WHERE THE RUBBER MEETS THE ROAD
The Intersection of Research, Policy, and Practice
September 12-14 | Seattle, WA | #SIRC2019
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PROGRAM COMMITTEE

Rinad Beidas, PhD
Melissa Bernstein, PhD
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Sean Wright
Welcome to the 5th Biennial Society for Implementation Research and Collaboration Conference, SIRC 2019! This year our conference plans to be more exciting than ever, bringing together researchers, practitioners, policy makers, students, and faculty from around the globe to explore implementation in action through our conference theme “Where the rubber meets the road.” As the field of implementation science continues to develop and grow, we are challenged to expand our dialogue to ensure that research, policy, and practice inform one another and are aligned to reach common goals.

SIRC has evolved considerably since the first conference in 2011, growing each year in its size and global impact. In past years, we have been astounded by the incredible response to the call for proposals – this year was no different! We again received a record number of abstract proposals, more than doubling the number of submissions since the last conference in 2017. We would like to acknowledge the incredible contributions of our conference planning committee, abstract reviewers, and SIRC officers. With such a large number of abstracts to review, we had our work cut out for us. Our hope is that the selected presentations create a dynamic and thought-provoking conference that embodies our conference theme.

The plenary talks demonstrate the intersection of research, policy, and practice, and the relevance of our work at a global scale. We hope the eight IGNITE plenaries will provide an exciting way to hear about some of the cutting-edge work being done in implementation science. Many of our IGNITE speakers will be available during the SIRC-hosted happy hour following the plenary to discuss their work in more detail. Our seven symposia were selected from an incredible pool of submissions specifically because of their application to the conference theme. Oral presentations and panels have been strategically grouped into interest areas. You will notice that we also grouped the posters along interest areas with the intention of facilitating connections. Themed lunch opportunities are likewise available, including an option specific to students in attendance as well as an opportunity to meet an editor of Implementation Science. Finally, we hope that you enjoy the social events available as a chance to connect and enjoy all that Seattle has to offer.

The conference theme could not be more relevant given current events. Now more than ever, we are challenged to ensure that the best of science is being utilized to help our communities face numerous public health crises. While SIRC is predominately focused on mental health and health care, we are certain the lessons from our conference can inform many fields where implementation science helps bridge the gap between research and practice.

We hope you enjoy the few days in beautiful Seattle, make new friends, and reconnect with colleagues. This is an opportunity for collaboration and connection and we encourage you to pursue new opportunities and learn from fellow travelers on the road of implementation science.

Best wishes,
Sue Kerns and Bob Franks
Conference Co-chairs
Dear SIRC Attendees,

I’d like to add my welcome to the conference and thank our wonderful Conference Co-Chairs, Sue Kerns and Bob Franks! The last two years have been filled with change and growth for SIRC – having research and practice conference co-chairs is an example of those changes that have helped us improve as a society. Along those lines, I’d like to share a few big updates for SIRC.

As you likely know, SIRC evolved as a society following a NIMH-funded conference grant and we have continued to develop as an entity. Over the past year, I worked with the officers and the Business Innovations Clinic at the University of Arkansas Little Rock, Bowen School of Law to incorporate SIRC as an entity and obtain non-profit status through the IRS. This has included tasks big (creating bylaws) and small (getting a post office box) and has resulted in several changes behind the scenes that will continue as we make SIRC a more efficient entity. I’d like to thank our lawyers Kim Vu-Dinh and Wesley Harris in guiding a group of implementation researchers through this legal process – their pro bono work was not only stellar, but kind and patient. A major impetus for incorporation was our desire to create a new journal for the field.

SIRC began conceiving of a new journal at the 2015 conference when we held an open session to discuss the need, scope, and path for such an endeavor. We convened a formal Planning Committee and held an inaugural meeting at our 2017 conference to solidify details and launch monthly meetings for a workgroup led by co-founding editors-in-chief Cara Lewis and Sonja Schoenwald. SIRC’s journal proposal was positively received by several publishers with whom we met on several occasions to ensure a competitive scope for the expanding market. In 2018, we secured 7 inaugural Associate Editors (AEs) including Danny Almirall, Rinad Beidas, David Bradford, Aaron Lyon, Larry Palinkas, Michael Southam-Gerow, and Terje Ogden. In 2019, after much deliberation and many iterations, we solidified the title and scope of the SIRC journal: Implementation Research and Practice is an international, peer-reviewed, open access, online-only journal providing rapid publication of interdisciplinary research that advances the implementation in diverse contexts of effective approaches to assess, prevent, and treat mental health, substance use, or other addictive behaviors, or their co-occurrence, in the general population or among those at-risk or suffering from these disorders. Although we are not ready to announce the publisher as the program goes to print, we anticipate with excitement being able to do so soon. We should be ready by conference time to accept manuscripts for consideration in the inaugural year, and to describe the submission process. Meanwhile, we are gathering information about work in progress likely to be ready for submission.

SIRC and SIRC officers have done so much other great work (e.g., webinars, office hours with Established Network of Expertise members) that you will hear highlighted in our SIRC Updates during the conference. The officers have given selflessly of their time, energy, and talent and I’m so grateful to them and to our SIRC members for helping create this wonderful society.

Thank you and enjoy the conference!
Sara J. Landes
SIRC President
GENERAL INFORMATION

Registration Desk
Staff will be available at the Registration Desk to provide assistance and information throughout the conference. Please see below for locations each day.

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Location</th>
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<tbody>
<tr>
<td>Thursday</td>
<td>7:30 AM</td>
<td>Room 337</td>
</tr>
<tr>
<td>Friday</td>
<td>7:00 AM</td>
<td>South Ballroom Foyer</td>
</tr>
<tr>
<td>Saturday</td>
<td>7:30 AM</td>
<td>South Ballroom Foyer</td>
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</tbody>
</table>

Name Badges
Your name badge is your entrance ticket to conference activities including sessions, refreshment breaks, poster session, and the Friday night Reception.

Internet Access
Free wireless internet access is available campus-wide. To access the free Wi-Fi select the wireless network name “University of Washington”, open a browser, and enter the user name and password provided to you at the registration desk.

Refreshments and Lunches
A continental breakfast and afternoon snacks will be available in the South Ballroom and Foyer Friday and Saturday. The boxed lunches that you selected will be available for pickup in rooms 337 and 340. You will have a ticket with your selection and the room number where your lunch will be located.

Thursday: Boxed lunches that have been purchased ahead of time will be located in Room 337.

Poster Session – Saturday, 2:30 – 4:00
The poster session will take place in the Lyceum (room 160) on the first floor. Supplies for mounting your posters and a list with the board assignments will be available in the Lyceum Foyer. You may mount your posters from 2:00 – 2:30 PM. Posters must be removed by 6:00 PM on Saturday. Organizers cannot be responsible for posters left on boards.

Oral Presenters
Arrive at your session room at least 10 minutes before your session is scheduled to begin. Please note the length of time allotted for your talk and plan on leaving time at the end for follow up questions. In consideration of all speakers, the Session Chair will maintain these time limits rigorously. Each presentation room is equipped with a PC laptop, data projector, microphone (when appropriate), and a screen.

Optional Social Events
If you registered for one of the evening social events you will have a ticket in your registration packet with instructions on when and where to meet. You will need your ticket to attend the event.

Emergency Contacts
In an emergency, please dial 911. To contact the University Police for a non-emergency, dial 206-685-8973.

Services on Campus
Conveniently located on the lower level of the Husky Union Building (HUB) is a small branch of the University Bookstore (selling supplies, cards, books, souvenirs – hours are 9am-4pm); a cash machine; food vendors; a shop selling coffee, espresso and quick food items; and many lounge areas. Several other buildings on campus also offer coffee, espresso, and quick snacks.

Continuing Education Credits
Continuing Education credits will be offered for the 2019 conference for a fee of $99. Registration in advance is required. Credits will be awarded on a session by session basis. The Society for Implementation Research Collaboration is approved by the American Psychological Association to sponsor continuing education for psychologists. The Society for Implementation Research Collaboration maintains responsibility for this program and its content. To receive credits, participants must 1) sign both in and out of each session and 2) fill out an evaluation form.
## THURSDAY SCHEDULE AT A GLANCE

### Registration Desk Opens at 7:30 - Room 337

### Implementation Development Workshops 8:30 - 12:00

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<tr>
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<th>IDW 1</th>
<th>IDW 2</th>
<th>IDW 3</th>
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<tr>
<td></td>
<td>Room 238</td>
<td>Room 145</td>
<td>Room 307</td>
<td>Room 340</td>
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Break for Lunch on your own (12:00-1:30)
Boxed lunch pickup in room 337 (purchased in advance)

### Pre-Conference Workshops 1:30 - 5:00

<table>
<thead>
<tr>
<th>Workshop 1</th>
<th>Workshop 2</th>
<th>Workshop 3</th>
<th>Workshop 4</th>
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<tbody>
<tr>
<td>Room 214</td>
<td>Room 334</td>
<td>Room 145</td>
<td>Room 332</td>
<td>Room 340</td>
</tr>
<tr>
<td>Creating Implementation Laboratories to Efficiently Advance Implementation Science and Practice</td>
<td>Developing Comprehensive Infrastructure to Support Evidence-Based Practice Implementation and Sustainability: Where Does SIRC Go From Here?</td>
<td>Communicating Beyond the Academy: Engaging With the Public, the Press, and Policymakers</td>
<td>Accelerating the Implementation of Practice and Policy Research in Health and Human Services: Innovative Education and Training for Implementation Science</td>
<td>Introduction to Implementation Science</td>
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</tbody>
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Ravenna Brewery Night 6:00 - Optional, pre-registration required
### FRIDAY SCHEDULE AT A GLANCE

<table>
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<td><strong>7:00-8:00</strong></td>
<td>Registration Desk Opens at 7:00 - South Ballroom Foyer</td>
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<tr>
<td><strong>8:00-8:45</strong></td>
<td>Continental Breakfast - South Ballroom</td>
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<tr>
<td><strong>8:45-10:00</strong></td>
<td>Welcome &amp; Opening Remarks - South Ballroom</td>
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<tr>
<td><strong>10:00-10:30</strong></td>
<td>Plenary 1 - South Ballroom: Arthur Evans</td>
</tr>
<tr>
<td><strong>10:30-11:45</strong></td>
<td><em>Where the Rubber Meets the Road: Reframing Implementation to Advance the Science and Practice</em></td>
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<tr>
<td><strong>11:45-1:00</strong></td>
<td>Break</td>
</tr>
<tr>
<td><strong>10:30-11:45</strong></td>
<td><strong>BREAKOUT SESSIONS A</strong></td>
</tr>
<tr>
<td>Breakout A1</td>
<td>Room 334 - The Intersection of Policy and Practice Should Not be a Multi-Car Pile-Up: Research on the Role of the ‘Outer Context’ in Implementing Effective Practices</td>
</tr>
<tr>
<td>Breakout A2</td>
<td>Room 332 - Collaboration Driving Innovation: Implementation Science in Action</td>
</tr>
<tr>
<td>Breakout A3</td>
<td>Room 214 - Fueling Implementation through Collaborative Care in Healthcare Settings</td>
</tr>
<tr>
<td>Breakout A4</td>
<td>Room 145 - Network of Expertise (Part 1)</td>
</tr>
<tr>
<td><strong>11:45-1:00</strong></td>
<td>Lunch (boxed lunches will be provided)</td>
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<tr>
<td><strong>1:00-2:15</strong></td>
<td><strong>BREAKOUT SESSIONS B</strong></td>
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<tr>
<td>Breakout B1</td>
<td>Room 334 - Leadership and Organizational Change for Implementation – Strategy Adaptation for Context, Population, and Practice: Common and Unique Elements and Mechanisms</td>
</tr>
<tr>
<td>Breakout B2</td>
<td>Room 332 - Building Roads: Exploring Implementation Outcomes Across Diverse Contexts</td>
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<tr>
<td>Breakout B3</td>
<td>Room 214 - Creating Bridges: The Role of Intermediary Organizations</td>
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<tr>
<td>Breakout B4</td>
<td>Room 145 - Network of Expertise (Part 2)</td>
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<tr>
<td><strong>2:15-2:30</strong></td>
<td>Break</td>
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</table>

**SIRC Lunch Events**

- Meet an Editor: An Open Discussion about Implementation Science, its Perspectives, Policies and Approaches
  
  Room 332

- Practitioner Lunch - South Ballroom, round tables
## FRIDAY SCHEDULE AT A GLANCE

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<tr>
<th>BREAKOUT SESSIONS C</th>
<th>2:30-3:45</th>
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<tr>
<td>Breakout C1</td>
<td>Breakout C2</td>
</tr>
<tr>
<td>Room 334</td>
<td>Room 332</td>
</tr>
<tr>
<td>The Intersection Of Behavioral Economics, Participatory Design, and Implementation Science</td>
<td>Designated Implementation Drivers in Action to Achieve Programmatic Goals</td>
</tr>
</tbody>
</table>

### 3:45-4:00

Break

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### IGNITE PLENARY SESSIONS: The Winding Roads of Implementation Science in Action 4:00-5:15

<table>
<thead>
<tr>
<th>IGNITE 1</th>
<th>Implementing Service Cascade Models with Fidelity: A Case Study of Cross-System Coordination Strengths and Challenges</th>
</tr>
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<tr>
<td>IGNITE 2</td>
<td>A Pragmatic Method for Costing Implementation Strategies Using the Time-Driven Activity-Based Costing</td>
</tr>
<tr>
<td>IGNITE 3</td>
<td>Shared Goal, Different Languages: Communication Between Implementation Researchers And Social Entrepreneurs</td>
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<tr>
<td>IGNITE 4</td>
<td>Making it Happen: Implementation Efforts for Systems Level Change in Child Welfare</td>
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<tr>
<td>IGNITE 5</td>
<td>A Multiple Case Study of a Tailored Approach to Implementing Measurement-Based Care for Depression</td>
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<tr>
<td>IGNITE 6</td>
<td>Systematic Adaptation of Evidence-Based Interventions: An Intervention Mapping Approach</td>
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<tr>
<td>IGNITE 7</td>
<td>Co-Creation of Change in Policy and Practice: The Community Academic Partnership for Translational Use of Research Evidence (CAPTURE)</td>
</tr>
<tr>
<td>IGNITE 8</td>
<td>Developing a Strategic Implementation Research Plan Within an Integrated Healthcare System</td>
</tr>
</tbody>
</table>

### 5:15-5:30

Break

### 5:30-7:30

Reception - South Ballroom

- Agua Verde Dinner 6:30 - 8:00 - Optional, pre-registration required
- Student Event: Big Time Brewery 7:30 - Optional, pre-registration required
SATURDAY SCHEDULE AT A GLANCE

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>7:30-8:00</td>
<td>Registration Desk Opens at 7:30 - South Ballroom Foyer</td>
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<tr>
<td>8:00-8:45</td>
<td>Continental Breakfast - South Ballroom</td>
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<tr>
<td>8:45-10:00</td>
<td>Updates on SIRC Initiatives - South Ballroom</td>
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<tr>
<td>10:00-10:30</td>
<td>Plenary 2 - South Ballroom: Daisy Anyango Okoth, BA, Mrs. Sheila Wambui Nderitu, Dip., Pastor Bernard Wafula Nambafu Nabalia, Dip., Mrs. Omariba Anne Nyaboke, BA, Dip., Mrs. Lilian Nandutu Aluka, BA, &amp; Shannon Dorsey <em>Overcoming Implementation Challenges in Low-Resource Communities: Methods and Solutions from Western Kenya</em></td>
<td>South Ballroom</td>
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<tr>
<td>10:30-11:45</td>
<td>Breakout Sessions D</td>
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<tr>
<td>Room 214</td>
<td>Bridging the Implementation Research to Practice Gap: Exploring</td>
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<td>Collaboration and Solutions Between Researchers, Policy-Makers and</td>
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<td>Funders, Implementation Supports and Implementing Organisations</td>
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<tr>
<td>Room 332</td>
<td>The Intersection of Implementation Science and Healthcare Policy and</td>
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<td></td>
<td>Systems</td>
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<tr>
<td>Room 145</td>
<td>Makes, Models, and Mechanics: Implementation Strategies for</td>
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<td></td>
<td>Promoting Positive Outcomes in Public Health and Systems of Care</td>
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<tr>
<td>Room 106</td>
<td>From the Dealership to the Driveway: The Impact of Implementation</td>
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<td></td>
<td>Science on Public Policy Development and Practice</td>
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<tr>
<td>South Ballroom</td>
<td>The Role of Implementation Science in Achieving Health Equity</td>
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<tr>
<td>11:45-1:00</td>
<td>Lunch (boxed lunches will be provided)</td>
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</table>

