

# Better Policy

A novel ICES-developed methodology provides the foundation to support Ontario's dementia strategy and local health system planning.

## The Problem

Brain disorders are an important public health concern in Canada, affecting one in three people in our lifetimes. Given the advancing age of the Ontario population, health planners have more need than ever for reliable data on the prevalence of brain disorders, particularly Alzheimer's and related dementias.

## The Research

To improve health care planning with reliable province-specific data, ICES partnered with the Ontario Brain Institute in 2014 to identify the prevalence, incidence and health system costs of several types of brain disorders.

The research was conducted by scientists in ICES' Health System Planning and Evaluation Research Program. The team applied custom algorithms to filter the records of more than 20 million patients to reliably identify people with brain disorders and track them into the future.

## Recent Impact

- This work, which was foundational to Ontario's dementia capacity planning project, was undertaken in partnership with Cancer Care Ontario and the Ontario Brain Institute. It used ICES data and algorithms for a system capacity model developed for the Ministry of Health and Long-Term Care.
- The team's work continues to support the provincial dementia strategy through requests for additional data related to service use and costs, and through regional reports for local health planners.
- The algorithms continue to be adapted by ICES scientists and others for peer-reviewed Canadian and international research, including a much-cited paper in *The Lancet* exploring the impact of pollution on the incidence of dementia and other diseases.

## Impact Highlights



**First real-world data** on the prevalence of brain disorders in Ontario.



**Ongoing supply of data and analysis** for Ontario's dementia strategy and regional service planning.



Algorithms continue to be **adapted for high-impact research** on brain disorders.

"This project is a good example of the way ICES shares our novel methodologies broadly through our networks, teaching external researchers and planners to use linked administrative data to answer important health policy questions."

### Susan Bronskill

Senior Scientist and Lead, Health System Planning and Evaluation Research Program

#### REFERENCES

Bronskill et al. *Brain Disorders in Ontario: Prevalence, Incidence and Costs from Health Administrative Data* (2015).  
Chen et al. *Lancet* (2017).