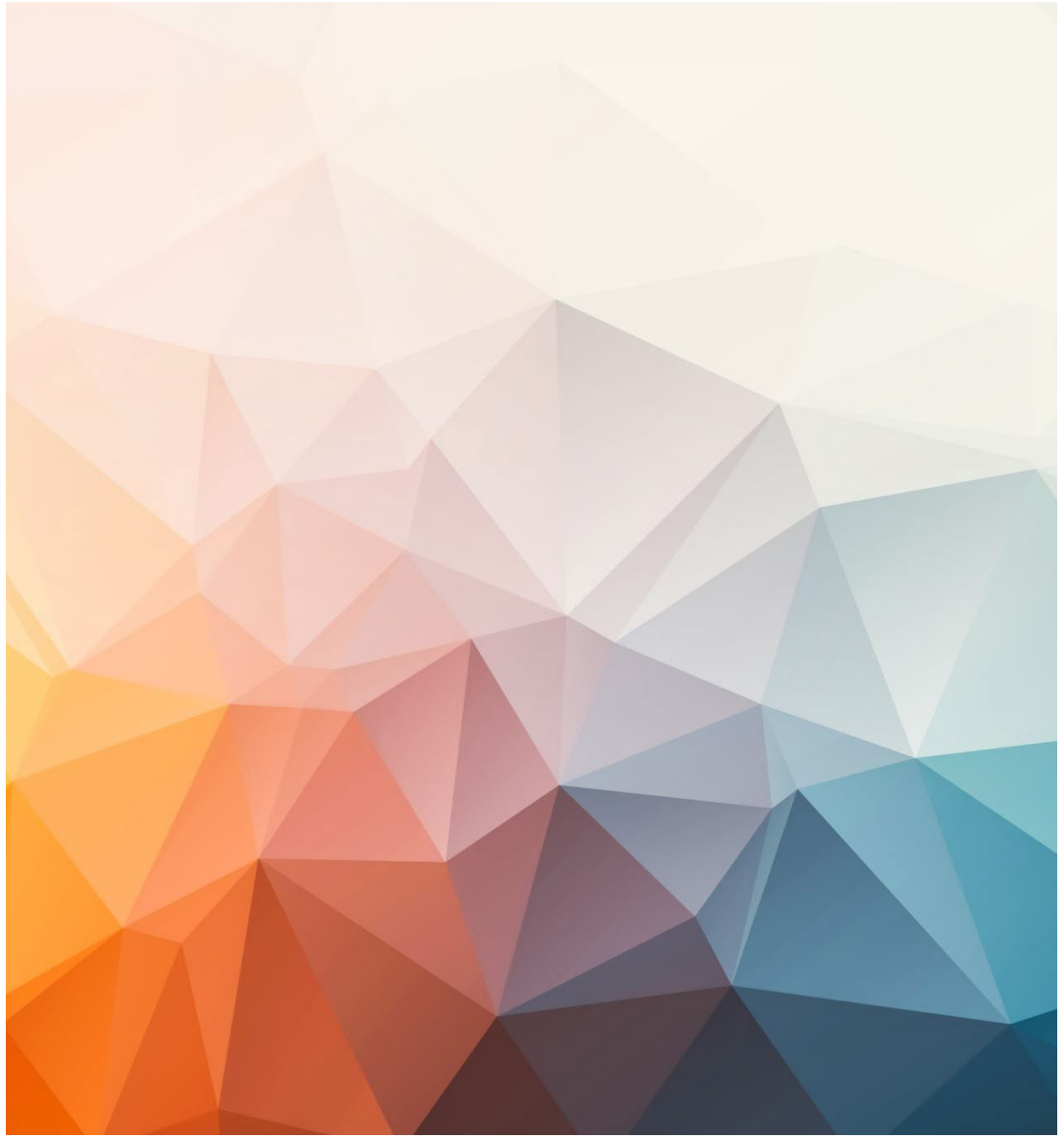
Passion for geriatrics and the care of older adults

Consultant to HealthCentric Advisors

Unpaid consultant for American Geriatrics Society, Fragility Fracture Network, and AO Trauma

