Pregnancy and Opioid Use
Using prescription monitoring program data to improve opioid safety during pregnancy and alter clinical practice

BJA Research-Practitioner Partnerships/Data-Driven Pilots National Meeting
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Sarah Bowman, MPH
Rhode Island Department of Health
Research Team

Boston Medical Center
  • Traci C. Green, PhD., MSc (research PI)
  • Judith Linden, MD
  • Nicole Robertson, MPH

Rhode Island Department of Health
  • Sarah Bowman, MPH
  • Sarah Harrigan, MPA
  • Peter Ragosta, RPh

RMC Corporation
  • Gillian Leichtling

Rhode Island Neonatal Abstinence Syndrome Task Force

The Warren Alpert Medical School at Brown University, Office of Continuing Medical Education
Background

- Significant increase in neonatal abstinence syndrome (NAS) rate in many states
- Prevalence of prescription opioid use during pregnancy is estimated at 14%, with 15% receiving opioid analgesics for 3 or more months
- Nationally, drug treatment admissions involving prescription opioids for women of childbearing age have increased from under 2% to nearly 14% from 1998 to 2008
- Multiple studies confirm the safety and utility of both prescribed methadone and buprenorphine for opioid-dependent pregnant women and the use of opioids in the treatment of chronic pain during pregnancy
- The medical community continues to hold misconceptions about medication assisted therapy (MAT)
Physicians note their lack of training on pregnancy and opioid use and decreased confidence in their clinical care skills in addressing substance use among pregnant patients. Well-designed, theory driven continuing education is needed.

PDMPs can be used for detecting possible misuse, monitoring opioid during clinical care and improving opioid safety among pregnant women and women of childbearing age.

Studies show, academic detailing addressing opioid prescribing can standardize care and influence physician behavior.

A survey of 48 PDMP directors indicated very few existing or planned efforts to use PDMPs or their data for addressing NAS and opioid use among women of childbearing age or pregnant.
Rhode Island Opportunity

- Rhode Island has the nation’s highest rate of illicit drug use per capita and non-medical use of prescription opioids ranks far above the national average.

- Neonatal Abstinence Syndrome (NAS) rates in Rhode Island have more than doubled in the last decade.

- High rates of opioid dispensing to women of childbearing age.

- Growing number of MAT opportunities, especially for pregnant women.

- Small state, geographically manageable for population-level intervention.

- Collaborations are strong.
Project Goal

• Improve healthcare quality and access

• Improve neonatal & maternal health outcomes

• Promote standardization and implementation of evidence-based practices for safe opioid prescribing during pregnancy
**Project Aims**

- Create a CME and academic detailing materials that the nuanced topic of pregnancy and opioid use
- Disseminate and promote CME statewide
- Use PDMP to identify communities with high rates of prescribing to women of childbearing age for supplemental academic detailing
- Evaluate intervention comparing communities with academic detailing and CME to control communities with CME only on clinical outcomes
Anticipate 5 training modules, with tailored content built around the “virtual patient”, content will be adapted for OB/GYN, family medicine, and internal medicine audiences [live and online]

Topics will include:

- pharmacology of opioids in pregnancy
- identifying and managing opioid addiction during pregnancy
- opioid agonist treatment recommendations and care coordination in pregnancy
- issues related to labor and postpartum/neonatal care
- legal and ethical considerations related to opioid use and misuse during pregnancy
- as relevant, CME sessions will feature resources and representatives from state and local agencies providing programming and services supporting clinical care of pregnant women using opioids
Activities

Develop CME content with Advisory Group
- Pharmacology, Ethics, Identification and Management
- Resources from state/local agencies
- "Virtual patients" to simulate clinical scenarios

Develop Academic Detailing
- Toolkits for resources and case management
- Multi-lingual patient materials
- Checklists for best practices

Statewide Launch
- Hosting CME over three-month period
- Invitations and unsolicited letters
- Academic detailing in high exposure areas

Evaluation
- Surveys to measure pre- and post-implementation
- Administrative data to measure successes and barriers
- Linked clinical data to examine outcomes on target patient populations
• Current CME will build off the work completed by Gillian Leichling at RMC to develop an interactive learning module

• SBIR Phase 1 grant created outline, curriculum, tested feasibility of interactive module

• Expert-driven content

• Set bar for interactive, sustainable learning module
How is this CME different?

- Current CME courses provide limited content addressing on both pregnancy and opioid use, and training style is limited
  - Many courses are *not tested*
  - Offer a text-based experience with *limited or no interactivity*
  - Focused on *knowledge change rather than behavioral* skill-building or use of existing clinical tools like the PDMP

- RI CME will include virtual patients, simulated decision-making, and video scenarios that vary based on clinician decision and response.

*Technology affords the ability to engage and educate physicians seeking to build skills!*
## Project Timeline

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3: Ongoing till project end</th>
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<tbody>
<tr>
<td>completion: June 2017</td>
<td>completion: June 2018</td>
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<tr>
<td>Create CME program and complimentary academic detailing materials</td>
<td>Deploy CME program statewide</td>
<td>Analysis of maternal and neonatal outcomes to measure impact of educational interventions offered to providers</td>
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<tr>
<td>Outreach to OB/GYN providers to engage in training</td>
<td>Identify providers in communities with high prescribing for academic detailing</td>
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<td>Roll out CME program to pilot group for CME refinement</td>
<td>Examine PDMP registration, usage data, and NAS rates by community</td>
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Deliverables

- Live and Online CME
  - Hosted interactive tools, patient case studies, virtual clinical mentor
  - Links to local and national resources
- Academic detailing materials
- Evaluation of CME and detailing
Thank You!

Questions/Comments?
Sarah.Bowman@health.ri.gov
Traci.c.green@gmail.com
Nicole.robertson@bmc.org