





Agitation Associated With Alzheimer's Dementia (AAD) in the Long-Term Care (LTC) Setting



This program is paid for by Otsuka Pharmaceutical Development & Commercialization, Inc. (OPDC)





Alzheimer's Dementia Is a Highly Prevalent Neurodegenerative Disorder¹

Estimated number of US adults aged ≥65 years living with Alzheimer's dementia:

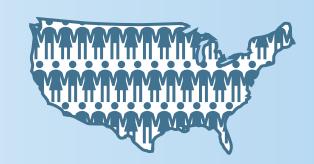


2023

~6.7

2050

~12.7 MILLION





75% of people with Alzheimer's dementia aged ≥80 years old live in a LTC facility, compared with **4%** of the general population

LTC, long-term care. US, United States.

1. Alzheimer's Association 2023. Alzheimers Dement. 2023;19(4):1598-1695.



Disease State Overview of Agitation Associated With Alzheimer's Dementia (AAD)

Agitation is one of the most common neuropsychiatric symptoms of Alzheimer's dementia¹

- Manifestations of Alzheimer's dementia are not limited to cognitive decline and functional impairment, and include a range of neuropsychiatric symptoms, such as anxiety, irritability, and agitation²⁻⁵
- Symptoms of agitation manifest as both non-aggressive and aggressive behaviors, such as^{6,7}:

EXCESSIVE MOTOR ACTIVITY:

Pacing, restlessness, repetitiveness, and hoarding



VERBAL AGGRESSION:

Screaming, using profanity, and asking repetitive questions

PHYSICAL AGGRESSION:

Hitting, kicking, punching, biting, and throwing things

- Halpern R, et al. Int J Geriatr Psychiatry. 2019;34(3):420-431.
- Alzheimer's Association 2023. Alzheimers Dement. 2023;19(4):1598-1695.
- 3. Antonsdottir IM, et al. Expert Opin Pharmacother. 2015;16(11):1649-1656.
- Anatchkova M, et al. Int Psychogeriatr. 2019;31(9):1305-1318.
- Kales HC, et al. BMJ. 2015;350:h369.
- Sano M, et al. Int Psychogeriatr. 2023;1-13.

Rabinowitz J, et al. Am J Geriatr Psychiatry. 2005;13(11):991-998.



Agitation Is One of the Most Complex, Prominent, Stressful, and Costly Aspects of Alzheimer's Dementia Care¹

Agitation can be present at any stage of Alzheimer's dementia²

However, it is most often recognized in the moderate-severe and severe stages of Alzheimer's dementia²



Agitation in Alzheimer's dementia is a common cause of placement in LTC³





LTC long-term care

Antonsdottir IM, et al. Expert Opin Pharmacother. 2015;16(11):1649-1656.

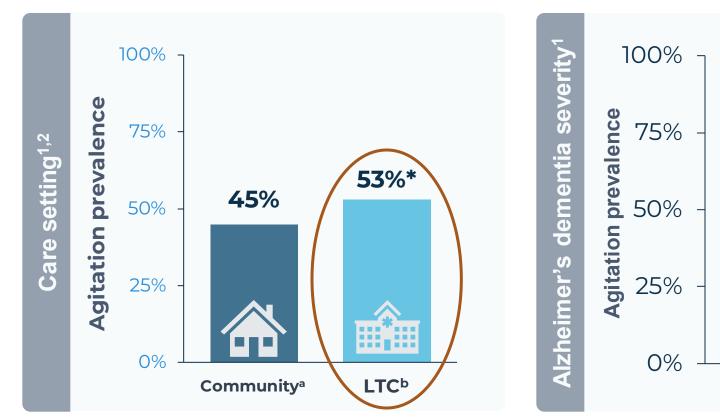
Halpern R, et al. Int J Geriatr Psychiatry. 2019;34(3):420-431.

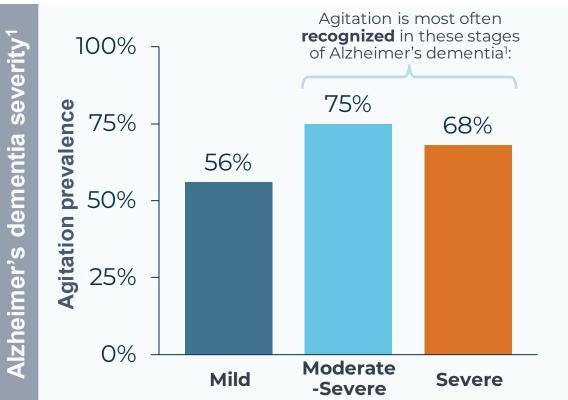
Cloutier M, et al. Alzheimers Dement (NY). 2019;5:851-861.