**SIRC Lunch Events**

- Student Lunch - South Ballroom, round tables
- SIRC Mechanisms Network of Expertise (MNoE) Working Lunch - Room 332 *By Invitation*
# SATURDAY SCHEDULE AT A GLANCE

<table>
<thead>
<tr>
<th>BREAKOUT SESSIONS E</th>
<th>1:00-2:15</th>
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<tbody>
<tr>
<td>Breakout E1</td>
<td>Room 214</td>
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<tr>
<td>Economic and Cost Research Methods to Inform Administrators’ and Policymakers’ Investments in Implementation</td>
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<tr>
<td>Breakout E2</td>
<td>Room 332</td>
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<tr>
<td>Moving Beyond “To Adapt Or Not?”: Understanding and Optimizing Adaptations for Maximum Impact In Real-World Implementation</td>
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<tr>
<td>Breakout E3</td>
<td>Room 145</td>
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<tr>
<td>Fueling Up: Developing and Utilizing Measures and Tools to Enhance Implementation Outcomes</td>
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</tr>
<tr>
<td>Breakout E4</td>
<td>Room 106</td>
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<tr>
<td>Highways and Byways: Implementation Factors in Action Across Multiple Settings</td>
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</tbody>
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<table>
<thead>
<tr>
<th>2:15-2:30</th>
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<tbody>
<tr>
<td>Break</td>
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<table>
<thead>
<tr>
<th>2:30-4:00</th>
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<tbody>
<tr>
<td>Poster Session - Lyceum</td>
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<tr>
<th>BREAKOUT SESSIONS F</th>
<th>2:30-3:45</th>
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<tbody>
<tr>
<td>Breakout F1</td>
<td>Room 214</td>
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<tr>
<td>Psychometric and Pragmatic Properties of Inner and Outer Context Measures in Implementation Science</td>
<td></td>
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<tr>
<td>Breakout F2</td>
<td>Room 332</td>
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<tr>
<td>Where the Rubber Meets the Road in Clinical Mental Health Settings</td>
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<tr>
<td>Breakout F3</td>
<td>Room 145</td>
</tr>
<tr>
<td>From Coaching to Machine Learning: Strategies to Address the Bumps and Potholes of Implementation</td>
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</tr>
<tr>
<td>Breakout F4</td>
<td>Room 106</td>
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<td>Going the Distance: Co-Creation, Collaborative Partnerships, and Innovation to Expand Reach</td>
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<th>3:45-4:00</th>
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<td>Break</td>
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<th>4:00-5:15</th>
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<td>Plenary 3 - South Ballroom: Per Nilson, Melanie Barwick, Jeremy Grimshaw, Bryan Weiner, Robyn Mildon Perspectives on the Intersection of Implementation Research, Policy, and Practice: Offering a Path Forward</td>
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<tr>
<td>Awards &amp; Closing - South Ballroom</td>
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<td>Cruise Lake WA &amp; Lake Union, Boarding 6:30 - Optional, pre-registration required</td>
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MEET THE SIRC OFFICERS

President: Sara J. Landes, PhD
The SIRC president plans the next conference, represents SIRC, calls meetings, oversees initiatives, and coordinates the other officers. Sara Landes is currently an associate professor at the University of Arkansas for Medical Sciences in the Center for Implementation Research and the Associate Director of the Behavioral Health QUERI and a clinical psychologist in the Central Arkansas Veterans Healthcare System. Her research interests are in implementing evidence-based psychotherapies in large health care systems such as the VA, with a focus on treatments for suicide.

Past-President: Cara C. Lewis, PhD, HSPP
The past president advises the president. Cara Lewis is an associate investigator at Kaiser Permanente Washington Health Research Institute, and affiliate professor at the University of Washington. She is an established implementation researcher with two NIMH-funded R01s focused on leveraging measurement to improve mental health services in community-based settings.

Past-President: Kate Comtois, PhD, MPH
The past president advises the president. Kate Comtois is a full professor in the Department of Psychiatry and Behavioral Sciences at the University of Washington. She is an EBP Champion as she directs a clinic in which she has been implementing EBPs as well as an Intermediary – providing training and consultation on Dialectical Behavior Therapy implementation. She is the founder of SIRC and was PI of the NIMH conference grant from which SIRC began.

Secretary: Beth Prusaczyk, PhD, MSW
The secretary schedules meetings, takes minutes, tracks tasks and monitors the website and sirc@uw.edu email. Dr. Prusaczyk is an Instructor at Washington University School of Medicine in St. Louis. She received her PhD in social work from Washington University in St. Louis in 2017. Dr. Prusaczyk’s research focuses on using implementation science to improve healthcare for older adults, specifically with the use of existing healthcare data for vulnerable older adults in acute care settings. She also has expertise in translating research to policymakers and served as a 2018-2019 fellow in the Senate Special Committee on Aging for Senator Bob Casey (D-PA).

Membership Chair: Cameo Stanick, PhD
The membership chair oversees membership, collects dues, and conducts initiatives to increase membership of under-represented groups. Cameo Stanick, PhD, is Vice President of Clinical Practice, Training, and Research and Evaluation at Hathaway-Sycamores Child and Family Services in Los Angeles. With Drs. Cara Lewis, Bryan Weiner, and Byron Powell, Dr. Stanick led the NIMH-funded R01 for the Instrument Review Project. Her research and clinical work focuses on dissemination and implementation of EBPs in community- and school-based mental health settings, with specific emphasis on childhood trauma.
MEET THE SIRC OFFICERS

Treasurer: Andria Pierson, MEd
The treasurer manages the budget and accounts and forecasts funds for future conferences and initiatives. Andria is Program Manager for the Military Suicide Research Consortium Dissemination & Implementation Core and Training Manager for the Center for Suicide Prevention and Recovery (CSPaR) at the University of Washington. Her background is in continuing education program management and curriculum development for scientific, public sector, and international student programs.

Communications Chair: Ana Baumann, PhD
The communications chair organizes and coordinates SIRC marketing and social networking. Dr. Ana Baumann is a Research Assistant Faculty at Washington University in St. Louis. She is passionate about implementation science and adaptation of EBPs nationally and internationally, decreasing disparities in care, and training in implementation science.

Research Conference Co-Chair: Suzanne Kerns, PhD
The research conference co-chair co-leads development of the conference vision with the President and organizes the biennial conference. The research co-chair focuses on the quality and utility of research presentations and dissemination at the conference. Suzanne Kerns, PhD, is a Research Associate Professor and the Executive Director of the Center for Effective Interventions at the University of Denver Graduate School of Social Work. Her clinical and research interests focus on enhancing the well-being of children and families through ensuring access to proven-effective treatment approaches, including examining the acquisition, implementation, adaptation and sustainability of evidence-based practices.

Practitioner Conference Co-Chair: Bob Franks, PhD
The practitioner conference co-chair co-leads development of the conference vision with the President and organizes the biennial conference. The practitioner co-chair focuses on bridging the research-to-practice gap, incorporating relevant clinical experience, and improving the conference’s relevancy for practice-oriented attendees. Dr. Bob Franks is president and CEO of Judge Baker Children’s Center and a faculty member at Harvard Medical School. Dr. Franks has been working in the field of implementation for over fifteen years. He has worked in academic settings, non-profit institutions and has established intermediary organizations to implement, scale, and sustain best practices in children’s mental health, education, juvenile justice, and child welfare. Over the course of his career, he has led numerous statewide implementations of a wide range of evidence-based practices. Dr. Franks has collaborated with colleagues to explore the roles and functions of intermediary organizations and ways in which they actively support the implementation and sustainability of evidence-based practices at the policy, systems, and practice levels.
MEET THE SIRC OFFICERS

Chair of Practitioner Network of Expertise: Doyanne Darnell, PhD
The SIRC Practitioner Network of Expertise is comprised of experts on the principles and process of EBP implementation – that which occurs outside of research environments including policy makers, administrators, intermediaries, and providers. Dr. Darnell is a licensed psychologist and Assistant Professor in the Department of Psychiatry and Behavioral Sciences at the University of Washington. She studies the integration of behavioral interventions into general medical settings with a focus on developing scalable and sustainable methods for training front-line providers.

Technology Chair: Phil Fizur, PsyD
The technology chair oversees and programs the website and related online initiatives. Phil Fizur is a licensed clinical psychologist at Cooper University Health Care where he primarily focuses on implementation of evidenced based treatments for psychological factors associated with increased resource utilization.

Social Chair: Shannon Dorsey, PhD
The social chair organizes and coordinates SIRC social events during the SIRC conference including dinners, fun runs, and other activities. In addition, the social chair organizes events for SIRC members to gather across the year and while attending other conferences. Dr. Shannon Dorsey is an Associate Professor at the University of Washington (UW) in the Department of Psychology. She is an Adjunct Associate Professor in the School of Medicine and in the Department of Global Health. Dr. Dorsey’s research focuses on dissemination and implementation of evidence-based treatments (EBTs) for children and adolescents, with a particular focus on approaches to training and supervising trauma-focused EBTs domestically and globally. She tests novel approaches of increasing availability and access to high-fidelity EBTs in public health settings, with recent work focused on studying implementation policies and practices that support successful implementation of a child-focused EBT in the education and health sectors in western Kenya.
MEET THE SIRC OFFICERS

Co-Chair of New Investigator Network of Expertise: Byron Powell, PhD, LCSW. The co-chairs of the new investigator network of expertise (NoE) lead this division of the NoE to provide support and guidance to those who are New Investigator NoE members. Byron J. Powell is an Assistant Professor at the Brown School at Washington University in St. Louis. His research focuses on 1) identifying contextual determinants of implementing evidence-based practices in routine care; 2) identifying, developing, tailoring, and evaluating implementation strategies to address contextual determinants; and 3) advancing research methodology in implementation science.

Co-Chair of New Investigator Network of Expertise: Joanna Moulin, PhD. The co-chairs of the new investigator network of expertise (NoE) lead this division of the NoE to provide support and guidance to those who are New Investigator NoE members. Joanna Moulin is a lecturer at Curtin University in Perth, Western Australia. A pharmacist by profession, she now focuses on implementation research across a range of diverse clinical and community settings, and has an interest in measurement development and testing.

Chair of Established Investigator Network of Expertise: Shannon Wiltsey Stirman, PhD. The chair of the established investigator network of expertise (NoE) lead this division of the NoE to provide support and guidance to those who are Established Investigator NoE members. Shannon Wiltsey Stirman graduated from St. John’s College in Santa Fe, NM, and received her PhD in Clinical Psychology from the University of Pennsylvania. She completed an internship at the VA Palo Alto Healthcare System, and returned to Philadelphia for postdoctoral training, where she received an NIMH-funded K99/R00 award to study implementation and sustainability of CBT in a partnership between Penn and the City of Philadelphia’s Department of Behavioral Health and disability Services to implement cognitive therapy across the city’s network of providers. In 2009, Dr. Stirman joined the Women's Health Sciences Division of the VA National Center for PTSD and the Department of Psychiatry at Boston University. She was a Fellow of the NIMH and VA-funded Implementation Research Institute, and later served as an expert faculty member. In 2015, Dr. Stirman transitioned to the Dissemination and Training Division of the National Center for PTSD and joined the Stanford faculty in 2016. Her research has been funded by the National Institute of Mental Health and the Canadian Institute for Health Research.
MEET THE SIRC OFFICERS

Student Representative Officers: Stephanie Yu
The student representatives lead the Student mentoring program and provide support to the SIRC officers as needed to maximize SIRC conferences and initiatives. Stephanie is a first-year Clinical Psychology doctoral student at UCLA, working with Dr. Anna Lau. She is passionate about disseminating and implementing evidence-based practices (EBPs) to reduce mental health disparities for low-income, diverse populations. Specifically, she is interested in 1) adaptation frameworks to increase intervention fit to the complex contexts and diverse patients of community mental health, 2) disparities in minority mental health.

Student Representative Officers: Heather Bullock
The student representatives lead the Student mentoring program and provide support to the SIRC officers as needed to maximize SIRC conferences and initiatives. Heather has an extensive background in healthcare policy and knowledge translation, holding progressive leadership positions. Currently, Heather is the Executive Director of RISE, which provides evidence-based support to Ontario Health Teams, using a ‘rapid learning and improvement’ lens and Director of Provincial Partnerships at Waypoint Centre for Mental Health Care. Heather recently completed her PhD in Health Policy at McMaster University. As part of her studies she was awarded the prestigious national Pierre Elliot Trudeau Foundation Doctoral Scholarship and also received the Ontario Graduate Scholarship. Her research interests lie in how large jurisdictions implement evidence-informed policy directions in mental health systems. Her thesis explored how developed countries structure their implementation efforts as well as the process of policy implementation in Ontario’s mental health and addiction system.

Student Secretary Officer: Callie Walsh-Bailey
The Student Secretary Officer assists the secretary by taking minutes, managing emails, and organizing meetings. Callie is a Research Specialist at Kaiser Permanente Washington Health Research Institute and a first year doctoral student in Public Health Sciences at Washington University in St. Louis. Callie is interested in bringing a health equity lens to implementation science and improving chronic illness care, especially for individuals whose conditions may be exacerbated by social, economic, and behavioral needs.

Student Membership Officer: Madeline Larson
The Student Membership Officer assists the Membership Chair with membership communications and conducting membership outreach in the service of reaching membership targets. Madeline is a fourth year doctoral student in the school psychology program at the University of Minnesota. Overall, her work focuses on promoting youth and family access to high-quality behavioral health services via the implementation of evidence-based treatments (EBT) in community-based and non-specialty settings, such as schools and primary care centers. To achieve this work, Madeline’s research centers on: (1) community-academic partnerships, intermediaries, and embedded research; (2) identification of determinants and design of implementation strategies that enhance successful uptake and delivery of EBT; as well as (3) identification and pragmatic measurement of mechanisms by which implementation strategies work to more precisely match strategies to barriers that impede successful uptake and delivery of EBT.
MEET THE SIRC OFFICERS

Student Communications Officer: Vivian Byeon
The Student Communications Officer assists the Communications Chair with representing SIRC in the social media landscape, as well as the website and mailing list. Vivian Byeon is currently a clinical research coordinator at the Penn Center for Mental Health at the University of Pennsylvania and, in Fall 2019, she will be a first year doctoral student in the Clinical Psychology program at the University of California, Los Angeles. She is interested in improving the adoption and sustainment of evidence-based practices in community mental health settings domestically and globally, specifically through the development of organizational and system-level implementation strategies.

Student Conference Chair: Meagan Pilar
The Student Conference Chair aids in the development of the biennial conference with the Program Chair and manages the student program committee. Meagan is a third year doctoral student in the Public Health Sciences program at Washington University in St. Louis. Her research interests include the implementation of evidence-based mental health interventions, as well as investigating factors that improve policy implementation.
PLENARY PRESENTATIONS

Friday, September 13th, 2019 at 8:45am – 10am
Plenary 1: Where the Rubber Meets the Road: Reframing Implementation to Advance the Science and Practice
Arthur C. Evans Jr., PhD

Overview: This presentation focuses on the mental models that we have as individuals working in the field of implementation science, and how those mental frameworks create challenges and opportunities for the success of our work. We must consider both how we are approaching implementation as well as why we are doing implementation. Throughout the presentation, Dr. Evans will share examples of his own experiences with implementation “where the rubber meets the road”. Based on many years of work centered at the intersection of policy, science, and practice, he will offer his reflections on lessons learned and suggestions for the path forward for implementation science.

