**Supplemental Digital Content, Table 5. Odds ratios of the year of prescription, provider type, and beneficiary characteristics for initial and refill potentially inappropriate medication prescriptions**

|  |  |  |
| --- | --- | --- |
| Characteristic | Initial PIM, OR (95% CI) | Refill PIM, OR (95% CI) |
| Year of prescription |  |  |
|  2016 | Ref | Ref |
|  2018 | 0.91 (0.90–0.92)\* | 0.92 (0.92–0.93)\* |
| Provider type |  |  |
|  Physician | Ref | Ref |
|  Nurse practitioner | 0.80 (0.78–0.81)\* | 0.49 (0.49–0.50)\* |
| NP regulation |  |  |
|  Restricted authority | Ref | Ref |
|  Conditional authority | 0.98 (0.95–1.02) | 0.94 (0.91–0.97)\* |
|  Full authority | 0.86 (0.76–0.97)\* | 0.80 (0.71–0.90)\* |
| Age, year |  |  |
|  66–69 | Ref | Ref |
|  70–74 | 0.92 (0.90–0.93)\* | 0.88 (0.87–0.89)\* |
|  75–79 | 0.87 (0.85–0.88)\* | 0.83 (0.82–0.84)\* |
|  80–84 | 0.81 (0.79–0.82)\* | 0.79 (0.78–0.80)\* |
|  85+ | 0.69 (0.67–0.70)\* | 0.72 (0.71–0.73)\* |
| Gender |  |  |
|  Male | Ref | Ref |
|  Female | 1.45 (1.43–1.46)\* | 1.73 (1.71–1.74)\* |
| Race or ethnicity |  |  |
|  Non-Hispanic white | Ref | Ref |
|  Black | 0.84 (0.82–0.86)\* | 0.66 (0.65–0.67)\* |
|  Hispanic | 1.21 (1.18–1.24)\* | 0.81 (0.79–0.82)\* |
|  Other | 1.27 (1.24–1.30)\* | 0.95 (0.94–0.97)\* |
| Original Entitlement |  |  |
|  Aged | Ref | Ref |
|  ESRD or disability | 1.04 (1.03–1.06)\* | 1.48 (1.47–1.50)\* |
| Dual eligibility |  |  |
|  No | Ref | Ref |
|  Yes | 1.14 (1.13–1.16)\* | 1.74 (1.72–1.76)\* |
| Hospitalization |  |  |
|  No | Ref | Ref |
|  Yes | 1.04 (1.02–1.05)\* | 1.13 (1.12–1.14)\* |
| Charlson comorbidity index score |  |  |
|  0 condition | Ref | Ref |
|  1–2 conditions | 0.90 (0.89–0.91)\* | 1.03 (1.02–1.04)\* |
|  ≥ 3 conditions | 0.83 (0.82–0.84)\* | 1.02 (1.00–1.03)\* |
| Residence location |  |  |
|  Metropolitan | Ref | Ref |
|  Urban | 1.04 (1.03–1.05)\* | 1.09 (1.08–1.10)\* |
|  Rural | 1.00 (0.97–1.03) | 1.06 (1.04–1.09)\* |
| Residence region |  |  |
|  Northeast | Ref | Ref |
|  Midwest | 1.05 (0.92–1.21) | 1.16 (1.01–1.32)\* |
|  South | 1.39 (1.22–1.59)\* | 1.43 (1.25–1.62)\* |
|  West | 1.14 (0.98–1.32) | 1.32 (1.14–1.52)\* |

\*p < 0.001.

Note: CI = confidence interval; ESRD = end stage renal disease; NP = nurse practitioner; OR = odds ratio; PIM, potentially inappropriate medication; Ref = reference group.