

## Supplemental Tables

### Supplemental Table A. Definitions of pregnancy, pregnancy complications, comorbid conditions, utilization outcomes, using ICD9-CM and CPT codes

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)
Pregestational 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) <i>or</i> ICD-9-CM diagnosis code 648.0* > 20 weeks prior to delivery (i.e. pregnancy weeks 1-19, not 20-40) <i>or</i> 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)
Gestational diabetes	648.8* (abnormal glucose tolerance in pregnancy) at any point in defined 40-weeks pregnancy period <i>OR</i> 250.** (diabetes mellitus) ≤ 20 weeks before delivery date (i.e. weeks 20-40) <i>OR</i> 648.0* (abnormal glucose tolerance in pregnancy) ≤ 20 weeks before delivery date (i.e. weeks 20-40) <i>and</i> not meeting criteria for “pre-gestational diabetes” above (if it meets the above criteria then it is defined as “pre-pregnancy diabetes”)
<b>Hypertensive disorders in pregnancy</b>	
Preeclampsia (mild or severe) & eclampsia	ICD-9-CM diagnosis codes: 642.4* (mild preeclampsia), 642.5 (severe preeclampsia); ICD-9-CM diagnosis codes: 642.6* (eclampsia)
Chronic hypertension	ICD-9-CM diagnosis codes: 642.0* (benign essential hypertension complicating pregnancy), 642.2* (other preexisting hypertension complicating pregnancy)
Gestational hypertension	ICD-9-CM diagnosis codes: 642.3* (transient hypertension in pregnancy) <i>or</i> 642.9* (unspecified hypertension complicating pregnancy) <i>and</i> not meeting above definition for “chronic hypertension”
Preeclampsia or eclampsia superimposed on pre-existing hypertension	ICD-9-CM diagnosis codes: 642.7 or meeting definitions for both preeclampsia and 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)
<b>Definitions of utilization of care outcomes</b>	
<i>Primary care outpatient visits:</i> One of the following 3 visit types with a designated primary care provider (e.g. family medicine, primary care nurse practitioner, internal medicine)	
Primary care outpatient visit	CPT codes: 99201-99205 (new patient visit), 99211-99215 (established patient visit), 99024 (post-operative check), 99241-99245 (consultation), 99381-99387 (preventive medicine visit), 99384 (adolescent visit, age 12-17 years), 99394 (adolescent visit, age 12-17years) <i>and</i> a specialty code corresponding to any primary care provider (e.g. internal medicine, family medicine; MD, NP or PA)
Office or other outpatient visit	CPT codes: 99201 - 99205- new pt visit; 99211 - 99215 – established patient 99024 - post-operative check up; 99241 - 99245- consultation

**Supplemental Table A. continued**

Preventive medicine visits	CPT codes:99381-99387, 99391-99397, 99401-99404, 99411, 99412, 99420, 99429
Adolescent medicine visits	99384: Adolescent (age 12 through 17 years); 99394: Adolescent (age 12 through 17 years)
<i>Postpartum obstetric care:</i>	
Office or outpatient hospital location (Place of service =11 or 22), professional claim type	
Either	Specialists visit within 3 months after delivery: Obstetrics & Gynecology, Certified nurse midwife, Gynecologist, Family practice, Family practice OB/Gyn, certified nurse midwife, Maternal and fetal medicine, Nurse practitioner, Perinatology
Or claim including 1 or more of the following V-codes:	V 24.1 - Postpartum care and examination of lactating mother V24.2- Routine postpartum follow-up
<i>Emergency room care</i>	
	CPT codes 99281-99285, 10040-69979 AND Place of service=23 (emergency room)
<i>Prenatal care</i>	Between estimated date of conception and delivery date, requiring ≥ 100 days of insurance coverage in pregnancy and claim from an office or outpatient hospital location (place of service =11 or 22), as a professional claim type, with one of the following specialists: Obstetrics & Gynecology, Certified nurse midwife, Gynecologist, Family practice, Family practice OB/Gyn, certified nurse midwife, Maternal and fetal medicine, Nurse practitioner, Perinatology
Receipt of early prenatal care	Above definition and required a prenatal care visit in ≥ 176 days of i.e. first 104 days of pregnancy (18)
<i>Laboratory testing</i>	
Any glucose testing	CPT codes for the following: BMP (80049), CMP (80054), HgBA1c (83036), GTT (82951), quantitative glucose (82947)
<i>Medications</i>	Antihypertensive medications included the following classes of medications: ACEI, ARB, diuretics, CCB, vasodilator, beta blockers, rennin inhibitors, and all combinations
	All insulin types
	All classes of oral hypoglycemic medications

**Abbreviations:** ACEI=angiotensin converting enzyme inhibitors; ARB=angiotensin receptor blockers; CCB=calcium channel blockers, CPT: Current Procedural Terminology; ICD9-CM= International Classification of Diseases, Ninth Revision, Clinical Modification

