

# Describing trends in health service use for persons living with dementia in rural and urban areas of Quebec

T Bui<sup>1</sup>, G Arseneault-Lapierre<sup>2</sup>, C Godard-Sebillotte<sup>2</sup>, N Sourial<sup>4</sup>, L Rochette<sup>3</sup>, I Vedel<sup>2</sup>

<sup>1</sup> Department of Epidemiology, Biostatistics and Occupational Health, McGill University, Montreal, Quebec, Canada.

<sup>2</sup> Department of Family Medicine, McGill University, Montreal, Quebec, Canada.

<sup>3</sup> Institut national de santé publique du Québec (INSPQ) Québec, Québec, Canada.

<sup>4</sup> Department of Family and Emergency Medicine, University of Montreal Research Center, Montreal, Quebec, Canada.



McGill

## Background

- Patients living with dementia (PWD) receive lower quality care; specifically, late diagnosis, inadequate follow-up, duplicate tests and poor continuity of care leading to higher use of services.
- Rural residents are more likely to face barriers in obtaining access to a primary health care physician (PCP) due to distance and resource distribution.
- Evidence gap: how rurality relates to PWD and access to a PCP is less-known.

## Objectives

The aim of this study is to describe the visits to a primary care physician among persons living with dementia in urban and rural contexts.

## Methods

### Design

Repeated, annual cross-sectional cohort design using administrative databases from the Institut national de santé publique du Québec between 2000 and 2017.

### Population

Community-dwelling adults 65+ in Quebec with a new diagnosis of dementia. All incident cases of dementia occurring between April 1<sup>st</sup> and March 31<sup>st</sup> for each year were included. Dementia diagnosis was ascertained using a validated algorithm.

Rurality was defined by a Postal Code Conversion File which includes 8 Statistical Area Classification (SAC) types. SAC1 is the most urban, SAC6 is the most rural.

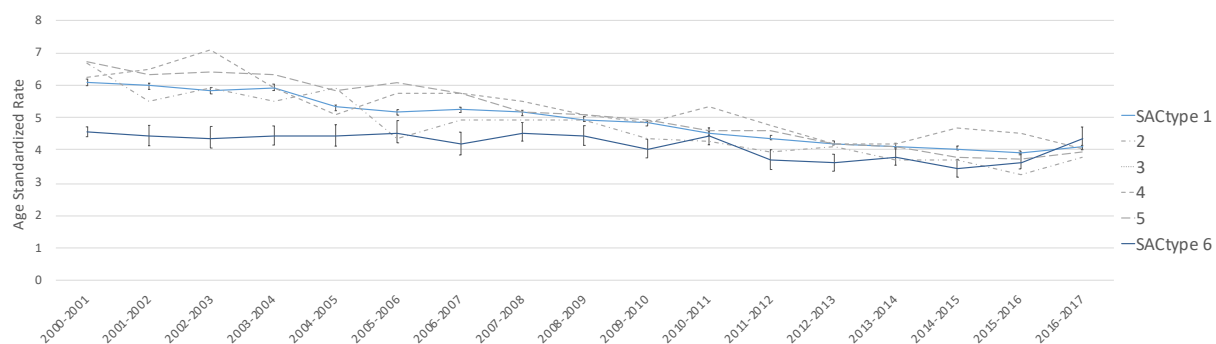
### Indicators

The number of visits to a primary care physician is the indicator for health care service utilization that was selected from a previously developed framework.

### Analysis

Visual and graphical analysis of indicators adjusted for person-time and standardized for age with added confidence intervals are displayed.

## Results



**Figure 1: Age standardized rates of the number of visits to a primary care physician (PCP) in the year following diagnosis from 2000-2017**

The rate of the number of visits was computed on the entire cohorts. Age standardized rates are reported as per 1 person-year for the total number of visits to a primary care physician in the year following the index date of diagnosis. SAC type 7 and 8 were excluded in the descriptive analyses due to lack of data.

## Demographic Information

	2017
Population 65+ in Quebec	1,462,672
Total diagnosed with Dementia	223,969
% women	62.7%
SAC 1	65.46%
SAC 2	3.14%
SAC 3	11.15%
SAC4	5.07%
SAC5	10.98%
SAC6	3.90%

## Discussion

- From 2000-2017, the number of visits to a PCP during the year following diagnosis decreased for urban PWD (SAC1), while visits to a PCP the year following diagnosis for rural PWD (SAC6) remained stable.
- Until 2010, rural PWD had fewer visits to a PCP compared to urban PWD. This difference disappeared thereafter.

## Conclusions & Next Steps

- Findings provide an initial portrait of secular trends in the dementia population for the access to a primary care physician.
- Characterizing access to primary care for PWD is essential to inform decision-makers for the implementation of adequate policies and promote equity in dementia care.
- The next steps are to analyze remaining indicators and adjust/standardize indicators.

## Acknowledgements

Thank you to the Canadian Consortium on Neurodegeneration in Aging (CCNA), Canadian Institutes of Health Research (CIHR), and Réseau québécois de recherche sur le vieillissement (RQRV) for funding this project. I would also like to extend my gratitude to the ROSA team for their support.



Please email any questions or inquiries to: [tammy.bui@mail.mcgill.ca](mailto:tammy.bui@mail.mcgill.ca)