**Supplementary Materials.**

**Table S1. Cross-tabulations of sex and race.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Overall Clinic Population** | **Chronic Opioid Users** | **Non-opioid users** |  | **Chronic Benzodiazepine Users** | **Non-BZD users** |  |
| **Demographics** | | **n=25,120** | **n=833** | **n=24,287** |  | **n=959** | **n=24,161** |  |
| **Race** | **Sex** | **n(%)** | **n(%)** | **n(%)** | **P-value** | **n(%)** | **n(%)** | **P-value** |
| White/Caucasian | Female | 12,399 (49.4%) | 468 (56.18%) | 11,931 (49.12%) | <0.001 | 653 (68.09%) | 11,746 (48.61%) | <0.001 |
| Male | 8,174 (32.5%) | 247 (29.65%) | 7,927 (32.63%) | 0.07 | 233 (24.30%) | 7,941 (32.87%) | <0.001 |
| Black | Female | 2,421 (9.6%) | 79 (9.48%) | 2,348 (9.67%) | 0.86 | 39 (4.07%) | 2,382 (9.85%) | <0.001 |
| Male | 1,208 (4.8%) | 27 (3.24%) | 1,181 (4.86%) | 0.03 | 13 (1.36%) | 1,195 (4.94%) | <0.001 |
| Other Race | Female | 566 (2.3%) | 9 (1.08%) | 557 (2.29%) | 0.02 | 14 (1.46%) | 552 (2.28%) | 0.09 |
| Male | 351 (1.4%) | 3 (0.36%) | 348 (1.43%) | 0.01 | 7 (0.73%) | 344 (1.42%) | 0.07 |

**Interpretation: Percentages represent column percents – e.g., among chronic opioid users, the proportion that were white and female, etc.**

**Table S2. Factors Associated with Co-Prescribing among Opioid Users**

|  |  |  |
| --- | --- | --- |
|  | **Unadjusted Odds Ratios**  **OR (95% CI)** | **Adjusted Odds Ratios**  **aOR (95% CI)** |
| **Demographics** |  |  |
| **Age (mean)** |  |  |
| 65-69 (ref) | **-** | **-** |
| 70-79 | **1.170 (0.754, 1.815)** | **1.290 (0.792, 2.100)** |
| 80-89 | **0.790 (0.439, 1.422)** | **1.056 (0.556, 2.007)** |
| 90+ | **0.561 (0.163, 1.936)** | **0.831 (0.225, 3.063)** |
| **Sex** |  |  |
| Male (ref) |  |  |
| Female | **1.389 (0.914, 2.111)** | **1.124 (0.715, 1.767)** |
| **Race** |  |  |
| White/Caucasian (ref) | **-** | **-** |
| Black | **0.422 (0.200, 0.890)\*** | **0.464 (0.212, 1.014)** |
| Other | **2.582 (0.765, 8.716)** | **3.087 (0.833, 11.438)** |
| **Rurality** |  |  |
| Rural (ref) | **-** | **-** |
| Suburban | **1.609 (0.817, 3.169)** | **1.972 (0.948, 4.105)** |
| Urban | **0.578 (0.300, 1.114)** | **0.510 (0.251, 1.040)** |
| **Medicaid Use** |  |  |
| Yes | **1.222 (0.750, 1.990)** | **1.368 (0.794, 2.356)** |
| No (ref) | **-** | **-** |
| **Clinical Characteristics** |  |  |
| **Have you fallen in the past year?** |  |  |
| Yes | **1.499 (1.008, 2.230) \*** | **1.247 (0.807, 1.926)** |
| No (ref) |  |  |
| **Chronic Pain** | **0.472 (0.181, 1.230)** | **0.536 (0.184, 1.564)** |
| **Anxiety** | **3.275 (2.169, 4.945)** | **2.832 (1.831, 4.381)\*** |
| **Major Depression** | **2.126 (1.445, 3.127)** | **1.728 (1.127, 2.65)\*** |
| **Post-traumatic stress disorder** | **11.665 (3.459, 39.342)** | **10.810 (2.937, 39.783)\*** |
| **Insomnia** | **1.932 (1.243, 3.005)** | **1.89 (1.170, 3.080)\*** |

**Table S3. Factors Associated with Co-Prescribing among Benzodiazepine Users**

|  |  |  |
| --- | --- | --- |
|  | **Unadjusted Odds Ratios**  **OR (95% CI)** | **Adjusted Odds Ratios**  **aOR (95% CI)** |
| **Demographics** |  |  |
| **Age (mean)** |  |  |
| 65-69 (ref) | **-** | **-** |
| 70-79 | **1.238 (0.802, 1.910)** | **1.353 (0.842, 2.175)** |
| 80-89 | **0.779 (0.436, 1.390)** | **0.786 (0.422, 1.464)** |
| 90+ | **0.939 (0.268, 3.298)** | **0.852 (0.229, 3.169)** |
| **Sex** |  |  |
| Male (ref) | **-** | **-** |
| Female | **0.945 (0.622, 1.436)** | **0.859 (0.547, 1.350)** |
| **Race** |  |  |
| White/Caucasian (ref) | **-** | **-** |
| Black | **1.207 (0.554, 2.628)** | **1.317 (0.576, 3.011)** |
| Other | **1.562 (0.517, 4.723)** | **1.407 (0.427, 4.638)** |
| **Rurality** |  |  |
| Rural (ref) | **-** | **-** |
| Suburban | **0.514 (0.274, 0.966)\*** | **0.668 (0.343, 1.301)** |
| Urban | **0.283 (0.149, 0.539)** | **0.250 (0.126, 0.498)\*** |
| **Medicaid Use** |  |  |
| Yes | **2.396 [1.447-3.969]\*** | **1.532 [0.879, 2.670]** |
| No (ref) | **-** | **-** |
| **Clinical Characteristics** |  |  |
| **Have you fallen in the past year?** |  |  |
| Yes | **2.447 (1.638, 3.654)\*** | **1.902 (1.226, 2.951)\*** |
| No (ref) | - | **-** |
| **Chronic Pain** | **5.823 (2.524, 13.429)** | **5.301 (2.262, 12.425)\*** |
| **Anxiety** | **0.768 (0.524, 1.127)** | **0.736 (0.489, 1.108)** |
| **Major Depression** | **1.965 (1.358, 2.902)** | **1.828 (1.194, 2.798)\*** |
| **Post-traumatic stress disorder** | **6.081 (2.302, 16.066)** | **7.308 (2.351, 22.714)\*** |
| **Insomnia** | **0.991 (0.650, 1.510)** | **0.989 (0.631, 1.549)** |