Prevalence of Agitation Associated With Alzheimer's Dementia (AAD)

AAD is prevalent across care settings and Alzheimer's dementia severities^{1,2}





^{*}Nursing home percentage reported includes those with Alzheimer's dementia and other dementias. aResidential homes. bNursing homes/skilled nursing facilities.

AAD, agitation associated with Alzheimer's dementia. LTC, long-term care.



Halpern R, et al. Int J Geriatr Psychiatry. 2019;34(3):420-431.

Fillit H, et al. Int J Geriatr Psychiatry. 2021;36(12):1959-1969.

The Four IPA Criteria Offer a Solid Foundation for Recognition of Agitation in Cognitive Disorders^{1,2}

- 1. The IPA definition of agitation in cognitive disorders includes four criteria:
- 2. The patient meets the criteria for cognitive impairment or dementia syndrome
- 3. The patient exhibit ≥1 agitation behavior(s) with emotional duress that is persistent or frequently recurrent for ≥2 weeks or the behavior represents a dramatic change from the patient's usual behavior*
- 4. The behaviors are severe and associated with excess distress or produce disability beyond that due to cognitive impairment
- 5. The behaviors cannot be attributed to another psychiatric disorder, medical condition, including delirium, suboptimal care conditions, or the physiological effects of a substance

Agitation behaviors include:



EXCESSIVE MOTOR ACTIVITY BEHAVIORS:

- Pacing
- Rocking
- Gesturing
- Pointing fingers
- Restlessness
- Performing repetitious mannerisms



VERBAL AGGRESSION BEHAVIORS:

- Yelling
- Speaking in an excessively loud voice
- Using profanity
- Screaming
- Shouting



PHYSICAL AGGRESSION BEHAVIORS:

- Grabbing
- Shoving
- Pushina
- Resisting
- Hitting others
- Kicking objects or people

- Scratching
- Biting
- Throwing objects
- Hitting self
- Slamming doors
- Tearing things
- Destroying property



^{*}In special circumstances, the ability to document the behaviors over 2 weeks may not be possible and other terms of persistence and severity may be needed to capture the syndrome beyond a single episode.

IPA, International Psychogeriatric Association.

Sano M, et al. Int Psychogeriatr. 2023;1-13.

Cummings J, et al. Int Psychogeriatr. 2015;27(1):7-17.

The CMAI Measures a Broad Range of Behaviors of Agitation Consistent With the IPA Definition of Agitation^{1,2}



EXCESSIVE MOTOR ACTIVITY



VERBAL AGGRESSION



PHYSICAL AGGRESSION



OTHER BEHAVIORS

29 CMAI behaviors ^{2,3}				
Pacing and aimless wandering	Hiding things	Throwing things	Spitting	Making physical sexual advances or exposing genitals
Inappropriate dressing or disrobing	Hoarding things	Screaming	Cursing or verbal aggression	Eating or drinking inappropriate substances
Trying to get to a different place	Constant unwarranted request for attention and/or help	Biting	Hitting self or others	Making strange noises
Handling things inappropriately	Repetitive sentences and questions	Scratching	Kicking	Intentional falling
Performing repetitious mannerisms	Complaining	Hurting self or others	Grabbing people or things inappropriately	Making verbal sexual advances
General restlessness	Negativism	Tearing things or destroying property	Pushing	
	12/2	2		0

Many behaviors in the CMAI are relevant to the three domains of the IPA definition of agitation, including^{1,2}:

CMAI, Cohen-Mansfield Agitation Inventory. IPA, International Psychogeriatric Association.



^{1.} Cummings J, et al. Int Psychogeriatr. 2015;27(1):7-17.

Cohen-Mansfield J. *Instruction Manual for the Cohen-Mansfield Agitation Inventory (CMAI).* 1991. Rockville, MD: Research Institute of the Hebrew Home of Greater Washington.

^{3.} Rabinowitz J, et al. Am J Geriatr Psychiatry. 2005;13(11):991-998.

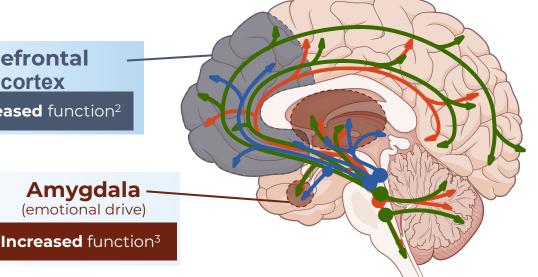
Summary of Brain Pathology and Monoaminergic Dysfunction in AAD

Tau pathology and neurodegeneration in prefrontal and subcortical brain regions may increase the risk of developing AAD¹

AAD may reflect an imbalance between top-down executive control and bottom-up emotional drive¹

Dysfunction of NSD neurotransmitter system may contribute to imbalance between **executive control** and **emotional overdrive**²⁻¹⁰











Dopamine system

Dysregulation⁹

- 6. Lanctôt KL, et al. J Neuropsychiatry Clin Neurosci. 2001;13(1):5-21.
- Evers EA, et al. Curr Pharm Des. 2010;16(18):1998-2011.
- 8. Duke AA, et al. Psychol Bull. 2013;139(5):1148.
- Cox SM, et al. Br J Psychiatry. 2011;199(5):391-397.
- 10. Lindenmayer JP. J Clin Psychiatry. 2000;61(14):5-10.

