Use of prescription opioids has increased markedly in recent years, resulting in public health and safety concerns of prescription opioid abuse. Little is known about geographic variation and local demographic determinants for prescription opioid abuse.

**Background**

Using the number of treatment admissions for prescription opioid abuse as a local index for prescription opioid abuse, this study:
1. profiles geographic patterns of prescription opioid abuse across the contiguous United States; and
2. examines the effect of local admission characteristics (i.e., client age, sex, and race) on prescription opioid abuse.

**Objectives**

- CBSAs with highest proportions of prescription opioid treatment admissions became more dispersed after adjustment.
- CBSAs at or crossing state borders were more likely to report high proportions of prescription opioid treatment admissions.
- CBSAs within individual states showed variation in proportion quintiles of prescription opioid treatment admissions.

**Methods**

**Study Design & Data Source**: Ecological study using the 2012 Treatment Episode Data Set-Admission, an admission-level dataset comprised of client information collected from state-funded substance abuse treatment facilities.

**Unit of Analysis**: The core based statistical area (CBSA), which consists of county, counties, or equivalent entities associated with ≥ 1 core (urbanized area or cluster) of ≥ 10,000 population, through a high degree of social and economic integration.

**Measure**: Prescription opioid treatment admissions as a proportion of total opioid treatment admissions were calculated for each CBSA with ≥ 1 opioid-related (prescription opioid + non-prescription methadone + heroin) treatment admission.

**Analyses**:
1. Logistic regression adjusted for CBSA-level client age (median), sex (% female), and race (% nonwhite) estimates. Odds ratios (ORs) and 95% confidence intervals (CIs) were reported.
2. Crude and adjusted proportions were mapped in quintiles.

**Results**

- Patterns of potential prescription opioid abuse after adjustment suggested the geographic variation may be partially explained by risk population characteristics.
- Higher proportions of prescription opioid treatment admissions occurring at state borders warrants further examination of the association of prescription opioid abuse with state prescription drug monitoring programs and other state-level initiatives aimed at reducing prescription drug abuse.
- Within individual states, potential prescription opioid abuse varies, suggesting state-level prevention and treatment programs targeting prescription drug abuse may not be evenly delivered throughout the state.

* Funded by the Maryland Statewide Epidemiological Outcomes Workgroup

**Conclusions and Implications**

**Table 1. Admission Characteristics among Opioid-Related Treatment Admissions**

<table>
<thead>
<tr>
<th>Admission (n)</th>
<th>448,642</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBSA (n)</td>
<td>258</td>
</tr>
<tr>
<td>Median age (years)</td>
<td>30-34</td>
</tr>
<tr>
<td>Female (%)</td>
<td>36.83</td>
</tr>
<tr>
<td>Non-white (%)</td>
<td>25.39</td>
</tr>
</tbody>
</table>

**Table 2. Effect of Local Admission Characteristics on Prescription Opioid-Related Treatment Admissions**

<table>
<thead>
<tr>
<th>% Female</th>
<th>OR 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.04</td>
<td>1.02 - 1.05</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% Non-white</th>
<th>OR 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.97</td>
<td>0.95 - 0.98</td>
</tr>
</tbody>
</table>

**Table 1. Admission Characteristics among Opioid-Related Treatment Admissions**

**Table 2. Effect of Local Admission Characteristics on Prescription Opioid-Related Treatment Admissions**

**Where You Live and Who You Are Matter: Prescription Opioid Treatment Admissions**

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