Data Brief: Opioid Dependency and Pregnancy in Vermont
Medicaid Claims Data and the Vermont Uniform Hospital Discharge Data Set

The Vermont Department of Health compiled this analysis to address questions regarding the number of births in the state to women with opioid dependency. The vast majority of women delivering an infant with neonatal withdrawal syndrome (NWS) are on medication assisted therapy (MAT)\(^1\) for opioid dependency – meaning their infants will go through a period of planned withdrawal. Over 90% of women delivering an NWS infant were on Medicaid. Only 32 Medicaid women delivered an infant with NWS when they were not receiving MAT.

Summary of findings

Medicaid and Vital Records Data 2010:
- A total of 162 women delivered an infant with an NWS code – approximately 2.6% of all deliveries in Vermont in 2010.
- Four out of five Vermont women delivering infants with NWS were on medication assisted therapy (MAT) (130 women) in Vermont in 2010. Since these pregnant women are undergoing legitimate treatment, it is understood that the infant will go through a period of planned withdrawal.
  - Less than 1% of all Vermont deliveries in 2010 (32) resulted in infants with NWS born to a mother NOT coded as being on MAT.

Data analysis

Medicaid claims data includes codes for mothers receiving buprenorphine or one week of methadone in medication assisted therapy (MAT), and codes for neonatal withdrawal syndrome (NWS). While the Medicaid data do not link the mother to the infant, the Vital Records Birth Certificate data can link the two. These data then provide information regarding which mothers delivering infants with NWS were on MAT. Data were analyzed for Vermont residents only (as determined by the birth certificate) who delivered in 2010.

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\(^1\) MAT is the use of medications, in combination with counseling and behavioral therapies, to provide a whole-patient approach to the treatment of substance use disorders. Research shows that when treating substance-use disorders, a combination of medication and behavioral therapies is most successful. Medication assisted treatment (MAT) is clinically driven with a focus on individualized patient care.
Summary of findings

Vermont Uniform Hospital Discharge Data Set 2010:

- Approximately 93% of deliveries to women with dual codes for delivery and some form of opioid drug use (either dependency/abuse or MAT) were Medicaid deliveries in Vermont hospitals to Vermont residents in 2010 (there were only 11 non-Medicaid dual code deliveries).

- According to Hospital Discharge Data (different from Medicaid claims data on previous page) out of all Vermont infants, 2.5% (157 infants) were born with NWS in Vermont in 2010 (differences in reporting, coding and data are due to deliveries as coded by mother, versus infant, and the two separate data sources, which do not always match). Only 14 of the 157 NWS infants were non-Medicaid.

- Approximately 55% of Medicaid women with dual codes for delivery and some form of opioid drug use (either dependency/abuse or MAT) delivered at Fletcher Allen Medical Center.

- Figure 2 shows all hospitals with over six dual coded women or over six NWS infants (all other hospitals had fewer than six of both). For example, Rutland Regional Medical Center had 26 women with dual codes for opioid abuse/dependence and delivery, and fewer than six infants with NWS codes.

Figure 2. Total number of Vermont resident women with dual codes for opioid dependency/abuse and delivery, and total number of infants with neonatal withdrawal syndrome by Vermont hospital

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Women with codes</th>
<th>NWS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeastern Vermont Regional Health Care</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Fletcher Allen Health Care</td>
<td>87</td>
<td>99</td>
</tr>
<tr>
<td>Central Vermont Medical Center</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Rutland Regional Medical Center</td>
<td>26 (&lt;=6)</td>
<td></td>
</tr>
<tr>
<td>Springfield Hospital</td>
<td>8 (&lt;6)</td>
<td></td>
</tr>
<tr>
<td>Southwestern Vermont Medical Center</td>
<td>&lt;=6</td>
<td>11</td>
</tr>
</tbody>
</table>

Data analysis

The Vermont Uniform Hospital Discharge Data Set provides delivery codes and diagnosis codes for opioid dependence/abuse and NWS. The mother and infant cannot be linked in this dataset. In addition, information regarding whether the mother was on MAT is not distinguished from dependence/abuse. Data are collected for Medicaid and non-Medicaid deliveries. Data were analyzed for Vermont hospitals and Vermont residents only for deliveries in 2010.

Contact

Shayla Livingston
Public Health Analyst
Vermont Department of Health
Shayla.Livingston@state.vt.us
(802) 863-6337