

Long-Term Care Practice Reports:

An audit and feedback tool for physicians in LTC to aid quality improvement efforts optimizing antipsychotic medication prescribing

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2016 Annual CAHSPR Conference, Toronto, Ontario

Health Quality Ontario

The provincial advisor on the quality of health care in Ontario



Objectives

- Background on project origins
- Describe the methods of the report development
 - Design and change ideas
 - Indicator selection and analysis
- Preliminary results for Antipsychotic prescribing indicators
- Summary
- Future Work

Background

- As part of the 2012 Physician Services Agreement, the Physician Services Committee established a working group: Appropriate Prescribing Working Group
- This working group was tasked with recommending opportunities to improve prescribing and implementing targeted educational strategies in Ontario:
 - These programs are to be voluntary and confidential to the physician
 - The Physician Services Committee will oversee the programs
 - Initial topic chosen was antipsychotic prescribing in LTC
- **A Demonstration Project with two arms was approved:**

Personalized Practice Reports (aka Audit and Feedback)

- A widely used strategy providing health care provider(s) with a summary of their clinical performance over a specified period of time



Educational Outreach (Academic Detailing)

- Provision of unbiased, evidence-based information about prescribing directly to prescribers and inter-professional teams

PRACTICE REPORT DEVELOPMENT

Practice Report Development

- Audit and Feedback tool: *Long-Term Care Practice Report*
 - Based on best evidence
 - To drive practice improvement in long-term care
- Confidential, voluntary and available to all LTC physicians
- Consultation with stakeholders to inform layout design
 - LTC physicians, Nurses, Nurse Practitioners, Geriatric Psychiatrists, Pharmacists and other stakeholders
- Report promotion through assistance from partners:



LTC Practice Report Content

- LTC Practice Report:

Antipsychotic Prescribing Indicators	CCRS Data	Regional and Provincial Data	Change Ideas	Tools and Resources
<ul style="list-style-type: none">LTC Practice levelStratified by home and diagnosis groupsResident CharacteristicsUpdated quarterly	<ul style="list-style-type: none">Publicly reported CIHI Antipsychotic indicator at practice levelRAI-MDS 2.0 scalesUpdated annually	<ul style="list-style-type: none">LHIN and Ontario level data for each indicator	<ul style="list-style-type: none">Step-by-step process for optimizing antipsychotic prescribing	<ul style="list-style-type: none">To support quality improvement initiatives

LTC Practice Report Overview

My Dashboard

Data sources: OHIP, ODB, DAD, OMHRS
My LHIN: LHIN X

What are my antipsychotic prescribing patterns?

Data reporting period: April 1, 2013 – March 31, 2015

Legend: My Residents (Green), Ontario (Purple)



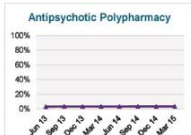
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For more information on your results, please click on the page-number link located under each graph. Data is suppressed when the numerator is between one and five (shown as NR or NR*).

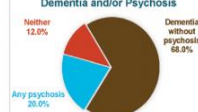
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Who are all my residents?

Data reporting period: January 1, 2015 – March 31, 2015



My Residents with Dementia and/or Psychosis

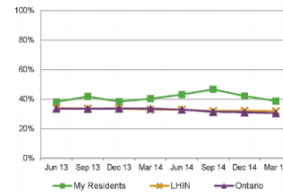


*Diagnoses captured through previous five years of OHIP/DAD/OMHRS data and one year of ODB data.