AAD, agitation associated with Alzheimer's dementia. NSD, norepinephrine-serotonin-dopamine.

- Rosenberg PB, et al. Mol Aspects Med. 2015;43-44:25-37.
- 2. Banno K, et al. Neuropsychiatr Dis Treat. 2014;10:339-348.
- 3. Wright Cl, et al. Biol Psychiatry. 2007;62(12):1388-1395.
- 4. Jacobs HI, et al. Mol Psychiatry. 2021;26(3):897-906.
- 5. Arnsten AF, et al. Neurobiol Stress, 2015;1:89-99.



AAD Worsens the Impact of an Already Devastating and Burdensome Disease^{1,2}

Overall, agitation versus no agitation in patients with Alzheimer's dementia been associated with 1-7:



Accelerated disease progression



Functional decline



Decreased quality of life



Greater comorbidities



Increased use of concomitant therapies



Earlier death



Increased risk of hospitalization/institutionalization

In the LTC setting, agitation versus no agitation has been associated with a significantly increased risk of:



Falls



Fractures



Infections



Higher medication



Other NPS^a

alncludes depression, anxiety, delusion, and hallucinations.
AAD, agitation associated with Alzheimer's dementia. LTC, long-term care. NPS, neuropsychiatric symptoms.

1. Fillit H, et al. Int J Geriatr Psychiatry. 2021;36(12):1959-1969.2.

- Jones E, et al. J Alzheimers Dis. 2021;83(1):89-101. 3.
- 3. Halpern R, et al. Int J Geriatr Psychiatry. 2019;34(3):420-431.4.
 - Koenig AM, et al. Curr Psychiatry Rep. 2016;18(1):3. 5.
- Peters ME, et al. Am J Psychiatry. 2015;172(5):460-465. 6.
- 5. Scarmeas N, et al. Arch Neurol. 2007;64(12):1755-1761.
- Banerjee S, et al. J Neurol Neurosurg Psychiatry. 2006;77(2):146-148.



The Level of Disruptiveness of Agitated Behaviors Increases With Frequency for All Types of Behavior^{1,a}



^aMeasured using the CMAI.

 ${\it CMAI, Cohen-Mansfield\ Agitation\ Inventory.\ LTC,\ long-term\ care.}$

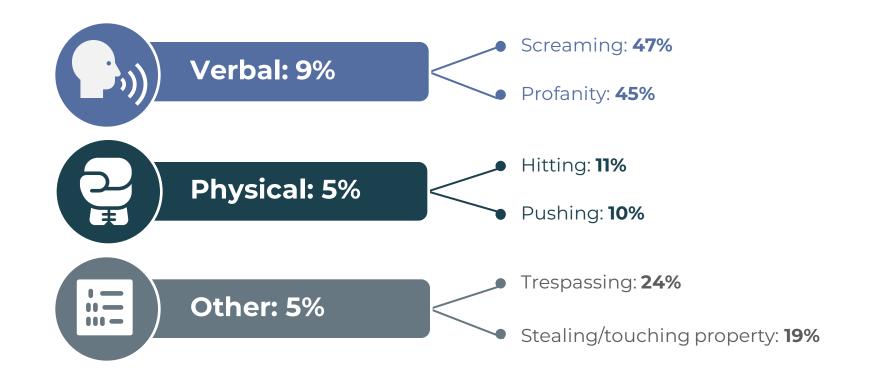


^{1.} Cohen-Mansfield J. *J Psychiatr Res.* 2008;43(1):64-69.

Fillit H, et al. Int J Geriatr Psychiatry. 2021;36(12):1959-1969.

Resident-to-Resident Mistreatment in the LTC Setting Is a Large and Pervasive Problem¹

The most common forms of recorded resident-to-resident mistreatment include:

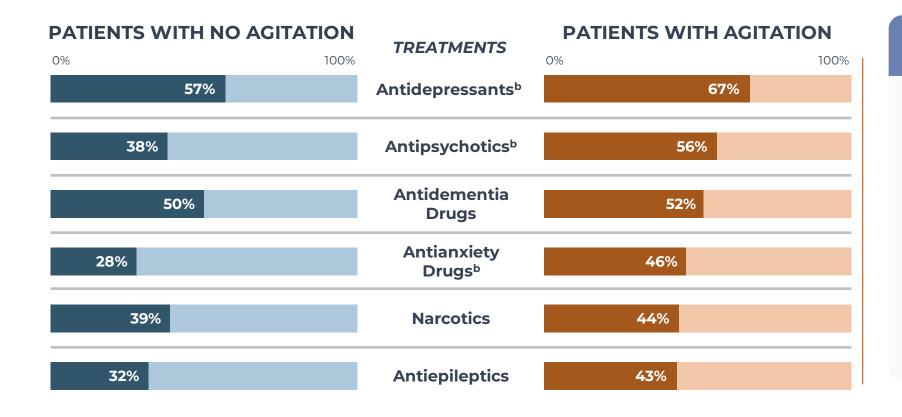


LTC, long-term care.