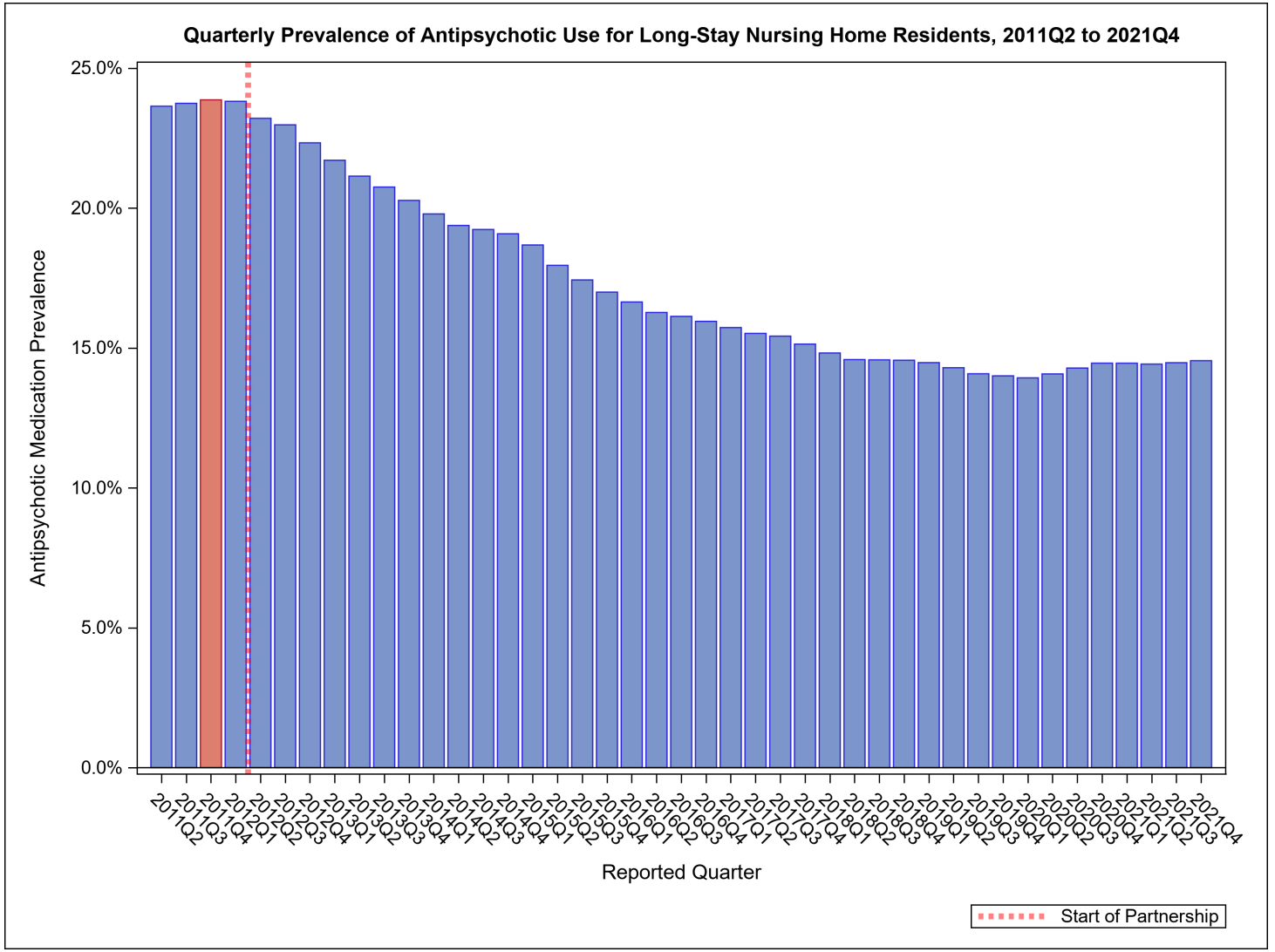
Outline

- Data
- Definitions
- Non-pharmacological strategies
- Series outline

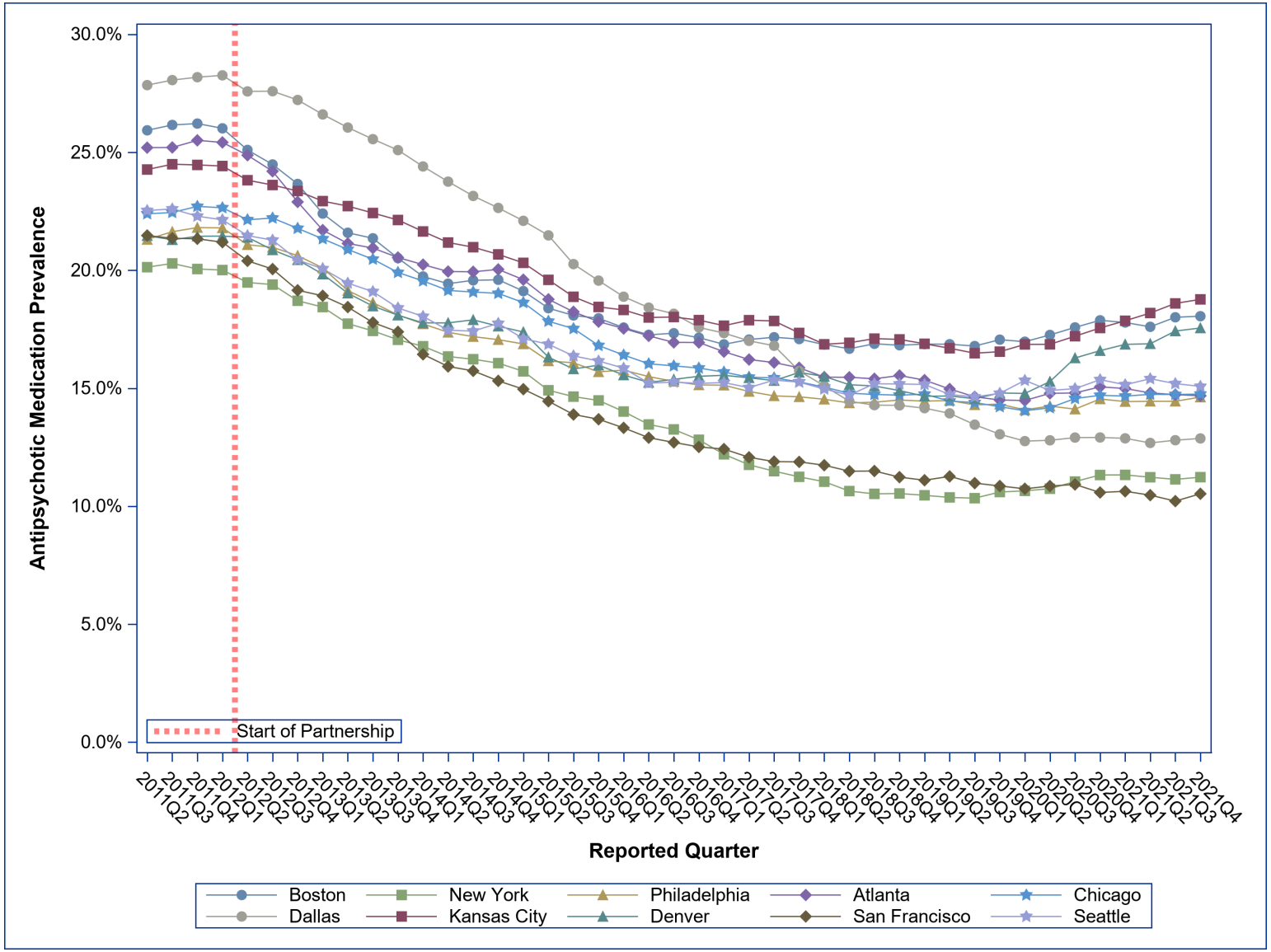


How are we Doing?

- **National Partnership to Improve Dementia Care in Nursing Homes: Antipsychotic Medication Use Data Report (April 2022)**



