Prescription Drug Abuse: Developing Evidence-Based State Level Interventions

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The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months: No relationships to disclose.
Learning Objectives

- Discuss PMP in MS and US
- Describe Data Match
- Evaluate “Lessons Learned”
Center for Mississippi Health Policy

- Independent, non-profit organization
- Mission is to inform health policy decisions by providing sound research and analysis
- Do not advocate or lobby for particular solutions
Project Partners

- Mississippi State Department of Health
  - Office of Vital Records
  - Pharmacy
- MS Board of Pharmacy
- MS Prescription Monitoring Program


Prescription Monitoring Programs (PMP) – U.S.

Prescription Monitoring Program (PMP) - Mississippi

- Began in 2004
- All prescriptions for controlled substances dispensed in or into MS must be entered in the PMP system
- Administered by MS Board of Pharmacy
Project Overview-Timeline

June 2012
- Approached MS PMP/MSDH
- Introductory meetings
- Background research

August-December 2012
- Facilitated agreement between stakeholders
- Set up data match
- Identified and obtained PMP reports

January-May 2013
- PDF – Excel transfer (manual data entry)
- Descriptive statistics on total population
Project Overview-Timeline

June 2013
- Data analysis (SAS)
- Updated lit review for Issue Brief

July-September 2013
- Finalized and published Issue Brief
- Began dissemination

Ongoing
- Encourage the use of data to drive policy-makers and stakeholder groups
Drug Poisoning Deaths
Drug Type, United States (2008)

Unintentional Drug Poisoning Deaths
Drug Type, Mississippi (2011)

- X40: Non-Opioid Analgesics, Antipyretics, & Antiheumatics
- X41: Anti-Epileptic, Sedative-Hypnotic, Antiparkinsonism, & Psychotropic Drugs
- X42: Narcotics and Psychodysleptics (Hallucinogens)
- X44: Unspecified Drugs, Medicaments, & Biological Substances

Unintentional Drug Poisoning Deaths
Drug Type, Mississippi (2011)

Top “T-Codes” Mentioned on Death Certificates (2011)

1. Other and unspecified (T509): 194
2. Other opioids (Codeine and Morphine) (T402): 42
3. Benzodiazepines (T424): 36
4. Cocaine (T405): 14
5. Tricyclic and tetracyclic antidepressants (T430): 13
6. Other synthetic narcotics (Pethidine/Demerol) (T404): 12
7. Methadone (T403): 11 (tied)
8. Other unspecified antidepressants (T432): 11 (tied)

Overview-Mississippi (2011) Unintentional Poisoning by Drug Deaths

- 232 deaths

- Demographic breakdown:
  - 16-86 years of age
  - 50 percent Male/50 percent Female
  - 90 percent White
Project Overview - Background

- 232 Unintentional Drug Overdose Deaths (2011)

- 52 records not admissible for study:
  - No PMP record (12)
  - In PMP, no Rx for study period (40)

- 180 decedents included in study
Project Findings: Total Prescriptions and Quantity

<table>
<thead>
<tr>
<th></th>
<th>Total Number of Prescriptions per Person</th>
<th>Total Number of Doses per Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Maximum</td>
<td>196</td>
<td>16,072</td>
</tr>
<tr>
<td>Median</td>
<td>33.5</td>
<td>1,957.5</td>
</tr>
<tr>
<td>Mean</td>
<td>43.1</td>
<td>2,780.5</td>
</tr>
</tbody>
</table>
Project Findings: Descriptive Statistics - Males

- Total: 82 deaths
- Mean Age: 40 years
- Mean # Prescriptions: 38
- Mean # Prescribers: 6.5
- Mean # Dispensers: 4
Project Findings: Descriptive Statistics - Females

- Total: 98 deaths
- Mean Age: 45 years
- Mean # Prescriptions: 47
- Mean # Prescribers: 7
- Mean # Dispensers: 4.5
Project Findings: Distribution by Drug Schedule

- Schedule I: 31%
- Schedule II: 43%
- Schedule III: 19%
- Schedule IV: 4%
- Schedule V: 3%
Project Findings:
Prescriptions by Drug Category

- Pain Killers: 53%
- Sedatives: 37%
- Muscle Relaxants: 5%
- Stimulants: 2%
- Other: 3%
- Pain Killers: 53%
Project Findings: Number of Unique Opioid Rxs

- 28% of patients had 6-7 opioid prescriptions.
- 21% had 4-5 prescriptions.
- 19% had 3 prescriptions.
- 14% had 2 prescriptions.
- 8% had 1 prescription.
- 4% had 0 prescriptions.
- 1% had 1 prescription.
Project Findings: Number of Prescribers per Decedent

- 1-2: 26%
- 3-5: 27%
- 6-10: 13%
- 11-15: 4%
- 16-20: 2%
- 21-25: 2%
- 26-29: 2
decedent
Project Findings: Prescriptions Written per Prescriber

- 82%
- 15%
- 3%
- <10
- 11 - 49
- 50+
Project Findings:
Number of Dispensers per Decedent

- 1-3: 48%
- 4-6: 28%
- 7-9: 15%
- 10-12: 6%
- 13+: 3%
Project Findings: Source of Payment

- Commercial Insurance: 47%
- Major Medical: 34%
- Medicaid: 12%
- Medicare: 3%
- Private Pay: 4%
- N/A: 1%
Next Steps

- Larger data match
- Regular reporting to PMP Advisory Board
- Use of other data sets
Resources for States


Additional Resources

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