Alabama Medicaid
Opioid Prescribing Trends and Outcomes
DUR Board Meeting
April 25, 2018

ROBERT MOON, MD
CHIEF MEDICAL OFFICER
ALABAMA MEDICAID AGENCY
Today’s Agenda

Opioid Prescribing Trends
Opioid Cost Trends
Medicaid Initiative to Reduce Opioid Prescribing
Case Presentation: NAS
Medicaid Opioid Prescribing Trends
### Alabama Medicaid Agency
Members Prescribed a Full Agonist Opioid
CY 2011 to CY 2017

#### Percentage of Members Receiving a Prescription in CY 2017

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>0-12</td>
<td>3.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13-18</td>
<td></td>
<td>15.2%</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>19-44</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>41.4%</td>
<td></td>
<td></td>
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<tr>
<td>45-64</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>53.0%</td>
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</table>
MEDICAID OPIOID PRESCRIBING TRENDS: FY 2011- FY 2017

Alabama Medicaid Agency
Change in Full Agonist Opioid Prescribing
FY 2011 to FY 2017

Percent Change from FY 2011

-30%
-20%
-10%
0%
10%
20%
30%


Avg Daily MMEs
Unique Annual Recipients
Avg Monthly Recipients
Avg Monthly Quantity Dispensed
Trends in Prescribing Sources

Medicaid Members Ages 13-18 Prescribed an Opioid
By Prescribing Provider Specialty
CY 2011 - 2017

Change from 2011-2017:
Emergency Room -57%
Family Medicine -50%
OB/GYN -36%
Pediatrician -52%
Internal Medicine -49%
General Practitioner -62%

Number of Members

5,000 10,000 15,000 20,000 25,000 30,000

Dentists and Oral Surgeons
All Others

+8% -44%
Percentage of Adult Medicaid Members Prescribed an Opioid*

- Based on address of fully-eligible recipients
- Recipients with greater than 11 months of eligibility
Percentage of Medicaid Members Aged 13-18 Prescribed an Opioid*

- Based on address of fully-eligible recipients
- Recipients with greater than 11 months of eligibility
Still work to be done...

<table>
<thead>
<tr>
<th>Year</th>
<th>Alabama Rate</th>
<th>Alabama Rank</th>
<th>Comparison State Rank</th>
<th>Comparison State</th>
<th>Comparison State Rate</th>
<th>Alabama Compared to #2 State</th>
<th>Number of State Rates Over 100</th>
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<tbody>
<tr>
<td>2016</td>
<td>121.0</td>
<td>#1</td>
<td>#2</td>
<td>Arkansas</td>
<td>114.6</td>
<td>5.6%</td>
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<tr>
<td>2015</td>
<td>125.0</td>
<td>#1</td>
<td>#2</td>
<td>Arkansas</td>
<td>117.2</td>
<td>6.7%</td>
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<td>2014</td>
<td>135.2</td>
<td>#1</td>
<td>#2</td>
<td>West Virginia</td>
<td>126.4</td>
<td>7.0%</td>
<td>9</td>
</tr>
<tr>
<td>2013</td>
<td>142.4</td>
<td>#1</td>
<td>#2</td>
<td>West Virginia</td>
<td>129.0</td>
<td>10.4%</td>
<td>10</td>
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<tr>
<td>2012</td>
<td>143.8</td>
<td>#1</td>
<td>#2</td>
<td>West Virginia</td>
<td>136.9</td>
<td>5.0%</td>
<td>11</td>
</tr>
<tr>
<td>2011</td>
<td>136.6</td>
<td>#4</td>
<td>#1</td>
<td>West Virginia</td>
<td>139.6</td>
<td></td>
<td>12</td>
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<tr>
<td>2010</td>
<td>134.3</td>
<td>#4</td>
<td>#1</td>
<td>West Virginia</td>
<td>143.1</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>2009</td>
<td>131.6</td>
<td>#4</td>
<td>#1</td>
<td>West Virginia</td>
<td>146.9</td>
<td></td>
<td>10</td>
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<tr>
<td>2008</td>
<td>126.1</td>
<td>#4</td>
<td>#1</td>
<td>West Virginia</td>
<td>145.5</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>2007</td>
<td>120.3</td>
<td>#4</td>
<td>#1</td>
<td>West Virginia</td>
<td>135.1</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>2006</td>
<td>115.6</td>
<td>#4</td>
<td>#1</td>
<td>West Virginia</td>
<td>129.9</td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

Over the last 10 years West Virginia decreased their prescribing rate by 26% while Alabama increased its rate by 5%.

Data Source
https://www.cdc.gov/drugoverdose/maps/rxrate-maps.html
Opioid Prescribing Metrics.xl
Medicaid Opioid Spending Trends
MEDICAID OPIOID DRUG SPEND: FY 2011 – FY 2017 (IN MILLIONS)

Alabama Medicaid Agency
Opiate Drug Spend (in millions)

**FY 2017**
- Antagonists: $0.1
  - $1.75 Avg.
  - Per Day Supplied: 418 Recipients
  - $196 Avg Per Recipient
- Partial Agonist: $5.9
  - $8.33 Avg.
  - Per Day Supplied: 3,898 Members
  - $1,506 Avg Per Recipient
- Full Agonist: $7.0
  - $11.4 Avg.
  - Per Day Supplied: 124,330 Recipients
  - $56 Avg Per Recipient
- Total federal & state spend: $12.9 million

