

Reducing Excessive Use of Antipsychotic Agents in Nursing Homes

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The excessive use of antipsychotic drugs among long-term nursing home residents with dementia has been among the most challenging issues in the care of this vulnerable population. According to data from 2013-2014, dementia affects 50.4% of the 1.4 million persons residing in the 15 600 nursing homes in the United States.¹ Despite long-standing and widely recognized concerns about safety and efficacy, antipsychotic agents, including older "typical" agents (ie, haloperidol and chlorpromazine) and newer "atypical" agents (ie, quetiapine, risperidone, and olanzapine), have been commonly used to treat behavioral and psychological symptoms of dementia.

This Viewpoint describes a national initiative of the Centers for Medicare & Medicaid Services (CMS) focused on the use of antipsychotics in nursing homes. These efforts have led to a 33% relative reduction (from 23.9% to 16.0%) in the prevalence of antipsychotic use among long-term nursing home residents over the past 5 years (Figure).³

The Other US Drug Problem

Beginning in the 1970s, quality and safety problems in nursing homes began to draw the attention of advocacy groups, the media, researchers, and federal regulators—with the overuse of antipsychotic medications raising special concerns. In some nursing homes, nearly half of all residents were found to be receiving these medications.⁴ In 1986, the Institute of Medicine issued *Improving the Quality of Care in Nursing Homes*, a highly critical report regarding the quality of nursing home care. One year later, Congress passed the Omnibus Budget Reconciliation Act of 1987 (OBRA-87), with amendments calling for greater oversight of antipsychotic use in nursing homes. This legislation established approved indications for antipsychotics. For residents with behavior issues, the regulations required quantitative documentation of the problem, a trial of nonpharmacologic behavioral interventions (eg, individualized activity programs to address boredom and loneliness), and gradual dose reductions after 6 months of therapy.⁵

OBRA-87 regulations were associated with substantial declines in use of typical antipsychotic agents, and by 1995, only 16% of nursing home residents were receiving these medications. However, the introduction of atypical antipsychotics substantially changed antipsychotic prescribing patterns. Atypical antipsychotics were widely promoted as much safer than older agents, despite ensuing data to the contrary. Within 5 years of their introduction, atypical antipsychotic agents had virtually replaced typical antipsychotics in nursing homes and had become the dominant therapeutic modality for the off-label treatment of behavioral and psychological symptoms of dementia. By 2011, nearly a quarter of all

US nursing home residents were receiving antipsychotic medications.³

The 2011 Office of Inspector General Report

In May 2011, the Office of Inspector General (OIG) released a widely publicized report, "Medicare Atypical Antipsychotic Drug Claims for Elderly Nursing Home Residents,"⁶ revealing that 83% of atypical antipsychotic drug claims were prescribed for nursing home residents without a US Food and Drug Administration (FDA) indication, and that 88% of claims were related to use in residents with dementia, for whom antipsychotics are associated with an increased risk of mortality as specified in the FDA black box warning. At a hearing of the US Senate Special Committee on Aging on November 30, 2011, Inspector General for the Department of Health and Human Services Daniel Levinson testified that nursing home residents often received antipsychotic drugs in ways that violated federal standards and that CMS should "hold nursing homes accountable."⁷

The OIG report gained widespread attention from the media, nursing home advocacy organizations, and legislators from both parties. In response, CMS launched the National Partnership to Improve Dementia Care in Nursing Homes on March 29, 2012, with a focus on "protecting residents from being prescribed antipsychotic medications unless there is a valid, clinical indication and a systematic process to evaluate each individual's need."^{2,3} By the end of 2016, the percentage of long-term residents receiving antipsychotic therapy had decreased to 16% (Figure).³

The National Partnership to Improve Dementia Care in Nursing Homes

To achieve its objective of reducing antipsychotic medication use in US nursing homes, CMS endorsed 5 strategies: (1) engaging stakeholders, (2) creating and disseminating educational resources, (3) public reporting, (4) enhancing guidance and training of state surveyors, and (5) increasing enforcement of regulations. Beginning in the fall of 2011, CMS engaged with quality improvement organizations, advocacy groups, the National Nursing Home Quality Improvement Campaign, and other stakeholders to establish new state-level coalitions for dementia care with local "champions." CMS also directly contacted several of the largest nursing home chains to discuss how those corporations were working to reduce antipsychotic prescribing, specifically in facilities with the highest prevalence of use.

