

Identifying Diabetes Cases Using New Brunswick Administrative Data

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This project examines supplementary approaches to and potential gaps in the use of CCDSS data to identify diabetes cases in NB administrative data

Did you know that different datasets have different criteria for inclusion? This means they may contain different portions of the population of New Brunswickers with diabetes.

- The CCDSS is an administrative data tool commonly used to identify diabetes cases and estimate disease prevalence.
- HbA1c blood tests are used to diagnose and monitor diabetes. An administrative dataset includes A1c test results.
- Chronic Disease Management (CDM) for diabetes is billed and provided by a physician. Records of CDM for diabetes are found in physician billing datasets.

CCDSS
(Canadian Chronic Disease Surveillance System)
n=93674

Chronic Disease Management
(Physician Billing)
n=52749

Positive Hemoglobin A1c Bloodtests
n=77791

Total population size of individuals 18+ with diabetes identified through various datasets between 2012 and 2018

Discordance of 1 chronic disease in 1 province...
The CCDSS includes datasets for more than 20 chronic conditions. How many are we **missing** on a national scale?

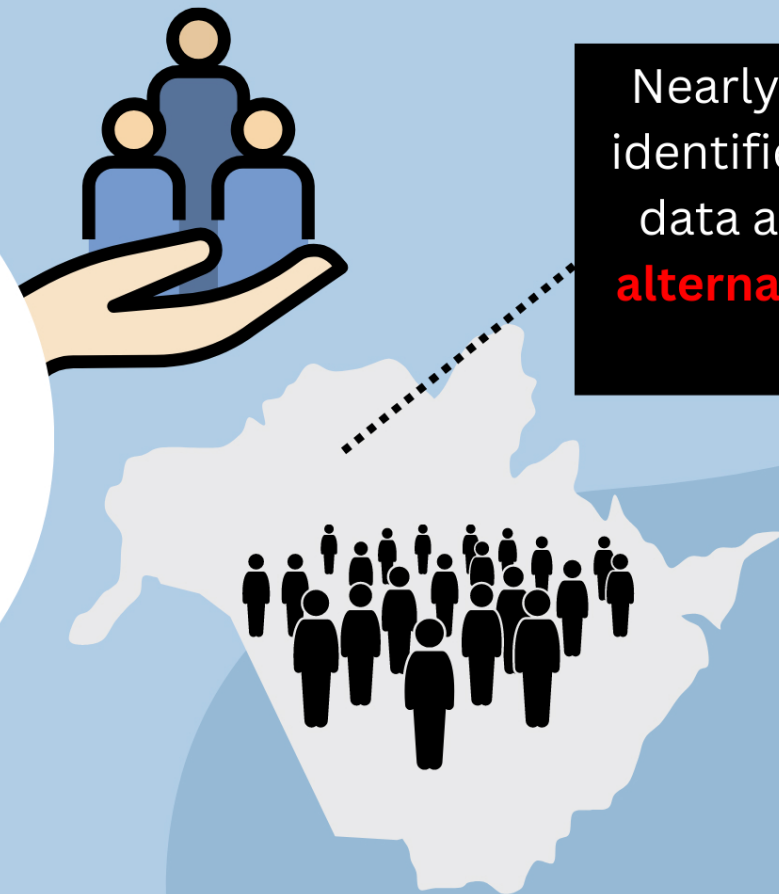


1.7%
cases missing from the CCDSS when supplemented with A1c/CDM diagnosis in 2012

