Supplementary Data

Definitions of pregnancy	
Delivery definition to select cohort (18)	ICD-9-CM codes: 650 (normal delivery), 651 (multiple gestation), V27.0 (outcome of delivery, single liveborn), V27.1 (outcome of delivery, single stillborn), V27.2 (outcome of delivery, twins, both liveborn), V27.3 (outcome of delivery, twins, 1 liveborn, 1 stillborn), V27.4 (outcome of delivery, other multiple births, all liveborn), V27.5 (outcome of delivery, other multiple births, all liveborn), V27.6 (outcome of delivery, other multiple births, some liveborn)

Pregnancy complications	
Gestational diabetes	648.8* (abnormal glucose tolerance in pregnancy) at any point in defined 40-week pregnancy period OR 250.** (diabetes mellitus) ≤20 weeks before delivery date (i.e., weeks 20–40) OR 648.0* (abnormal glucose tolerance in pregnancy) ≤20 weeks before delivery date (i.e., weeks 20–40) and not meeting criteria for preconception diabetes below (if it meets the below criteria, then it is defined as ''preconception diabetes'')
Preeclampsia (mild or severe) and eclampsia	ICD-9-CM diagnosis codes: 642.4* (mild preeclampsia), 642.5 (severe preeclampsia); ICD-9-CM diagnosis codes: 642.6* (eclampsia)
Gestational hypertension	ICD-9-CM diagnosis codes: 642.3* (transient hypertension in pregnancy) or 642.9* (unspecified hypertension complicating pregnancy) and not meeting the below definition for chronic hypertension
Preterm labor or delivery of preterm infant	ICD-9-CM diagnosis codes: 644.0 (threatened premature labor), 644.00 (threatened premature labor unspecified as to episode of care), 644.03 (threatened premature labor antepartum), 644.1 (Other threatened labor), 644.10 (other threatened labor unspecified as to episode of care), 644.13 (other threatened labor antepartum), 644.2* (early onset of delivery)
Smoking	305.1* (tobacco use disorder) or 649.0 (tobacco use disorder complicating pregnancy)

Preconception medical comorbidities	
Chronic hypertension	ICD-9-CM diagnosis codes: 642.0* (benign essential hypertension complicating pregnancy), 642.2* (other preexisting hypertension complicating pregnancy)
Preconception diabetes	ICD-9-CM diagnosis code 250.** (diabetes mellitus) identified more than 20 weeks prior to delivery date (i.e. pregnancy weeks 1–19, not 20–-40) or ICD-9-CM diagnosis code 648.0* >20 weeks prior to delivery (i.e. pregnancy weeks 1–19, not 20–40) or A prescription claim for a diabetes medication (see definition below) more than 20 weeks prior to delivery (i.e., pregnancy weeks 1–20, not 21–40)
Obesity	ICD-9-C M diagnostic codes: 278.** or 649.1 (obesity complicating pregnancy)
Asthma	ICD-9 C M diagnostic codes: 401.1
Psychiatric disorder	648.4* (mental disorder complicating pregnancy) or 300.** (anxiety disorder) or 295.**(schizophrenia) or 296.4* or 296.1* or 296.0* or 296.5* or 296.6* or 296.7 or 296.8* (bipolar disorder) or 296.2* (major depression, single episode) or 296.3* (major depression, recurrent) or 311.* (depressive disorder, NOS)
Substance abuse disorder	304.** (drug dependence, not including alcohol) or 305.5* (opioid abuse) or 35.6* (cocaine abuse) or 648.3* (drug dependence in pregnancy) or 305.6 (cocaine abuse) or 305.5 (opioid abuse) or 303.** (dependence) or 305.0 (alcohol abuse)

Definitions of utilization of care outcomes	
Primary care outpatient visits	One of the following visit types with a designated primary care provider (e.g., family medicine, primary care nurse practitioner, internal medicine) CPT codes: 99201-99205 (new patient visit), 99211-99215 (established patient visit), 99024 (postoperative check), 99241-99245 (consultation), 99381-99387 (preventive medicine visit), 99384 (adolescent visit, age 12–17 years), 99394 (adolescent visit, age 12–17years) and a specialty code corresponding to any primary care provider (e.g.; internal medicine, family medicine; MD, NP or PA)

CPT, current procedural terminology; ICD-9, *International Classification of Diseases*, ninth revision; ICD-9-CM, ICD-9 Clinical Modification; MD, medical doctor; NP, nurse practitioner; PA, physician aissistant.