Presenter Biography: Arthur C. Evans Jr., PhD, is CEO of the American Psychological Association. Before joining APA, Evans spent 12 years as commissioner of Philadelphia’s Department of Behavioral Health and Intellectual Disability Service. He realigned the agency’s treatment philosophy, service delivery models and fiscal policies to improve health outcomes and increase the efficiency of the service system. Evans has been recognized nationally and internationally for his work in behavioral health care policy and service delivery innovation. In 2015, he was recognized by the White House as an “Advocate for Action” by the Office of National Drug Control Policy. In 2013, he received the American Medical Association’s top government service award in healthcare, the Dr. Nathan Davis Award for Outstanding Government Service. Evans is also regarded as a strong mental health advocate and was recognized by Faces and Voices of Recovery with the Lisa Mojer-Torres Award. In 2017, he was awarded the Visionary Leadership Award by the National Council of Behavioral Health and inducted into the Florida Atlantic University Alumni Hall of Fame at his alma mater. He has also been recognized as a strong advocate for social justice, having received three different Martin Luther King Jr. awards. Evans holds faculty appointments at the University of Pennsylvania Perelman School of Medicine, Drexel University School of Public Health and the Philadelphia College of Osteopathic Medicine, and has held a faculty appointment at the Yale University School of Medicine.
Saturday, September 14th, 2019 at 8:45am – 10am

Plenary 2: Overcoming Implementation Challenges in Low-Resource Communities: Methods and Solutions from Western Kenya

ACE Africa Team: Daisy Anyango Okoth, BA, Mrs. Sheila Wambui Nderitu, Dip., Pastor Bernard Wafula Nambafu Nabalial, Dip., Mrs. Omariba Anne Nyaboke, BA, Dip., Mrs. Lilian Nandutu Aluka, BA, Shannon Dorsey, PhD

Overview: Mental health interventions delivered via task-sharing in low-resources contexts have been effective; however, implementation strategies for scaling and sustainably delivering interventions with minimal governmental funding are lacking. The ACE Africa team presents methods and initial findings from identifying feasible and locally-relevant implementation practices and policies (IPPs) associated with successful implementation of task-shared mental health care in western Kenya. Methods for identifying IPPS and for developing and providing implementation support hold relevance for other task-shared interventions, since the process was feasible and aided implementing partners in feeling more prepared and able to effectively offer intervention.

Daisy Anyango Okoth, BA, Mrs. Sheila Wambui Nderitu, Dip., Pastor Bernard Wafula Nambafu Nabalia, Dip., Mrs. Omariba Anne Nyaboke, BA, Dip., Mrs. Lilian Nandutu Aluka, BA from ACE Africa serve as supervisors and local trainers for lay counselors providing Trauma-focused Cognitive Behavioral Therapy (TF-CBT), in schools and villages. As part of an NIMH-funded study, they led a stakeholder-involved process to identify implementation policies and practices in education and health sectors that support successful implementation. Partnering with stakeholders, they co-developed and deliver implementation support for schools and villages beginning to implement TF-CBT.

Shannon Dorsey, PhD, is an Associate Professor in the Department of Psychology at the University of Washington. Her research is on implementation and effectiveness of mental health treatments for children and adolescents in the United States and globally in low-resource contexts.
Overview: SIRC will close its 5th biennial conference with a panel of experts representing four countries, addressing the conference theme, “Where the Rubber Meets the Road: the Intersection of Implementation Research, Policy and Practice.” In addition to eliciting panelist reflections on their conference experience (e.g., noteworthy moments, highlights, challenges), they will respond to questions from the moderator, audience, and Twitter. The goal of the session is to ensure the next generation of implementation research and our conference is informed by policy and practices priorities.

Per Nilsen, PhD, is a Professor of Social Medicine and Public Health, with a particular focus on implementation science, at Linköping University, Sweden. He was responsible for building a research program on implementation science at Linköping University. He leads several projects on implementation of changes in health and welfare. Dr. Nilsen has developed Master and doctoral-level implementation courses, which have run annually since 2011. The PhD course attracts students from the Nordic countries and beyond. Dr. Nilsen takes particular interest in issues concerning practice change and the use of theories, models and frameworks for improved understanding and explanation of implementation challenges.

Melanie Barwick, PhD, CPsych is a Senior Scientist in the SickKids’ Research Institute and affiliated with the SickKids’ Learning Institute and SickKids Centre for Global Child Health. She is Professor in the Department of Psychiatry and Adjunct Professor in the Dalla Lana School of Public Health at the University of Toronto. She is a Governing Board Director for AMREF Health Africa and Children’s Mental Health Ontario (CMHO), and Associate Editor for the journal, Evidence & Policy. Dr. Barwick is an internationally recognized expert in implementation science and knowledge translation (KT). Her research aims to improve the implementation of evidence into practice and to broaden the reach of evidence more generally to support decision making, practice, policy, knowledge and awareness. She developed and provides professional development in KT internationally through the Specialist Knowledge Translation Training™ and the Knowledge Translation Professional Certificate™ (http://tinyurl.com/p2p5du6). The KTPC is recognized as a Leading Practice by Accreditation Canada and has over 380 graduates worldwide. Since 2004, SKTT™ and SKTTAustralia™ have trained over 3000 learners internationally.
Dr. Jeremy Grimshaw received a MBChB (MD equivalent) from the University of Edinburgh, UK. He trained as a family physician prior to undertaking a PhD in health services research at the University of Aberdeen. He moved to Canada in 2002. His research focuses on the evaluation of interventions to disseminate and implement evidence-based practice. Dr. Grimshaw is a Senior Scientist, Clinical Epidemiology Program, Ottawa Hospital Research Institute, a Full Professor in the Department of Medicine, University of Ottawa and a Tier 1 Canada Research Chair in Health Knowledge Transfer and Uptake. He is a Fellow of the Canadian Academy of Health Sciences and a Corresponding Fellow of the Royal College of Edinburgh. He has been awarded the CIHR Knowledge Translation award twice and is the 2018 CIHR Barer-Flood career achievement award winner for Health Services and Policy Research. He has over 550 peer reviewed publications.

Bryan Weiner, PhD, is Professor in the Departments of Global Health and Health Services at the University of Washington. Dr. Weiner’s research focuses on the implementation of innovations and evidence-based practices in healthcare. Over the past 23 years, he has examined a wide range of innovations including quality improvement practices, care management practices, and patient safety practices; as well evidence-based clinical practices in cancer and cardiovascular disease. His research has advanced implementation science by creating knowledge about the organizational determinants of effective implementation, developing new theories of implementation, and improving the state of measurement in the field.

Robyn Mildon PhD, is the Executive Director of the Centre for Evidence and Implementation (http://www.ceiglobal.org), Visiting Associate Professor, Yong Loo Lin School of Medicine, National University of Singapore and an Honorary Associate Professor, University of Melbourne, Australia. She has a longstanding career focused on the implementation, mainstreaming, and scaling-up of evidence to achieve social impact for children, families and communities in a range of health and human service areas. Dr. Mildon has lead a number of national, multi-year initiatives aimed at improving the selection, and use of, evidence to in real-world service and policy settings. In addition to her Australian-based work, she has built a portfolio of projects collaborating with both government and non-government agencies in countries such as Singapore, Norway, Sweden, the United Kingdom, the USA, and New Zealand, and has been an invited speaker at multiple events around the globe. Dr. Mildon was the founding Chair of the 1st, 2nd, and 3rd Australasian Implementation Conference (AIC) and was the Co-Chair for the 2018 Global Evidence and Implementation Conference (https://www.geis2018.org) co-hosted by the Centre for Evidence and Implementation and the Campbell Collaboration.
IGNITE: The Winding Roads of Implementation Science in Action
Melissa Bernstein, Zuleyha Cidav, Byron Powell, Maria E. Fernández, Sara J. Landes, Alicia Bunger, Gregory Aarons, Enola Proctor

Melissa Bernstein, PhD is an Implementation Specialist for the Advancing California’s Trauma-Informed Systems (ACTS) project with the Chadwick Center at Rady Children’s Hospital-San Diego. She came to the Chadwick Center in 2018 from the University of Oklahoma Health Sciences Center where she held an assistant professorship and completed a postdoctoral fellowship at the Center for Child Abuse and Neglect. As a licensed clinical psychologist working with children, youth, and families impacted by traumatic stress, she has developed expertise in understanding child maltreatment and utilizing evidence-based practices at an individual, family, and system level, including Trauma-Focused Cognitive Behavior Therapy and Cognitive Behavior Therapy for youth with Problematic Sexual Behavior. Dr. Bernstein joined the Chadwick Center in 2018 to support systems and organizations in planning for, implementing, and sustaining trauma-informed change that aligns with best practice and science. She currently provides training, technical assistance, and implementation support to child welfare systems across the state of California through the ACTS project.

Zuleyha Cidav, PhD, is a Research Assistant Professor in the Center for Mental Health at the University of Pennsylvania. She earned a PhD degree in Economics from the University of Texas at Austin and completed a postdoctoral fellowship in Health Services Research at the University of Pennsylvania. Her main interest is in the economic evaluation of health services, policy and practice. She studied patterns of organization, financing, and delivery of healthcare services to persons with psychiatric and developmental disabilities with a focus on better understanding the economic consequences of mental and developmental disabilities on families, public and private health care service sectors, and society. She conducted studies on children with Autism, examining determinants of their service use and costs, and societal and familial economic impacts. Dr. Cidav’s current work focuses on the economic evaluation of initiatives to implement evidence-based practices, incorporating economic analysis into implementation science studies, developing pragmatic and efficient methods for tracking implementation activities to enable economic evaluation. She is a co-investigator on numerous research grants from the NIH and other research foundations examining the effectiveness, cost, and implementation of health care interventions.
PLENARY PRESENTATIONS

Byron Powell, PhD, is an Assistant Professor at the Brown School at Washington University in St. Louis. His research focuses on 1) identifying contextual determinants of implementing evidence-based practices in routine care; 2) identifying, developing, tailoring, and evaluating implementation strategies to address contextual determinants; and 3) advancing research methodology in implementation science.

María E. Fernández, PhD, is a Professor of Health Promotion and Behavioral Sciences at The University of Texas Health Science Center at Houston (UTHealth) School of Public Health, and Director of the Center for Health Promotion and Prevention Research (CHPPR). She has extensive experience developing and evaluating health promotion interventions, and conducts research to improve dissemination and implementation of effective programs. Dr. Fernández recently co-authored two books, the 4th edition of Planning Health Promotion Programs: An Intervention Mapping Approach (2016) including a new chapter on using the intervention mapping approach for program adaptation, and Handbook of Community-based Participatory Research (2017). Her research has focused on cancer prevention and control among underserved populations. She has conducted both qualitative and quantitative studies that range from the identification and description of basic behavioral conceptual models of cancer screening and vaccination to the development and evaluation of new interventions to increase cancer control that have resulted in over 100 peer reviewed publications. Dr. Fernández has a large portfolio of federally and state-funded research and extensive experience in developing, evaluating, and disseminating breast and cervical cancer screening interventions. She is an expert in dissemination and implementation research and conducts studies to understand and intervene to accelerate the use of evidence-based cancer control interventions in real-world settings.

Sara J. Landes, PhD, is the Associate Director of the Behavioral Health QUERI and a psychologist at the Central Arkansas Veterans Healthcare System. She is also an Associate Professor at the University of Arkansas for Medical Sciences and core faculty of the UAMS Center for Implementation Research. Dr. Landes’ research interests are in the dissemination and implementation of evidence-based mental health treatments, with a focus on suicide prevention and larger health care systems. She has received research funding from VA HSR&D, QUERI, the National Institute of Mental Health, and the Department of Defense. Dr. Landes currently serves as the President of the Society for Implementation Research Collaboration.
PLENARY PRESENTATIONS

Alicia Bunger, MSW, PhD is an associate professor in the College of Social Work at the Ohio State University. Her research examines how can human service organizations and professionals work together to improve service access, quality, and outcomes for the communities they serve. Currently, Dr. Bunger is focusing on implementation of interventions that require collaboration across systems, and is interested in developing practical tools to support executive leaders.

Gregory Aarons, PhD is a clinical and organizational psychologist, Professor of Psychiatry at UC San Diego, and Director of the Child and Adolescent Services Research Center (CASRC). His research, funded by the National Institute on Drug Abuse, National Institute of Mental Health, Centers for Disease Control, and the W.T. Grant Foundation focuses on identifying and improving system, organizational, and individual factors that support implementation and sustainment of evidence-based practices and quality of care in health and allied health care settings. Dr. Aarons’ work on developing and testing leadership and organization development strategies and training supervisors to become effective leaders to support evidence-based practice implementation and sustainment in health and allied health settings. The leadership and organizational change for implementation (LOCI) strategy is being used and tested in settings focusing on mental health, schools, child welfare, HIV prevention, and trauma care in the US, Norway, and West Africa. His highly referenced “Exploration, Preparation, Implementation, Sustainment” (EPIS) implementation framework is being used in many health and allied health care settings to support evidence-based practice implementation. His most recent work focuses on scaling up evidence-based practices, and developing and fostering community-academic partnerships to increase the use of research evidence in policy and practice.
Enola Proctor, PhD is the Shanti K. Khinduka Distinguished Professor Emerita. Dr. Proctor’s teaching and research are motivated by the question, how do we ensure that people receive the very best possible care? She has studied this question in a variety of social work, public health, and health care settings, ranging from hospitals to community agencies. She has contributed to the intellectual capital for the rapidly growing field of dissemination and implementation science, leading teams to distinguish, clearly define, develop taxonomies, and stimulate systematic work to advance the conceptual, linguistic, and methodological clarity in the field. Her recent studies address how organizations and individual providers can adopt and deliver evidence based programs and interventions. Dr. Proctor’s research has been funded by the NIH including the NCRR, NCI, NIMH, NHLBI, and NIA, and AHRQ. She directs the Implementation Research Institute, a training program in implementation science funded by the National Institute for Mental Health, and serves as a core faculty member for a similar training program supported by the National Heart, Lung, and Blood Institute (NHLBI). She was founding director of the Center for Dissemination and Implementation for the Washington University Institute for Public Health, the Dissemination and Implementation Research Core for Washington University’s CTSA program, and dissemination and implementation research cores for research centers in the areas of cancer and diabetes.
AGENDA | THURSDAY, SEPTEMBER 12

7:30 | Room 337
REGISTRATION OPENS

8:30-12:00
IMPLEMENTATION DEVELOPMENT WORKSHOPS

- Room 228: IDW 1 (by invitation)
- Room 145: IDW 2 (by invitation)
- Room 307: IDW 3 (by invitation)
- Room 340: IDW 4 (by invitation)

12:00-1:30 | Room 337
REGISTRATION & LUNCH (on your own or by pre-purchase)

1:30-5:00
PRE-CONFERENCE WORKSHOPS

- Room 214
  Workshop 1: Creating Implementation Laboratories to Efficiently Advance Implementation Science and Practice
  Jeremy Grimshaw & Noah Ivers

- Room 334
  Workshop 2: Developing Comprehensive Infrastructure to Support Evidence-Based Practice Implementation and Sustainability: Where Does SIRC Go From Here?
  Alexia Jaouich, Purnima Sundar, Heather Bullock, Carrie Comeau, Amberlee Venti, Blair Brooke-Weiss, & Gery Shelafoe

- Room 145
  Workshop 3: Communicating Beyond the Academy: Engaging with the Public, the Press, and Policymakers
  Beth Prusaczyk

- Room 332
  Robyn Mildon & Joanne Yoong

- Room 340
  Workshop 5: Introduction to Implementation Science
  Byron J. Powell, Rinad S. Beidas, & Shannon Wiltsey Stirman

6:00
RAVENNA BREWERY NIGHT (Optional - pre-registration required)
AGENDA | FRIDAY, SEPTEMBER 13

7:00 | South Ballroom Foyer
REGISTRATION OPENS

7:00-8:00 | South Ballroom
CONTINENTAL BREAKFAST

8:00-8:45 | South Ballroom
Welcome & Opening Remarks

8:45-10:00 | South Ballroom
Plenary 1: Where the Rubber Meets the Road: Reframing Implementation to Advance the Science and Practice
Arthur Evans

10:00-10:30 | BREAK

10:30-11:45
BREAKOUT SESSIONS A

Room 334
Session A1 - The Intersection of Policy and Practice Should Not Be a Multi-Car Pile-Up: Research on the Role of the ‘Outer Context’ in Implementing Effective Practices
Chair: Eric Bruns
Discussant: Kimberly E. Hoagwood

Talk 1: Public Opinion as an Outer-Contextual Factor in Health Policy D&I Research and Practice: Evidence that the Public Cares About Evidence
Jonathan Purtle

Max Crowley

Talk 3: Measurement Infrastructure for Influencing the Outer Context: Integrating Evidence-Based Practice Reporting and Client Surveys to Guide Decision-Making in a Learning Health Care System
Noah R. Gubner, Felix I. Rodriguez, Rose Krebill-Prather, Kristen Petersen, & Sarah Cusworth Walker

Talk 4: Giving the Outer Setting Its Due: Adapting the Stages of Implementation Completion to Policy and System-Level Change Efforts
Eric J. Bruns, Jonathan R. Olson, Philip H. Benjamin, & Lisa Saldana