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Overall Rate: Percentage of residents aged 66 and older who have been prescribed an antipsychotic medication

Overall Rate, by my LTC practice, LHIN and Ontario, April 1, 2013 to March 31, 2015



Period	Jun 13	Sep 13	Dec 13	Mar 14	Jun 14	Sep 14	Dec 14	Mar 15
My Residents	38.2	41.8	38.3	40.4	43.1	45.7	42.2	38.8
LHIN	34.0	33.6	33.6	32.9	32.0	32.1	31.9	
Ontario	33.6	33.5	33.7	33.6	33.0	31.5	31.1	30.5

Data Sources: OHIP, ODB, DAD, OMHRS databases
NR: Not Reportable, NR*: Not Reportable*, N/A: Not Available

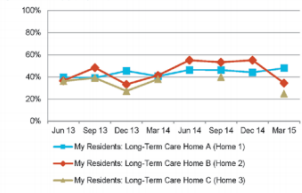
What are the inclusions/exclusions for this indicator?

This denominator **includes**: all residents aged 66 and older who are not in palliative care.

This indicator **excludes**: 38 residents under the age of 66 and 9 residents in palliative care for the most recent quarter of data. After these exclusions, there were 103 residents in the denominator. Of these residents, 14 (13.6%) were in LTC for fewer than 100 days.

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Overall Rate, by my LTC Home(s)¹, April 1, 2013 to March 31, 2015



Period	Jun 13	Sep 13	Dec 13	Mar 14	Jun 14	Sep 14	Dec 14	Mar 15
My Residents: LTC Home 1	39.7	39.3	45.5	40.7	46.4	46.3	44.2	48.0
My Residents: LTC Home 2	36.7	49.4	33.3	41.4	55.2	53.3	55.2	34.5
My Residents: LTC Home 3	36.4	39.1	27.3	38.1	NR	40.0	NR	25.0

Data Sources: OHIP, ODB, DAD, OMHRS databases
Note: The LTC Home(s) you practice in are identified through the OHIP claims information. Please refer to the detailed Methodology (page 19) or contact practicesupport@hqontario.ca if the home(s) listed here do not reflect your LTC practice.

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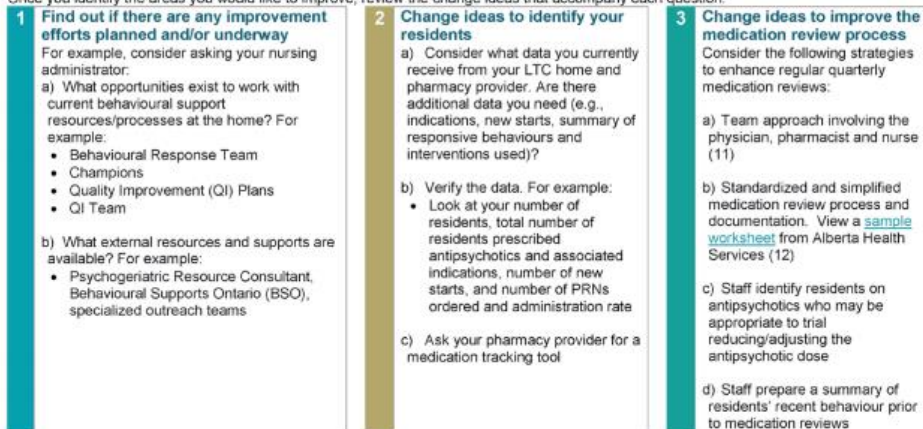
Change Ideas

Identify areas for improvement and test changes

First, identify areas of focus to improve your antipsychotic prescribing indicators by asking yourself these questions:



Once you identify the areas you would like to improve, review the change ideas that accompany each question:



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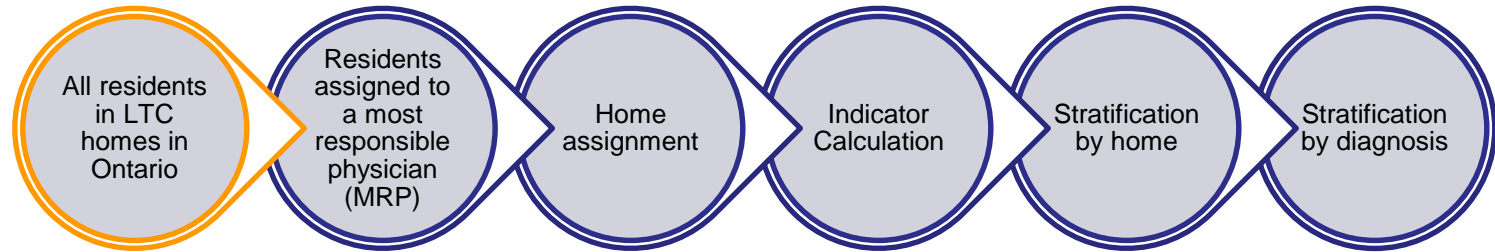
INDICATOR DEVELOPMENT AND METHODOLOGY

