

Studying Prescription Monitoring Program Impacts in a Community Psychiatry Practice-Based Research Network

A UNIVERSITY HOSPITALS/CWRU DEPARTMENT OF PSYCHIATRY INITIATIVE
IN COLLABORATION WITH THE CWRU PBRN SHARED RESOURCE TEAM AND THE
CLINICAL AND TRANSLATIONAL SCIENCE COLLABORATIVE OF CLEVELAND

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Objectives

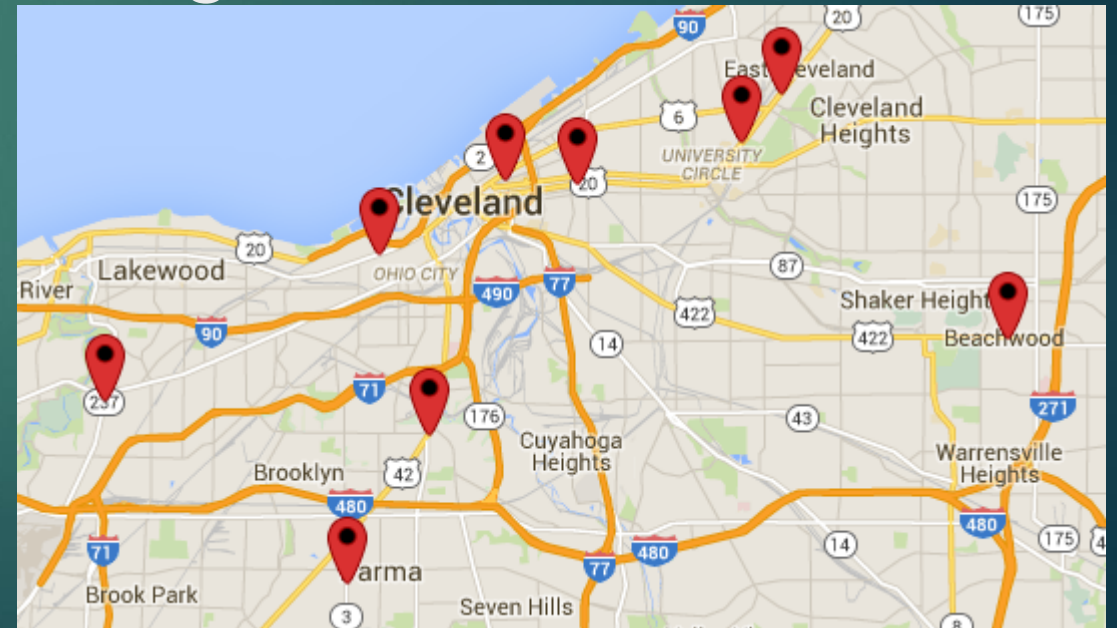
- ▶ 1. Describe the possible uses of Practice-Based Research Networks (PBRNs) in Community Psychiatry
- ▶ 2. Create and develop research questions pertaining to the potential impacts of Prescription Monitoring Programs (PMPs) on community-based psychiatric prescribers.
- ▶ 3. Identify the steps in implementing a Card Study Protocol in a Community Psychiatric Practice-Based Research Network.

Introduction: Agenda

- ▶ I. Background
 - ▶ PBRN
 - ▶ PMP Monitoring
- ▶ II. Developing a Research Question
 - ▶ Research Question Activity
- ▶ III. Choosing Methodology
 - ▶ What is a Card Study?
 - ▶ Card Development Activity
- ▶ IV. Participating in Practice-Based Research
 - ▶ Card Completion Activity
- ▶ V. Results and Lessons Learned

Background: What is a PBRN?

Practice Based Research Network
Collaborations of practice settings that work together to generate research knowledge



Background:

What is a PMP?

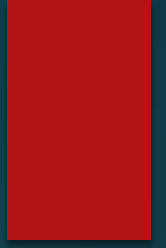
- ▶ Prescription Monitoring Programs (PMPs) are registries that record **patient, pharmacy, prescription drug**, and **prescriber** data in order to inform practitioners about their patients recent acquisitions of controlled substances
- ▶ Prescription Drug Monitoring has become a priority with increasing awareness of prescription drug misuse, diversion, and associated mortality
- ▶ State laws differ widely with regard to PMPs

Background:

What is a PMP?

