



Backgrounder: Reducing inappropriate antipsychotic medication in long-term care residents can improve lives and save money

The Canadian Foundation for Healthcare Improvement (CFHI) helped 56 long-term care facilities across seven provinces and one territory in Canada lower antipsychotic (AP) drug use for their residents with dementia who were inappropriately prescribed the medication.

Fifteen teams worked to establish more patient-centred, team-based and data-driven approaches to managing challenging behaviours associated with dementia. The results were astoundingly positive. The AP program reduced and discontinued AP prescriptions for more than half of participating residents with no increases in aggressive behaviours, while also lowering falls by 20 percent. Thirty-six percent of participating residents had their medications discontinued and 18 percent had their dose reduced.

So what would happen if we scaled up across the country?

CFHI provides regional projections based on this AP reduction program which identify the true costs of over-medication in long-term care facilities, both in terms of drug costs and hospital visits. For provinces where data was limited, national averages were adjusted to local populations.

National Portrait

How Big is the Problem?

It is estimated that 27.5 percent of long-term care residents in Canada are prescribed AP medication without a diagnosis of psychosis. That is **one in four people in long-term care who need AP reduction programs** in place. Nation-wide AP reduction programs would benefit over 100,000 people every year and save \$5.2 billion healthcare dollars over the next 30 years.

The problem with AP drugs is that:

- they are not the best strategy for managing dementia
- they are associated with cognitive decline
- they can cause serious harm, including premature death
- the prescriptions are expensive
- the associated complications from over-use are even more expensive.





Saving Healthcare Dollars

The economic benefits of AP reduction programs are remarkable, even when the costs of programming are factored in. The following healthcare savings factor in ER visits, hospitalizations and prescriptions:

In five years, nation-wide AP reduction programs would net \$194 million in healthcare savings. In 30 years, nation-wide AP reduction programs would net \$5.2 billion in healthcare savings.

Bottom line: **\$1 invested in AP reduction prevents \$4.24 in healthcare costs.**

A Closer Look at Curbing Drug Costs

After the first five years of AP reduction programs:

- About 35,000 long-term care residents per year would reduce or discontinue their AP prescriptions
- 25 million AP prescriptions would be avoided altogether
- A grand total \$32 million savings in AP prescription costs.

After 30-years of AP reduction programs:

- Every year, about 105,000 long-term care residents would reduce or discontinue their AP prescriptions
- 448 million antipsychotic prescriptions would be avoided altogether
- A grand total of \$844 million savings in AP prescription costs.

Preventing Expensive Falls

AP medications significantly increase the likelihood of falling, which is a leading cause of hospitalization among seniors. Nation-wide AP reduction programs would lower falls by at least 20 percent, which translates to nearly half a million fewer ER and hospital visits over the next 30 years:

In five years, AP reduction programs decrease ER and hospital visits by 8 percent:

- Saving \$28 million in ER costs
- Saving \$195 million in hospital costs.

In 30 years, AP reduction programs decrease ER and hospital visits by 14 percent:

- Saving \$700 million in ER costs
- Saving \$5.2 billion in hospital costs.

AP medication also increases risk of stroke and heart attack, but these complications were not included in this analysis because data was unavailable.





Ontario and Quebec

The Problem in Ontario

In Ontario, 27.3 percent of long-term care residents are inappropriately prescribed AP medications. That's **more than one in four people in long-term care who could benefit from an AP reduction program**. Over the next 30 years, Ontario will have more people in long-term care than any other province—almost five times more than Alberta, for example.

That's why AP programs would have the greatest impact in Ontario. Over 30 years, AP programs in Ontario would benefit on average 43,000 long term care residents *per year*. Factoring in prescriptions and fall-related healthcare costs, Ontario has the potential to save \$1,637 for every participating senior, every year. Even with program costs, **Ontario would save on average \$70-million healthcare dollars *per year***.

Reducing AP Prescriptions in Ontario

Five years of AP reduction programs in Ontario would:

- Cut 10-million AP prescriptions
- Save \$13-million in AP prescription costs.

30 years of AP reduction programs in Ontario would:

- Cut 183-million AP prescriptions
- Save \$345-million in AP prescription costs.

Preventing Falls in Ontario

Long-term care residents in AP reduction programs are much less likely to fall. Falling is a leading cause of hospitalization among seniors. By reducing AP prescriptions, AP programs also reduce ER and hospital visits.

In five years, AP reduction programs in Ontario:

- Prevent 37,000 falls
- Save \$90-million fall-related healthcare costs.

In 30 years, AP reduction programs in Ontario:

- Prevent 669,000 hospital falls
- Save \$2.4-billion fall-related healthcare costs.

\$1 spent on AP reduction programs in Ontario saves \$4.24

That's including reductions in prescriptions, ER visits due to falling, and hospitalizations due to falling. Here's how that adds up:





- Five years of AP programs nets Ontario \$78-million
- 30 years of AP programs nets Ontario \$2.1-billion.

The net savings in Ontario add up to 41 percent of Canada's total healthcare savings if AP programs are rolled out across the country.

Ontario Participants

The following healthcare organizations and associated long-term care facilities implemented CFHI's AP reduction programs.

Ontario

Sienna Living

Camilla Care Community

Streetsville Care Community

Cheltenham Care Community

Parkwood Mennonite Home

Revera

Bay Ridges

Hallowell House

Main Street Terrace

McGarrell Place

Reachview Village

Sherwood Court

The Meadows

Trillium Court

The Royal Ottawa Health Care Group

Trinity Village Care Centre

The Problem in Quebec

In Quebec, it is estimated that 27.5 percent of long-term care residents are inappropriately prescribed AP medication. That's **more than 1 in 4 people in long-term care who could benefit from AP reduction programs in Quebec.**

Over 30 years, this means AP programs in Quebec would benefit on average 25,000 long term care residents *per year*. Factoring in prescriptions and fall-related healthcare costs, Quebec has the potential to save \$1,627 for every participating senior, every year. Including programs costs, **Quebec would save on average \$41-million healthcare dollars *per year*.**

There were no Quebec-based healthcare organizations and long-term care facilities in CFHI's AP reduction program. National averages were used to project the impact of AP programs in that province.





Reducing AP Prescriptions in Quebec

After the first five years of AP reduction programs in Quebec:

- Cut 6-million AP prescriptions
- Save \$8-million in AP prescription costs

After 30 years of AP reduction programs in Quebec:

- Cut 108-million AP prescriptions
- Save \$202-million in AP prescription costs.

Preventing Falls in Quebec

Long-term care residents in AP reduction programs are much less likely to fall. Falling is a leading cause of hospitalization among seniors. By reducing AP prescriptions, AP programs also reduce ER and hospital visits.

In five years, AP reduction programs in Quebec:

- Prevent 22,500 falls
- Save \$55-million fall-related healthcare costs.

In 30 years, AP reduction programs in Quebec:

- Prevent 394,000 falls
- Save \$1.4-billion fall-related healthcare costs.

\$1 spent on AP reduction programs in Quebec saves \$4.24

That's including reduction in prescriptions, ER visits due to falling, and hospitalizations due to falling. Here's how that adds up:

- Five years of AP programs nets Quebec \$48-million
- 30 years of AP programs nets Quebec \$1.2-billion.

The net savings in Quebec add up to 24% of Canada's total healthcare savings if AP programs are rolled out across the country.

