

The Ontario Drug Policy Research Network (ODPRN) conducted multiple studies evaluating the efficacy, safety, and accessibility of atypical antipsychotics for the management of behavioural and psychological symptoms of dementia (BPSD) in elderly patients using multiple research methods.

## What did we find?

### EFFICACY + SAFETY

Atypical antipsychotics were not shown to have a significant effect on improving the behavioural and psychological symptoms of dementia in elderly patients. In contrast to our results, other meta-analyses have found that select atypical antipsychotics may show some benefit in the management of behavioural symptoms of dementia, although their overall effect is small. We found that using atypical antipsychotics increased the risk of mortality in elderly patients with dementia. However, atypical antipsychotics did not increase the risk of falls or weight change. Other non-randomized studies have also found that antipsychotics increase mortality in elderly patients with dementia, and Health Canada has also issued a warning for their use in elderly patients.

### ACCESSIBILITY + USE

There were no accessibility issues identified in our review as all atypical antipsychotics (with the exception of clozapine) are listed as general benefit. The rate of use is approximately 14 times higher in long-term care (LTC) settings than in the community (328 per 1,000 eligible users in LTC and 22 per 1,000 eligible users in community).

### COST

In 2013 the total expenditure by the Ontario public drug program on atypical antipsychotics for patients over 65 totaled \$35 million. Yet, a large portion of this spending was on brand name drugs (\$6 million or 17.5% of total costs) which are not more effective and are only used by 6% of users. Spending on brand name drugs has continued to rise since their introduction, with no sign of slowing.

## How did we conduct our studies?

The ODPRN conducted a drug class review consisting of multiple studies: a qualitative study to determine the experiences of use and prescribing; a systematic review to determine efficacy and safety; a pharmacoepidemiological analysis to determine patterns of use in Ontario and across Canada; an environmental scan to determine national and international guidelines and public drug coverage models; and pharmacoeconomic analyses to determine the cost of public drug funding under different coverage policies. Detailed descriptions of each of these studies are available at the ODPRN website: [www.odprn.ca](http://www.odprn.ca).

## What do we recommend?

### 1) Implement programs to reduce the inappropriate use of antipsychotic drugs for elderly people with dementia

Non-pharmacological initiatives including exercise therapy, environmental changes, and music therapy have been used for patients with dementia and behavioural issues. In some patients, combination of various treatments (including pharmacological and non-pharmacological) are needed for management of BPSD.

Educational training for healthcare providers in long-term care facilities on dementia care and appropriate use of antipsychotics for BPSD has been used as a tool to reduce the inappropriate use of antipsychotic medications. In addition, information and training specific for caregivers is recommended.

### 2) Address rising expenditures associated with use of expensive, brand-name only atypical antipsychotics in the elderly

Rising expenditures associated with the uptake of new, expensive brand-name only drugs should be explored through formulary changes (e.g., requiring Ministry approval to access brand-name only agents) or price negotiations with manufacturers (e.g., price reductions, price-caps).

### 3) Engage in further research

A review of non-pharmacological strategies for management of BPSD is needed to help provide effective alternatives to antipsychotics. As well, more research is needed on the efficacy and safety of other off-label uses of atypical antipsychotics in the elderly (e.g., insomnia, anxiety). Furthermore, the drivers of antipsychotic use in the elderly living in the community setting needs to be further explored including the development of initiatives to decrease inappropriate use in this population.