- ▶ Observational Studies and Surveys support PMP's effectiveness
- ▶ PMP's have reported precipitous decreases in several states in "Doctor Shopping."
- ▶ Preliminary CDC data has indicated a decrease in opioid analgesic deaths.
- ▶ Impacts on Prescriber behavior have not been studied extensively

Background: PMPs across the nation



Background: What is OARRS?

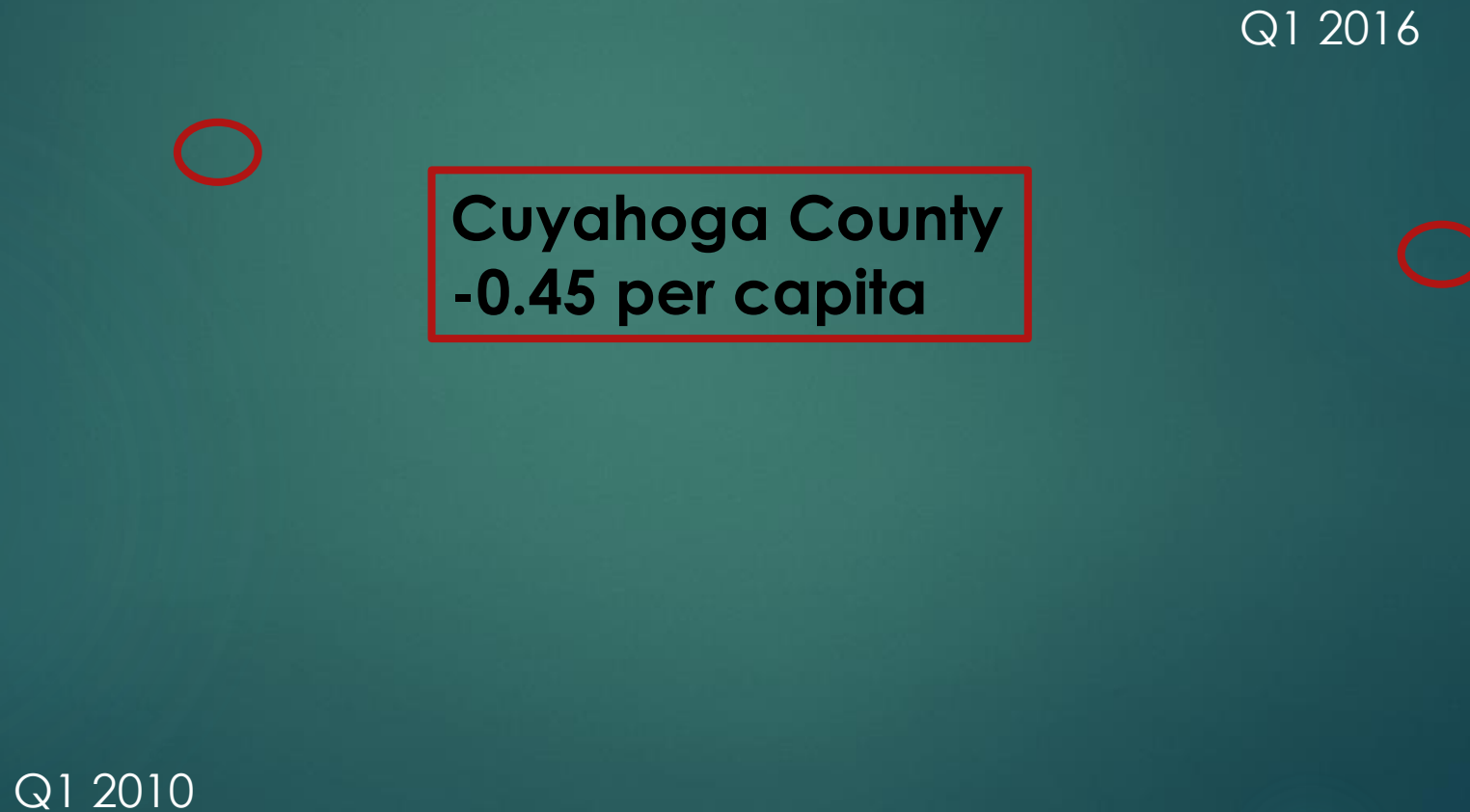
- ▶ Begun in 2007
- ▶ Mandated Checks starting in 2015
- ▶ Delegation of OARRS database checks allowed to MAs

Background:

Effects of OARRS in Ohio (2012-2015)

- ▶ Total doses of opioids decreased by 92 million doses (11.6%)
- ▶ Total doses of benzodiazepines decreased by 22 million doses (7.4%)
- ▶ Doctor Shopping decreased 71% between 2010 and 2015.