**FY 2011**
- Antagonists: $0.1
  - $4.19 Avg.
  - Per Day Supplied: 168 Recipients
  - $681 Avg Per Recipient
- Partial Agonist: $1.2
  - $7.66 Avg.
  - Per Day Supplied: 1,234 Recipients
  - $966 Avg Per Recipient
- Full Agonist: $8.6
  - $11.0 Avg.
  - Per Day Supplied: 146,080 Recipients
  - $59 Avg Per Recipient
- Total federal & state spend: $9.9 million
Alabama Medicaid Agency
Effect of Opioid Dependency on Avg Annual Claims Cost Per Member
FY 2016

<table>
<thead>
<tr>
<th>Age Group</th>
<th>% Members Diagnosed</th>
<th>Number of Members</th>
<th>Diagnosis Not Present</th>
<th>Diagnosis Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-18</td>
<td>.08%</td>
<td>106</td>
<td>$0</td>
<td>+416%</td>
</tr>
<tr>
<td>19-44</td>
<td>5.0%</td>
<td>3,168</td>
<td>$5,000</td>
<td>+111%</td>
</tr>
<tr>
<td>45-64</td>
<td>5.3%</td>
<td>2,267</td>
<td>$10,000</td>
<td>+71%</td>
</tr>
<tr>
<td>Overall</td>
<td>2.4%</td>
<td>5,441</td>
<td>$15,000</td>
<td>+195%</td>
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</tbody>
</table>

Members Excluded: 1) Not eligible the entire year, 2) PlanFirst (family planning only) at any time during the year, 3) Ever had cancer diagnosis, 4) Ever had sickle cell anemia diagnosis, 5) Mothers giving birth during the year, 6) dually eligible for Medicare/Medicaid at any time during the year and 7) age 65 and older. Total cohort after exclusions of 232,166 members.
Oral Surgeon Opioid Prescribing Pilot
Oral Surgeon Opioid Prescribing Survey Initiative (June, 2017)

Objective
- Understand what influences the prescribing behavior of oral surgeons
- Raise oral surgeons’ awareness of:
  1. Current recommended best practices in prescribing opioids and
  2. Their current opioid prescribing habits relative to their peers

Methodology
- Thirty oral surgeons were faxed a package containing: 1) a 7-question survey; and 2) a report comparing their opioid prescribing practices to the others receiving the survey
  - Fourteen doctors elected to respond to the survey

Results and Follow-up (February, 2018)
- Survey results provided to all 30 providers
- Updated history on the prescribing practices
- Letters from 2 practices describing their experience in lowering their opioid prescribing
All doctors who responded to the survey prescribe opioids to adolescent patients to treat *acute* pain.

60% of the doctors advise patients some of the time that the combination of an NSAID with acetaminophen could be sufficient for pain management for tooth or post-op pain.

71% of the doctors report some utilization of the Prescription Drug Monitoring Program (PDMP) Database.

93% of doctors state that prior training/practice standard of care influences their prescribing habits.
Oral Surgeon Opioid Prescribing Survey Initiative

Did Continuing Education and Data Have an Influence?

![Graph showing average morphine milligram equivalents (MME) per prescription over calendar quarters from 2010-3 to 2018-1. The graph includes data for different groups and a comparison to oral surgeons not surveyed.](image-url)
"Legitimate opioid use before high school graduation is independently associated with a **33% increase in the risk of future opioid misuse** after high school. This association is concentrated among individuals who have **little to no history of drug use** and **strong disapproval of illegal drug use** at baseline."

- Monitoring the Future Study National Survey Results on Drug Use, January 2017

Source: Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use — United States, 2006–2015

Centers for Disease Control and Prevention
Case Presentation
Neonatal Abstinence Syndrome (NAS)
**Neonatal Abstinence Syndrome (NAS)**

**NAS** Drug withdrawal syndrome in newborns caused primarily by *in utero* exposure to opioids. [CDC]

**NAS Infants by County (2016)**

**Medicaid Infants with NAS by Race**

<table>
<thead>
<tr>
<th>Race</th>
<th>2016 per 1,000 Births</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>26.9</td>
</tr>
<tr>
<td>Black</td>
<td>5.7</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2.7</td>
</tr>
<tr>
<td>Other</td>
<td>15.7</td>
</tr>
</tbody>
</table>

**Infants Diagnosed with NAS**

**Mothers' Medicaid Opioids Claims Status**

- Mothers with Opioid Claim
- Mothers w/o Opioid Claim
- Mother Not Identified

**Percent of Births**

- 0.0% - 4.9%
Cost Analysis of Neonatal Abstinence Syndrome

Alabama Medicaid Agency
Claims Data Analysis
Calendar Years 2010-2013

<table>
<thead>
<tr>
<th></th>
<th>Infants Diagnosed with NAS (N)</th>
<th>Number of NAS Infants Admitted to NICU</th>
<th>Average Days Spent in the NICU</th>
<th>Average NICU Cost per Infant</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAS Diagnosed from Mothers Who Had Claims For Less Than 30 days Supply of Opioids (Low Use)</td>
<td>143</td>
<td>112 (78%)</td>
<td>15</td>
<td>$ 27,450</td>
</tr>
<tr>
<td>NAS Diagnosed from Mothers Who Had Claims For More Than 30 days Supply of Opioids (High Use)</td>
<td>188</td>
<td>120 (64%)</td>
<td>11</td>
<td>$ 22,606</td>
</tr>
<tr>
<td>NAS Diagnosed from Mothers Who Had No Claims For Opioids</td>
<td>670</td>
<td>495 (74%)</td>
<td>23</td>
<td>$ 32,814</td>
</tr>
</tbody>
</table>

• Mothers with high use of opioids have a higher rate of NAS, but better fetal outcomes.
• Cost and length of stay are significantly reduced in physician managed mothers.
• 670 infants were diagnosed with NAS during the study time whose mothers had no claims for opioids.

*Reflects opioid claims during pregnancy with or without the use of other medications. Not exclusive.
*Based on CY 2010-2013
Questions