Rates Vary by Region



Nationally 39% Decline from 2011 to 2021

location	2011Q4	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	Percentage point difference (2011Q4-2021Q4	% Change
National	23.9%	15.5%	15.4%	15.1%	14.8%	14.6%	14.6%	14.6%	14.5%	14.3%	14.1%	14.0%	13.9%	14.1%	14.3%	14.5%	14.5%	14.4%	14.5%	14.5%	-9.3	-39.1%
Boston	26.2%	17.1%	17.2%	17.1%	16.9%	16.7%	16.9%	16.8%	16.9%	16.9%	16.8%	17.1%	17.0%	17.3%	17.6%	17.9%	17.8%	17.6%	18.0%	18.1%	-8.1	-31.1%
New York	20.1%	11.8%	11.5%	11.2%	11.0%	10.6%	10.5%	10.5%	10.5%	10.4%	10.3%	10.6%	10.7%	10.7%	11.0%	11.3%	11.3%	11.2%	11.1%	11.2%	-8.8	-44.0%
Philadelphia	21.8%	14.9%	14.7%	14.6%	14.5%	14.4%	14.4%	14.5%	14.5%	14.5%	14.3%	14.3%	14.1%	14.2%	14.1%	14.5%	14.4%	14.4%	14.4%	14.6%	-7.1	-33.0%
Atlanta	25.5%	16.2%	16.1%	15.9%	15.5%	15.5%	15.4%	15.5%	15.3%	15.0%	14.6%	14.5%	14.5%	14.8%	14.8%	15.1%	15.0%	14.8%	14.7%	14.7%	-10.8	-42.4%
Chicago	22.7%	15.5%	15.4%	15.3%	15.0%	14.8%	14.7%	14.7%	14.7%	14.5%	14.4%	14.2%	14.0%	14.2%	14.6%	14.7%	14.7%	14.7%	14.7%	14.8%	-7.9	-35.0%
Dallas	28.2%	17.0%	16.8%	15.7%	15.1%	14.4%	14.3%	14.3%	14.2%	13.9%	13.5%	13.1%	12.8%	12.8%	12.9%	12.9%	12.9%	12.7%	12.8%	12.9%	-15.3	-54.3%
Kansas City	24.5%	17.9%	17.9%	17.3%	16.9%	16.9%	17.1%	17.1%	16.9%	16.7%	16.5%	16.6%	16.9%	16.9%	17.2%	17.6%	17.9%	18.2%	18.6%	18.8%	-5.7	-23.3%
Denver	21.4%	15.4%	15.3%	15.7%	15.5%	15.2%	15.1%	14.9%	14.7%	14.7%	14.6%	14.8%	14.8%	15.3%	16.3%	16.6%	16.9%	16.9%	17.4%	17.6%	-3.8	-18.1%
San Francisco	21.3%	12.1%	11.9%	11.9%	11.7%	11.5%	11.5%	11.2%	11.1%	11.3%	11.0%	10.9%	10.7%	10.9%	10.9%	10.6%	10.6%	10.5%	10.2%	10.5%	-10.8	-50.7%
Seattle	22.3%	15.0%	15.3%	15.3%	15.0%	14.7%	15.2%	15.2%	15.2%	14.7%	14.6%	14.8%	15.3%	14.9%	15.0%	15.4%	15.2%	15.4%	15.2%	15.1%	-7.2	-32.4%

Statewide Data

	2011Q4	2021Q4	Percentage Point Difference	% change	Rank
National	23.9	14.5	9.3	39.1	
CT	8	15.6	10.4	39.9	26
Maine	27.2	20.9	5.87	21.6	51
Mass	26.7	19.2	7.53	28.2	44
NH	25.5	16.4	9.16	35.9	30
RI	24.0	18.2	5.76	24	42
Vermont	25.4	15.1	10.3	40.6	23

DEMENTIA CARE

As many as 80%–90% of patients with dementia develop at least one psychotic symptom or behavioral disturbance over the course of their illness.

Behavioral disturbances or psychotic symptoms in dementia often precipitate nursing-home placement.

Disturbances are potentially treatable, so it is vital to recognize them early.

Nursing Home Barriers to Best Practices Related to Dementia Care

- Nursing and nursing assistant shortage
- Inexperienced nurses and staff
- High use of travel nurses
- High turnover of staff
- Demands on staffing time for other efforts than care (documentation, checklist, etc.)
- Poor staff morale and support
- Poor interprofessional communication
- Poor transitions of care between hospitals/psychiatric units and nursing homes

OUTCOME: Vicious Cycle

CLINICAL FEATURES

Particularly as dementia progresses, psychiatric symptoms may develop that resemble discrete mental disorders such as depression or mania.

The course and features are more difficult to predict, and treatments are less reliably effective than when these disorders occur in younger adults without dementia.

Neuropsychiatric symptoms such as apathy, poor self-care, or paranoia may be the first indication of dementia.