Room 332
Session A2 - Collaboration Driving Innovation: Implementation Science in Action
Chair: Sheila Patel
Discussant: Leopoldo Cabassa

Talk 1: Cross-Collaborations Among Researchers, Community, Government Agencies, and a Federal Funding Agency to Support Implementation of Evidence-Based Cardiovascular Disease Prevention in Primary Care: The EvidenceNOW Initiative
Donna Shelley, Michael Parchman, & Robert McNellis
AGENDA | FRIDAY, SEPTEMBER 13

Talk 2: A Collaboration Between Practitioners, Intermediaries, and Researchers to Increase Access to Evidence-Based Chronic Pain Care  
Jessica Chen, Lisa Glynn, Timothy Dawson, Hannah Gelman, & Steven Zeliadt

Talk 3: Untangling Trauma-Related Knowledge and Practice Changes among Brokers in a Community-Based Learning Collaborative: Role of Interprofessional Collaboration  
Funlola Are, Rochelle Hanson, Samuel Peer, & Ben Saunders

Talk 4: Real-Time Implementation of a Multi-Tiered, Trauma-Focused Intervention Model after Hurricane Maria in Puerto Rico: Synergy of Research, Practice, and Policy  
Rosaura Orengo-Aguayo & Regan Stewart

Room 214  
Session A3 - Fueling Implementation through Collaborative Care in Healthcare Settings  
Chair: Ian Bennett  
Discussant: Heather L. Bullock

Talk 1: Change in Patient Outcomes after Augmenting a Low-Level Implementation Strategy in Community Practices that are Slow to adopt a Collaborative Chronic Care Model: A Cluster Randomized Implementation Trial  
Shawna Smith, Daniel Almirall, Katherine Prenovost, Mark Bauer, Celeste Liebrecht, Daniel Eisenberg, & Amy Kilbourne

Talk 2: A Community-Based Implementation Roadmap to Inform Scalability, Sustainability, and Spread of Evidence-Based Collaborative Care Interventions  
Amy Rusch, Shawna Smith, Lindsay Decamp, Celeste Liebrecht, Gregory Dalack, & Amy Kilbourne

Talk 3: The Collaborative Chronic Care Model for Mental Health Conditions: From Partnered Implementation Trial to Scale-Up and Spread  
Mark Bauer, Kendra Weaver, Bo Kim, Christopher Miller, Robert Lew, Kelly Stolzmann, Jennifer Sullivan, Rachel Rienteau, Samantha Connolly, Jeffery Pitcock, Stig Ludvigsen, & A. Rani Elwy

Talk 4: A Randomized Stepped Wedge Hybrid-II Trial to Implement the Collaborative Chronic Care Model in VA General Mental Health Clinics  
Christopher Miller, Bo Kim, Robert Lew, Kelly Stolzmann, Jennifer Sullivan, Rachel Rienteau, Jeffery Pitcock, Alicia Williamson, Samantha Connolly, A. Rani Elwy, Kendra Weaver, & Mark Bauer

Room 145  
Session A4 - Mechanisms Network of Expertise (Part 1)

Open Working Meeting: What are the Challenges of Using Theory to Understand Context and Inform the Study of Implementation Strategy, Mechanism, and Outcome Linkages?  
Rinad Beidas, Nate Williams, Byron Powell, Brian Mittman, Gracelyn Cruden, Simon Schriger, Rebecca Lengnick-Hall, & Amber Haley
AGENDA | FRIDAY, SEPTEMBER 13

11:45-1:00
LUNCH (box lunches provided)

Please bring your boxed lunch to one of these optional SIRC Lunch Events:
(See Descriptions on page 42)

Room 332
Meet an Editor: An Open Discussion about Implementation Science, its Perspectives, Policies and Approaches
Anne Sales

South Ballroom
Practitioner Lunch - round tables

1:00-2:15
BREAKOUT SESSIONS B

Room 334
Session B1 - Leadership and Organizational Change for Implementation - Strategy Adaptation for Context, Population, and Practice: Common and Unique Elements and Mechanisms
Chair: Gregory Aarons
Discussant: Ulrica von Thiele Schwarz

Talk 1: Development, Adaptation, and Preliminary Evaluation of the Leadership and Organizational Change for Implementation Strategy
Mark G. Ehrhart, Marisa Sklar, Kristine Carandang, Melissa R. Hatch, Joanna C. Moullin, & Gregory A. Aarons

Talk 2: Testing a Multi-Level Implementation Strategy for two Evidence-Based Autism Interventions
Lauren Brookman-Frazee, Aubyn Stahmer, Allison Jobin, & Kristine Carandang

Talk 3: Translation and Adaptation of LOCI for Implementation of Evidence-Based Treatment for PTSD in Norwegian Child and Adult Mental Health Care Services
Erlend Høen Laukvik, Ane-Marthe Solheim Skar, & Karina M. Egeland

Room 332
Session B2 - Building Roads: Exploring Implementation Outcomes Across Diverse Contexts
Chair: Meagan Pilar
Discussant: Cameo Stanick

Talk 1: Making Sense of Context: A Systematic Review
Lisa Rogers, Aoife DeBrún, & Eilish McAuliffe

Talk 2: Implementing Mental Health Assessment in a Juvenile Detention Behavioral Health Unit: Lessons Learned from a Community Academic Partnership
Brittany Rudd, Jacquelyn George, Lauren Cliggitt, Sean Snyder, Mynesha Whyte, & Rinad S. Beidas

Talk 3: DIY Implementation: Lessons from a Practitioner-Led Implementation of an Evidence-Based Practice
Sean Wright & Sonia Combs

Lisa Sanetti, Alexandra Pierce, Michele Femc-Bagwell, & Alicia Dugan
AGENDA | FRIDAY, SEPTEMBER 13

Room 214
Session B3 - Creating Bridges: The Role of Intermediary Organizations
Chair: Sapana Patel
Discussant: Robert Franks

Talk 1: Assessing Intermediary Organization Capacity for Active Implementation Support: Development and Collaborative Early Usability Appraisal of an Intermediary Organization Capacity Assessment Tool
Robin Jenkins, William Aldridge, & Rebecca Roppolo

Talk 2: A Tailored Implementation Approach to Improving PTSD Care in Military Treatment Facilities: Integrating Practice-Based Knowledge and Implementation Science
David Riggs, Katherine Dondanville, Elisa Borah, & Craig Rosen

Talk 3: Rubber Meets the Road: How One Intermediary Organization Uses Implementation Science to Inform Training and Implementation Supports for a Large State System of Behavioral Health
Sapana Patel, & Lisa Dixon

Talk 4: Utilization of Train-the-Trainer Programs to Support the Sustainability of Evidence-Based Trauma-Informed Interventions: The Perspectives of Model Developers, Trainers, and Intermediary Agencies within the National Child Traumatic Stress Network
Shannon Chaplo, George Ake, Lisa Amaya-Jackson, Byron J. Powell, & Ginny Sprang

Room 145
Session B4 - Mechanisms Network of Expertise (Part 2)

Open Working Meeting: What are the Design, Analysis, Methods, and Measurement Challenges Associated with the Study of Implementation Mechanisms?
Aaron Lyon, Greg Aarons, Cara Lewis, Bryan Weiner, Stephanie Brewer, Callie Walsh-Bailey, Ann Nguyen, & Sarah Vejnoska

2:15-2:30 | BREAK

2:30-3:45
BREAKOUT SESSIONS C

Room 334
Session C1 - The Intersection of Behavioral Economics, Participatory Design, and Implementation Science
Chair: Briana Last
Discussant: Gregory Aarons

Talk 1: Nudge Yourself: Stakeholder Design of Implementation Strategies that Leverage Insights from Behavioral Economics
Briana S. Last, Courtney Benjamin Wolk, & Rinad S. Beidas

Talk 2: Using Stakeholder Values to Promote Implementation of an Evidence-Based mHealth Intervention for Addiction Treatment in Primary Care
Andrew Quanbeck

Talk 3: Applying Insights from Participatory Design to Design Implementation Strategies
Rinad S. Beidas, Nathaniel Williams, & Rebecca Stewart
AGENDA | FRIDAY, SEPTEMBER 13

Talk 4: Leveraging Normative Pressure to Increase Data Collection among Therapists Working with Children with Autism
David S. Mandell, Heather Nuske, & Emily Becker-Haimes

Room 332
Session C2 - Designated Implementation Drivers in Action to Achieve Programmatic Goals
Chair: Gracelyn Cruden
Discussant: Sara J. Landes

Talk 1: Applications of Standardized Patient Methodology to Measure Fidelity in an Implementation Trial of the Teen Marijuana Check-Up
Bryan Hartzler, Denise Walker, Aaron Lyon, Kevin King, Lauren Matthews, Tara Ogilvie, Devon Bushnell, & Katie Wicklander

Talk 2: A Hybrid Type 1 Design to Facilitate Rapid Testing and Translation of an Emergency Department-Based Opioid Use Disorder Intervention through an Academic-State Government Partnership
Dennis Watson, Alan McGuire, Rebecca Buhner, & Krista Brucker

Talk 3: Evaluating Associations between Implementation Barriers, Strategies, and Program Performance: Data from 140 Substance Abuse Treatment Programs in an Integrated Healthcare System
Eric Hermes & Ilse Wiechers

Talk 4: Setting the Foundation for Successful Engagement with Implementation Strategies: Multilevel Perspectives from Substance Use Treatment Agencies
Chariz Seijo, Kendal Reeder, Kristine Carandang, Marisa Sklar, Mark Ehrhart, Cathleen Willging, & Gregory Aarons

Room 214
Session C3 - Applications of Implementation Science: Where the Rubber Meets the Road in Healthcare Settings
Chair: Sheena McHugh
Discussant: Beth Prusaczyk

Talk 1: Involving Patients, Practitioners, and Policy Makers to Develop a Theory-Based Implementation Intervention to Increase the Uptake of Diabetic Retinopathy Screening
Fiona Riordan, Emmy Racine, Susan Smith, Aileen Murphy, John Browne, Patricia Kearney, & Sheena McHugh

Talk 2: Results from a Randomized Trial Comparing Strategies for Helping CHCs Implement Guideline-Concordant Cardioprotective Care
Rachel Gold, Arwen Bunce, Stuart Cowburn, James V. Davis, Joan Nelson, Deborah J. Cohen, James Dearing, & Michael A. Horberg

Talk 3: Main Findings from the Substance Abuse Treatment to HIV Care (SAT2HIV) Project: A Type 2 Effectiveness-Implementation Hybrid Trial
Bryan Garner, Stephen Tueller, Steve Martino, Heather Gotham, Kathryn Speck, Michael Chaple, Denna Vandersloot, Michael Bradshaw, Elizabeth Ball, Alyssa Toro, Marianne Kluckmann, Mathew Roosa, & James Ford

Talk 4: The Integrative Systems Practice for Implementation Research (INSPiRE) Model: Application to Context-Appropriate Design of a Cervical Cancer Screening Program in the Peruvian Amazon
Valerie Paz-Soldan, Magdalena Jurczuk, Margaret Kosek, Anne Rositch, Graciela Meza, Prajakta Asdul, Laura Nervi, J. Kathleen Tracy, Javier Vasquez, Renso Lopez, Reyles Rios, Joanna Brown, Sandra Soto, & Patti Gravitt
AGENDA | FRIDAY, SEPTEMBER 13

Room 145
Session C4 - Driving the School Bus: Exploring Applications of Implementation Science in School and Community Settings
Chair: Elizabeth Connors
Discussant: Lisa Sanetti

Talk 1: A Secondary Analysis of Longitudinal State-Level Support for School-Based Health Centers Mental Health Services
Tatiana Bustos, Amy Drahota, & Kaston Anderson-Carpenter

Talk 2: Teacher Perspectives on the Development of the Beliefs and Attitudes for Successful Implementation in Schools for Teachers (BASIS-T)
Andrew Thayer, James Merle, Madeline Larson, Jenna McGinnis, Clayton Cook, & Aaron Lyon

Talk 3: Understanding Successful Implementation of School-Based Behavioral Health Services: A Longitudinal Study of Implementation Barriers and Facilitators
Enya Vroom, Amanda Weston, & Oliver Massey

Talk 4: Randomized Trial to Optimize a Brief Online Training and Consultation Strategy for Measurement-Based Care in School Mental Health
Aaron Lyon, Freda F. Liu, Jessica I. Coifman, Heather Cook, Kevin King, Kristy Ludwig, Amy Law, Shannon Dorsey, & Elizabeth McCauley

3:45-4:00 | BREAK

4:00-5:15 | South Ballroom
IGNITE PLENARY SESSION - The Winding Roads of Implementation Science in Action

IGNITE 1 - Implementing Service Cascade Models with Fidelity: A Case Study of Cross-System Collaboration Strengths and Challenges
Alicia Bunger, Christy Kranich, Susan Yoon, & Lisa Juckett

IGNITE 2 - A Pragmatic Method for Costing Implementation Strategies Using the Time-Driven Activity-Based Costing
Zuleyha Cidav, Jeffery Pyne, Geoffrey Curran, David Mandell, Rinad Beidas, Jennifer Mautone, Ricardo Eiraldi, & Steven Marcus

IGNITE 3 - Shared Goal, Different Languages: Communication between Implementation Researchers and Social Entrepreneurs
Enola Proctor, Rachel Tabak, Cole Hooley, Virginia McKay, & Emre Toker

IGNITE 4 - Making it Happen: Implementation Efforts for Systems Level Change in Child Welfare
Melissa Bernstein, Brent Crandal, Gregory Aarons, & Kimberly Giardina

IGNITE 5 - A Multiple Case Study of a Tailored Approach to Implementing Measurement-Based Care for Depression
Byron Powell, Meredith Boyd, Hannah Kassab, & Cara Lewis

IGNITE 6 - Systematic Adaptation of Evidence-Based Interventions: An Intervention Mapping Approach
Maria Fernández, Cam Escoffery, Maya Foster, & Patricia Mullen
IGNITE 7 - Co-Creation of Change in Policy and Practice: The Community Academic Partnership for Translational Use of Research Evidence (CAPTURE)
Gregory Aarons, Kimberly Giardina, Danielle Fettes, Margo Fudge, & the CAPTURE Steering Committee

IGNITE 8 - Developing a Strategic Implementation Research Plan Within an Integrated Healthcare System
Sara J. Landes, JoAnn Kirchner, Mark Bauer, Christopher Miller, Mona Ritchie, & Jeffrey Smith

5:15-5:30  |  BREAK
5:30-7:30  |  South Ballroom
           |  SIRC 2019 RECEPTION

6:30-8:00  |  AGUA VERDE DINNER (optional - pre-registration required)

7:30  
       |  BIG TIME BREWERY (optional - pre-registration required)
AGENDA | SATURDAY, SEPTEMBER 14

7:30 | South Ballroom Foyer
REGISTRATION OPENS

7:30-8:00 | South Ballroom
CONTINENTAL BREAKFAST

8:00-8:45 | South Ballroom
Updates on SIRC Initiatives

8:45-10:00 | South Ballroom
Plenary 2: Overcoming Implementation Challenges in Low-Resource Communities: Methods and Solutions from Western Kenya
ACE Africa Team: Daisy Anyango Okoth, BA, Mrs. Sheila Wambui Nderitu, Dip., Pastor Bernard Wafuda Nambafu Nabalia, Dip., Mrs. Omariba Anne Nyaboke, BA, Dip., Mrs. Lilian Nandutu Aluka, BA, & Shannon Dorsey

10:00-10:30 | BREAK

10:30-11:45
BREAKOUT SESSIONS D

Room 214
Session D1 - Bridging the Implementation Research to Practice Gap: Exploring Collaboration and Solutions Between Researchers, Policy-Makers and Funders, Implementation Supports and Implementing Organisations
Chair: Jacquie Brown
Discussant: Aaron Lyon
Panelists: Byron Powell, Jenna McWilliam, & Arthur Evans

Room 332
Session D2 - The Intersection of Implementation Science and Healthcare Policy and Systems
Chair: Madeline Larson
Discussant: Erin Finley

Talk 1: HealthLinks: Evaluation Challenges and Learnings from Three Organisational Perspectives
Norm Good & Philippa Niven

Kimberly Pratt, Briana Todd, Angela Gray, & Jorielle Houston

Talk 3: Measuring the Fidelity of Implementation Facilitation in a Primary Care Integrated Pain Support (PIPS) Program
Steve Martino, Amanda Midboe, Alicia Heapy, Sarah Krein, Fenton Brenda, Robert Kerns, & William Becker

