Planning the IT MATTTRs Pragmatic Trial:
Research Prioritization, Design, and Implementation of a Medication Assisted Treatment Study for Primary Care

LINDA ZITTELEMAN, MSPH
JODI SUMMERS HOLTROP, PHD
UNIVERSITY OF COLORADO
DEPARTMENT OF FAMILY MEDICINE
What we will cover

- What this study was about
- How we went about making decisions and factors influencing: prioritization, design, outcomes, implementation
- Reflections
Disclosures

- Funded by the Agency for Healthcare Research and Quality (AHRQ) grant #5R18HS025056
- Jodi Holtrop is funded on an IPA contact with AHRQ as a Senior Scientific Advisor
Study Basics

- IT MATTTRs: Implementing Technology and Medication Assisted Treatment Team Training in Rural Colorado

- Purpose:
  - Using community, provider, and team-based strategies in rural communities and primary care practices, improve awareness and practice implementation of medication assisted treatment (MAT) for opioid use disorder (OUD)
  - Identify factors that facilitate or impede successful implementation of MAT in rural primary care practices and communities
Prioritization (and Inspiration)

- This study was done in the context of **practice-based research**.

- What is practice-based research?
  - Expand settings and context in which research is conducted, discoveries are tested, and guidelines and best practices are informed
  - Real-world settings
  - Primary care: where most people get most of their care most of the time

The Kerr White Boxes

*Traditional medical research occurs in this itsy-bitsy little box*
Prioritization: Rural Practice-Based Research Network

Two specific practice-based research networks involved with study:

- 16 counties of eastern rural and frontier Colorado
- 54 primary care practices
- Front Range and south central Colorado
- Mostly safety net practices

- Both PBRNs are member of the State Network of Colorado Ambulatory Practices and Partners (SNOCAP)
- Housed in the Univ of Colorado Dept of Family Medicine
Prioritization: Community Voice

- Opioid use called out by practices as a major health issue and concern:
  - Prescribing opioids
  - Limited access to diagnostic and treatment services for OUD
  - Complete lack of Medication Assisted Treatment (MAT)

- HPRN Community Advisory Council identified this as a major concern and brought into context the stigma around OUD and lack of community knowledge of MAT.

- South central Colorado created active community coalition to address OUD locally
Prioritization: Data

- Treatment Gap: only 15% of people in need receive treatment nationally.
- Only 2 clinicians with waiver to prescribe buprenorphine for OUD in eastern and southern rural Colorado (2016)
Prioritization: Why did we do this study?

- Prioritization of OUD was the result of being informed by data combined with lived experience
- Align priorities and needs identified by stakeholders with funding opportunities
- Title of AHRQ funding opportunity: “Increasing Access to Medication Assisted Treatment (MAT) in Rural Primary Care Practices”
Development and Implementation: Multiple implementation strategies to build MAT capacity

1. Engage and activate the local community
   - Increase knowledge, develop positive attitudes towards MAT
   - Create demand for MAT

2. Train clinicians
   - Increase the number of clinicians completing the required training to receive a waiver to prescribe buprenorphine for OUD

3. Train the entire practice team
   - Increase knowledge and positive attitudes about OUD and MAT
   - Implement MAT components and protocols
   - Provide (or “deliver”) MAT
1. Engage and activate the local community

- We chose to partner with **local community members** to help develop a community-based awareness and action campaign around MAT for OUD.
  
  - Use the Boot Camp Translation process to translate the science and evidence-based guidelines around OUD and MAT into culturally relevant messages and local dissemination strategies.

- Why work within the broader community?
  
  - Thin membrane between the practice and community in rural communities.
  - Community partners have said, “We can’t confine the work within the walls of the practice.”

- Why use Boot Camp Translation?
  
  - Promotes co-learning with all partners.
  - Builds on strengths and resources within the community.
  - BCT is a tested mechanism to engage community and patient partners in research.
“MAT for OUD in the SLV”

EVERYONE DESERVES ACCESS TO CARE
IT’S REAL, IT’S US, IT CAN BE TREATED.
WHAT IF <_______> HAD GOTTEN HELP?

“Have You Met MAT?”

- Deaths from opioid drug overdose increased 300% in eastern Colorado over the past decade.
- How long have you been taking your pain medication?
- When addicted, people take opioid pain medicines or heroin just to feel normal.
- Get your life back – with local outpatient care.
- Talk to your doctor about MAT!
2. Train clinicians

- Why train clinicians? Primary care clinicians cannot prescribe medication (buprenorphine) for OUD without completing a training and obtaining a waiver to prescribe. Aim to increase number of clinicians with waiver to prescribe - a necessary component to provide MAT.