CLINICAL FEATURES:

Reflects loss of ability to modulate behavior in a socially acceptable way

Overt resistance to care is most often seen in later stages of dementia

May involve verbal outbursts, physical aggression, resistance to bathing or other care needs, and restless motor activity such as pacing or rocking

Often occurs concomitantly with psychotic symptoms such as paranoia, delusional thinking, or hallucinations

ASSESSMENT

Obtain a history from both the resident and others

- Team members
- Family

Elicit a clear description of the behavior

- Temporal onset and course
- Associated circumstances
- Relationship to key environmental factors, such as caregiver status and recent stressors

DIFFERENTIAL DIAGNOSIS: MEDICAL CAUSES

- Disturbances that are new, acute in onset, or evolving rapidly are most often due to a medical condition or medication toxicity.
- An isolated behavioral disturbance in a patient with dementia can be the *sole* presenting symptom of acute conditions such as pneumonia, UTI, arthritis, pain, angina, constipation, or uncontrolled diabetes.
- Medication toxicity can present as behavioral symptoms alone.

DIFFERENTIAL DIAGNOSIS: ENVIRONMENTAL CAUSES

- Life stressor (e.g., death of a spouse or other family member)
- Change to daylight savings time or travel across time zones
- New routine, new caregivers, or new roommate
- Overstimulation (e.g., too much noise, crowded rooms, close contact with too many people)
- Understimulation (e.g., relative absence of people, spending much time alone, use of television as a companion)
- Disruptive behavior of other patients

DIFFERENTIAL DIAGNOSIS: STRESS IN CAREGIVING RELATIONSHIP

May exacerbate/cause a behavioral disturbance

Relationships with potential for stress include:

- Inexperienced caregivers
- Domineering caregivers
- Caregivers who themselves are impaired by medical or psychiatric disturbances

MANIFESTATION OF DEMENTIA: CATASTROPHIC REACTION

- Defined as an acute behavioral, physical, or verbal reaction to environmental stressors that results from inability to make routine adjustments in daily life
- Might include anger, emotional lability, or aggression when confronted with a deficit
- Best treated by identifying and avoiding precipitants, providing structured routines and activities, and recognizing early signs so the patient can be distracted and supported before reacting

BEHAVIORAL SYMPTOMS BY DEMENTIA TYPE

- **Frontotemporal dementia (Pick's disease):** often associated with prominent disinhibition, compulsive behaviors, and social impairment
  - In severe cases, a syndrome of hyperphagia, hyperactivity, and hypersexuality may occur
- **Dementia with Lewy bodies:** prominent psychosis characterized by visual hallucinations
- Behavioral problems can occur in all dementia types

TREATMENTS FOR SPECIFIC DISTURBANCES: GENERAL PRINCIPLES

- Management of pain, dehydration, hunger, and thirst is paramount
- Consider the possibility of positional discomforts or nausea secondary to medication effects
- Modify environment to improve orientation
- Good lighting, one-on-one attention, supportive care, and attention to personal needs and wants are also important

BEHAVIORAL INTERVENTIONS

- Treat underlying medical precipitants
- Replace poorly fitting hearing aids, eyeglasses, and dentures
- Remove offending medications, particularly anticholinergic agents
- Keep the environment comfortable, calm, and homelike with use of familiar possessions
- Provide regular daily activities and structure
- Monitor for new medical problems
- Attend to patient's sleep and eating patterns
- Simplify bathing and dressing with the use of adaptive clothing and assistive devices if needed

TO REDUCE SUNDOWNING

- Give adequate daytime stimulation
- Maintain adequate levels of light in daytime
- Establish bedtime routine and ritual
- Remove environmental factors that might keep patient awake
- Discourage drinking stimulants near bedtime
- Give diuretics/laxatives early in day
- Place familiar objects at bedside

ANTI-PSYCHOTIC AGENTS (1 of 3)

The 6 agents in this table are off-label for treatment of psychosis in dementia

Drug	Daily Dose	Adverse Effects	Comments	Forms
Aripiprazole	5–15 mg	Mild sedation, mild hypotension	Warning about increased cerebrovascular events in dementia, possible hyperglycemia	Tablet, liquid concentrate
Clozapine	12.5–200 mg	Sedation, hypotension, anticholinergic effects, hyperglycemia, agranulocytosis	Weekly CBC required; poorly tolerated by older adults; reserve for treatment of refractory cases	Tablet, rapidly dissolving tablet

ANTI-PSYCHOTIC AGENTS (2 of 3)

