Collaborators

- **Recovery-Oriented Care Collaborative PBRN**
  - **University of Southern California Academic Partners:** John Brekke, PhD & Erin Kelly, PhD
  - **Community Partners / Executive Members:** Lisa Davis, PhD; Laura Pancake; Leslie Giambone; & Lezlie Murch

- **Behavioral Research and Innovation Network (BRAIN): The UH/CWRU Psychiatry PBRN**
  - **Case Western Reserve University Academic Partners:** Kathy Clegg, MD; Christina Delos Reyes, MD; Andrew Hunt, MD; Steve Zyzanski, PhD; & Jim Werner, PhD
  - **Community Partners:** Centers for Families and Children (CMHC), Signature Health (CMHC), Recovery Resources (CMHC), & Frontline Services (CMHC)

- **Recovery-Oriented Collaborative Care PBRN**
  - **University of Colorado Academic Partners:** Jeanette Waxmonsky, PhD & Alex Reed, PsyD, MPH
  - **Community Partners:** Signal Behavioral Health Network (Colorado) & Jefferson Center for Mental Health providers
Members of the 3 PBRNs met at the NACPRG conference in 2016

- Decided to collaborate!

- Developed a multistate project on behavioral health providers attitudes about and training in addressing marijuana use among their patients
Current Marijuana Legalization

Marijuana Legalization Status
- Medical marijuana legalized
- Marijuana legalized for recreational use
- No laws legalizing marijuana
Marijuana Use & Serious Mental Illness

- Persons with SMI are about twice as likely than the general population for marijuana use.
- Marijuana Use is:
  - Associated with a doubled risk of developing schizophrenia.¹
  - For those with psychotic disorders, ongoing marijuana use is associated with increased psychotic symptoms.²
- Marijuana use during adolescence is associated with an increased risk for depressive disorders as well as attempted and completed suicide in adulthood.²

(Lack of) Treatment for Co-Occurring Marijuana Use and Mental Illness

- Most people with co-occurring mental illness and substance abuse disorders receive primarily treatment in a mental health care but are not getting the care they need to address both disorders.

- 2012 NSDUH survey: Among the 2.6 million adults age 18 years and older who had a serious mental illness and co-occurring substance abuse disorder, only 15.8% received both mental health care and specialty substance abuse treatment.

- It is not known if and how behavioral health providers are counseling or monitoring marijuana use in their patients, particularly in states with legal and/or recreational marijuana laws.

Research Questions:

Within different policy environments around the legality of marijuana:

- What are behavioral health providers’ knowledge, attitudes, beliefs, and comfort level in addressing marijuana use in patients with serious mental illness (SMI)?

- How do behavioral health providers’ knowledge, attitudes, beliefs, and comfort level impact their assessment and treatment of marijuana use in this patient population?

- What are training needs/gaps for behavioral health providers to address marijuana use in this population?
Survey Development and Methods

- Developed an online survey with likert scale items - based on surveys developed for medical providers in Colorado and Washington (Carlini et al., 2017; Kondrad & Reid, 2013)
- Feedback provided from community and academic partners across the networks
  - 14 providers (therapists, nurse-practitioners, psychiatrists, pharmacist, peer specialist, health coaches)
  - Survey took about 10-15 minutes to complete (longer for prescribers)
- Lottery incentive: 10 Participants in each state will receive / received $100
- Distributed to PBRN members in CA from January-March 2018
- Distribution of survey in Ohio began June 19th, 2018
- Planned distribution of survey in Colorado in July 2018
Provider Survey Items

1. Demographics
2. What providers know about their state laws regarding marijuana
3. Where providers learn about marijuana
4. Participants’ ratings of their attitudes and beliefs in regard to marijuana use
5. Participants’ ratings of their training and comfort with addressing substance abuse
6. Substance abuse referral experience and expectations - what treatments providers perceive as effective for addressing marijuana use, what are the barriers to marijuana use treatment
Study Samples

California

- Data collection from January 2018 - March 2018
- 462 surveys started
  - 445 agreed to complete survey
  - Between 383-440 responses across items (393 clicked survey completion)
- Sample Descriptives:
  - 72% Female
  - 48% 35 or younger
  - 48% worked in MH for <5 years
  - Race/Ethnicities
    - 44% Hispanic/Latino
    - 33% White/Caucasian
    - 10% Asian
    - 9% African American
    - 4% Other

