

Appendix 2. Covariates, potential confounders, and effect modifiers

Dataset	Description	Intended Purpose
Ontario Mother-Baby linked dataset (MOMBABY)	MOMBABY includes all inpatient birth admission records from the Discharge Abstract Database. It links mothers and their newborns deterministically based on the maternal/newborn chart number.	<ul style="list-style-type: none"> • Cohort creation (e.g., birthing date) • Baseline characteristics (e.g., parity) • Covariates and confounders of interest (e.g., parity, infants ≤24 months in household)
Ontario Health Insurance Policy (OHIP)	The OHIP claims database contains information on publicly funded services, primarily provided by physicians, to Ontario residents eligible for the health insurance system. The main data elements are service/billing codes for the service provided.	<ul style="list-style-type: none"> • Outcome definition: Physician claims for Tdap (G847) and influenza (G590, G592, Q130, G538) vaccination records • Covariates and confounders of interest (e.g., prenatal care provider type¹, early prenatal care visits², use of assistive fertility³)
COVaxON	COVaxON is a central data repository for SARS-CoV-2 vaccine data and reporting in Ontario.	<ul style="list-style-type: none"> • Outcome definition: SARS-CoV-2 vaccination record
Discharge Abstract Data (DAD)	The DAD is a national database that captures administrative, clinical and demographic information on all hospital discharges and day surgeries in Canada.	<ul style="list-style-type: none"> • Covariates and confounders of interest (e.g., delivery type)
Canadian Index of Multiple Deprivation (CIMD)	The CIMD is a geographically based index developed to quantify the degree of marginalization occurring across the country using census data.	<ul style="list-style-type: none"> • Covariates and confounders of interest (e.g., neighbourhood-level ethnocultural composition, residential instability, economic dependency quintiles)
Registered Persons Database (RPDB)	The RPDB contains basic demographic information about anyone who has ever received an Ontario health card number.	<ul style="list-style-type: none"> • Cohort creation (participant eligibility – e.g., sex) • Baseline characteristics (e.g., maternal age) • Covariates and confounders of interest (e.g., rurality)

¹ Prenatal care provider type was assigned based on the specialty of the provider with the most P004 billings in OHIP between the pregnant person's conception date and index date. If this was tied between a family physician and obstetrician, we considered this "shared care." Our approach to identify midwifery clients was two-fold. First, we looked for any service provider codes for 11004 in the DAD. Second, we looked for any of the following OHIP codes for midwifery services between conception and delivery date: A800, A801, A802, A813, A815, A816, C800, C801, C802, C813, C815, C816, K224, or Q513.

² Early prenatal care visits (prior to 32 weeks of gestation) were determined by a count of P002, P003, P004, and P005.

³ Infertility consultations were identified by OHIP fees for A205, A935, A135, A005, A905, or A285 with a diagnosis code of 628 within 2 years of the conception date.

Client Agency Program Enrolment (CAPE/INST)	CAPE lists patients registered to primary care organizations and contains information on their association to a specific physician and primary care organization.	<ul style="list-style-type: none"> • Covariates and confounders of interest (e.g., patient rostering/ attachment, primary care model)
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