Indicator Selection and Development

- Literature review
- Modified Delphi Process
- Survey and discussion with Advisory Committee
- 4 Indicators of antipsychotic prescribing selected[†]
- Cohort definition based on OHIP/ODB to have more timely data
- Most responsible physician assignment algorithm developed to assign resident to physician

[†]Rochon, P. A., et al. Variation in nursing home antipsychotic prescribing rates. *Archives of Internal Medicine*, 2007; 167(7): 676-83.

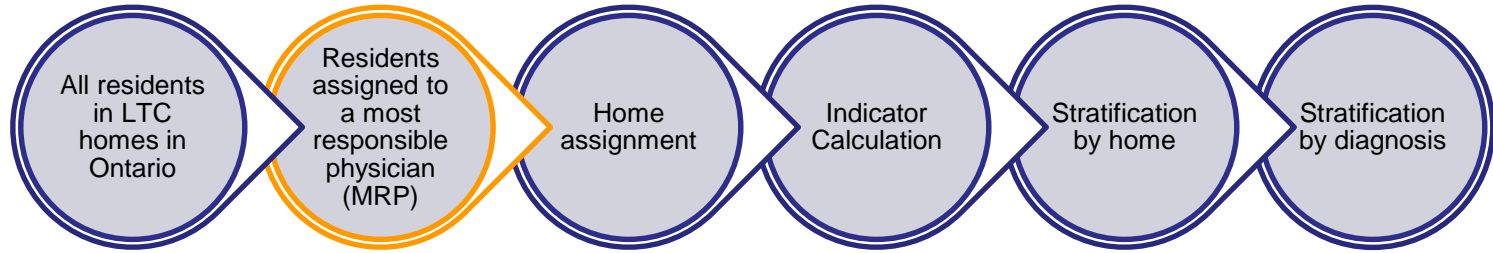
Cohort Definition



- **LTC Cohort:**

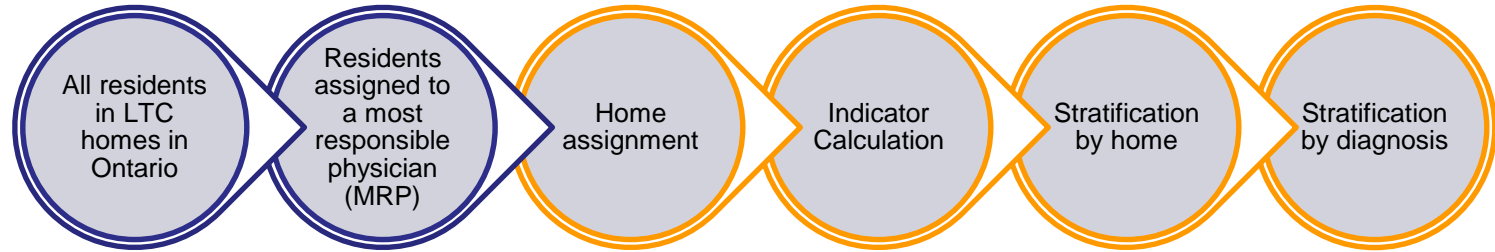
- Identified using OHIP and Ontario Drug Benefit (ODB) Program database
- Required any combination of two records from OHIP and ODB with LTC flag
- Included residents 19 to 115 years of age, with valid LTC institution number
- Validated cohort definition by comparing to CCRS data