Talk 4: Applying Implementation Science Frameworks to Evaluate the Whole Health System of Care Transformation in VA: Measuring the Highway While It’s Being Built
Barbara Bokhour, Justeen Hyde, & Steven Zeliadt
AGENDA | SATURDAY, SEPTEMBER 14

Room 145
Session D3 - Makes, Models, and Mechanics: Implementation Strategies for Promoting Positive Outcomes in Public Health and Systems of Care
Chair: Rebecca Legnick-Hall
Discussant: Suzanne Kerns

Talk 1: Hybrid Implementation Trials as a Platform for Adapting a Mental Health Intervention for Latinx Children with ASD in Publicly-Funded Mental Health Services
Eliana Hurwich-Reiss, Colby Chlebowski, Kassandra Martinez, & Lauren Brookman-Frazee

Talk 2: Optimizing Public Health Interventions by Using Mechanistic Evaluations: A Case Example from a School-Based Physical Activity Implementation Trial
Hopin Lee, Nicole Nathan, Kirsty Hope, & Luke Wolfenden

Talk 3: Experimental Designs for Building Effective Adaptive Implementation Interventions
Daniel Almirall, Shawna Smith, Andrew Quanbeck, & Amy Kilbourne

Room 106
Session D4 - From the Dealership to the Driveway: The Impact of Implementation Science on Public Policy Development and Practice
Chair: Dani Adams
Discussant: Joanna Moullin

Talk 1: How Policy Mandates for Evidence-Based Practices Filter into Clinical Routines: A Mixed Methods Study
Lorella Palazzo, Peter Mendel, Kelli Scott, & Cara Lewis

Heather L. Bullock, John N. Lavis, Michael G. Wilson, Gillian Mulvale, & Ashleigh Miatello

Talk 3: Evidence-Based Policymaking to Prevent Youth Substance Misuse: Where the Rubber Slams into the Evidence-Based Program Implementation Road
Brittany Cooper, Adam Darnell, Angie Funaiole, Kevin Haggerty, & Sarah Mariani

Talk 4: Integrating Research, Policy, and Practice to Implement the Largest Suicide Risk Identification Strategy in a United States Healthcare System
Bridget Matarazzo, Nazanin Bahraini, Suzanne McGarity, Megan Harvey, & Lisa Brenner

South Ballroom
Session D5 - The Role of Implementation Science in Achieving Health Equity
Chair: Amanda Farley
Discussant: Lisa Saldana
Panelists: Allison Metz, Ana Baumann, Leopoldo Cabassa, Kimberly DuMont, Beadsie Woo, JD Smith, Inger Burnett-Zeigler, Juan Villamar, Carlos Gallo, Hendricks Brown, & Moira McNulty
AGENDA | SATURDAY, SEPTEMBER 14

11:45-1:00
LUNCH (box lunches provided)

Please bring your boxed lunch to one of these optional SIRC Lunch Events:
(See Descriptions on page 43)

South Ballroom
Student Lunch - round tables

1:00-2:15
BREAKOUT SESSIONS E

Room 214
Session E1 - Economic and Cost Research Methods to Inform Administrators’ and Policymakers’ Investments in Implementation
Chair: Alex Dopp
Discussant: Ramesh Raghavan

Talk 1: Economic Evaluation of Implementation Strategies: Making the Business Case for Implementation Science in the Real World
Amy M. Kilbourne, *Andria Eisman, & Daniel Eisenberg

Talk 2: Use of Discrete Choice Experiments to Inform Stakeholder Decision-Making about Implementation
Ramzi Salloum, Elizabeth Shenkman, Stephanie Staras, Jordan Louviere, & David Chambers

Talk 3: Modeling to Learn: Conserving Staff Time when Comparing Implementation Alternatives via Simulation
Lindsey Zimmerman, David Lounsbury, Tom Rust, Craig Rosen, Rachel Kimerling, Jodie Trafton, Steven Lindley, Andrew Holbrook, Stacey Park, Jane Branscomb, Debra Kibbe, James Rollins, & Savet Hong

Talk 4: Mixed-Method Approaches to Strengthen Economic and Cost Research Methods in Implementation Science
Alex R. Dopp, Peter Mundey, Lana O. Beasley, Jane F. Silovsky, & Daniel Eisenberg

Room 332
Session E2 - Moving Beyond “to Adapt or Not?”: Understanding and Optimizing Adaptations for Maximum Impact in Real-World Implementation
Chair: Julia Moore
Discussant: Sarah Walker

Talk 1: Developing the Adaptation-Impact Model and Translating It for Use in Practice
M. Alexis Kirk, Julia E. Moore, Byron J. Powell, & Sarah Birken

Talk 2: Striking the Right Balance: Tracking Adaptations to Community-Based Prevention Programs to Enhance Guidance to Implementers
Brittany Cooper, Garrett Jenkins, & AnaMaria Diaz Martinez

Talk 3: Rapid Adaptation: Making Adaptations Work for Real World Systems, Services, and Science
Sarah Cusworth Walker & Michael Graham-Squire

Room 145
Session E3 - Fueling Up: Developing and Utilizing Measures and Tools to Enhance Implementation Outcomes
AGENDA | SATURDAY, SEPTEMBER 14

Chair: Stephanie Yu
Discussant: Bryan Weiner

Talk 1: Advancing Evidence Synthesis from Effectiveness to Implementation: Recommendations for the Integration of Implementation Measures into Evidence Synthesis Approaches
Aaron Tierney, Marie Haverfield, Mark McGovern, & Donna Zulman

Talk 2: What Fidelity Data Don’t Say: Types of Adopters and Resisters in an Implementation Trial in Early Care and Education Classrooms
Taren Swindle, Julie Rutledge, & Geoffrey Curran

Talk 3: Implementation Outcome Instruments Used in Healthcare Settings and Their Measurement Properties: A Systematic Review
Zarnie Khadjesari, Sabah Boufkhed, Silia Vitoratou, Laura Schatte, Alexandra Ziemann, Christina Daskalopoulou, Eleonora Uglık-Marucha, Nick Sevdalis, & Louise Hull

Talk 4: Development of an Instrument for Evaluating Implementation Efforts and Benchmarking Regarding Person Centred Care
Helena Fridberg, Lars Wallin, Catarina Wallengren, Henrietta Forsman, Anders Kottorp, & Malin Tistad

Room 106
Session E4 - Highways and Byways: Implementation Factors in Action across Multiple Settings
Chair: Callie Walsh-Bailey
Discussant: Alicia Bunger

Talk 1: Implementation Practice Track: Where the Rubber Meets the Road-- Novel Applications and Adaptations of Implementation Tools and Strategies in Real World Settings
Robert Franks & Jonathan Scaccia

Talk 2: How Can Implementation Quality be Evaluated? An Example from a Pilot Initiative in Australian Child and Family Services
Vanessa Rose

Talk 3: Implementation Science for Depression Interventions in Low- and Middle-Income Countries: A Systematic Review
Bradley Wagenaar, Wilson Hammett, Courtney Jackson, Dana Atkins, Jennifer Belus, & Christopher Kemp

Talk 4: Predicting Quality Improvement Sustainability with Artificial Neural Networks
Tim Rappon, Erica Bridge, Alyssa Indar, & Whitney Berta

2:15-2:30  |  BREAK
2:30-4:00  |  Lyceum
POSTER SESSION
AGENDA | SATURDAY, SEPTEMBER 14

2:30-3:45
BREAKOUT SESSIONS F

Room 214
Session F1 - Psychometric and Pragmatic Properties of Inner and Outer Context Measures in Implementation Science
Chair: Byron J. Powell
Discussant: Laura Damschroder

Talk 1: Pragmatic Measures for Implementation Research: Development of the Psychometric and Pragmatic Evidence Rating Scale (PAPERS)

Talk 2: Psychometric and Pragmatic Evaluation of Measures of Readiness for Implementation
Bryan J. Weiner, Caitlin N. Dorsey, Kayne D. Mettert, & Cara C. Lewis

Talk 3: Measuring Organizational Culture and Climate: A Systematic Review

Talk 4: A Systematic Review of Outer Setting Measures in Behavioral Health
Sheena McHugh, Eric J. Bruns, Jonathan Purtle, Caitlin N. Dorsey, Kayne D. Mettert, & Cara C. Lewis

Room 332
Session F2 - Where The Rubber Meets the Road in Clinical Mental Health Settings
Chair: Ana Baumann
Discussant: Shannon Wiltsey Stirman

Talk 1: Applying the Theory of Planned Behavior and the Consolidated Framework for Implementation Research to Understand Therapists’ Perceived Barriers and Facilitators to Using Trauma Narratives
Hannah Frank, Briana Last, Reem AlRabiah, Jessica Fishman, Brittany Rudd, Hilary Kratz, Colleen Harker, Sara Fernandez-Marcote, Kamilah Jackson, & Rinad Beidas

Talk 2: The Relationship between Therapist-Driven Adaptations to Evidence-Based Practices (EBP) and the Extensiveness of EBP Strategy Delivery in Community Implementation
Stephanie H. Yu, Lauren Brookman-Frazee, Joanna J. Kim, Miya L. Barnett, & Anna S. Lau

Talk 3: One Size Does Not Fit All: Clinician Intentions to Implement Cognitive-Behavioral Therapy Vary by Specific Component
Emily Becker-Haimes, Jessica Fishman, Torrey Creed, Courtney Benjamin Wolk, Nicholas Affrunti, Danielle Centeno, & David Mandell

Talk 4: A Comparison of Consultant Effects, Activities, and Perceptions on Therapist Fidelity and Patient Treatment Outcomes
Heidi La Bash, Norman Shields, Tasoula Masina, Kera Swanson, Jiyoung Song, Clara Johnson, Matthew Beristianos, Erin Finley, Vanessa Ramirez, Jeanine Lane, Michael Suvak, Candice Monson, & Shannon Wiltsey Stirman
AGENDA | SATURDAY, SEPTEMBER 14

Room 145
Session F3 - From Coaching to Machine Learning: Strategies to Address the Bumps and Potholes of Implementation
Chair: Amber Haley
Discussant: Lisa Saldana

Talk 1: From Blank Page to Local Optimization: Participatory Systems Modeling to Improve Local Evidence Based Practice Implementation
David Lounsbury, Debra Kibbe, James Rollins, & Lindsey Zimmerman

Talk 2: Building Implementation Capacity through Development of a Coaching Network
Kristen Miner, Emily Bilek, Jennifer Vichich, Shawna Smith, & Elizabeth Koschmann

Talk 3: The Parent Engagement in Evidence-Based Services Questionnaire: Advancing Our Understanding of Parental Intentions for Engaging in Evidence-Based Practice
Spencer Choy, Jaime Pua Chang, & Brad Nakamura

Talk 4: What Works Best in Practice? The Effectiveness of ‘Real-World’ Facilitation Strategies in Overcoming Evidence-Based Barriers to Implementation
Lydia Moussa, Katarzyna Musial, Simon Kocbek, & Victoria Garcia Cardenas

Room 106
Session F4 - Going the Distance: Co-Creation, Collaborative Partnerships, and Innovation to Expand Reach
Chair: Oscar Fleming
Discussant: Alison Hamilton

Talk 1: Implementation Strategies of a Co-Designed Physical Activity Program for Older Adults
Erica Lau, Joanie Sims-Gould, Samantha Gray, & Heather McKay

Talk 2: Innovative Funding to Achieve Reach: Pay for Success
Suzanne Kerns & Mollie Bradlee

Talk 3: Implementation of Systems-Level Interventions to Expand Rural Access to Medication-Assisted Treatment (MAT) for Opioid Use Disorders
Claire Snell-Rood, Cathleen Willing, & Robin Pollini

Thomas Engell, Benedicte Kirkøen, Karianne Thune Hammerstrøm, Hege Kornør, Kristine Horseng Ludvigsen, & Kristine Amlund Hagen

3:45-4:00 | BREAK

4:00-5:15 | South Ballroom
PLENARY 3 - PERSPECTIVES ON THE INTERSECTION OF IMPLEMENTATION RESEARCH, POLICY, AND PRACTICE: OFFERING A PATH FORWARD
Per Nilsen, Melanie Barwick, Bryan Weiner, Jeremy Grimshaw, (Moderator: Robyn Mildon)

5:15-5:45 | South Ballroom
AWARDS AND CLOSING

6:30 Boarding
CRUISE LAKE WASHINGTON & LAKE UNION (Optional - pre-registration required)
Meet an Editor: An Open Discussion about Implementation Science, its Perspectives, Policies, and Approaches

Location: Room 332
Presenter: Anne Sales

Anne Sales is a Professor in the Department of Learning Health Sciences at the University of Michigan Medical School, and Associate Chair for Health System Innovations; she is also a Research Scientist at the Center for Clinical Management Research at VA Ann Arbor Healthcare System.

In this session, Dr. Sales will present historical perspectives from the journal Implementation Science, including trends in submissions and published papers, as well as covering current journal policies and positions. These are published in the most recent editorial covering common reasons for rejection from the journal: https://implementationscience.biomedcentral.com/articles/10.1186/s13012-017-0546-3.

She will also discuss the launch of a new journal, Implementation Science Communications, and the reasons for launching a new journal. There will be extensive time for discussion of specific policies and practices, although discussion of specific manuscripts is not encouraged.

PRACTITIONER LUNCH

Location: South Ballroom
Organized by the SIRC Practitioner Network of Expertise

The Practitioner Network of Expertise, which includes Provider, Intermediaries, and Policy/Funder sub-networks, will each meet to connect with fellow practitioners and discuss ideas for what each sub-network would like to do over the next couple of years.
LUNCH EVENTS | SATURDAY

Student Lunch

Location: South Ballroom

Organized by the SIRC Student Network of Expertise

There are numerous career possibilities in the implementation field. The Student Lunch is open to any members of SIRC (especially students) who are interested in exploring different career trajectories. Have lunch with experts who work at various levels of the implementation process and can tell you more about the incredible work that they do as administrators, intermediaries, policymakers, researchers, service providers, and more!
Poster Group - COMMUNITY MENTAL HEALTH

Examining the Relationship Between Client Engagement Challenges and Community Therapists’ Delivery of Evidence-Based Strategies to Youth and their Caregivers
Blanche Wright, Anna Lau, Joanna Kim, Resham Gellatly, Mary Kuckertz, & Lauren Brookman-Frazee

Therapist Characteristics as Predictors of Perceptions of Evidence-Based Assessment (EBA)
Kenny Le, Lauren Brookman-Frazee, Joyce Lui, Mary Kuckertz, & Anna Lau

Looking Beyond the Clinic Door: Examining the Relationship Between Clinic Neighborhood Characteristics and Therapist Emotional Exhaustion in a Large-Scale Implementation Effort
Mary Kuckertz, Anna Lau, Teresa Lind, Kenny Le, Mojdeh Motamedi, & Lauren Brookman-Frazee

Monitoring Treatment Engagement: How Do Providers Know When Youth and Families Are Engaged in or Disengaged from Treatment?
Ellie Wu, Kimberly Becker, Anna Hukill, & Bruce Chorpita

Lay Counselor Burnout and Turnover Across Systems: Are There Differences that are Important for Implementation of Task-Sharing Approaches?
Leah Lucid, Prerna Martin, Christine L. Gray, Rosemary Meza, Augustine I. Wasonga, Kathryn Whetten, & Shannon Dorsey

Maintaining Community Partnership and Program Fidelity while Replicating a Community-Based Mental Health Intervention: A Case Study of the New Haven MOMS Partnership® Replication in Bridgeport, Connecticut, New York City, and Washington D.C.
Sonia Taneja & Megan Smith

Applying a Causal Model to the Implementation of Evidence-Based Practice for Autistic Adults in Community Settings
Brenna Maddox, Rinad Beidas, Jessica Fishman, Samantha Crabbe, & David Mandell

Harnessing Implementation Science with Community-Based Social Service Organizations to Address Depression and Social Isolation for Older Adults Living in Poverty
Lesley Steinman

Poster Group - PARTNERSHIPS, COLLABORATION, AND STAKEHOLDERS

Putting Partners First: Implementation Research Driven by Partner Strategic Goals
Paige Denison, Christine Kava, Marlena Kohn, Miruna Petrescu-Prahova, & Maureen Pike

Reflections on a Decade of Policy/Practice-Driven Implementation Research: Strategies for Meaningful Collaboration
Sarah Kaye