Lachs MS, et al. Ann Intern Med. 2016;165(4):229-236.

AAD Is Associated with Higher Medication Use in LTC^{1,a}





- Associated with a high incidence of adverse drug reactions and drug-drug interactions and may manifest as NPS in this elderly population^{1,2}
- Known to increase the possibility of a "prescribing cascade," in which side effects of drugs are misdiagnosed as symptoms of another medical condition resulting in further prescriptions and side effects²

AAD, association associated Alzheimer's dementia. LTC, long-term care. NPS, neuropsychiatric symptoms, GDR, gradual dose reduction.

State Operations Manual Appendix PP – Guidance to Surveyors for Long Term Care. Centers for Medicare & Medicaid Services (CMS). Rev. 211. Available at: https://www.cms.gov/medicare/provider-enrollment-and-certification/guidanceforlawsandregulations/downloads/appendix-pp-state-operations-manual.pdf.



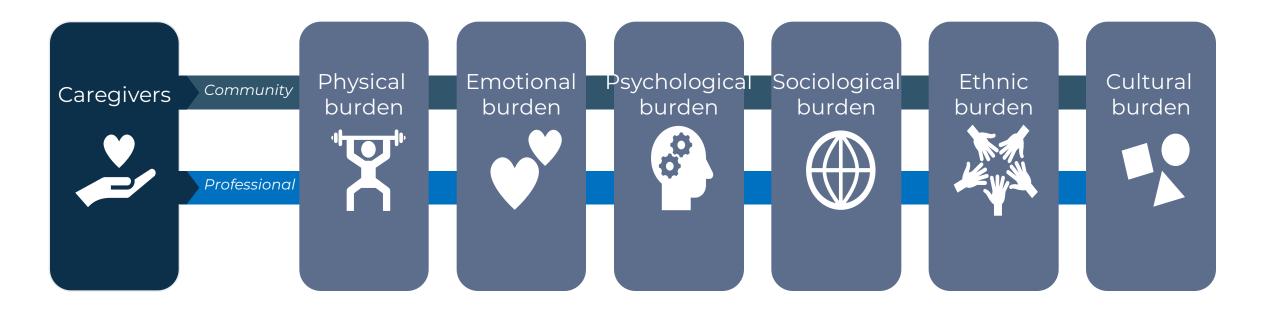
^aCompared to patients with dementia and no agitation.

^bMay require GDR.³

^{1.} Fillit H, et al. Int J Geriatr Psychiatry. 2021;36(12):1959-1969.

Aigbogun MS, et al. BMC Neuro. 2019;19(1):33.

Many Professional Caregiving Themes Parallel Those of Family Caregiving, Including Burden of Patient Care^{1,2}





^{1.} McCarty EF and Drebing C. J Nurses Staff Dev. 2002;18(5):250-257.

Kunkle R, et al. West J Nurs Res. 2021;43(9):877-893.

Agitation-associated Behaviors Have Been Associated With Substantial Burden to LTC Caregivers^{1–3}

Agitation-associated Behaviors³

Described as one of the most difficult, potentially dangerous, and emotionally distressing aspects of patient care

Caregiver Burden⁴

Includes:

- Physical problems
- Emotional problems
- Loss of empathy/ detachment
- Negative attitude toward job

Caregiver Outcomes⁴

Expressed as:

- Physical fatigue and illness
- Emotional depletion
- Psychopathology
- Increased use of clinical services



AAD could be considered a risk factor for caregiver burnout, reduced workability, and generally weaker health⁵

AAD, agitation associated with Alzheimer's dementia. LTC, long-term care.

- Kunkle R, et al. West J Nurs Res. 2021;43(9):877-893.
- 2. Fillit H, et al. Int J Geriatr Psychiatry. 2021;36(12):1959-1969.

- Zeller A, et al. Geriatr Nurs. 2009;30(3):174-187.
- McCarty EF and Drebing C. J Nurses Staff Dev. 2002;18(5):250-257.
- 5. Palm R, et al. J Alzheimers Dis. 2018;66(4):1463-1470.