Ohio

- Launched 6/19/18; Data through 6/22/18
- 149 surveys started
  - 147 agreed to complete survey
  - Between 122-147 responses across items (123 clicked survey completion)
- Sample Descriptives:
  - 84% female
  - 46% 35 or younger
  - 37% worked in MH <5 years
  - Race/Ethnicities
    - 82% White/Caucasian
    - 10% African American
    - 4% Hispanic/Latino
    - 3% Asian
    - 1% Other
46% of CA providers “agreed” or “strongly agreed” that marijuana should be legal for recreational use versus 55% of Ohio providers “agreed” or “strongly agreed” that marijuana should be legal for recreational use., \( t(540) = .42, p = .66 \)
Where do behavioral health providers learn about marijuana?

- On average, CA providers looked to 3.62 sources (SD = 1.73; range 0 - 9) and Ohio providers looked to 3.51 sources (SD = 2.03), t(577) = .78, p = .44.
Training Experiences and Preparation

78% of CA providers said their agency provides substance use treatment, 98% of Ohio providers did.
Attitudes on Use of Marijuana

72% of CA providers said that they had clients with a prescription for Marijuana vs. 46% of Ohio providers.

1 = Strongly disagree to 5 = Strongly agree
Paired t-test Comparisons of Alcohol vs Marijuana Assessment

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<th>Ready to Quit</th>
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</table>

1 = Not at all to 5 = In most cases

California | Ohio

* indicates a statistically significant difference.
Experiences with Substance Use Discussion and Treatment Referral

1= Never to 5 = Very often
Barriers to Treatment

On average, CA providers identified 4.72 barriers (SD = 2.30) and Ohio providers saw 4.70 (SD = 2.15)
Innovation and Impact

- First large study scale to survey behavioral health providers regarding addressing marijuana use in their patients with SMI.
- "Naturalistic study" with 3 states (OH, CA, CO) who have different medical and recreational marijuana use laws and policies.
  - Ohio providers have more positive expectations about the impact of marijuana on their clients and feel better prepared to address substance use by their clients.
  - This may be due to more substance use services being provided in CMHCs in Ohio than in California or that CA providers see more clients who use MJ and have more experience with potential adverse effects.
  - Identified significant training gaps and treatment provision differences between states.
- Study results will help design training curricula for behavioral health providers to address marijuana use and inform tailored cessation interventions for this population.
Thank you!
Ohio - Legal for medical reasons

- **Current Laws:** “Recreational use of marijuana remains illegal (but decriminalized) in Ohio, although the state does allow medical use of the herb. House Bill 523, which took effect on Sept. 8, 2016, established the basic framework for medical marijuana in the state. While there are no dispensaries set up, eligible patients may obtain a state-issued patient identification card to use as an affirmative defense.” ([https://statelaws.findlaw.com/ohio-law/ohio-marijuana-laws.html](https://statelaws.findlaw.com/ohio-law/ohio-marijuana-laws.html))

- Behavioral Research and Innovation Network (BRAIN): The University Hospital/Case Western Reserve University Psychiatry PBRN
California - In transition to legalizing recreational use

- **Current Laws:** Under Prop. 64, the Adult Use of Marijuana Act (AUMA), approved in November 2016
  - AUMA allows adults 21+ to possess, privately use, and give away up to 1 oz
  - Legalizes the sale, distribution and production of cannabis at state-licensed facilities beginning January 1, 2018 - but local municipalities can determine if they want to grant licenses and limited licenses have been granted so far
  - Cannot use in public spaces, near schools, or drive under the influence

- Recovery-Oriented Care Collaborative PBRN
  - Established in 2012 by four community-based mental health agencies: Exodus Recovery, Didi Hirsch, Pacific Clinics, and Mental Health America and Dr. Brekke of the University of Southern California
  - Published 3 articles on first 2 projects
Colorado - Legal for medical and recreational use

- **Current Laws:** Colorado legalized marijuana in November 2012. Implemented legal retail shops in January 2014
- Law permits personal recreational use of marijuana by adults 21 or older.

- **Recovery-Oriented Collaborative Care**
  - SNOCAP (Shared Networks of Colorado Ambulatory Practices and Partners) = PBRN of PBRNs at University of Colorado
  - CHORDS (Colorado Health Observation Regional Data Service) - federated virtual data warehouse