Drug	Daily Dose	Adverse Effects	Comments	Forms
Olanzapine	2.5–10 mg	Sedation, falls, gait disturbance	Warning about hyperglycemia and cerebrovascular events in patients with dementia	Tablet, rapidly dissolving tablet, IM injection
Quetiapine	25–200 mg	Sedation, hypotension	Warning about hyperglycemia; ophthalmologic exam recommended every 6 months	Tablet

ANTI-PSYCHOTIC AGENTS (3 of 3)

Drug	Daily Dose	Adverse Effects	Comments	Forms
Risperidone	0.5–2 mg	Sedation, hypotension, EPS with doses > 1 mg/day	Warning about cerebrovascular events in patients with dementia, hyperglycemia warning	Tablet, rapidly dissolving tablet, liquid concentrate, depot IM injection
Ziprasidone	40–160 mg	Higher risk of prolonged QTc interval, hyperglycemia	Little published information on use in older adults	Capsule, IM injection

CHOLINESTERASE INHIBITORS

- In patients with mild to moderate Alzheimer's disease, donepezil or galantamine are better than placebo in reducing psychosis and behavioral disturbances.

- In patients with dementia with Lewy bodies who are sensitive to the EPS of antipsychotic agents, cholinesterase inhibitors have been reported to reduce visual hallucinations.

MANAGING SLEEP DISTURBANCES

- Improve sleep hygiene *(see next slide)*
- Use bright-light therapy
- Treat associated depression and delusions
- If the above do not succeed, consider (off-label):
  - Trazodone 25–150 mg at bedtime
  - Mirtazapine 7.5–15 mg at bedtime
  - Melatonin 3-5mg at bedtime
- Avoid benzodiazepines, z-drugs, or antihistamines

SLEEP HYGIENE

- Establish a stable routine for going to bed and awakening
- Pay attention to noise, light, and temperature
- Increase daytime activity and light exercise
- Reduce or eliminate caffeine
- Reduce evening fluid consumption to minimize nocturia
- Give activating medications early in the day if patient unable to eliminate
- Control nighttime pain
- Limit daytime napping to brief periods of 20 to 30 minutes

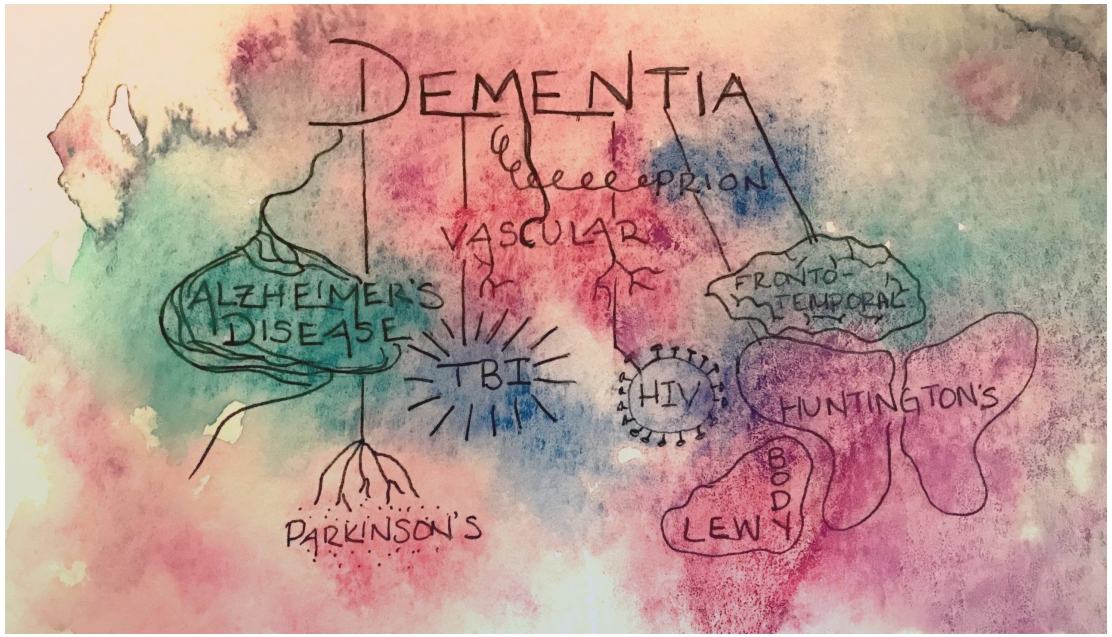
MANAGING AGGRESSION AND AGITATION

- Behavioral interventions: distraction, supervision, routine, structure
- Behavior modification using rewards
- Avoid physical restraints