The LTC Industry Is Currently Facing a Serious Labor and Economic Crisis^{1,a}



The ongoing struggle to find caregivers in this setting may affect quality of care for patients



54% Are having to turn away prospective residents



Are concerned their facility may have to close due to persistent workforce challenges



CMS plans to propose a new federal staffing mandate to address current staffing challenges in nursing homes



78% Have hired temporary agency staff to adjust for staffing shortages



84% Are facing moderate to high levels of staffing shortages^b

American Health Care Association. State of the Nursing Home Industry: Survey of 524 Nursing Home Providers Highlights Persistent Staffing and Economic Crisis. 2023. Available at: https://www.ahcancal.org/News-and-Communications/Fact-Sheets/FactSheets/SNF-Survey-December-2022.pdf



^aAccording to a recent AHCA survey of 524 NH providers.

Defined as: "On one or more occasion, you could not fill all your shifts without agency or asking people to work overtime/extra shifts." CMS, Center for Medicare & Medicaid Services. LTC, long-term care.

The Goal of the Interdisciplinary Team Is to Provide Patient-Centered Care¹

The interdisciplinary team varies by setting and facility, but can be comprised of the following care providers^{2,3}:



The interdisciplinary team assesses, coordinates, and manages comprehensive health care for each resident's varying needsa:



 a In accordance with federal/state regulations (eg, 42 CFR 483.5, 42 CFR 483.10 through 483.75; CMS State Operations Manual Appendix PP) $^{4.5}$

CMS, Center for Medicare & Medicaid Services. LTC, long-term care.

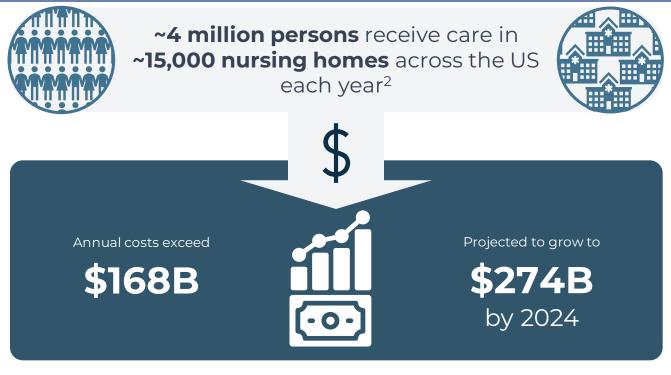
- NEJM. NEJM Catalyst. "What Is Patient-Centered Care?" 2017. Available at: https://catalyst.nejm.org/doi/full/10.1056/CAT.17.0559.
- Philip AM and Soper MH. Interdisciplinary Care Teams for Medicare-Medicaid Enrollees: Considerations for States. 2016. Available at: https://www.chcs.org/resource/interdisciplinary-care-teams-for-medicare-medicaid-enrollees-considerations-for-states/
- State Operations Manual Appendix PP Guidance to Surveyors for Long Term Care. Centers for Medicare & Medicaid Services (CMS). Rev. 211. Available at: https://www.cms.gov/medicare/provider-enrollment-and certification/guidanceforlawsandregulations/downloads/pendix-pp-state-operations-manual.pdf.
- Stefanacci RG and Cusak CL. Ann Longterm Care. 2016;24(4):17-20.

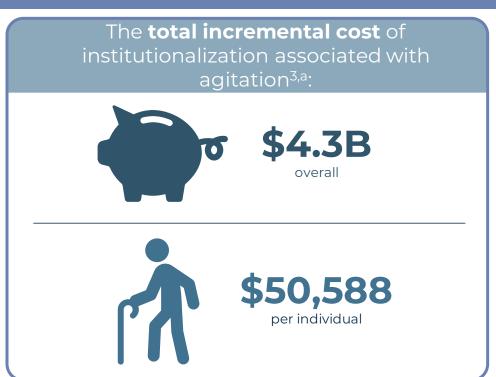
National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Health Care Services; Committee on the Quality of Care in Nursing Homes. The National Imperative to Improve Nursing Home Quality: Honoring Our Commitment to Residents, Families, and Staff. Washington (DC): National Academies Press (US); April 6, 2022.



Economic Burden

Management of AAD in LTC residents is associated with significant healthcare resource utilization and costs¹





- 1. Fillit H, et al. Int J Geriatr Psychiatry. 2021;36(12):1959-1969.
- 2. National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Health Care Services; Committee on the Quality of Care in Nursing Homes. The National Imperative to Improve Nursing Home Quality: Honoring Our Commitment to Residents, Families, and Staff. Washington (DC): National Academies Press (US); 2022.
- 3. Cloutier M, et al. Alzheimers Dement (NY). 2019;5:851-861.



^aAccording to a recent retrospective report, 2018 US dollars. B, billion. LTC, long-term care. US, United States.

