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Central nervous system-active polypharmacy among community-dwelling persons with dementia in the United States

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Abstract

Background: Psychotropic prescribing and central nervous system (CNS)-active polypharmacy are increasing among community-dwelling older adults in the United States.¹ While psychotropic prescribing to persons living with dementia (PLWD) in long-term care has received significant regulatory attention, there are no recent estimates of use among PLWD in the community. The aim of this analysis is to determine the prevalence of CNS-polypharmacy ("CNS-poly")—potentially inappropriate for older adults given risks of associated falls and overdose²—among community-dwelling PLWD.

Method: The cohort included beneficiaries: 1) enrolled in fee-for-service Medicare with Part D (prescription drug); 2) with a dementia diagnosis from 10/1/14 - 9/30/15 (the baseline); and 3) who were community-dwelling (determined by Minimum Data Set). CNS-poly was defined as receipt of ≥ 3 medications for ≥ 31 consecutive days from the following classes: opioids, antipsychotics, antidepressants, benzodiazepines, "z-drugs", anti-epileptics. The CNS-poly observation period was 10/1/15-9/30/16; as with baseline, those with time in LTC were excluded. We determined CNS-poly overall and by demographic characteristics, then by state.

Result: Among 740,274 beneficiaries, 14.8% experienced CNS-poly. The prevalence was higher among: females versus males (16.1% vs 12.2%); younger persons (24.2%, 14.6%, 10.2% for those 65-74, 75-84, and ≥85); and non-Hispanic white and Hispanic beneficiaries compared to non-Hispanic black and other (15.6%, 15.6%, 9.4%, and 8.8%); but comparable for urban and rural (15.8% vs 15.8%). The Figure presents state-level prevalence by quintile. The state-level median was 14.4%, with Hawaii lowest (5.4%) and North Carolina highest (19.1%).

Conclusion: CNS-poly is widespread among PLWD in the U.S.-much higher than among the general population of older adults¹-and varies widely by patient demographics and by state. Future work is needed to understand drivers of this high rate of CNS-poly and to develop patient, provider, and policy-level interventions to more appropriately target psychotropic use.

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FIGURE 1