Spotlight

Off-label Antipsychotic Use in Older Adults with Dementia: Not Just a Nursing Home Problem

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Despite serious health risks, antipsychotic (AP) drugs are often prescribed off-label to dementia patients to treat behavioral symptoms of the disease. While efforts to reduce AP use among dementia patients living in nursing homes are showing some success, less attention is given to older adults living in the community. The AARP Public Policy Institute recently analyzed insurance claims data and found that rates of AP use among older adults with dementia who live in the community have increased since 2012.

Providers continue to prescribe potentially harmful antipsychotic (AP) medications to older adults with dementia, putting them at increased risk of adverse health events such as stroke and death.[1,2] Despite known health risks, as well as a US Food and Drug Administration[3] black box warning,[a] APs are often prescribed off-label to treat the behavioral symptoms of dementia.

A 2015 US Government Accountability Office (GAO)-issued report to Congress found that, in 2012, 33 percent of Medicare Part D beneficiaries with dementia who were living in a nursing home were prescribed an AP and, among dementia patients with no time in a nursing home, 14 percent were prescribed an AP.[4] The Centers for Medicare & Medicaid Services (CMS) replicated the GAO methodology and produced nearly identical results: among Medicare Part D beneficiaries with dementia in 2012, AP use was 33 percent and 15 percent among those living inside and outside nursing homes, respectively.[5]

While decades-long efforts to reduce AP use among dementia patients living in nursing homes are showing some success,[6] less attention has been given to the practice outside nursing homes. In fact, recent analyses of insurance claims data conducted by the AARP Public Policy Institute show that rates of AP use among older adults with dementia who live in the community have increased since 2012.

Methods

We used administrative claims data to calculate annual rates of AP use among community-only adults ages 65 and older who had dementia and were enrolled in Medicare Advantage (MA) plans from 2012 to 2015. The data were obtained from the OptumLabs® Data Warehouse, a comprehensive, longitudinal, real-world data asset with de-identified lives across claims and clinical information.[7]

a A warning on a prescription drug's label designed to call attention to serious or life-threatening risks.

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To be categorized as a patient with dementia, we required subjects to have a qualifying dementia diagnosis[b] or at least two prescription claims for dementia drugs.[c] In addition, we required each subject to have at least 12 months of continuous enrollment in an MA plan following the dementia diagnosis. Because APs are indicated for the treatment of patients with schizophrenia,[d] bipolar disorder,[e] Tourette syndrome,[f] or Huntington's disease,[g] we excluded patients with these conditions. Similar to the GAO and CMS reports, we defined community-only adults as those living in any location other than a nursing home, including assisted living facilities.

Results

In our sample of community-only MA enrollees ages 65 and older with dementia, AP use increased by over 6 percent between 2012 and 2015, from 12.6 percent to 13.4 percent (Figure). AP use was higher among women than men (16.2 percent v. 14.2 percent) and lowest in the West Census region (Table). Older adults with dementia (ages 75+) were more likely than the younger age group (ages 65–74) to have a prescription for APs (12.8 percent v. 12.0 percent).

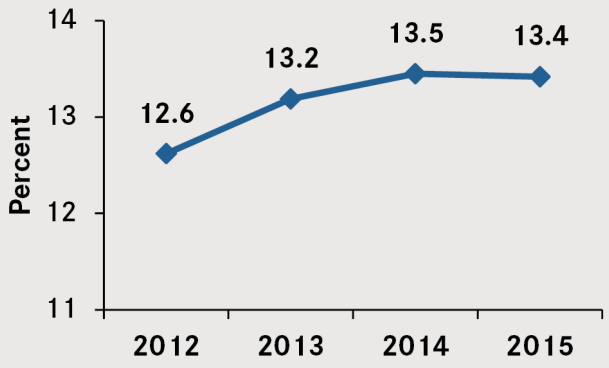
Our 2012 AP rate of 12.6 percent among MA enrollees was slightly lower than the 2012 rates of 14 percent and 15 percent of Medicare Part D beneficiaries reported in the GAO and CMS analyses, respectively. However, the results from all three studies show similar patterns: AP use rates were highest in females, the older age groups, and those living in the South.

Conclusions

AP rates rose between 2012 and 2015 among community-only adults with dementia who were enrolled in MA plans. According to the National Partnership to Improve Dementia Care in Nursing Homes, AP use among nursing home residents declined by approximately 34 percent during this time.

FIGURE

Antipsychotic Use among Community-Only Dementia Patients Ages 65+ with Medicare Advantage, 2012–15



Source: OptumLabs Data Warehouse.