- Used existing, certified waiver training courses offered by national organizations, such as the American Society of Addiction Medicine

- Promote training opportunities to clinicians:
  - Made training available at no cost to clinicians (ASAM course)
  - Partnered with Practice Innovation Program that had support to offer an incentive plan to pay clinicians for completing training
3. **Train entire practice team**

- Why train practice teams?
  - Clinician waiver training necessary – but sufficient?
  - HPRN has worked with multiple initiatives and studies to promote team-based care
  - Support culture change and sustainability in practice (more than just clinician’s responsibility, passion)
  - Engaging entire team increases practices’ ability to identify staff members with passion about topic
3. Train the entire practice team

- What was the IT MATTTRs Team Training?
  - 4 modules, covering epidemiology, neurobiology of addiction, pharmacology, and MAT steps
  - Developed by research team, with collaboration from local MAT experts, community members, and professional practice facilitators

- How was team training implemented?
  - Delivered either onsite at the practice by trained Practice Facilitator or via the online ECHO platform (a tele-education model)
  - Onsite training: One session every 1-2 months to accommodate practice schedules, allow time for discussion and decision-making at practices.
  - ECHO Colorado: 8 sessions, one per week, following ECHO model
Design:

- Pre-Post cross sectional surveys used to assess community knowledge and attitudes
- Cluster randomized, pragmatic trial design used for practice team training
- Practices were randomized to receive Team Training using one of two delivery methods:
  - SOuND Team Training
    - Delivered in-person (onsite) by trained Practice Facilitator
    - 4 1-hour sessions, with tailored follow-up MAT implementation support
    - All team members encouraged to attend
  - ECHO (with ECHO Colorado Program)
    - Web-based tele-health model
    - Delivered by a session Facilitator and expert panel
    - 4 cohorts with multiple practices each with 8 weekly sessions, 30-60 minutes each
    - Capped participation per cohort
Design “Why’s”:

- Why a randomized trial?
  - SOuND model: Successfully used in multiple other studies in HPRN. Practices like when you show up.
  - ECHO model: Utilization increasing, and suggested in the RFA to consider using this approach
  - This study presented an opportunity to explore how implementation differed between the two delivery options and in what circumstances one might be more effective than the other.

- Why pre-study randomization assignment?
  - We identified all the possible practices and then randomized them, THEN recruited them to the study.
  - Pros: Practices knew what condition they were getting.
  - Cons: Could result in unequal distribution of conditions, pending participation.
# Outcomes: RE-AIM Model

<table>
<thead>
<tr>
<th>RE-AIM</th>
<th>Outcome of Interest</th>
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<tr>
<td><strong>Reach</strong></td>
<td># and % patients diagnosed with OUD who enroll in MAT</td>
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<tr>
<td><strong>Effectiveness</strong></td>
<td>Quality of Life (cravings and withdrawal, depression and anxiety, sleep disorders, pain and function)</td>
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<td><strong>Adoption</strong></td>
<td>Number, %, and characteristics of practices implementing MAT program after training (Yes/No)</td>
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<td><strong>Implementation</strong></td>
<td>• Level of implementation of MAT program components (26-item checklist)</td>
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<td></td>
<td>• # of providers obtaining buprenorphine waiver</td>
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<td></td>
<td>• Delivery of MAT</td>
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<td></td>
<td>• Facilitators and barriers to implementing MAT</td>
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<td></td>
<td>• Practice team members change in knowledge and attitudes towards OUD/MAT</td>
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<td></td>
<td>• Community change in knowledge and attitudes towards OUD/MAT</td>
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<td><strong>Maintenance</strong></td>
<td>Integration of MAT program into practice flow and policies at 6 months</td>
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<td></td>
<td># of patients retained in MAT program &gt;6 months</td>
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Why this model for outcomes?

1. Best known model for studying outcomes in dissemination and implementation studies.
2. Allows for examination of multi-level outcomes at the patient, staff member, provider, practice and community levels.
3. We really like it! It helps plan out what you are going to do and how you will collect the data to answer the different RE-AIM domains.
4. Allows for mixed methods including qualitative (interviews, observations, field notes), quantitative (checklists, surveys, EMR clinical data) and mixed methods (qualitative comparative analysis).
5. Very familiar with this model as developer is at our institution and we have used it before.
Implementing MAT in practices can take a while. Factor in time for practice change to occur in evaluation plan.

Local community engagement is critical. Can’t imagine doing the project without these partners! How will you know what people want and need?

Pre-study randomization – worked well for us because not that many practices said no. Was easier to know from the beginning what condition went with what practice.

Partnerships can make a big difference. Incentive payment plan for Provider Waiver training was a big unexpected boost to participation.

Curriculum would not be as good without community and practice facilitator contributions.

Relationships matter. PBRNs are good partners and have potential to bring long-term relationships practices and community partners to the table.

Boot camp translation helped the group to think outside the box for materials and dissemination strategies that utilize local communication culture and resources.

Team training: Still analyzing data. We suspect both models have strengths – and analysis will aim to demonstrate how best to take advantage of those strengths for future programs.
Thank you!

Questions?

linda.zittleman@cuanschutz.edu
jodi.holtrop@cuanschutz.edu