**Supplemental table B.** Characteristics of the study sample by insurance type (Medicaid vs. commercial), and within Medicaid insurance group, by those who became eligible for Medicaid because of a pregnancy diagnosis (vs. those who met other eligibility criteria)

Characteristic	Medicaid			Commercial	p-value*
	Eligible based on pregnancy N=17,464	Other eligibility N=9,865	Total N=27,329	Total N=4,011	
Mean age at delivery, years (SD)	24.9 (5.6)	23.4 (6.1)	24.3 (5.8)	31.3 (4.5)	<0.001
<b>Age category (%)</b>					
< 18	3.6%	14.9%	7.65%	0.1%	<0.001
18-24	52.4%	48.9%	51.2%	6.3%	
25-29	24.0%	19.6%	22.4%	27.4%	
30-34	12.7%	10.4%	11.9%	42.9%	
> 35	7.3%	6.3%	7.0%	23.4%	
<b>Race / ethnicity (in Medicaid only)</b>					
African American, %	33.0%	64.3%	44.3%	n/a	n/a
White, %	38.5%	24.3%	33.4%	n/a	n/a
Hispanic, %	5.5%	3.6%	4.8%	n/a	n/a
Other race, %	23.1%	7.8%	17.6%	n/a	n/a
<b>Neighborhood level characteristics<sup>1</sup></b>					
Mean proportion of African American residents, % (SD %)	28.6% (24.4%)	41.5% (29.6%)	33.2% (27.2%)	24.3% (23.7%)	<0.001
Mean proportion without high school diploma among age < 25, % (SD %)	19.5% (8.82%)	24.2% (10.6%)	21.2% (9.8%)	16.9% (10.2%)	<0.001
Mean proportion of residents below federal poverty, % (SD %)	8.0% (6.1%)	12.3% (9.1%)	9.56% (7.6%)	7.1% (7.3%)	<0.001
Mean proportion urban, % (SD %)	76.9% (33.3%)	85.7% (27.1%)	80.1% (31.5%)	93.8% (17.5%)	<0.001
<b>Pregnancy and delivery complications</b>					
Any hypertensive disorder in pregnancy, %	15.8%	19.5%	17.2%	11.96%	0.04
Pre-eclampsia, % (mild or severe)	7.8%	9.5%	8.4%	7.0%	0.002
Eclampsia	0.4%	0.7%	0.5%	0.3%	0.07
Chronic hypertension in pregnancy, %	5.6%	7.7%	6.4%	6.6%	0.52
Gestational hypertension	7.11%	7.5%	7.2%	6.43%	0.07
Gestational diabetes mellitus, %	9.30%	7.5%	8.66%	12.44%	<0.001
Pre-pregnancy diabetes, %	1.01%	1.70%	1.26%	1.94%	<0.001
Cesarean delivery, %	27.4%	26.8%	27.2%	33.2%	<0.001
Preterm delivery, %	8.6%	11.4%	9.6%	7.9%	<0.001
Multiple gestation, %	1.4%	1.7%	1.5%	2.5%	<0.001
Stillborn birth, %	0.3%	0.3%	0.3%	0.2%	0.65
<b>Drug use and smoking</b>					
Any drug use	3.2%	7.3%	4.7%	0.2%	<0.001
Alcohol use	0.3%	0.8%	0.5%	0.1%	<0.001
Smoking	26.2%	32.6%	28.5%	15.5%	<0.001

**Supplemental table B. continued**

<b>Other co-morbid illnesses in pregnancy</b>					
Depression	4.09%	7.28%	5.24%	6.11%	0.02
Other mental disorders	13.66%	19.92%	15.92%	8.13%	<0.001
Thyroid disease in pregnancy	2.09%	2.48%	2.23%	7.65%	<0.001
HIV	0.19%	1.08%	0.51%	0.12%	<0.001
Asthma	9.28%	16.33%	11.83%	8.45%	<0.001
Obesity	8.21%	12.86%	9.89%	7.23%	<0.001
<b>Insurance coverage</b>					
Mean coverage prior to conception, days (SD)	22.1 (54.4)	97.0 (84.5)	49.2 (75.9)	145.9 (65.0)	<0.001
Proportion with ≥ 3 months of preconception coverage, %	12.9%	55.23%	28.20%	82.25%	<0.001
Proportion with early pregnancy coverage (first 104 days of pregnancy), %	72.0%	83.5%	76.1%	94.8%	<0.001
Mean coverage post-delivery, days (SD)	170.8 (118.7)	316.4 (189.1)	223.3 (129.5)	324.1 (82.2)	<0.001
Proportion with ≥ 6 months post-delivery coverage, %	29.7%	88.2%	51.8%	89.7%	<0.001

\* p-value between Total Medicaid and Total Commercial insurance groups