Most Responsible Physician Assignment



- **Most Responsible Physician (MRP) assignment:**
 - Step 1: Residents assigned to MRP who has greatest number of W010 OHIP LTC fee codes billed
 - Step 2: For those with no W010 fee codes billed, resident is assigned to physician with largest number of other LTC fee codes
 - Validated through a sample of consented physicians

Indicator Development and Methodology



- **Indicator development:**

- LTC home assigned based on OHIP institution codes
- Stratification by homes (up to three) in which the physician practises and where the majority of their residents live
- Stratification by reported diagnosis:
 - Any Psychosis, Dementia alone, Neither
- Diagnoses identified by examining five years of OHIP, DAD, OMHRS and one year or ODB data

RESULTS

Descriptive Statistics on OHIP/ODB cohort, Q2 2015

Variable	Value
Total Number of Residents	75, 854
Median Age	83.5 yrs.
Females	69.0%
New Residents	11.2%
Palliative	4.5%
Recorded diagnosis of psychosis or Dementia:	
Any diagnosis of Psychosis	20.5%
Dementia alone	67.7%
Neither	12.1%
Severe/Very Severe Aggressive Behaviour*	22.3%
Possible Depressive Disorder**	32.5%
Severe Daily Pain†	1.8%
Severe Cognitive Impairment††	29.6%

*Aggressive Behaviour Scale rating of 3+. **Depression Rating Scale rating of 3+.

†Pain Scale rating of 3. ††Score 4 to 6 on Cognitive Performance Scale.

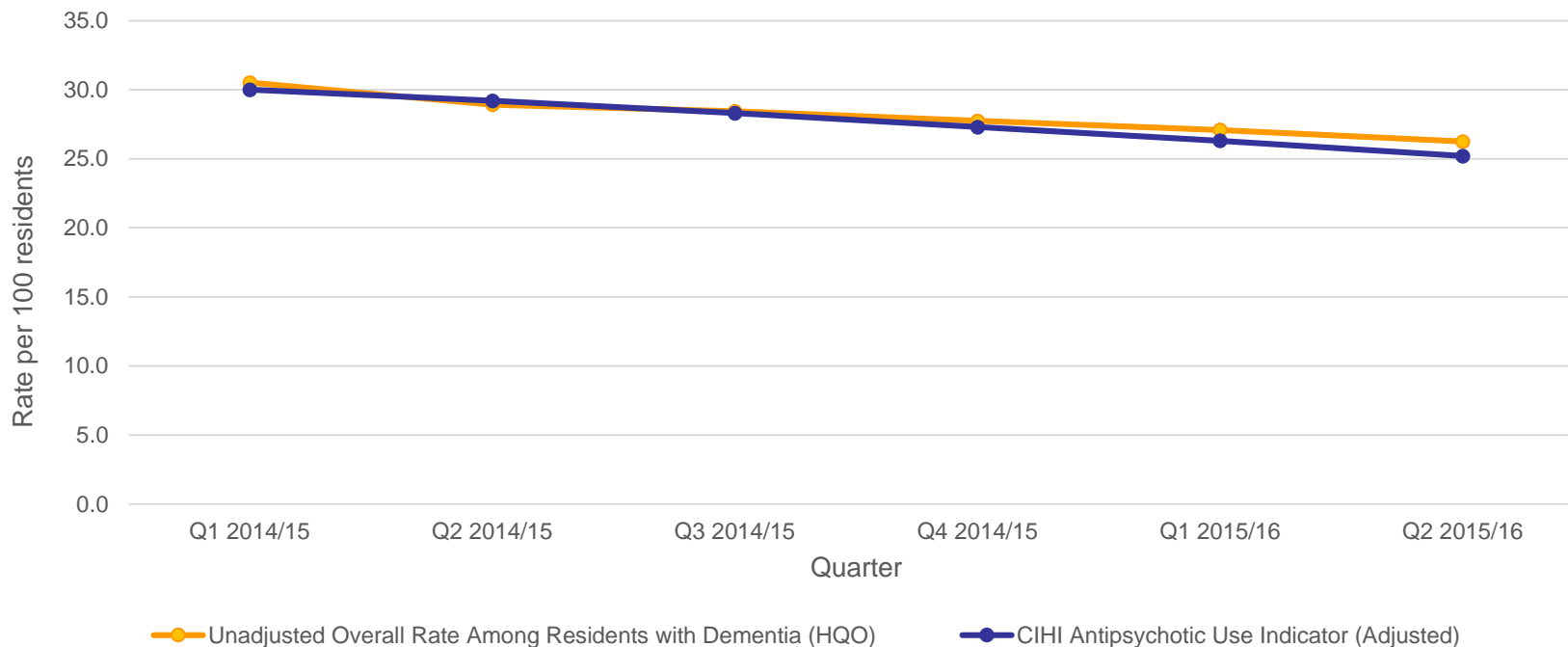
Table: Unadjusted rates for the antipsychotic indicators among those with dementia alone, Ontario, Q2 2015

