**Supplemental Table. Distribution and Regression Results for Service Utilization Measures by Severity of Glucose Test Result (excludes women with hypertensive disorders)**

| **Service Utilization Measure** | **GDM Screening Test Result** | | | | |
| --- | --- | --- | --- | --- | --- |
| **Normal GCT**  (n=23714, 85.6%) | **Normal OGTT by CC & NDDG** (n=2031, 7.3%) | **1-2 Abnormal by CC**  (n=579, 2.1%) | **1 Abnormal by NDDG**  (n=719, 2.6%) | **GDM**  (n=666, 2.4%) |
| **Dispensed glucose testing suppliesa** |  |  |  |  |  |
| % yes | 0.2 | 1.9 | 2.4 | 16.1 | 92.9 |
| OR (95%CI)d | 1.0  referent | 7.7  (5.0, 11.7) | 8.8  (4.8, 16.3) | 70.6  (49.9, 99.8) | 5330  (3562, 7977) |
| **Dispensed medications for GDMa** |  |  |  |  |  |
| % yes | 0 | 0.0 | 0.1 | 3.2 | 8.3 |
| OR (95%CI) | Model not able to run to due small cell sizes | | | | |
| **Obstetrical ultrasoundb** |  | | | | |
| Number of encounters | 1.2 | 1.1 | 1.2 | 1.4 | 2.1 |
| RR (95% CI)d | 1.0  referent | 1.0  (1.0, 1.1) | 1.1  (1.0, 1.3) | 1.3  (1.1, 1.4) | 2.0  (1.8, 2.3) |
| **Noninvasive antenatal testsb** |  |  |  |  |  |
| Number of encounters | 1.4 | 1.6 | 1.6 | 1.9 | 3.0 |
| RR (95% CI)d | 1.0  referent | 1.1  (1.0, 1.2) | 1.1  (1.1, 1.2) | 1.3  (1.1, 1.5) | 2.0  (1.8, 2.3) |
| **Invasive antenatal testsb** |  |  |  |  |  |
| Number of encounters | 0.05 | 0.07 | 0.05 | 0.10 | 0.11 |
| RR (95% CI)d | 1.0  referent | 1.3  (1.0, 1.7) | 1.0  (0.6, 1.7) | 1.9  (1.3, 2.6) | 2.0  (1.4, 2.6) |
| **Laboratory visitsb** |  |  |  |  |  |
| Number of encounters | 1.5 | 2.6 | 2.6 | 2.7 | 2.6 |
| RR (95% CI)d | 1.0  referent | 1.8  (1.7, 1.8) | 1.7  (1.7, 1.8) | 1.8  (1.8, 1.9) | 1.8  (1.7, 1.9) |
| **Ambulatory visitsb** |  |  |  |  |  |
| **OB/Gyn** |  |  |  |  |  |
| Number of encounters | 7.8 | 7.6 | 7.8 | 8.2 | 10.3 |
| RR (95% CI)d | 1.0  referent | 1.0  (1.0, 1.0) | 1.0  (1.0, 1.1) | 1.1  (1.0, 1.1) | 1.4  (1.3, 1.4) |
| **Nutrition** |  |  |  |  |  |
| Number of encounters | 0.0 | 0.1 | 0.1 | 0.5 | 1.1 |
| RR (95% CI)d | 1.0  referent | 4.2  (3.4, 5.2) | 5.3  (3.9, 7.1) | 30.6  (26.3, 35.6) | 73.7  (65.0, 83.6) |
| **Urgent/Emergent/ Other** |  |  |  |  |  |
| Number of encounters | 3.1 | 3.2 | 3.2 | 3.3 | 3.1 |
| RR (95% CI)d | 1.0  referent | 1.1  (1.0, 1.1) | 1.0  (1.0, 1.1) | 1.1  (1.0, 1.2) | 1.1  (1.0, 1.2) |
| **Telephone encounters** |  |  |  |  |  |
| Number of encounters | 2.7 | 4.0 | 4.1 | 5.0 | 8.0 |
| RR (95% CI)d | 1.0  referent | 1.5  (1.5, 1.5) | 1.5  (1.5, 1.6) | 1.9  (1.8, 2.0) | 3.1  (3.0, 3.3) |
| **Maternal delivery length of stayc** |  |  |  |  |  |
| **Overall** (days) | 3.5 | 3.6 | 3.8 | 3.7 | 3.8 |
| (95% CI)d | 0.0  Referent | 0.1  (0.0, 0.1) | 0.2  (0.1, 0.3) | 0.1  (0.0, 0.2) | 0.2  (0.1, 0.3) |
| **Cesarean births** (days) | 4.5 | 4.5 | 4.7 | 4.7 | 4.6 |
| (95% CI) | 0.0  Referent | 0.0  (-0.1, 0.1) | 0.1  (-0.0, 0.3) | 0.1  (0.0, 0.3) | 0.0  (-0.1, 0.2) |
| **Vaginal** (days) | 3.2 | 3.2 | 3.3 | 3.2 | 3.4 |
| (95% CI)d | 0.0  Referent | 0.1  (0.0, 0.1) | 0.1  (0.0, 0.2) | 0.0  (-0.0, 0.1) | 0.2  (0.1, 0.3) |

Abbreviations: GCT, glucose challenge test; OGTT, oral glucose tolerance test; CC, Carpenter and Coustan; NDDG, National Diabetes Data Group; CI, confidence interval; OR, odds ratio; RR, rate ratio.

a Dichotomous outcomes (yes/no) analyzed with logistic regression models to estimate odds ratios (OR) accounting for repeated measures (women with more than 1 pregnancy in the study) and adjusting for age and BMI.

bRate outcomes calculated as number of encounters divided by total person-weeks from >22 weeks gestation to delivery and analyzed with generalized linear Poisson regression models, with a negative binomial distribution and person-weeks from 22 weeks gestation to delivery as the offset variable to estimate rate ratios (RR). In situations where there were no zero counts, we modeled the number of “excess” counts. All models accounted for repeated measures (women with more than 1 pregnancy in the study) and were adjusted for age, BMI, race/ethnicity, education, parity, tobacco use, and Medicaid status.

cLinear outcomes (days) were analyzed with linear generalized estimating equation models to estimate a  coefficient. All models accounted for repeated measures (women with more than 1 pregnancy in the study) and were adjusted for age, BMI, race/ethnicity, education, parity, tobacco use, and Medicaid status.

dLinear trend p<0.05