

SUPPLEMENT

eTable 1. Description of Ontario health administrative data sources included in this study

Database	Description
Continuing Care Reporting System Long-Term Care (CCRS-LTC) database	The CCRS-LTC database is comprised of mandatory, clinical assessments performed on all nursing home residents in Ontario. Nursing home assessments are made using the Resident Assessment Instrument Minimum Data Set (RAI-MDS) version 2.0, a previously validated tool. ⁽¹⁾ Full assessments are completed on admission, annually and following any significant health status change by trained medical personnel.
Discharge Abstract Database (DAD)	The DAD is compiled by the Canadian Institute for Health Information and contains administrative, clinical (diagnoses and procedures), and demographic information for all admissions to acute care hospitals in Ontario. DAD records have been demonstrated to have excellent agreement (over 99%) for demographic and administrative data. Regarding diagnoses, median agreement between original DAD records and re-abstracted records for the 50 most common most responsible diagnoses was noted to be 81% (Sensitivity 82%; Specificity 82%). The corresponding median agreement for the 50 most frequently performed surgical procedures was 92% (sensitivity 95%, positive predictive value 91%). ⁽²⁾
Home Care Database (HCD)	Information on publically funded and delivered home care services in Ontario including client social and clinical characteristics as well as type and volume of service.
ICES Physician Database (IPDB)	The IPDB provides information about all physicians who have practiced in Ontario and is comprised of data contained in the OHIP Claims History Database, the OHIP Corporate Provider Database (CPDB), and the Ontario Physician Human Resource Data Centre (OPHRDC) Database. The database contains information on demographics (age, gender, year of graduation, school of graduation); specialty (functional and certified); location of practice; and measures of physician activity (billings and workload data).
National Ambulatory Care Reporting System (NACRS)	The NACRS is compiled by the Canadian Institute for Health Information and contains administrative, clinical (diagnoses and procedures), and demographic information for all patient visits made to hospital- and community-based ambulatory care centres (emergency departments, day surgery units, dialysis and cancer care clinics) in Ontario.
Ontario Drug Benefit (ODB) program database	The ODB database contains prescription medication claims for those covered under the provincial drug program, mainly those aged 65 years and older, nursing home residents, and those receiving social assistance. Each medication claim has an associated prescriber identifier which indicates the health practitioner who wrote the prescription. A special flag in the ODB database indicates whether the prescription was dispensed in the community or nursing home setting. An audit of 5,155 randomly selected prescriptions dispensed from 50 Ontario pharmacies determined that the ODB had an error rate of 0.7% and none of the pharmacy characteristics examined (locations, owner affiliation, productivity) were associated with coding errors. ⁽³⁾

Ontario Health Insurance Plan (OHIP) physician billing claims database	The OHIP physician billing claims database contains information on all outpatient services provided by fee-for-service physicians in Ontario and “shadow billings” for physicians paid under alternate payment plans. Billing codes are specific in identifying services provided in the nursing home setting.
Registered Persons Database (RPDB)	The RPDB provides basic demographic information (age, sex, area of residence, date of birth, and date of death for deceased individuals) about anyone who has ever received an Ontario health card number (e.g., been enrolled in the province’s publicly funded health insurance system).

References

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2. Juurlink D, Preyra C, Croxford R, Chong A, Austin P, Tu J, et al. Canadian institute for health information discharge abstract database: a validation study. ICES investigative report Institute for Clinical Evaluative Sciences, Toronto. 2006.
3. Levy A, O'Brien B, Sellors C, Grootendorst P, Willison D. Coding accuracy of administrative drug claims in the Ontario Drug Benefit database. *The Canadian journal of clinical pharmacology*. 2003;10(2):67-71.