Impact of opioid classifications and use on overall Medicaid expenditures among adult (≥21 years) enrollees in Oklahoma

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Results

Table 1a. Descriptive Summary of Oklahoma Medicaid Enrollee Demographic, Healthcare Costs and Resource Use by Opioid Classification for September 2013 through August 2014, Continued

<table>
<thead>
<tr>
<th>Opioid Classification</th>
<th>None</th>
<th>N/A</th>
<th>RX $</th>
<th>No. ER Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>non-ADTR (N=541)</td>
<td>541</td>
<td>(100.0)</td>
<td>9,609.26</td>
<td>10.52 (0.15)</td>
</tr>
<tr>
<td>ADTR (N=541)</td>
<td>541</td>
<td>(100.0)</td>
<td>9,522.36</td>
<td>10.52 (0.15)</td>
</tr>
</tbody>
</table>

Table 2. Expected Mean Summaries of Healthcare Expenditures (Log Scale) by Opioid Classification and Charlson Comorbidity Score Derived from Multivariable Linear Regression Models (N=938)

<table>
<thead>
<tr>
<th>Opioid Classification</th>
<th>No. Prex Press*</th>
<th>RX $</th>
<th>Medical $</th>
<th>Healthcare $</th>
</tr>
</thead>
<tbody>
<tr>
<td>non-ADTR (N=397)</td>
<td>397 (100.0)</td>
<td>9.60</td>
<td>0.15</td>
<td>10.52</td>
</tr>
<tr>
<td>ADTR (N=397)</td>
<td>397 (100.0)</td>
<td>9.52</td>
<td>0.15</td>
<td>10.47</td>
</tr>
</tbody>
</table>

Figure 2. Boxplot Showing the Relationship Between Total Healthcare Costs (Log Scale) and Charlson Comorbidity Score by Opioid Drug Classification

Figure 3. Boxplot Showing the Relationship Between Total Prescription Costs (Log Scale) and Charlson Comorbidity Score by Opioid Drug Classification

Conclusions

• Prescription costs constitute a significant portion (35%) of the overall Medicaid expenditures for these patients.
• The use of ADTR is the biggest driver of overall Medicaid expenditures due to the high price of the branded products compared to generic alternatives.
• Indicators of potential misuse were not present (e.g. number of prescribers).
• Overall healthcare costs between opioid types vary depending on patient CCS and CA.
• Medical costs and prescription costs between opioid types vary depending on CA and CCS respectively.
• Differences in CCS and CA and ADTR vs. GA may result from prescriber selection of ADTR for those with known dependency or potential for extended use.
• Further research is required to determine if initiation on ADTR lowers incidence of opioid dependence and reduces misuse and abuse.

Limitations

• Causal inference is not possible from results given study design limitations.
• Results only provide a snapshot of cost correlates in 2013/14; different results may be obtained in a different reference period.

Disclosure Statement

• Nancy Nesser and Shellie Keast disclose employment or contractual employment with the Oklahoma Health Care Authority.
• The remaining authors have no financial disclosures related to this work.

References