**SUPPLEMENTAL DIGITAL CONTENT 2**

**Generalized estimating equation sensitivity analysis of factors associated with receipt of repeat, Potentially Inappropriate Medication (PIM) prescriptions among those treated for depression or anxiety**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Depression Only (n=60,127 prescriptions, 9.6% PIMs)** | | **Test Statisticc** | **df** | **p-value** | **Anxiety Only (n=23,333 prescriptions, 62.3% PIMs)** | | **Test Statisticc** | **df** | **p-value** | **Comorbid Depression & Anxiety**  **(n=64,464 prescriptions, 37.1% PIMs)** | | **Test Statisticc** | **df** | **p-value** |
| **Characteristic** | **aORa** | **95% CI** |  |  |  | **aORa** | **95% CI** |  |  |  | **aORa** | **95% CI** |  |  |  |
| **Sex** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Male** | 1.00 | REF |  |  |  | 1.00 | REF |  |  |  | 1.00 | REF |  |  |  |
| **Female** | **1.18** | **(1.03, 1.34)** | **5.97** | **1** | **0.0145** | 0.97 | (0.85, 1.10) | 0.28 | 1 | 0.5947 | **1.14** | **(1.05, 1.24)** | **9.88** | **1** | **0.0017** |
| **Age Category, in years** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **65-74** | 1.00 | REF |  |  |  | 1.00 | REF |  |  |  | 1.00 | REF |  |  |  |
| **75-84** | 1.02 | (0.92, 1.13) | 0.14 | 1 | 0.7126 | 0.99 | (0.88, 1.10) | 0.06 | 1 | 0.8074 | 0.96 | (0.89, 1.03) | 1.57 | 1 | 0.2098 |
| **≥85** | 0.91 | (0.76, 1.09) | 1.05 | 1 | 0.3044 | **1.20** | **(1.01, 1.44)** | **4.21** | **1** | **0.0403** | **0.85** | **(0.75, 0.95)** | **7.98** | **1** | **0.0047** |
| **Race** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **White** | 1.00 | REF |  |  |  | 1.00 | REF |  |  |  | 1.00 | REF |  |  |  |
| **Black** | 1.20 | (0.74, 1.94) | 0.56 | 1 | 0.4532 | 1.55 | (0.84, 2.86) | 1.97 | 1 | 0.1609 | 0.74 | (0.49, 1.12) | 2.06 | 1 | 0.1510 |
| **Other** | 0.96 | (0.63, 1.47) | 0.03 | 1 | 0.8618 | 0.80 | (0.54, 1.17) | 1.34 | 1 | 0.2466 | 0.88 | (0.67, 1.16) | 0.79 | 1 | 0.3749 |
| **Residence** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Urban** | 0.87 | (0.67, 1.13) | 1.08 | 1 | 0.2978 | 1.07 | (0.82, 1.38) | 0.24 | 1 | 0.6241 | 1.12 | (0.95, 1.32) | 1.76 | 1 | 0.1852 |
| **Suburban** | 1.03 | (0.76, 1.39) | 0.03 | 1 | 0.8542 | 1.16 | (0.86, 1.56) | 0.91 | 1 | 0.3391 | **1.22** | **(1.00, 1.48)** | **4.01** | **1** | **0.0453** |
| **Rural** | 1.00 | REF |  |  |  | 1.00 | REF |  |  |  | 1.00 | REF |  |  |  |
| **# of Chronic Conditionsb** | 1.01 | (0.98, 1.04) | 0.65 | 1 | 0.4214 | **1.03** | **(1.00, 1.06)** | **4.91** | **1** | **0.0266** | 1.00 | (0.99, 1.02) | 0.01 | 1 | 0.9096 |
| **Non-AD Dementia** | 0.93 | (0.81, 1.08) | 0.81 | 1 | 0.3670 | **0.76** | **(0.65, 0.88)** | **12.76** | **1** | **0.0004** | **0.88** | **(0.81, 0.96)** | **8.99** | **1** | **0.0027** |
| **Prescriber** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Neurologist** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Yes** | 0.94 | (0.71, 1.24) | 0.20 | 1 | 0.6524 | 1.08 | (0.84, 1.39) | 0.39 | 1 | 0.5344 | **1.22** | **(1.06, 1.41)** | **7.23** | **1** | **0.0072** |
| **No** | 1.00 | REF |  |  |  | 1.00 | REF |  |  |  | 1.00 | REF |  |  |  |
| **Psychiatrist** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Yes** | 0.84 | (0.61, 1.14) | 1.26 | 1 | 0.2614 | 0.79 | (0.49 1.26) | 1.00 | 1 | 0.3171 | **0.68** | **(0.60, 0.78)** | **31.80** | **1** | **<0.0001** |
| **No** | 1.00 | REF |  |  |  | 1.00 | REF |  |  |  | 1.00 | REF |  |  |  |
| **Geriatrician** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Yes** | **0.75** | **(0.58, 0.96)** | **5.11** | **1** | **0.0237** | **0.37** | **(0.19, 0.72)** | **8.42** | **1** | **0.0037** | 0.74 | (0.53, 1.02) | 3.31 | 1 | 0.0688 |
| **No** | 1.00 | REF |  |  |  | 1.00 | REF |  |  |  | 1.00 | REF |  |  |  |

aAdjusted for sex, time-varying age category, race, residence, # of chronic conditions, non-AD dementia, neurologist prescriber, psychiatrist prescriber, geriatrician prescriber

bAcquired hypothyroidism, acute myocardial infarction, anemia, asthma, atrial fibrillation, benign prostatic hyperplasia, colorectal cancer, endometrial cancer, breast cancer, lung cancer, prostate cancer, cataract, chronic kidney disease, chronic obstructive pulmonary disease, diabetes, glaucoma, heart failure, hip/pelvic fracture, hyperlipidemia, hypertension, ischemic heart disease, osteoporosis, rheumatoid arthritis/osteoarthritis, stroke/transient ischemic attack

cChi-squared test