Treatment Considerations

A primary goal of developing a comprehensive, person-centered treatment plan is symptom relief^{1,2}



Differential diagnosis^{2,3}

Careful evaluation for general medical, psychiatric, environmental, or psychosocial problems that may underlie the disturbance

• Assessment for the type, frequency, severity, pattern, and timing of symptoms



Nonpharmacologic interventions^{2,3}

If agitation does not cause significant danger or marked distress to the patient or others, symptoms are best treated with environmental or behavioral measures including:

- Behavioral management therapy or behavioral interventions
- Emotion-oriented approaches
- Stimulation-oriented treatments (e.g., recreational activity, art therapy, music therapy, and pet therapy)



Pharmacologic interventions^{2,3}

If nonpharmacologic measures are unsuccessful or symptoms are severe, dangerous, and/or cause significant distress, then judicious pharmacological intervention is recommended

 Antipsychotics are the pharmacological therapy recommended by the APA for agitation in dementia There is only one FDAapproved drug for treatment of AAD, and it is classified as an atypical antipsychotic⁴



However, clinicians may prescribe other pharmacologic treatments, including^{3,5,6}:

- Antipsychotics (typical and atypical)
- Anxiolytics or sedative-hypnotics
- ✓ Anticonvulsants
- ✓ Antidepressants
- Other medications

APA, American Psychiatric Association.

Kales HC, et al J Am Geriatr Soc. 2014;62(4):762-769.

Kales HC, et al. *J Am Geriatr Soc.* 2014;62(4):762-765 Reus IV, et al. *Am J Psychiatry.* 2016;173(5):543-546.

Rabins PV, et al. Am J Psychiatry. 2007;164(12 Suppl):5-56.

FDA. FDA Approves First Drug to Treat Agitation Symptoms Associated with Dementia due to Alzheimer's Disease. May 2023. Available at: https://www.fda.gov/news-events/press-announcements/fda-approves-first-drug-treat-agitation-symptoms-associated-dementia-due-alzheimers-disease.

Aigbogun MS, et al. BMC Neuro. 2019;19(1):33.

Schneider LS, et al. Am J Geriatr Psychiatry. 2006;14(3):191-210.



The Use of Antipsychotics in the LTC Setting Is Highly Regulated¹

CMS' regulatory oversight for psychotropic medications^a ensures proper use²

Requirements for proper use:

Psychotropics^a cannot be prescribed without a documented diagnosis, and certain drug classes have additional regulations²



Additional monitoring requirements:



If psychotropics are prescribed, behavioral symptoms must be reviewed at least quarterly to determine if the dose can be reduced or discontinued (i.e., GDR)²

Auditing for inaccurate coding:

CMS will audit LTC facilities' MDS documentation and assessment of schizophrenia due to historical erroneous diagnoses and concern for residents being prescribed unnecessary antipsychotics³



CMS will downgrade quality measure ratings in cases of inaccurate coding (e.g., lacking comprehensive psychiatric evaluations or noting behaviors related to dementia versus schizophrenia)³

Updates to the Nursing Home Care Compare Website and Five Star Quality Rating System: Adjusting Quality Measure Ratings Based on Erroneous Schizophrenia Coding, and Posting Citations Under Dispute. Centers for Medicare & Medicaid Services (CMS), QSO-23-05-NH, 1-18-23. Available at: https://www.cms.gov/medicare/provider-enrollment-andcertification/surveycertificationgeninfo/policy-and-memos-states/updates-nursing-home-care-compare-website-andfive-star-quality-rating-system-adjusting-quality

CMS. Center for Medicare & Medicaid Services. GDR, gradual dose reduction, LTC, long-term care, MDS, minimum data set.

State Operations Manual Appendix PP – Guidance to Surveyors for Long Term Care. Centers for Medicare & Medicaid Services (CMS). Rev. 211. Available at: https://www.cms.gov/medicare/provider-enrollment-andcertification/guidanceforlawsandregulations/downloads/appendix-pp-state-operations-manual.pdf.



^aIncludes antipsychotic, antidepressant, antianxiety, and hypnotic drugs.

Assistant Secretary for Planning and Evaluation. Antipsychotic Medication Prescribing in Long-Term Care Facilities Increased in the Early Months of the COVID-19 Pandemic. 2022. Available at: https://aspe.hhs.gov/reports/antipsychoticuse-ltcfs-early-months-covid-19pandemic#:~:text=Prescriptions%20dispensed%20for%20antipsychotics%20in,to%2020.5%20thousand%20in%202019.

Inappropriate Use of Psychotropic Drugs in LTC Settings

There has long been concern about inappropriate use of psychotropic drugs, namely antipsychotics, in LTC residents¹



A 1986 investigation into quality of care in nursing homes found that psychotropic drugs were being used inappropriately to sedate patients to keep behavioral- and workforce-related issues at bay¹



In 2006, the
Psychosocial
Outcome Severity
Guide implemented
strategies to reduce
inappropriate use of
psychotropic drugs²



In 2012, CMS amplified monitoring use of psychotropic drugs in nursing home residents through targeted quality measures for both short- and long-term stays²



CMS continues to monitor psychotropic drug use in nursing home residents, with a focus on appropriate utilization²

CMS, Center for Medicare and Medicaid Services. NH, nursing home. OBRA, Omnibus Budget Reconciliation Act. US, United States.