Engaging Stakeholders in the Development of an Intervention to Systematically Tailor Implementation Strategies
Amber Haley, Sheila Patel, Jamie Guillergan, Lisa Amaya Jackson, Mellicent Blythe, Beverly Glienke, Alicia Sellers, Jennifer Grady, & Byron Powell

Building Capacity in Advance Care Planning: An Example of Collaboration Amongst Policy-Makers, Care Providers, Community Organizations, and Implementation Researchers
Robin Urquhart
Comparing State Mental Health Agency and State Insurance Agency Directors’ Perspectives on the Benefits and Barriers to Inter-Agency Collaboration Related to Implementation of Federal Mental Health Parity Policy
Katherine Nelson & Jonathan Purtle

Poster Group - MENTAL HEALTH INTEGRATION IN PRIMARY CARE
A Rapid Review to Inform Implementation of a Behavioral Health Intervention in Primary Care: Methods and Outcomes
Madeline Larson, Mimi Choy-Brown, & Scott Marsalis

Rural Primary Care Organizational Change Toward Trauma-Informed Integrated Primary Care through Community Partnerships
Deborah Moon, Eve-Lynn Nelson, Michelle Johnson-Motoyama, Shawna Wright, & Becci Akin

Providers’ Perspectives on Implementing a Multiple Family Group for Children with Disruptive Behavior
Emily Hamovitch, Kate Lambert, Mary Acri, Lindsay Bornheimer, Idan Falek, Madeline Galler, & Mimi Choy-Brown

The Impact of New National and State Insurance Policy on Implementation of the Collaborative Care Model for Perinatal Depression; the Rubber Hits the Road for Government Policy to Support Behavioral Health Integration
Ian Bennett, Ashok Reddy, Anna Ratzliff, Stephanie Shushman, & Jay Wellington

Poster Group - IMPLEMENTATION STRATEGIES
Active Ingredients of Implementation: Examining the Overlap Between Behaviour Change Techniques And Implementation Strategies
Sheena McHugh, Justin Presseau, Courtney Leucking, & Byron Powell

Unpacking and Re-Packaging What We Know About Barriers and Facilitators Assessments
Sobia Khan, Julia Moore, & Byron Powell

Demonstrating the Value of Coincidence Analysis for Identifying Successful Implementation Strategies
Sarah Birken, Soohyun Hwang, Laura Viera, Emily Haines, Tamara Huson, Rebecca Whitaker, Lawrence Shulman, & Deborah Mayer

Describing Audit and Feedback in Practice: A Multi-Site Exploration of Ward Monitoring Audit and Feedback
Michael Sykes, Richard Thomson, Tracy Finch, Niina Kolehmainen, & Louise Allan

Poster Group - ORGANIZATIONAL OR SUPERVISOR FACTORS
Exploring Variability in Implementation Leadership and Climate Across Organizational Level
Melina Melgarejo & Jessica Suhrheinrich

A Survey of Supervisors’ and Managers’ Practices and Needs to Support Evidence-Based Practice Implementation in Large Behavioral Health Care System in New York State
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Jessa Engelberg, Andrea Morris, Aileen Aylward, Rayad Shams, & Tim Platts-Mills

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Laura Eise, Stephanie Skavenski van Wyk, Jeremy C. Kane, Kristina Metz, & Laura K. Murray

Changing Policy and Practice in Substance Use Treatment Clinics through the Implementation of a Tailored, Comprehensive Tobacco Free Workplace Program
Lorraine Reitzel, Bryce Kyburz, Isabel Leal, Kathy Le, Virmarie Correa-Fernandez, Teresa Williams, Daniel O’Connor, Ezemenari Obasi, & Kathleen Casey
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Kimberly Garner, Monica Matthieu, JoAnn Kirchner, & National ACP-GV Implementation and Evaluation Team

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Danielle Adams, Andrea Cole, Michelle Munson, Curtis McMillen, & Victoria Stanhope

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Marianne Farkas, Sigal Vax, Vasudha Gidugu, Kim Mueser, Chitra Khare, & Philippe Bloch

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Edward Miech, Nicholas Rattray, & Teresa Damush

Applying Implementation Science for Real World Impact: Operationalized Core Practice Components, Feasibility Testing, and Next Steps  
William Aldridge, Rebecca Roppolo, Julie Austen, & Robin Jenkins

If You Want More Research Based Practice, You Need More Practice Based and Early Stage D&I Trained Researchers (Borrowed and Slightly Changed from Larry Green)  
Rodger Kessler, Cady Berkel, Matthew Buman, Stephanie Brenhofer, & Scott Leischow

Integrating Implementation Science and Public Policy Research: Two Examples  
Beth McGinty, Lainie Rutkow, & Gail Daumit
Session A1 - The Intersection of Policy and Practice Should Not Be a Multi-Car Pile-Up: Research on the Role of the ‘Outer Context’ in Implementing Effective Practices

Location: Room 334
Chair: Eric Bruns
Discussant: Kimberly E. Hoagwood

Policy, fiscal, social, political, and other factors in the “outer setting” of the implementation ecology greatly influence the degree to which research-based health services are available to aid individuals in need [1-2]. And yet, within the context of implementation science, measurement and knowledge of these dynamics are poorly developed compared to other levels [3-4]. If implementation science is to meet its full potential to promote public health, it will require tangible, “rubber meets the road” strategies at all levels, including strategies directed at outer-setting actors such as legislators (who establish policy and direct public investments), administrators and managers (who develop and oversee rate structures, data systems, provider contracts, and collaborative entities), and the public (who may demand and/or support policy changes and innovations). Reliable and valid measures of outer setting activity and determinants are also badly needed, to promote research, quality improvement, and learning health systems. The current symposium will present new research on the outer setting and its influence on implementation of innovations in health and behavioral health. The symposium will begin with a context-setting discussion of the gaps in outer setting measurement and research in implementation science, and how research from other disciplines such as policy research and knowledge translation might fill these gaps. The symposium will then present four papers focused on outer setting determinants, strategies, and measurement. The first two papers focus on political and legislative determinants of implementation, including research on public opinion about the role of evidence in federal policy-making (Purtle et al.), and results of a 30-year review of all federal mental health legislation asking how content is related to whether a bill becomes law (Crowley et al.). The final two papers focus on novel measurement strategies, including an adaptation of Saldana’s Stages of Implementation Completion (SIC) instrument [5] to capture and track outer-context focused implementation support activities in children’s mental health (Olson & Bruns), and a project to develop, validate, and use a statewide monitoring system for evidence-based mental health services using billing records. The session will conclude with reflections on implications for health systems and future research from discussant Kimberly Hoagwood.

Talk 1: Public Opinion as an Outer-Contextual Factor in Health Policy D&I Research and Practice: Evidence that the Public Cares About Evidence

Jonathan Purtle
'Drexel University

Background

Barriers to evidence-informed health policymaking are well-established [1]. Although many barriers are technical in nature (e.g., poor communication of research findings) [2], a major impediment stems from the political nature of policymaking [3-4]. Public opinion is a key aspect of politics; and one that is relevant to efforts to promote evidence-informed policymaking because public opinion influences policymakers’ behaviors [5-6]. Thus, if policymakers learn that the public wants their decisions to be supported by evidence, this information could spur policymakers to make more evidence-informed health policy decisions and demonstrate evidence use to their constituents. However, no prior research has examined public opinion about evidence-informed policymaking.
Purpose
This study sought to characterize public opinion about the influence that evidence should, and does, have on health policy development in U.S. Congress relative to other factors and examine differences in opinion by political party affiliation.

Materials and Methods
A public opinion survey was conducted in 2018 using the SSRS Probability Panel (N=532), a nationally representative internet panel. Respondents separately rated the extent to which six factors (e.g., evidence, budget impact, industry interests) “should have” and “currently have” influence on U.S. congresspersons’ health policy decisions.

Results
Evidence (59%) was the most frequently identified factor that should have “a lot of influence” on health policy development, but only 11% of respondents thought that evidence currently has “a lot of influence” (p<.001). Opinions about evidence did not vary significantly by respondent political party affiliation.

Conclusions
There is strong bi-partisan public support for evidence to have much more influence on health policymaking in U.S. Congress. This finding is promising in a time of elevated political polarization in the United States. The survey results have implications for interventions that aim to promote evidence-informed health policymaking. As findings suggest public demand for evidence-informed health policymaking, and prior research demonstrating that public opinion often influences elected policymakers’ behaviors [5-6], interventions that systematically document the extent to which elected policymakers’ actions (e.g., public statements, content of bills introduced, tweets) are evidence-supported and disseminate this information to the public could encourage policymakers to make more evidence-informed health policy decisions.

References

Max Crowley

1Penn State University

Background
Mental health problems affect millions of individuals and cost over $240 billion annually in increased healthcare, criminal justice, child welfare, education, and labor costs [1]. Ongoing efforts to take evidence-based mental health strategies to scale have encountered a number of barriers to successful uptake and sustained use [2-4]. To overcome these barriers, researchers and advocates often seek to influence public policy to facilitate increased investment in mental health [5-7]. Yet, little work has systematically sought to understand the specific content of past mental health legislation and how the content of the legislation is related to whether a bill becomes law.

Materials and Methods
In order to answer these pressing questions about mental health policy, we conducted a mixed methods review of all federal bills introduced to Congress over the last three decades (1989-2019; N=171,861). This includes systematic coding of mental health’s inclusion in federal legislation, quantitative analyses of that inclusion’s relationship with bills becoming law, and qualitative analyses of how mental health policy may be used to improve population health.

Results
In the 101st Congress (January 3, 1989, to January 3, 1991), only 14 mental health bills were introduced, comprising only .001% of all bills introduced. By the 115th Congress (January 3, 2017, to January 3, 2019), over 4% of all bills of any type included mental health provisions. In addition to increases in mental health policy across time, we will also present results of analyses that identify characteristics of bills that are more likely to be successfully enacted into law. Finally, results from qualitative analyses will be used to illustrate how elements of mental health policies can facilitate or restrict high-quality implementation.

Conclusions
We will discuss implications of these findings through the lens of the outer context of the implementation ecology; specifically, by identifying supports and barriers from federal legislation and policy that may be most likely to promote successful implementation of evidence-based treatments. We will also discuss implications for how best to engage directly with policymakers to support increased availability and effectiveness of mental health services.

References
Talk 3: Measurement Infrastructure for Influencing the Outer Context: Integrating Evidence-Based Practice Reporting and Client Surveys to Guide Decision-Making in a Learning Health Care System

Noah R. Gubner¹,², Felix I. Rodriguez³, Rose Krebill-Prather⁴, Kristen Petersen⁴, & Sarah Cusworth Walker¹,²

¹University of Washington, ²Washington State Evidence-Based Practice Institute, ³Washington State Health Care Authority, ⁴Washington State University

Background
Legislation in Washington State (HB2536), passed in 2012, mandated the reporting of evidence-based practices (EBPs) for all children-serving systems in Washington State. In response, the Division of Behavioral Health and Recovery and University of Washington’s Evidence-Based Practice Institute developed a measurement method to track use of EBPs in routine services statewide. This method provides a cost effective and adaptable surveillance tool to monitor evidence-based practices (EBPs) and can also be merged with other data sources to monitor disparities in utilization and effectiveness. In this paper we will present this as an example of “outer setting” influences on EBP use as well as proof of concept for this integrated data infrastructure as a means to guide decision-making at the policy level.

Materials and Methods
We analyzed a sample of youth (<21 years old) from Washington State who had received at least one hour of publicly funded outpatient mental health (MH) service. Current procedural terminology (CPT) billing codes were used to identify if clients in the sample received any valid EBP psychotherapy sessions during the observation period (May – Oct, 2015). Billing data were then tied to self-reported perceptions of outcomes of service from the Child-Family Mental Health Consumer Survey. These outcome data was compared between youth who did and did not receive a valid EBP session during the observation period.

Results
Among this sample of 1,580 youth, 19.7% (n=312) received at least one valid EBP psychotherapy session. Youth from rural (21.4%) versus urban (16.2%) providers were more likely to have received an EBP session (χ²=6.02, p=0.014). There were significant differences by race/ethnicity (χ²=14.71, p=0.04). Non-Hispanic Whites (20.2%) and American Indians (33.3%) were more likely, while African Americans (12.3%) and Hispanics (15.7%) were less likely to have received a valid EBP session. There was a trend for an interaction between race/ethnicity and receipt of an EBP session on self-reported positive services outcomes, with receipt of an EBP session potentially being associated with more positive services outcomes among youth who were non-White versus White.

Conclusions
As a proof of concept, we demonstrate that billing data provides a cost-effective tool to monitor the receipt of EBP MH sessions and can be tied to other data sources to examine outcomes across a health network.
Talk 4: Giving the Outer Setting Its Due: Adapting the Stages of Implementation Completion to Policy and System-Level Change Efforts

Eric J. Bruns¹, Jonathan R. Olson¹, Philip H. Benjamin¹, & Lisa Saldana²
¹University of Washington, ²Oregon Social Learning Center

Background
Successful implementation of Wraparound care coordination for youth with complex behavioral health needs requires hospitable policy and financing conditions [1]. Thus, when the “rubber meets the road,” implementation support for Wraparound requires attention to the “outer setting” of the implementation ecology [2], including cross-agency coordination, Medicaid payment reform, and cross-sector information systems. Unfortunately, existing implementation measures are scarce at the outer context [3], as is research on relevant outer setting strategies [4]. This presentation describes efforts to track Wraparound implementation at system and organizational levels using an adaptation of the Stages of Implementation Completion (SIC) [5].

Materials and Methods
The SIC assesses implementation across eight stages and three phases: pre-implementation, implementation, and sustainment. We adapted and added SIC items to align with multilevel Wraparound implementation support as enacted by the National Wraparound Implementation Center (NWIC), including an array of state systems (outer setting) variables such as state leadership engagement, cross-system communication and collaboration, financing strategies, and contract requirements. We have collected data for two pilot states, and are completing collation for eight additional states.

Results
Adaptation of the SIC entailed adding 12 items and removing 4. Furthermore, we operationalized each SIC variable in terms of measurable Wraparound processes and activities. Preliminary results from two pilot states indicate high completion rates across stages for both states (completion percentages from 60% to 100%). However, states differed significantly in their time to completion, with State 1 averaging 3.75 months for completion of stages and state 2 averaging 26.38 months. Item- and stage-level analyses revealed that State 2 struggled to engage state leadership in implementation. State 1 adopted a new approach to building Wraparound implementation infrastructure – investing in Care Management Entities (CMEs) [6], while State 2 relied on Community Mental Health Centers.

Conclusions
Findings provide proof of concept for incorporating outer setting items into an established implementation measure and underscore the influence of outer context in Wraparound implementation. The presentation will show how NWIC is using this measure to support states to build systems that facilitate better implementation and outcomes, while also promoting new and needed research for mental health and implementation science.

References
Session A2 - Collaboration Driving Innovation: Implementation Science in Action

Location: Room 332
Chair: Sheila Patel1
Discussant: Leopoldo Cabassa2

1University of North Carolina at Chapel Hill, 2University of Washington in St. Louis

Talk 1: Cross-Collaborations Among Researchers, Community, Government Agencies, and a Federal Funding Agency to Support Implementation of Evidence-Based Cardiovascular Disease Prevention in Primary Care: The EvidenceNOW Initiative

Donna Shelley1, Michael Parchman2, & Robert McNellis3

1New York University, School of Medicine, 2Kaiser Permanente Washington Health Research Institute, 3Agency for Healthcare Research and Quality

Background
EvidenceNOW is an Agency for Healthcare Research and Quality (AHRQ)-funded research initiative focused on helping primary care practices improve the delivery of the “ABCS” of cardiovascular disease (CVD) prevention: Aspirin in high-risk individuals, Blood pressure control, Cholesterol management, and Smoking cessation. Seven cooperatives used practice facilitation (PF) as a unifying strategy to support the implementation and dissemination of evidence-based care for CVD risk factors. Each cooperative enrolled over 200 practices in their region. Cooperatives created an infrastructure to engage stakeholder organizations in their region to facilitate the initiative. AHRQ created infrastructure that included a national evaluator (ESCALATES) and committees and meetings that fostered cross-cooperative collaboration and dissemination.

Materials and Methods
This panel includes an AHRQ program officer who will discuss the infrastructure created and lessons learned for guiding the design of future funding opportunities [1] and case studies demonstrating how two cooperatives, HealthyHearts New York City [2] and Healthy Hearts Northwest [3], partnered with community and government agencies in their region to accomplish EvidenceNOW goals. The discussant is the ESCALATES Principal Investigator.

