

Appendix Table 1: Summary of databases used for variables and outcomes included in the study

	Database	Definition details and ICD Codes where applicable
Maternal Characteristics		
Maternal age	Health Insurance Registry	
Urban/ rural residence	Health Insurance Registry	Home address not in one of the two major urban centres in Manitoba with population > 10,000 persons
Parity	Hospital abstract	
Socioeconomic factor index group	Health Insurance Registry, Census data	Area-level measure of socio-economic status that was derived from Statistics Canada census data. Calculated using area level data to 6 digit postal code from: <ul style="list-style-type: none"> • Average household income • Percent of single parent households, • Unemployment rate for those age 15 and older, and • High school education rate
Maternal Outcomes		
Caesarean section	Hospital abstract	CSECT variable on delivery record
Operative vaginal delivery (vaginal delivery assisted by forceps and/or vacuum)	Hospital abstract	Intervention codes: 5MD55, 5MD54, 5MD53KL, 5MD53KK, 5MD53KN, 5MD53KM, 5MD53KJ, 5MD53KH, 5MD53KS, 5MD53KP, 5MD53JE, 5MD53JD
Induction	Hospital abstract	Intervention code: 5AC30
Mortality/Morbidity	Hospital abstract	ICD–10–CA codes: Eclampsia: O15 Rupture of uterus during labour: O71.1 Puerperal sepsis: O85 HIV disease: B20–B24, Z21 Cardiac arrest, cardiac failure, or myocardial infarction: O89.1, O74.2, O75.4, I21–I22, I46, I50, J81 Assisted ventilation: 1.GZ.31.CA–ND, 1.GZ.31.CR–ND Hysterectomy, open approach: 1.RM.89.LA (excluded if 1PL74, 1RS74, 1RS80 also present), 1.RM.87.LA–GX Blood transfusion: CIHI variable of red blood cell=yes, trans_auto=yes, or trans_other=Yes Repair of bladder, urethra, or intestine (5.PC.8–.JR, 1.NK.8–^^, 1.NM.80^^ Embolization/ligation/suture uterus for postpartum hemorrhage: O72 + 1 of (1.RM.13^^ or 1.KT.521 OR 5.PC.91.LA Placenta previa with hemorrhage and blood transfusion: O44.1 + CIHI variable of red blood cell=yes, trans_auto=yes, or trans_other=Yes Postpartum hemorrhage and blood transfusion: O72 + CIHI variable of red blood cell=yes, trans_auto=yes, or trans_other=Yes Postpartum hemorrhage and hysterectomy: O72 + 1.RM.89.LA (excluded if 1PL74, 1RS74, 1RS80 also present), 1.RM.87.LA–GX OR maternal death
Neonatal Outcomes		
Preterm delivery	Hospital abstract	<37 weeks

Early preterm delivery	Hospital abstract	<34 weeks
Birthweight	Hospital abstract	
Large-for-gestational-age	Hospital abstract, weight for gestation tables	>10 th percentile as per Kramer et al 2001
Small-for-gestational-age	Hospital abstract, weight for gestation tables	<10 th percentile as per Kramer et al 2001
Birth trauma	Hospital abstract	ICD 10 CM codes P10-11, P13-15
Neonatal intensive care unit admission	Hospital abstract	SCU codes during birth hospitalization episode (initial birth hospitalization and any subsequent transfers)
Neonatal readmission	Hospital abstract	Any hospital admission within 30 days of discharge
Congenital malformation	Hospital abstract	ICD-10-CM codes on the birth hospitalization record: E7-E9 (not E8687, E84), Q0, Q2 (not Q2.11, Q2.50, Q2.70), Q30.0-Q30.1, Q31-Q37, Q39-Q45, Q50-Q51, Q52 (not Q52.5), Q56, Q60-Q64, Q71-Q75, Q77-Q78, Q79.0, Q79.2-Q79.4, Q79.8, Q80-Q81, Q82.0-Q82.4, Q85-Q89, Q9.