GDR and Titration off Antipsychotic Medications

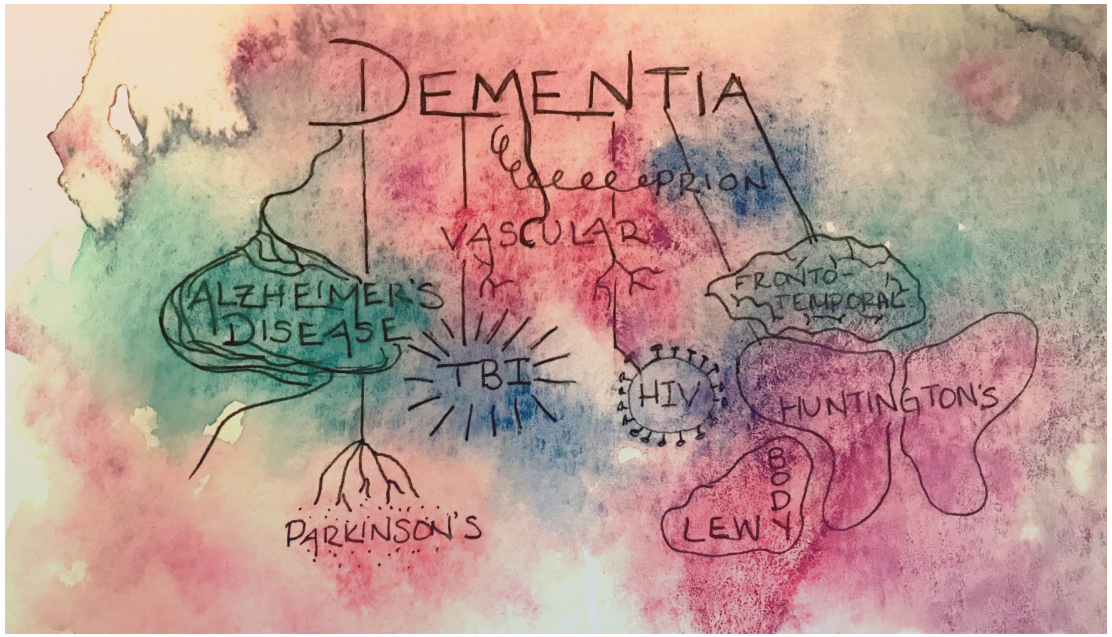
- Future session on this topic
- Warning for potential withdrawal symptoms
- GDR itself can trigger significant anxiety in resident, family, and staff
- As dementia progresses, the need for antipsychotics might disappear

SUMMARY



- The need to express basic needs such as hunger, thirst, or fatigue, which the patient cannot adequately communicate in dementia, may precipitate a behavioral disturbance.
- Delirium secondary to an underlying condition such as dehydration, urinary tract infection, or medication toxicity is a common cause of abrupt behavioral disturbances in patients with dementia.

SUMMARY



- Medication effects on behavioral disturbances in dementia tend to be modest and should be implemented only after trying environmental and other nonpharmacologic techniques.
- Antipsychotic medications may reduce agitation as a last resort, and antidepressants may be helpful if symptoms of depression are evident in the patient with a behavioral disturbance.
- GDR should be initiated as soon as possible and attempted often.

William Utermohlen’s Self-Portraits

Series Outline

Date	Topic
5/2	Dementia Friendly Care and Maine Dementia ChangeToolkit
5/9	A Game of Whack-a-Mole? Antipsychotic Reduction and its Unintended Effects in Nursing Homes
5/16	Perspectives from the Psychiatry Service
5/23	Newer Antipsychotics Deep Dive
5/29	Benzodiazepine Deep Dive
6/6	Trazodone Deep Dive
6/13	Setting Your Organization for Success
6/20	GDR Strategies / Deprescribing.org
6/27	Family and Resident Education on GDR
7/11	Surveyor Perspective
7/18	Antipsychotic Use at the End of Life
7/25	It Takes a Village – Empowering All Team Members to Reduce Antipsychotic Use

QUESTIONS?