Note: Excludes patients with schizophrenia, bipolar disorder, Tourette syndrome, and Huntington's disease.

Our findings affirm a conclusion reached in the 2015 GAO report that while AP use has declined in nursing homes due to several proactive measures, the Department of Health and Human Services has taken little action to reduce AP use among older adults living in the community. The GAO, therefore, recommended expanding efforts to curb AP use beyond nursing homes, including updating the National Alzheimer's Plan.[4]

Reducing the AP use rate among dementia patients living in the community is imperative, especially because many nursing home residents begin AP use prior to their arrival at the facility. Our rising estimates of AP use indicate that still not enough is being done to solve this problem.

b Diagnosis codes: 290, 2901x, 2903, 2904x, 2941, 2942, 331, 33182.

c Cholinesterase inhibitor or NMDA receptor antagonist: donepezil, rivastigmine, galantamine, or memantine.

d Diagnosis codes: 2950x–2959x.

e Diagnosis codes: 2960x, 2961x, 2964x–2969x.

f Diagnosis code: 307.23.

g Diagnosis code: 333.4.

TABLE

Antipsychotic Use among Community-Only Dementia Patients Ages 65+, 2012

Patients with Dementia		AARP Results*			GAO Results[4]			CMS Results[5]		
		# w/o AP prescription	# with AP prescription	% with AP prescription	# w/o AP prescription	# with AP prescription	% with AP prescription	# w/o AP prescription	# with AP prescription	% with AP prescription
Total		**26,012**	**3,757**	**12.6%**	**1,056,433**	**170,286**	**14%**	**851,101**	**153,805**	**15%**
Gender	Female	16,860	2,543	13.1%	677,304	119,779	15%	541,163	106,840	16%
	Male	9,152	1,214	11.7%	379,129	50,507	12%	309,938	46,965	13%
Age	66-74	5,020	685	12.0%	238,542	33,328	12%	195,861	32,016	14%
	75+^	20,992	3,072	12.8%	-	-	-	-	-	-
	75-84	-	-	-	468,323	73,171	14%	382,977	66,389	15%
	85+	-	-		349,568	63,787	15%	272,263	55,400	17%
Census Region	Midwest	9,432	1,359	12.6%	225,473	30,913	12%	179,532	26,833	13%
	Northeast	3,551	412	10.4%	204,389	34,316	14%	162,375	29,634	15%
	South	10,856	1,751	13.9%	384,800	65,196	15%	324,623	62,202	16%
	West	2,11	235	9.7%	241,771	39,861	14%	184,571	35,136	16%

**Source: OptumLabs Data Warehouse.*

^Unable to identify individuals ages 85+.

References

1 Gareri P, De Fazio P, Manfredi VG, De Sarro G. Use and safety of antipsychotics in behavioral disorders in elderly people with dementia. *J Clin Psychopharmacol*. 2014;34(1):109-123.

2 Tampi RR, Tampi DJ, Balachandran S, Srinivasan S. Antipsychotic use in dementia: a systematic review of benefits and risks from meta-analyses. *Ther Adv Chronic Dis*. 2016;7(5):229-245.

3 Kuehn BM. FDA warns antipsychotic drugs may be risky for elderly. *JAMA*. 2005;293(20):2462.

4 GAO-15-211 Antipsychotic Drug Use. United State Government Accountability Office; January 2015.

5 Antipsychotic Use in Part D Enrollees with dementia. Centers for Medicare & Medicaid Services; November 16, 2015.

6 *Antipsychotic Medication Use Data Report* National Partnership to Improve Dementia Care in Nursing Homes;2017.

7 OptumLabs. *OptumLabs and OptumLabs Data Warehouse (OLDW) Descriptions and Citation*. Cambridge, MA: n.p., February 2018. PDF. Reproduced with permission from OptumLabs.

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AARP's Public Policy Institute conducted this study using the OptumLabs Data Warehouse. The retrospective administrative claims data utilized in this study include medical claims and eligibility information from a large national U.S. health insurance plan. Individuals covered by this health plan, about 28.2 million (51 percent female) in 2013, are geographically diverse across the United States, with greatest representation in the South and Midwest U.S. Census regions. The health insurance plan provides fully insured coverage for professional (e.g., physician), facility (e.g., hospital), and outpatient prescription medication services. All study data were accessed using techniques that are in compliance with the Health Insurance Portability and Accountability Act (HIPAA) of 1996, and no identifiable protected health information was extracted during the course of the study.