Results
The aligned efforts of Cooperatives, AHRQ, and ESCALATES facilitated the collective expansion of capacity for practice transformation and rigorous evaluation. We found that: (a) large-scale, federally-funded research initiatives were strengthened through infrastructure that fostered collaboration across grantees (demonstrated by 12 cross-cooperative publications to date); (b) an external evaluator added tremendous value in supporting cross-cooperative collaboration and amplified opportunities for dissemination; (c) engaging with partner organizations early helped assess fit with organizational strategic plans, capacity, readiness for change, and data collection systems; (d) applying an implementation science framework [4] was necessary to guide intervention development and assessment; and (e) stakeholder organizations valued being included in research and funder meetings and dissemination activities.
Conclusions
For cooperatives, aligning goals, and attending to opportunities to grow research and quality improvement capacity among partnering agencies facilitated strong, enduring partnerships for practice transformation. Funders have a role to play in facilitating collaborations among cooperatives and evaluation. The findings that emerge through the efforts of multi-level partners are greater than the sum of the parts and further the field of dissemination and implementation science.

References

Talk 2: A Collaboration Between Practitioners, Intermediaries, and Researchers to Increase Access to Evidence-Based Chronic Pain Care

Jessica Chen1,2, Lisa Glynn2, Timothy Dawson1,2, Hannah Gelman3, & Steven Zeliadt1,3
1University of Washington, 2VA Puget Sound, 3Seattle-Denver Center of Innovation, VA HSR&D

This presentation describes initial lessons learned from a collaboration between front-line providers, intermediaries, and researchers to implement a telehealth model of chronic pain care to rural VA clinics.

Background
As opioid-related overdoses have increased exponentially in the U.S. over the last two decades, there has been greater emphasis on increasing access to non-opioid and non-pharmacological pain management, particularly to rural and under-served areas and in primary care settings. To address these priorities, front-line clinicians and clinical administrators at one Veterans Health Administration (VA) facility initiated a collaboration with VA implementation researchers to implement a novel hub-and-spoke telehealth model for chronic pain management (TelePain), which will deliver patient education, evidence-based psychotherapies, movement therapies (e.g., yoga for lower back pain), and non-opioid pharmacotherapies from a central specialty pain “hub” to rural VA primary care clinic “spokes.” The goal of the collaboration between practitioners, intermediaries, and researchers was to obtain grant funding to support external facilitation and evaluation activities.

Results and Conclusions
There were several lessons learned from this collaborative process regarding health care system changes that may better foster collaboration between research, policy, and practice. One was that the unpredictable and cyclical nature of grant funding can interfere with delivering implementation support when it is needed, namely at the time of clinical services rollout. Therefore, when clinical programs are being designed, they should consider building in funding for implementation support and evaluation from the outset. A second lesson learned was that implementation intermediaries, individuals who have experience with both care delivery and evaluative sciences,
may be particularly important for bridging the cultural divide between researchers and practitioners. Embedding intermediaries as fully-funded staff in the TelePain clinical program has helped to align research aims with clinical priorities and may support the long-term sustainability of implementation efforts.

References

Talk 3: Untangling Trauma-Related Knowledge and Practice Changes among Brokers in a Community-Based Learning Collaborative: Role of Interprofessional Collaboration

Funlola Are¹, Rochelle Hanson¹, Samuel Peer², & Ben Saunders¹
¹Medical University of South Carolina, ²Idaho State University

Background
While evidence-based treatments (EBTs) exist to ameliorate trauma-related mental health problems, many children do not receive them [1]. Possible reasons to account for this include limited availability of EBTs and poor collaboration amongst professionals involved in youth service provision [2]. Brokers, often child welfare workers, serve an important intermediary role in improving service access for youth [3], but they are often trained separately from clinical providers, precluding the opportunity to promote cross-discipline collaboration. Community Based Learning Collaboratives (CBLC) use specific training/implementation strategies involving multidisciplinary stakeholders to foster collaboration and build community capacity for trauma-focused EBTs [4]. The broker curriculum includes information about trauma impact, trauma-focused EBTs, family engagement strategies, and trauma-focused treatment planning, while also providing opportunities for cross-discipline training.

Materials and Methods
This presentation examines changes in trauma-related knowledge, practices and interprofessional collaboration among n = 33 brokers participating in CBLCs conducted as part of a statewide dissemination initiative. Brokers completed self-report measures examining knowledge of trauma-related topics taught as part of the CBLC curriculum, organizational climate, interprofessional collaboration, and trauma-related practices (e.g., assessment, psychoeducation) pre- and post-CBLC. Bivariate correlations were computed in SPSS, and interaction effects were probed using the PROCESS macro in SPSS.

Results
Analyses revealed that increases in knowledge about the trauma-related curriculum topics were significantly associated with positive changes in broker practices following CBLC participation. However, neither changes related to interprofessional collaboration nor organizational climate were significantly related to changes in broker practices. Moderation analyses revealed a significant interaction effect between interprofessional collaboration and knowledge of evidence-based treatment planning pre- and post-CBLC [F (1, 29) = 5.14; p = .03; R² = .25]. Those participants who reported the greatest pre- to post-CBLC change in interprofessional collaboration also reported a significant increase in skills related to evidence-based treatment planning (t = 2.62, p = .03, 95% CI = .04, 0.84).
Conclusions
Study findings suggest that brokers play an important role in building community capacity for EBT access and that cross-discipline strategies help to foster collaborative relationships among youth service providers. Implications for future research, policy and practice will be addressed.

References

Talk 4: Real-Time Implementation of a Multi-Tiered, Trauma-Focused Intervention Model after Hurricane Maria in Puerto Rico: Synergy of Research, Practice, and Policy
Rosaura Orengo-Aguayo1 & Regan Stewart1
1Medical University of South Carolina
Hurricane Maria made landfall in Puerto Rico on September 20, 2017, becoming the most devastating storm to impact the island in almost a century [1]. Natural disasters can adversely impact children and schools provide an ideal setting to implement wide-reaching interventions that can bolster resiliency and recovery [2]. Best practices outlined in the post-disaster literature recommend a three-pronged intervention approach aimed at restoring access to basic needs and safety in the immediate aftermath, bolstering resilience and recovery through evidence-based coping skills 3-6 months post-disaster, and offering evidence-based psychotherapy to individuals with clinical symptoms in the long-term recovery phase (6 months-1 year) [3]. This presentation will focus on the process by which our team established a partnership with the Puerto Rico Department of Education to implement these evidence-based, post-disaster guidelines in real-time after Hurricane Maria via a multi-phase, culturally sensitive, trauma-focused intervention model. We will describe outcomes (i.e., pre/post knowledge acquisition and qualitative impressions of trainings) of our three phases: 1) Psychological First Aid trainings (three weeks post hurricane) for school teachers and staff; 2) Skills for Psychological Recovery training (six months post hurricane) for school social workers and psychologists to meet the needs of students with sub-clinical trauma-related concerns and; 3) Trauma-Focused Cognitive Behavioral Therapy training (one year post hurricane) for school psychologists to address higher level and unremitting trauma-related symptoms in students. We also describe how key partnerships were established in real-time, the step-by-step implementation process, lessons learned, policy implications (our team presented findings before Congress), and future projects and research focused on real-world impact based on scientific implementation principles.

References
2. Bonanno GA, Brewin CR, Kaniasty K, La Greca AM. Weighing the costs of disaster: consequences, risks, and


**Session A3 - Fueling Implementation through Collaborative Care in Healthcare Settings**

**Location: Room 214**

Chair: Ian Bennett
Discussant: Heather L. Bullock

1University of Washington, 2McMaster University

**Talk 1: Change in Patient Outcomes after Augmenting a Low-Level Implementation Strategy in Community Practices that are Slow to adopt a Collaborative Chronic Care Model: A Cluster Randomized Implementation Trial**

Shawna Smith1, Daniel Almirall1, Katherine Prenovost1, Mark Bauer2, Celeste Liebrecht1, Daniel Eisenberg1, & Amy Kilbourne1

1University of Michigan, 2Harvard University

Implementation strategies are essential for promoting uptake of evidence-based practices and for patients to receive optimal care [1]. Yet strategies differ substantially in their intensity and feasibility. Lower-intensity strategies (e.g., training, technical support) are commonly used, but may be insufficient for all clinics. Limited research has examined the comparative effectiveness of augmentations to low-level implementation strategies for non-responding clinics [2-3]. In this Hybrid Type III implementation-effectiveness study [4], we compare the effectiveness of two augmentation strategies, External Facilitation (EF) vs. External + Internal Facilitation (EF/IF)[5] for improving uptake of an evidence-based collaborative care model (CCM) on 18-month mental health outcomes for patients with depression at community-based clinics initially non-responsive to lower-level implementation support.

Providers initially received support using a low-level implementation strategy, Replicating Effective Programs (REP). After 6 months, non-responsive clinics that had failed to deliver a clinically significant dose of the CCM to >10 patients were randomized to augment REP with either EF or EF/IF. Mixed effects models evaluated the comparative effectiveness of the two augmentations on patient outcomes at 18 months. The primary outcome was patient SF-12 mental health score; secondary outcomes were PHQ-9 depression score and self-reported receipt of the CCM during months 6 through 18.

27 clinics were non-responsive after 6 months of REP. 13 clinics (N=77 patients) were randomized to REP+EF and 14 (N=92) to REP+EF/IF. At 18 months, patients in the REP+EF/IF arm had worse SF-12 (diff=8.38; 95%CI=3.59, 13.18) and PHQ-9 scores (diff=1.82; 95%CI=-0.14, 3.79), and lower odds of CCM receipt (OR=0.67, 95% CI=0.30,1.49) than REP+EF patients.

Patients at initially non-responsive community-based clinics that were randomized to receive the more intensive EF/IF augmentation saw less improvement in mood symptoms at 18 months than those the received the EF augmentation, and were also no more likely to receive the CCM. While EF generally appeared to help clinics, a number of EF/IF clinics experienced barriers in implementing the IF strategy with fidelity, including failing to identify an IF. For large-scale implementation in community-based clinics, augmenting REP with EF for sites that need additional support may be more feasible, and ultimately more effective, than a more intensive EF/IF augmentation.
ABSTRACTS

References

Talk 2: A Community-Based Implementation Roadmap to Inform Scalability, Sustainability, and Spread of Evidence-Based Collaborative Care Interventions

Amy Rusch¹, Shawna Smith¹, Lindsay Decamp¹, Celeste Liebrecht¹, Gregory Dalack¹, & Amy Kilbourne¹
¹University of Michigan

Evidence-based collaborative care interventions (CCIs) can improve health by mitigating the access gap in mental health care treatment. However, CCIs can be difficult to implement and efforts to scale up CCIs are often stymied by a lack of practitioner knowledge for identifying and addressing barriers to implementation [1]. Implementation roadmaps provide a playbook outlining critical steps practitioners should follow in scaling up CCIs to new settings that overcome implementation barriers, measure implementation success, and garnering leadership support for longer-term CCI sustainability [2]. We present an Implementation Roadmap [3] that guides community-based CCI implementation based on the experiences of stakeholders successfully implementing a broad spectrum of CCIs through the Michigan Mental Health Integration Partnership (MIP) [4].

The goal of MIP is to support the scale up and spread of CCIs that enhance access to care for Medicaid-eligible consumers with behavioral healthcare needs, while also providing an in-situ implementation laboratory for informing sustained uptake of CCIs across a variety of community-based settings. Semi-structured interviews were carried out with stakeholders from successfully adopted MIP CCI projects to define common barriers, challenges, and implementation strategies deployed by the project teams. Interviews were transcribed and analyzed for common themes that identified a series of critical steps scaffolding the CCI implementation process and accompanying metrics for evaluating implementation progress.

25 interviews of key stakeholders were conducted across 7 successful MIP implementation teams, including 11 providers at implementation sites and 14 researchers/project managers. Stakeholders commonly identified specific steps that overcame barriers to CCI implementation, including deployment of web-based tools for facilitating implementation, embedding key metrics of implementation success, garnering upper level administration buy-in upfront, and specifying a process for tailoring implementation strategy deployment to specific site needs. These findings informed our resulting Implementation Roadmap, which includes eleven critical implementation steps and evaluative metrics for investigators implementing CCIs to consider across pre-implementation, implementation, and sustainability phases.
Maximal CCI public health impact requires improved reach. Our Implementation Roadmap provides a clear and practical guide for early stage community CCI implementation efforts, and ensure practitioners collect key metrics and systematically address barriers in ways that are foundational for larger scale, sustainable implementation efforts.

References

Talk 3: The Collaborative Chronic Care Model for Mental Health Conditions: From Partnered Implementation Trial to Scale-Up and Spread

Mark Bauer1,2, Kendra Weaver1, Bo Kim1,2, Christopher Miller1,2, Robert Lew1,4, Kelly Stolzmann1, Jennifer Sullivan1,4, Rachel Riendeau1,5, Samantha Connolly1,2, Jeffery Pitcock6, Stig Ludvigsen1, & A. Rani Elwy1,7
1Veterans Health Administration; 2Harvard Medical School, 3Boston University School of Medicine, 4Boston University School of Public Health, 5University of Iowa, 6Central Arkansas Veterans Healthcare System, 7Brown University Warren Alpert School of Medicine

Background
Collaborative Chronic Care Models (CCMs) have extensive controlled trial evidence for effectiveness in serious mental illnesses [1-2], but there is little evidence regarding feasibility or impact in typical practice conditions. In partnership with the VA Office of Mental Health and Suicide Prevention (OMHSP) we conducted a randomized, stepped wedge implementation trial using blended internal-external facilitation [3] to implement CCMs in Behavioral Health Interdisciplinary Program (BHIP) teams in the general mental health clinics of nine VA medical centers [4-5]. Based on experience in this trial, OMHSP launched an initiative to scale-up and spread the implementation effort more broadly.

Materials and Methods
Our research team and OMHSP engaged with Transformational Coaches (T-Coaches) from the VA Office of Veterans Access to Care to serve as external facilitators to engage additional VA medical centers across the country. T-Coaches are senior facilitators with skills in team-building and process redesign from diverse professional disciplines. Trial external facilitators and OMHSP leadership trained 17 T-Coaches in methods used in the trial. Sites were recruited by OMHSP. Blended facilitation was conducted for 12 months as in the implementation trial. Each of the T-Coaches partnered with a BHIP-CCM subject matter expert for the effort, and they conferred on a regular basis throughout the year.
Results
Thirty-nine sites were approached; of these 35 (89.7%) signed a letter of agreement. Of these, 28 facilities (80.0%) completed a site visit and entered the ongoing virtual facilitation process. Of these, 21 facilities (75.0%) completed the one-year facilitation and submitted CCM-concordance process summaries. The proportion of CCM-concordant processes ranged widely across facilities, with the more concordant sites equaling rates seen in the implementation trial and a broader low-end distribution (trial: 44-89, T-Coach scale-up: 13-93%).

Conclusions
In summary there was, not surprisingly, a broader range of CCM-concordance among these scale-up sites compared to the implementation trial. Nonetheless, taken together, the two BHIP-CCM implementation efforts reached 30 VA medical centers, of which 17 (56.7%) aligned over half of designated care processes with the evidence-based CCM. With strong operational partnerships and support, implementation trial efforts can be scaled up and spread to achieve broader healthcare system impact.

References

Talk 4: A Randomized Stepped Wedge Hybrid-II Trial to Implement the Collaborative Chronic Care Model in VA General Mental Health Clinics

Christopher Miller1, Bo Kim1, Robert Lew1, Kelly Stolzmann1, Jennifer Sullivan1, Rachel Riedeau2, Jeffery Pitcock2, Alicia Williamson4, Samantha Connolly1, A. Rani Elwy6, Kendra Weaver6, & Mark Bauer1

1VA Boston Healthcare System, 2University of Iowa, 3Central Arkansas Veterans Healthcare System, 4University of Michigan, 5Brown University, 6VA Office of Mental Health and Suicide Prevention

Background
Collaborative Chronic Care Models (CCMs) have extensive controlled trial evidence for effectiveness in serious mental illnesses [1], but there is little evidence regarding feasibility or impact in typical practice conditions. We determined the effectiveness of implementation facilitation on establishing the CCM in mental health teams, and its impact on health outcomes of team-treated individuals.
Materials and Methods
We used a randomized stepped wedge trial in Behavioral Health Interdisciplinary Program (BHIP) teams in outpatient general mental health clinics of nine VA facilities, using blended internal-external facilitation. Facilitation combined a study-funded external facilitator with a facility-funded internal facilitator working with a designated team for one year. We hypothesized that facilitation would be associated with improvements in both implementation and intervention outcomes (hybrid-II trial) [2]. Implementation outcomes included the clinician Team Development Measure (TDM) and proportion of CCM-concordant team care processes. The study was powered for the primary health outcome, VR-12 Mental Component Score (MCS). All Veterans treated by designated teams were included for hospitalization analyses, based on administrative data; a randomly selected sample was identified for health status interview. Individuals with dementia were excluded. For implementation outcomes, 62 clinicians were surveyed; site process summaries were rated for CCM concordance.