Hughes C and Lapane K. Drugs Aging. 2005;22(4):339-351.

^{2.} US Department of Health and Human Services; Office of Inspector General Christi A. Grimm. Long-Term Trends of Psychotropic Drug Use in Nursing Homes. Nov. 2022.

CMS Maintains Focus on Regulating Inappropriate Antipsychotic Use

Challenges associated with antipsychotic use in LTC facilities can include^{1,2}:



Questions over on-label use counting against facilities' overall antipsychotic measures^{3,4}



Ambiguity around family involvement in antipsychotic decision-making for patients with dementia¹



Risk of negative impact on regulatory and quality measures associated with antipsychotic use⁵



High burden of documentation to support appropriate utilization, including GDR⁶

There is a need for increased guidance surrounding appropriate antipsychotic use in LTC facilities⁷

CMS, Center for Medicare and Medicaid Services. GDR, gradual dose reduction.

- Tija J, et al. J Am Geriatr Soc. 2017;65(1):59-65.
- Farshaw S, et al. J Am Med Dir Assoc. 2020;21(2):233-239.
- 3. HHS Office of the Inspector General. CMS Could Improve the Data It Uses To Monitor Antipsychotic Drugs in Nursing Homes. May 2021. Available at: https://oig.hhs.gov/oei/reports/OEI-07-19-00490.asp.
- AMA. Appropriate Use of Antipsychotic Medications in Nursing Homes. Available at: https://www.amaassn.org/system/files/a22-703.pdf.
- Update Report on the National Partnership to Improve Dementia Care in Nursing Homes. CMS. June 2016. Available at: https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/SC-Letter-16-28-Partnership-Update-Report.pdf.
- 6. Ghairatmal M, et al. Am J Geriatr Psychiatry. 2020;28:4S.
- 7. Hughes C, Lapane K. *Drugs Aging*. 2005;22(4):339-351.



Specific Situations May Require Consideration of Antipsychotic Medication

Patient-centered care, including a complete assessment and nonpharmacologic strategies, should be attempted prior to initiating pharmacologic therapy with antipsychotic medication¹



Dangerous/distressing symptoms were **not relieved** with multiple nonpharmacological approaches (if not clinically contraindicated)



Dangerous/distressing symptoms **returned** after GDR attempt



Symptoms are significantly **distressing** to the resident



Behavioral symptoms present a **danger** to resident or others

Examples of groups focused on reducing inappropriate antipsychotic use:



With resources from AMDA to help optimize medication use in LTC facilities²

AMDA, American Medical Directors Association. ASCP, American Society of Consultant Pharmacists. GDR, gradual dose reduction. LTC, long-term care. PALTC, Post-Acute 2 and Long-Term Care Medicine.

State Operations Manual Appendix PP – Guidance to Surveyors for Long Term Care. Centers for Medicare & Medicaid Services (CMS), Rev. 211. Available at: https://www.cms.gov/medicare/provider-enrollment-and-certification/guidanceforlawsandregulations/downloads/appendix-pp-state-operations-manual.pdf.



ASCP provides a system of checks and balances to **improve antipsychotic oversight**³

Drive to Deprescribe Website. 2023. Available at: https://paltc.org/.
Project Pause: Effective Solutions for Improving Clinical Care in Long-Term Care Settings. 2020. Available at: https://www.agingresearch.org/wp-content/uploads/2020/12/Project PAUSE Final.pdf.



Summary



AAD is highly prevalent and present in all stages and severities of Alzheimer's dementia¹



AAD is associated with Tau pathology and increased norepinephrine, serotonin deficits, and dopamine dysregulation²⁻⁷



AAD is associated with substantial patient and caregiver burden and long-term consequences as well as significant healthcare resource utilization and costs^{8,9}



Antipsychotic use is highly regulated by CMS in an effort to curb inappropriate use and ensure appropriate use, including use in specific situations where antipsychotic medications may be indicated^{10,11}



There is only one FDA-approved drug for treatment of AAD, and it is classified as an atypical antipsychotic.¹² However, clinicians may prescribe other unapproved medications^{13–15}

AAD, agitation associated with Alzheimer's dementia. CMS, Center for Medicare and Medicaid Services. FDA, US Food and Drug Administration. LTC, 10. long-term care.

- Halpern R, et al. Int J Geriatr Psychiatry. 2019;34(3):420-431.
- Liu KY, et al. Ageing Res Rev. 2018;43:99-107.
- Arnsten AF, et al. Neurobiol Stress. 2015;1:88-89.
- 4. Evers EA, et al. Curr Pharm Des. 2010;16(18):1998-2011.
- Lindenmayer JP. J Clin Psychiatry. 2000;61(14):5-10.
- 6. Lanctot KJ, et al. J Neuropsych and Clin Neurosciences. 2001;13:5-21.
- Lyketsos CG. J Prev Alzheimers Dis. 2015;2(3):155-156.
- 8. Fillit H, et al. Int J Geriatr Psychiatry. 2021;36(12):1959-1969.