Indicator	Denominator	Rate (per 100 residents)	95% Lower Confidence Limit	95% Upper Confidence Limit
Overall Rate (Prevalence)				
Among residents with dementia alone	46, 703*	26.3	25.9	26.7
New Starts (Incidence)				
Among residents with dementia alone	46, 703*	2.2	2.1	2.3
Continuous Use for 3 or more months				
Among residents with dementia alone	11, 046†	70.9	70.1	71.8
Antipsychotic Polypharmacy (2 or more)				
Among residents with dementia alone	11, 046†	2.2	1.9	2.5

*Denominator excludes residents in palliative care or under age 66.

†Denominator is residents who have at least one antipsychotic dispensed in the quarter. Residents under age 66, in palliative care, in LTC <100 days are excluded.

Unadjusted overall rate of antipsychotics dispensed, among residents with dementia, and the CIHI antipsychotic indicator, Ontario



Data sources: Continuing Care Reporting System, provided by the Canadian Institute for Health Information. Health Quality Ontario Practice Reports; ODB, OHIP, DAD, OMHRS.

Summary

- Data limitations
 - Captures dispensing and not use of medication
 - Cannot capture symptoms or PRN
- Rate of use in province is decreasing with low level of new starts
- Expect decline to continue
- Over 300 registrants
- Feedback from physicians has been mostly positive, that the report is clear and easy to understand

Future Work

- Inclusion of a second topic: Falls Prevention and Mobility
- Indicator development and updated change ideas for second topic
- Enhancements to report design to optimize impact

Acknowledgements

ICES:

- Paula Rochon, MD
- Lauren Webster
- Hadas Fischer, MD

HQO:

- Julie Auger, MD
- Gail Dobell, PhD
- Stacey Johnson
- Jonathan Lam
- Tina Obwanga
- Blair Sandover
- Julie Skelding
- Dave Zago



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If you have any questions, contact us at: PracticeReport@HQOntario.ca

Indicators

Indicator	Numerator	Denominator	Exclusions
Overall Rate	# of residents with at least one AP dispensed	Total # of residents	<ul style="list-style-type: none"> Age 66 Palliative care
New Starts	# of residents with at least one AP dispensed without any previous AP dispensed in the previous 12 months	Total # of residents	<ul style="list-style-type: none"> Age 66 Palliative care
Continuous Use	# of residents with antipsychotics dispensed for 90 days	# of residents with a prescription for antipsychotics	<ul style="list-style-type: none"> Age 66 Palliative care In LTC for less than 100 days
Antipsychotic Polypharmacy	# of residents with two or more antipsychotic regimens each for 3 continuous months	# of residents with a prescription for antipsychotics	<ul style="list-style-type: none"> Age 66 Palliative care In LTC for less than 100 days