Background: Effects of OARRS in Ohio



Background: Effects of OARRS in Ohio

Benzodiazepine Prescriptions

Opioid Prescriptions

Background: Effects of OARRS in Ohio

Benzodiazepine Prescriptions

Doctor Shopping

OARRS Queries

Why Study PMPs in Community Psychiatry?

- ▶ Study real life clinical problems
- ▶ Methods require minimum time commitment from any clinician
- ▶ Rapid cycle between data collection and changing practice
- ▶ Many methodologies possible

Developing a Research Question

- ▶ Good Research
 - ▶ Relevant
 - ▶ Rapid and Recursive
 - ▶ Redefines Rigor
 - ▶ Resource Sensitive
 - ▶ Replicable



Developing a Research Question

- ▶ Must be a **Question** (not a statement)
- ▶ Must be **Relevant to Clinicians**
- ▶ Must address a **Problem**
- ▶ Must address a **Gap in Knowledge**
- ▶ Must consider **Stakeholders**

Research Question Activity:

What questions should we study?

In groups of 3, create a research question related to PMP that meets the following criteria:

1. Question
2. Relevant
3. Addresses a Problem
4. Addresses a Gap in Knowledge
5. Considers Stakeholders

Choosing Methodology

- ▶ Based on Research Question
 - ▶ Quantitative
 - ▶ Qualitative
- ▶ Based on Resources
 - ▶ Funding
 - ▶ Personnel
- ▶ Based on Stakeholders
 - ▶ Feasible from all perspectives
 - ▶ Solves problems for stakeholders
 - ▶ Relevance



Choosing Methodology

- ▶ Psychiatric PBRN Methods
 - ▶ Surveys
 - ▶ Qualitative Interviews and Focus Groups
 - ▶ Observation of Actual Practice (Card Studies)
 - ▶ Chart Review
 - ▶ Clinical Trials
 - ▶ System Quality Improvement Trials
 - ▶ Implementation Science
 - ▶ Participatory Action Research

Methodology:

What is a Card Study?

- ▶ An observational study that collects patient-level survey data at the point-of-care
- ▶ Have been used in primary care settings for more than 30 years
- ▶ Can be used to study specific conditions or care (clinician completes card when encounters a patient who meets inclusion criteria) OR
- ▶ Can be used to determine trends and prevalence of conditions (clinician completes a card on all patients seen during a specified time period)

Card Development Activity:

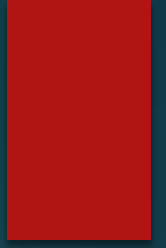
What questions should be on the Survey/Card?

- ▶ In small groups, you will each be given a component of the card to complete
 - ▶ Provider Survey
 - ▶ Patient Characteristics
 - ▶ OARRS Report Characteristics
 - ▶ Prescriber Decision Making

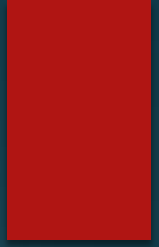
BRAIN OARRS Survey



BRAIN OARRS Card



BRAIN OARRS CARD



Participating in Practice-Based Research

- ▶ Roles
 - ▶ Organizational
 - ▶ Core Committee
 - ▶ Membership
 - ▶ Practice Facilitator
 - ▶ Stakeholder
 - ▶ Data Analysis
 - ▶ Dissemination



Card Completion Activity: The Clinician Experience

- ▶ 4 OARRS reports and clinical cases to be distributed to participants
- ▶ Work individually to fill out the OARRS card study based on the clinical case and OARRS report you have just reviewed

Card Completion Activity: Gathering Feedback

- ▶ What stood out to you about the OARRS report you reviewed?
- ▶ Do you think the information on this OARRS report would change your decision making about prescribing for this patent?
- ▶ If so, how?
- ▶ Other feedback?

Dissemination: Results - Providers

- ▶ Providers enrolled were a diverse mixture of race/ethnicity, age, and gender, but with a majority of white and Asian providers.
- ▶ Included APNs, MDs, and Trainees, representing the diversity of prescriber types at Cleveland CMHCs.