CMS created a website to disseminate educational and training resources emphasizing nonpharmacologic, person-centered approaches to dementia care and targeting health care practitioners at all levels, as well as

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family caregivers.⁸ Hand in Hand, a training program for certified nursing assistants, was distributed to every US nursing home.⁹

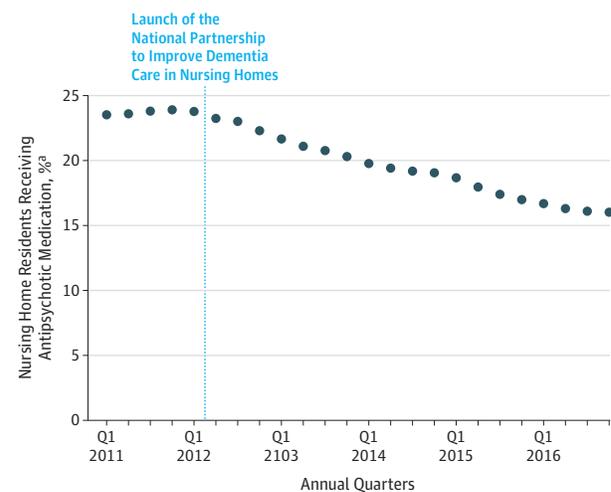
CMS began public reporting on antipsychotic medication use for each nursing home on the Nursing Home Compare website beginning in July 2012. Beginning in 2013, CMS and state coalitions increased direct outreach to facilities with persistently high rates of use. Starting in February 2015, CMS added the percentage of nursing home residents newly prescribed or currently receiving antipsychotics into the Five-Star Quality Rating System for nursing homes.

Beginning on May 24, 2013, CMS implemented enhanced guidance and mandatory trainings for state surveyors to improve their ability to detect deficient practices related to dementia care and unnecessary antipsychotic medication use, and to ensure that residents with dementia receiving an antipsychotic medication were included on all standard facility surveys. CMS regulations carry civil monetary penalties for noncompliance, and the number of citations relating to inappropriate antipsychotic use increased by nearly 20% nationally from 2012 to 2013.

Unanswered Questions

Despite the success of CMS and collaborating stakeholders, many questions remain: (1) Are recent declines in antipsychotic drug use in nursing homes sustainable, and how low can use go? (2) What explains substantial ongoing variations in antipsychotic use across regions, states, and individual facilities? (3) Have the reductions in antipsychotic use had effects on reducing adverse outcomes, such as falls, hip fractures, stroke, and death, as well as patient-centered outcomes like function, quality of life, and behavioral issues? (4) Has there been a shift to other medications with sedating effects that do not receive the same level of scrutiny, but which may pose similar safety concerns? (5) Have efforts under the partnership led to declines in antipsychotic use among persons with dementia in other settings, such as assisted-living facilities, which are not subject to the CMS regulations? (6) Which of the interventions was key to the decline in antipsychotic use, or was it the total of effort that was important?

Figure. Percentage of Long-Term Nursing Home Residents Receiving Antipsychotic Medication, 2011-2016



Source: Adapted from the Centers for Medicare & Medicaid Services (CMS).² CMS launched the National Partnership to Improve Dementia Care in Nursing Homes on March 29, 2012. Quarterly No. of long-stay nursing home residents, 2011-2016: median, 1 065 553 (25th percentile-75th percentile, 1 044 419-1 093 803).

^a Residents diagnosed with schizophrenia, Huntington disease, or Tourette syndrome were excluded.

Conclusions

There have been substantial reductions in antipsychotic drug use in nursing homes since the 2011 OIG Report and the inception of the National Partnership to Improve Dementia Care in Nursing Homes. Although the sustainability of these declines and their effects on the health of nursing home residents remain to be fully determined, the multifaceted approaches taken under this CMS-led initiative may provide a blueprint for addressing other quality of care issues in nursing homes, as well as other health care settings.

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