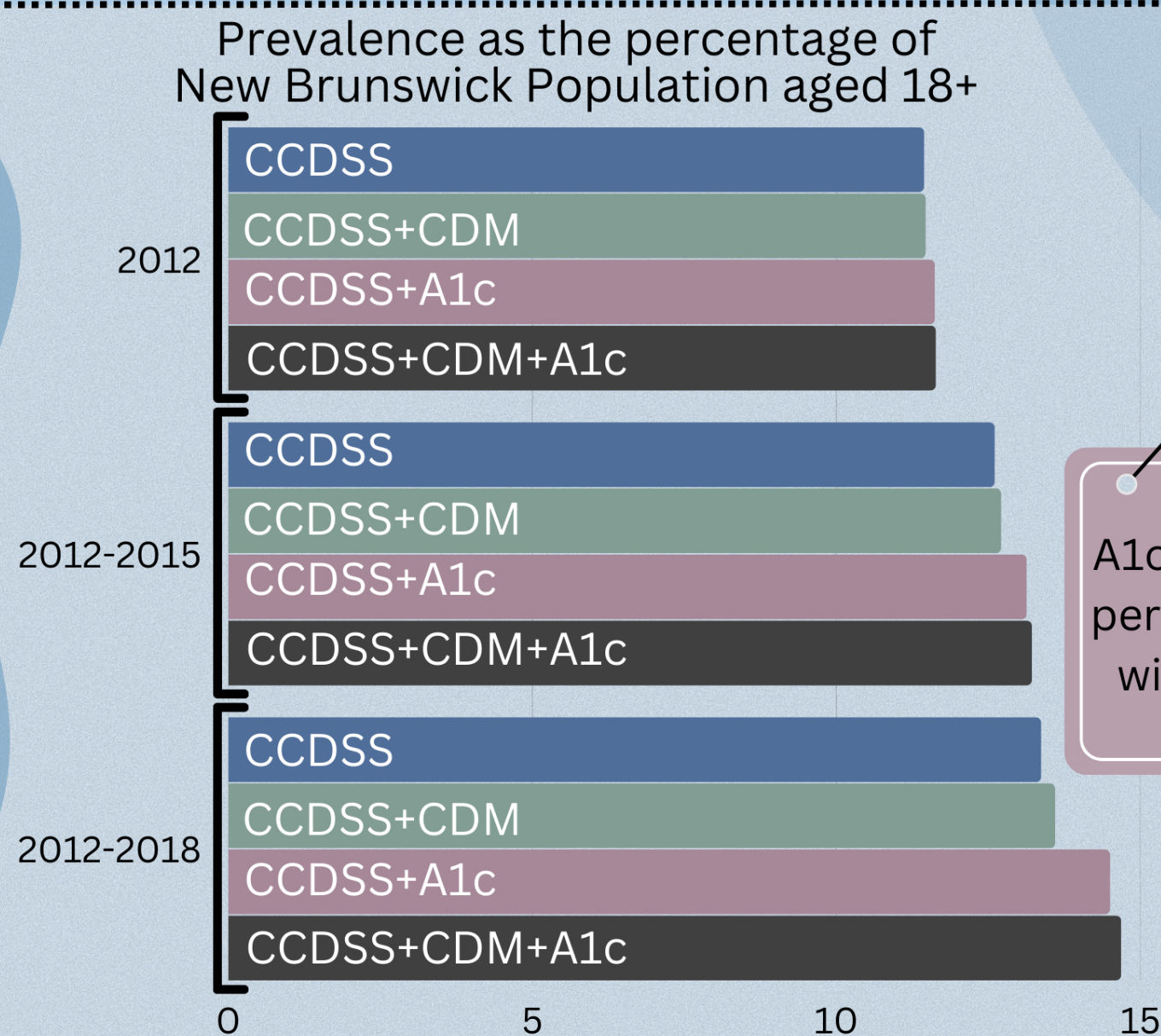
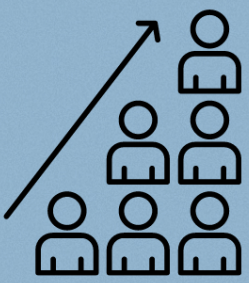
9%
cases missing from the CCDSS when supplemented with A1c/CDM diagnosis between 2012 and 2018

Including A1c and CDM data between 2012 and 2018 identifies an additional **7157** cases not found in the CCDSS compared to 2012 data alone

Nearly **1 in 10** diabetes cases identified in NB administrative data are found only through **alternative approaches** to the CCDSS in 2018



Prevalence increased at an average rate of 3% per year in CCDSS and 4% per year when all three methods were combined



Did you know that Hemoglobin A1c tests are recommended at least every 6 months, and every 3 months if blood sugar targets are not consistently achieved?

1.91
A1c tests on average per person, per year, with a diagnosis in the CCDSS

4.49% of individuals in CCDSS have received no A1c tests during the study period

Statistics Canada. (2023). Table 17-10-0134-01 Population estimates, July 1, by health region and peer group, 2018 boundaries. Ottawa. Released March 02, 2023. <https://doi.org/10.25318/1710013401-eng>