Dissemination: Results – Provider Attitudes

- ▶ Most providers are satisfied both categorically and in general with OARRS in their clinical practice.
- ▶ General Satisfaction was correlated with positive responses in all categories except views that “OARRS is an encumbrance”.
- ▶ Encumbrance ratings were not correlated with any specific provider characteristics.

Dissemination: Patient Characteristics

- ▶ The most common demographics were white, female, and enrolled in treatment for equal or longer than 1 year.
- ▶ Longer Treatment Duration was common
- ▶ Treatment adherence was estimated to be prevalent

Dissemination: Patient Diagnoses

- ▶ The most common comorbid diagnoses were depression and anxiety, although comorbidity was prevalent in 70% of cases.
- ▶ A significant minority had comorbid addiction diagnoses, and chronic pain.
- ▶ Chronic Pain was correlated with 36% of patients, and with opioid prescription.

Dissemination: OARRS – Red Flags

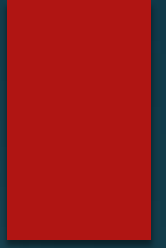
- ▶ Red Flags were reported in 22%(n=40) of OARRS reports.
- ▶ This rate was previously unknown in outpatient samples, and the modal number of flags per provider was 1 out of 8 encounters.

Dissemination:

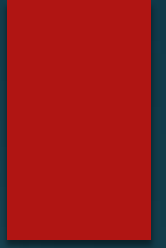
OARRS – Red Flags

- Providers discussed Red Flags with their patients frequently, and they reported wanting to check OARRS more often when Red Flags were present.
- Multiple prescribers and pharmacies were the most common red flags reported.
- In 40% of encounters, providers found OARRS important or extremely important to their decision-making. This attitude was significantly correlated with Red Flags.

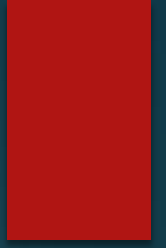
Dissemination: OARRS – Red Flags



Dissemination: OARRS – Prescribing



Dissemination: Results and Lessons Learned



Pending Secondary Analyses

- ▶ **Hypothesis:** Red Flag's are correlated with decreased/discontinued prescriptions
- ▶ **Hypothesis:** Some patient characteristics (Dx, Non-adherence, short Length of treatment) are correlated with more frequent discretionary OARRS checks
- ▶ **Hypothesis:** Provider/Patient characteristics (demographic, attitudes) are correlated with frequency of red flags
- ▶ **Hypothesis:** Provider/Patient characteristics (demographic, attitudes) are correlated with more frequent discretionary OARRS checks

Dissemination:

Lessons Learned – Key Findings

- ▶ **Broad Applicability:** The mandated utilization of the OARRS PMP has affected the practice of all prescribers in the state of Ohio.
- ▶ **First study** of psychiatric prescribers **mandated use** of OARRS.
- ▶ OARRS is an **acceptable and useful tool**, which often reveals new information that affects clinical decision-making.
- ▶ Psychiatric prescribers at Cleveland-area CMHCs use OARRS **more frequently than mandated**, likely due to its utility.

Dissemination:

Lessons Learned – Key Findings

- ▶ Although some prescribers' find it **burdensome**, almost all prescribers at Cleveland-area CMHCs are **satisfied** with its impact, regardless of demographics.
- ▶ Although there was some indication that more senior prescribers found OARRS implementation more burdensome, this may reflect fatigue with respect to electronic medical records, and more documentation requirements.
- ▶ Included APNs and trainees more accurately represents the current population of prescribers than Psychiatrist-only studies.

Dissemination: Lessons Learned

- ▶ With respect to Red Flags:
 - ▶ Red Flags in OARRS reports clearly impact provider prescription behavior, attitudes, and interactions with patients.
 - ▶ **Frequency of red flags is only 20%** in a diverse community sample.
 - ▶ Further, some providers may have lower rates of Red Flags, perhaps related to the prevalence of addiction in the population they serve.
 - ▶ Future research will require more prescribers, and more encounter cards per provider in order to correlate Red Flags with patient/prescriber characteristics.
 - ▶ While Red Flags affect clinical practice significantly, providers use their clinical judgment differentially with respect to red flags, balanced with other patient and illness characteristics.

Feedback:

What about PBRNs in Psych?