- Jones E, et al. J Alzheimers Dis. 2021;83(1):89-101.
- Assistant Secretary for Planning and Evaluation. Antipsychotic Medication Prescribing in Long-Term Care Facilities Increased in the Early Months of the COVID-19 Pandemic. 2022. Available at: https://aspe.hhs.gov/reports/antipsychotic-use-ltcfs-early-months-covid-10
- pandemic#:~:text=Prescriptions%20dispensed%20for%20antipsychotics %20in.to%2020.5%20thousand%20in%202019.
- State Operations Manual Appendix PP Guidance to Surveyors for Long Term Care. Centers for Medicare & Medicaid Services (CMS). Rev. 211. Available at: https://www.cms.gov/medicare/provider-enrollment-and-certification/guidanceforlawsandregulations/downloads/appendix-pp-state-operations-manual.pdf.
- 2. FDA Approves First Drug to Treat Agitation Symptoms Associated with Dementia due to Alzheimer's Disease. May 2023. Available at: https://www.fda.gov/news-events/press-announcements/fda-approvesfirst-drug-treat-agitation-symptoms-associated-dementia-duealzheimers-disease.
- 13. Rabins PV, et al. *Am J Psychiatry*. 2007;164(12 Suppl):5-56.
- 14. Aigbogun MS. et al. BMC Neuro. 2019:19(1):33.
- Schneider LS, et al. Am J Geriatr Psychiatry. 2006;14(3):191-210.



The Interdisciplinary Team is Important For Ensuring Appropriate Use of Antipsychotics in the LTC Setting¹













CMS.gov

- Tracks use of antipsychotics in nursing homes
- Seeks to discourage overutilization of psychotropic medications in nursing homes^{1,2}



Documentation

- Nonpharmacological approaches must be documented first
- Indication for antipsychotic prescriptions must be well-documented



Limited Antipsychotic Use

- Given only when necessary to treat a specific diagnosed and documented condition
- Received in conjunction with GDR and other nonpharmacologic interventions
- As needed orders limited to 14 days

CMS, Center for Medicare & Medicaid Services. GDR, gradual dose reduction. LTC, long-term care.

- Assistant Secretary for Planning and Evaluation. Antipsychotic Medication Prescribing in Long-Term Care Facilities Increased in the Early Months of the COVID-19 Pandemic. 2022. Available at: https://aspe.hhs.gov/reports/antipsychotic-use-ltcfs-early-months-covid-19-pandemic#:~text=Prescriptions%20dispensed%20for%20antipsychotics%20in,to%2020.5%20thousand%20in%202019.
- 2. State Operations Manual Appendix PP Guidance to Surveyors for Long Term Care. Centers for Medicare & Medicaid Services (CMS). Rev. 211. Available at: https://www.cms.gov/medicare/provider-enrollment-and-certification/guidanceforlawsandregulations/downloads/appendix-pp-state-operations-manual.pdf.



Medications Are Subject to Regular Monitoring for Each Resident¹

Required medication monitoring specified by CMS includes:



CMS, Center for Medicare & Medicaid Services. LTC, long-term care. PRN, as-needed.



State Operations Manual Appendix PP – Guidance to Surveyors for Long Term Care. Centers for Medicare & Medicaid Services (CMS). Rev. 211. Available at: https://www.cms.gov/medicare/provider-enrollment-and-certification/guidanceforlawsandregulations/downloads/appendix-pp-state-operations-manual.pdf.

Certain Circumstances Warrant Evaluation of a Resident and Medication(s), Although the Content And Extent of the Evaluation May Vary With the Situation¹

The evaluation process is important when selecting initial medications and/or nonpharmacological approaches and when deciding whether to modify or discontinue a current medication



- New, persistent, or recurrent clinically significant symptom or problem
- Worsening of an existing problem or condition
- Clinically significant change in condition/status
- Admission or re-admission







Orders for PRN

 antipsychotics which are
 not prescribed to treat a
 diagnosed specific
 condition or do not meet
 the PRN requirements for
 psychotropic and APs



- Irregularity identified in the pharmacist's medication regimen review
- New medication order or renewal of orders



LTC, long-term care. PRN, as-needed

l. State Operations Manual Appendix PP – Guidance to Surveyors for Long Term Care. Centers for Medicare & Medicaid Services (CMS). Rev. 211. Available at: https://www.cms.gov/medicare/provider-enrollment-and-certification/guidanceforlawsandregulations/downloads/appendix-pp-state-operations-manual.pdf.