Effect of Naloxone Access Law Type on Dispensing of Naloxone Prescriptions in the Medicaid Population from 2013 through 2017

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Disclosure
- Sarai Connell
- Potential conflicts of interest: none
- Sponsorship: none
- Proprietary information or results of ongoing research may be subject to different interpretations
- Speaker’s presentation is educational in nature and abides by the non-commercialism guidelines provided

Learning Objectives
1. Evaluate the effect Naloxone Access Laws (NAL) had on the access to naloxone in Medicaid.
2. Compare the effect of 4 different types of NALs on naloxone prescriptions in Medicaid.

Opioid epidemic
- Opioid overdoses deaths continue to rise
- “Public Health Emergency”
- Need for increased access to naloxone
- Laws that expand access to naloxone are referred to as naloxone access laws

Naloxone Access Laws
- By mid-2017 every state had a NAL
- The composition of NAL laws varies, but all NAL laws consist of ways to reduce the burden of access to naloxone
- 4 types of NAL that address naloxone prescribing

Four Types of NAL
1. Third-party
   - Allows prescriptions to be written for patients that do not need the naloxone themselves
2. Standing order
   - Allows a non-patient-specific order to be in place that allow naloxone to be dispensed according to a specific set of criteria
3. Per-protocol
   - Allows a set agreement to be in place between a prescriber and a pharmacy to dispense a prescription for naloxone according to a specific set of rules or guidelines
4. Pharmacist prescriptive authority
   - Allows pharmacists the ability to write prescriptions for naloxone without an associated physician

Medicaid

- Funded by the federal and state government
- Insurance for vulnerable populations
- Higher rates of mental and substance abuse disorders
- States are allowed to create unique programs as long as they meet minimum federal standards
- Oklahoma Medicaid
- Medicaid managed care organizations (MCO) vs Fee-for-Service (FFS)

Study Design

- Retrospective study looking at resource use from a public data source
- The primary objective of this study was to assess the effect of various aspects of NALs on naloxone dispensing in the Medicaid population.
- The secondary objective was to compare the Medicaid benefit program utilization between fee-for-service (FFS) or managed Medicaid (MCO).
- Alpha priori of less than 0.05 was used

Study Methods

- 2 primary data sources
  - Prescription Drug Abuse Policy System
- Exclusion:
  - States enacting their first NAL prior to 2013
  - States with less than 9 quarters of data post-NAL enactment
- Multivariable generalized estimating equations (GEE) were used for the outcome of naloxone prescriptions trends and controlling for law, state-specific variables, and year

Number of States with a NAL Passed by Year

<table>
<thead>
<tr>
<th>Type</th>
<th>Before 2013</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>First NAL</td>
<td>8</td>
<td>10</td>
<td>14</td>
<td>6</td>
<td>3</td>
<td></td>
<td>51</td>
</tr>
<tr>
<td>Third Party</td>
<td>5</td>
<td>7</td>
<td>16</td>
<td>5</td>
<td>3</td>
<td></td>
<td>46</td>
</tr>
<tr>
<td>Standing Order</td>
<td>0</td>
<td>4</td>
<td>9</td>
<td>15</td>
<td>11</td>
<td>5</td>
<td>44</td>
</tr>
<tr>
<td>Per-Protocol</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Pharmacist Prescriptive Authority</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>7</td>
</tr>
</tbody>
</table>

Naloxone Claims Trends

Naloxone Claim Trends by Payer Type
States with NALs

- 51 States with NALs
  - 8 States passed NALs prior to 2013
  - 43 States passed their first NAL during the study period
  - 13 states did not have at least 9 quarters of data available post-NAL enactment
  - 30 States included in regression analysis

Multivariable Regression Results

<table>
<thead>
<tr>
<th></th>
<th>IRR</th>
<th>P-value</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managed Care Organization</td>
<td>2.58</td>
<td>0.017</td>
<td>1.18, 5.63</td>
</tr>
<tr>
<td>Year</td>
<td>0.98</td>
<td>0.915</td>
<td>0.679, 1.41</td>
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<tr>
<td>Crude Opioid Overdose Rate</td>
<td>1.1</td>
<td>&lt;0.001</td>
<td>1.06, 1.13</td>
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<tr>
<td>Poverty Level</td>
<td>1.01</td>
<td>0.904</td>
<td>0.85, 1.2</td>
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<tr>
<td>Medicaid Population</td>
<td>1.47</td>
<td>0.244</td>
<td>0.77, 2.81</td>
</tr>
<tr>
<td>State Population</td>
<td>1</td>
<td>0.998</td>
<td>0.99, 1</td>
</tr>
<tr>
<td>Third Party Law</td>
<td>1.77</td>
<td>0.381</td>
<td>0.49, 6.4</td>
</tr>
<tr>
<td>Standing Order Law</td>
<td>3.32</td>
<td>0.005</td>
<td>1.44, 7.65</td>
</tr>
<tr>
<td>Per-Protocol Law</td>
<td>0.74</td>
<td>0.416</td>
<td>0.36, 1.53</td>
</tr>
<tr>
<td>Pharmacist Prescriptive Authority Law</td>
<td>3.72</td>
<td>0.025</td>
<td>1.17, 11.75</td>
</tr>
</tbody>
</table>

Discussion

- Naloxone laws are associated with increased naloxone claims
- The higher opioid overdose rates are associated with an increased number of naloxone claims in Medicaid
- Standing order and pharmacist prescriptive authority are associated with higher rate of naloxone dispensing in Medicaid
- Previous research found that a standing order for naloxone was associated with increased naloxone prescriptions, however pharmacist prescriptive authority was not included in that study

Limitations

- Presence of a copay was not studied
- Data was suppressed if the prescription count for any National Drug Code (NDC) was ≤10
- Not controlled for enrollment values by payer type
- Data represents only the number of naloxone prescriptions dispensed

Conclusion

- Passage of NALs is associated with an increase of naloxone claims in Medicaid
- Increased naloxone claims could mean an increase in access for Medicaid members to this life saving drug
- NALs that allow for standing order or pharmacist prescriptive authority are associated with a higher number of naloxone claims in Medicaid
- This research adds to current knowledge regarding effective laws for increasing access to naloxone and could assist states in evaluating which legislation to enact in an effort to increase access to naloxone for the Medicaid population

Self-Assessment Question

1. NAL access laws increase the access of naloxone prescriptions for Medicaid patients.
   a) True
   b) False

2. According to the results, which type of NAL had the greatest, statistically significant influence on naloxone prescriptions in Medicaid?
   a) Standing Orders
   b) Pharmacist Prescriptive Authority
   c) Third-Party Dispensing
   d) Per-Protocol Dispensing
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