Results
The population (n=5,596) included 881 (15%) women, average age 52.2+14.5. The interviewed sample (n=1,050) was similar, but oversampled for women (n=210, 20.0%). Facilitation was associated with improvements in TDM subscales for role clarity and team primacy. Percentage of CCM-concordant processes achieved varied (44-89%). No improvement in veteran self-ratings, including the primary outcome, was seen. However, in post-hoc analyses MCS improved in veterans with >3 treated mental health diagnoses versus others. Mental health hospitalization rate demonstrated a robust drop during facilitation; this finding withstood four internal validity tests [3].

Conclusions
Working solely at the clinician level with minimal study-funded support, CCM implementation yielded provider and Veteran benefits. Although impact on self-reported overall population health status was negligible, health status improved for complex individuals, and hospitalization rate declined. Facilitating CCM implementation provides a potential model for realigning VA outpatient general mental health care with an evidence-based model that improves provider team function and Veteran outcomes.

References
ABSTRACTS

Session B1 - Leadership and Organizational Change for Implementation - Strategy Adaptation for Context, Population, and Practice: Common and Unique Elements and Mechanisms

Location: Room 334

Chair: Gregory Aarons1,2
Discussant: Ulrica von Thiele Schwarz3,4

1University of California, San Diego, 2Child and Adolescent Services Research Center, 3Karolinska Institutet, 4Mälardalen University

Organizations that provide behavioral health services are at the forefront of translating research into practice. Organizations operate in complex multi-level contexts that span system and organizational levels and they face many challenges in implementation and sustainment of evidence-based practices (EBP). The improvement and alignment of leadership and organizational development as an implementation strategy is a growing area of implementation science. However, strategies must be adapted and tailored for specific contexts and for the types of EBPs being implemented. There may be common and unique mechanisms depending on context and EBP. This symposium features three distinct large-scale implementation projects all using adaptations of the Leadership and Organizational Change for Implementation (LOCI) strategy [1]. All use the Exploration, Preparation, Implementation, Sustainment (EPIS) framework [2-3], and highlight linking implementation theory, to strategy and outcomes. The projects take place in the United States and Norway and include LOCI for Motivational Interviewing (MI) implementation in substance use disorder treatment in Arizona and California (funded by the National Institute on Drug Abuse), LOCI adapted for Autism Spectrum Disorder EBP implementation in schools and community mental health settings in California (funded by the National Institute of Mental Health, NIMH); and LOCI translated and adapted for trauma EBP (TF-CBT, EMDR, CT-PTSD) implementation in Norway Health Trusts in both youth and adult clinics (funded by the Norwegian Ministry of Health and Care Services). This symposium highlights how projects proceeded through different phases of the EPIS framework. All projects are currently underway and will address how and why adaptations were made a-priori or ad-hoc, and how adaptations are being managed and documented. Each presentation will identify the implementation determinants, targets, and mechanisms being examined. Building on the approach of Scaling-Out [4], the presentations will highlight the identification, operationalization, and measurement of mechanisms common across these studies that allow for harmonization of data and outcomes and will increase understanding of generalizability of the LOCI implementation strategy to different service populations and different geographic and system/organizational contexts.

Talk 1: Development, Adaptation, and Preliminary Evaluation of the Leadership and Organizational Change for Implementation Strategy

Mark G. Ehrhart1, Marisa Sklar2,3, Kristine Carandang2,3, Melissa R. Hatch2,3, Joanna C. Moullin4, & Gregory A. Aarons2,3

1University of Central Florida, 2University of California, San Diego, 3Child and Adolescent Services Research Center, 4Curtin University

Background

This presentation describes the development of the Leadership and Organizational Change for Implementation (LOCI) strategy [1], subsequent adaptation, and preliminary data for implementing Motivational Interviewing (MI) in substance abuse treatment settings [2]. LOCI is an implementation strategy developed to align higher level organizational strategies with first-level leader development to create a strategic organizational climate to support implementation and sustainment of evidence-based practices (EBPs) [3]. Adaptations to the general design of LOCI that have occurred over time, as well as adaptations built in to LOCI to tailor the strategy to particular settings will be described. LOCI provides a general structure, curricula, and process for leading implementation, allowing for
flexibility so that leaders across levels can prioritize issues most relevant at a given time for a given context. We also describe mechanisms of change central to LOCI.

Materials and Methods
The current study involves 3 cohorts of 20 clinics in which clinics are being randomized to LOCI vs. webinar control conditions. For this presentation we utilize data from the first cohort 19 clinics and quantitatively examine differences in implementation leadership and climate by condition. Qualitative data were collected from and analyzed to identify factors influencing EBP implementation. Fourteen leaders across intervention and control conditions responded to an online survey and provided rankings (order of importance) and ratings of factors affecting EBP implementation. These data were supplemented with qualitative interviews.

Results
Preliminary results from the first cohort demonstrated that LOCI, compared to the control condition, showed significant improvements in implementation leadership and implementation climate. Qualitative analyses showed that compared to control leaders, LOCI leaders were more focused on staff competency and overcoming resistance. Time, turnover, and the influence of external contracts emerged as key themes.

Conclusions
The LOCI implementation strategy was designed to improve general and implementation leadership, subsequent implementation climate, and provider implementation behaviors including the adoption and use of EBP with fidelity. The ultimate goal is to improve client engagement in services and patient outcomes. Preliminary results suggest that LOCI can improve the context for implementation or EBPs, and that LOCI can help to focus leaders’ attention on improving implementation.

References

Talk 2: Testing a Multi-Level Implementation Strategy for two Evidence-Based Autism Interventions
Lauren Brookman-Frazee¹,², Aubyn Stahmer³, Allison Jobin¹,², & Kristine Carandang¹,²
¹University of California, San Diego, ²Child and Adolescent Services Research Center, ³University of California, Davis MIND Institute

Background
Children with ASD are a high priority population served in multiple public service systems. Evidence-based behavioral interventions are available [1-2], however, they are not routinely delivered in community care [3-6]. In response, our research groups used community-partnered approaches to adapt and test ASD interventions for routine delivery - "AIM HI" in children’s mental health [7] and “CPRT” in education [8]. We identified implementation leadership and climate as key implementation mechanisms in recent community effectiveness trials. We are conducting two, coordinated studies testing the effectiveness of an adapted version of the Leadership and Organizational Change for implementation (LOCI) strategy [9] as part of an implementation package [10]. This presentation describes the application of LOCI in two ASD services contexts for two EBIs.
Materials and Methods
The TEAMS project includes two linked randomized Hybrid Type 3 implementation trials to test two implementation strategies when paired with AIM HI or CPRT and examine mechanisms of these strategies, including implementation leadership and climate. The TEAMS Leadership Institute (TLI) applies LOCI as follows: (1) uses the LOCI components linked to mechanisms identified in the AIM HI and CPRT community effectiveness trials (i.e. implementation leadership and climate modules); (2) targets executive and mid-level leaders required to coordinate implementation; and (3) targets implementation of specific ASD interventions. We present process data on TLI implementation and initial themes from qualitative interviews to examine leader perceptions of the utility of TLI components and their impact on EBI implementation.

Results
To date, TLI has been conducted in 18 programs/districts in three California counties including 18 workshops and 152 coaching calls. Preliminary themes from interviews with 6 leaders who completed TLI indicate that TLI is feasible and useful to (1) convey to staff the importance of systematically planning EBI implementation, and (2) to maintain leader motivation and focus on executing strategic initiatives around AIM HI and CPRT amidst competing demands.

Conclusions
Preliminary data indicate the TEAMS application of LOCI is feasible and perceived as effective in facilitating the implementation of two ASD interventions. Future analyses will examine the impact of LOCI on targeted mechanisms – implementation leadership and climate.

References
10. Brookman-Frazee L, Stahmer AC. Effectiveness of a multi-level implementation strategy for ASD interventions:
Talk 3: Translation and Adaptation of LOCI for Implementation of Evidence-Based Treatment for PTSD in Norwegian Child and Adult Mental Health Care Services

Erlend Høen Laukvik¹, Ane-Marthe Solheim Skar¹, & Karina M. Egeland¹
¹Norwegian Center for Violence and Traumatic Stress Studies

Background
The Norwegian Centre for Violence and Traumatic Stress Studies (NKVTS) is commissioned by the Ministry of Health and Care Services to implement evidence-based treatment for post-traumatic stress disorder (PTSD) in both child and adult mental health care services. As part of this effort, the Leadership and Organizational Change for Implementation (LOCI) [1] was translated and adapted for the implementation of trauma treatment in Norwegian health trusts. The aim of the project is to evaluate the effectiveness of LOCI in supporting the implementation of evidence-based treatment for PTSD in Norwegian specialized mental health clinics [2]. The presentation will identify the implementation determinants, targets, and mechanisms being examined.

Materials and Methods
The study is a Type III scale-out project [3]. Several a-priori adaptations were made, including translation of the LOCI materials into Norwegian, and tailoring of the LOCI fidelity tool. The study design is a stepped wedge cluster randomized trial with random and sequential enrollment of clinics into three cohorts, with crossover of clusters from control conditions to active intervention conditions based on time intervals. Executives, clinic leaders, and therapists complete surveys assessing leadership and implementation climate at baseline, 4, 8, 12, 16, and 20 months. At baseline, all therapists at the participating clinics were trained in trauma screening and a sub sample in the treatment models for PTSD (TF-CBT, EMDR, CT-PTSD), and units were randomly assigned to one of three cohorts. In addition, the strategy uses the 360 degrees assessments to inform subsequent work on tailored leadership and climate development plans to enhance implementation. Therapy sessions are audio or video recorded and scored for fidelity. Patients complete surveys assessing symptom development during the therapy process.

Results
Consistent with the LOCI theoretical model, assessment of mechanisms will examine the effects of leadership on EBP fidelity through its effect on implementation climate.

Conclusions
This study will provide knowledge about the effect of the LOCI program within a Norwegian context. As such, the results might inform evidence-supported implementation strategies that could help sustain national-wide implementation of evidence-based trauma treatment and increase the quality and effectiveness of Norwegian health services.

References
Session B2 - Building Roads: Exploring Implementation Outcomes Across Diverse Contexts

Location: Room 332

Chair: Meagan Pilar
Discussant: Cameo Stanick

1Washington University in St. Louis, 2Hathaway-Sycamores Child and Family Services

Talk 1: Making Sense of Context: A Systematic Review

Lisa Rogers1, Aoife DeBrún1, & Eilish McAuliffe1
1University College Dublin

Introduction
The uptake of evidence-based healthcare interventions is challenging, with, on average, a 17-year time gap between the generation of evidence and implementation of interventions into routine practice [1]. Although contextual factors such as culture are strong influences for successful implementation [2], context remains a poorly understood construct, with a lack of consensus regarding how it should be defined and accounted for within research [3]. A systematic review was conducted to address this issue by providing an insight into how context is defined and assessed within healthcare implementation science literature and develops a definition to better enable effective measurement of context.

Materials and Methods
The databases of PubMed, PsychInfo, CINAHL, and EMBASE were searched. English language empirical studies published in the previous 10 years were included if context was treated as a key component in implementing a healthcare initiative. Articles also needed to provide a definition and measure of context in order to be included. Results were synthesised using a narrative approach and supported using PRISMA guidelines for the conduct and reporting of systematic reviews.

Results
The searches yielded 3,021 records of which 64 met the eligibility criteria and were included. Studies used a variety of definitions. Some listed contextual factors (n=19) while others documented sub-elements of a framework that included context (n=19). Remaining articles provided a rich definition of an aspect of context (n=14) or context generally (n=12). Quantitative studies mostly employed the Alberta Context Tool while qualitative papers used a variety of frameworks with Promoting Action on Research Implementation in Health Services framework the most highly cited. Mixed methods studies used diverse approaches to assess context. Some used frameworks to inform the methods chosen while others used quantitative measures to inform qualitative data collection. Most papers (n=50) applied the chosen measure to all aspects of study design with a majority analysing context at an individual or level (n=51).

Conclusions
This review highlighted inconsistencies in defining and measuring context which supported the development of an enhanced understanding for this construct. By providing this consensus, improvements in implementation processes may result as greater understanding will help researchers appropriately account for context in research.

References
Talk 2: Implementing Mental Health Assessment in a Juvenile Detention Behavioral Health Unit: Lessons Learned from a Community Academic Partnership

Brittany Rudd¹, Jacquelyn George², Lauren Cliggitt³, Sean Snyder⁴, Mynesha Whyte⁴, & Rinad S. Beidas¹
¹University of Pennsylvania, ²Temple University, ³Community Behavioral Health, ⁴Hall Mercer Community Mental Health Center

Background
The dual objectives of juvenile justice are to assure youth safety while in custody and to facilitate rehabilitation. Suicide is the second leading cause of death among 10-25 year olds [1], and is four times more likely among youth who enter juvenile justice (JJ) settings [2]. As youth in juvenile detention are at risk for engaging in suicidal behaviors, it is critical that behavioral health clinicians in juvenile detention settings conduct systematic evidence-based suicide risk, as well as general mental health, assessment. Recommendations for assessment in juvenile detention exist [3], but there is little guidance regarding how to implement them among behavioral health clinicians. The current presentation will describe a community academic (CAP) partnership, and the process that the partners underwent to implement a systemic protocol for assessing youth in a juvenile detention behavioral health unit.

Materials and Methods
A CAP was developed and a quality improvement procedure was utilized to develop and implement the assessment protocol.

Results
The CAP team included the service clinicians (Snyder and Whyte), and clinical supervisor (Cliggitt) in a behavioral health unit housed in a large, juvenile detention center in an urban city in Pennsylvania, as well as researchers from the University of Pennsylvania (Rudd, George, and Beidas). The development of the assessment protocol was an iterative process that occurred over eight months. The process started with a comprehensive review of current workflow and workflow infrastructure, including how youth were referred to the behavioral health unit and the information behavioral health unit staff had about youth prior to their intake. Iterative changes to workflow procedures were needed, including developing infrastructure to support assessment (e.g., developing report templates) during the behavioral health intake appointment. Finally, several assessment measures were piloted to determine fit.

Conclusions
The creation of a CAP was key to developing and implementing a comprehensive and feasible mental health and suicide assessment protocol. Lessons learned from the application of implementation science to the juvenile detention context from the joint perspectives of researcher (Rudd) and clinician (Synder) stakeholder perspectives will be presented.

References
2. Wasserman GA, McReynolds LS. Suicide risk at juvenile justice intake. Suicide Life Threat Behav. 2006;36(2):239-249.
Talk 3: DIY Implementation: Lessons from a Practitioner-Led Implementation of an Evidence-Based Practice

Sean Wright¹ & Sonia Combs²
¹Lutheran Community Services NW, ²Cor Counseling and Wellness

Background
Reports of implementation efforts initiated at the practitioner level are uncommon. To address this gap, we describe the results of and lessons from an ongoing practitioner-led implementation of Acceptance and Commitment Therapy (ACT), an evidence-based practice, in a community mental health center team.

Materials and Methods
We used a variety of implementation strategies (mostly training) during an ongoing implementation of ACT. Initially, we conducted a mixed methods study of the facilitators and barriers to implementation, collecting qualitative and quantitative survey data anonymously at two time points, sampled from all clinical staff (N=39) at our agency. The survey measured attitudes, knowledge, experience, and acceptability of the EBP. We assessed the significance of changes in Likert ratings using the sign test [1]. We used thematic analysis to code qualitative data. Recently, penetration was measured by relative use of ACT in a one-month sample of progress notes and by the relative percentage of team members using ACT. Implementation strategies used were identified by retrospective review and coded in accordance with the Expert Recommendations for Implementing Change (ERIC) project [2] and classified into concept mapping clusters for ERIC strategies [3]. We created a timeline of implementation activities and identified key individuals who facilitated these activities.

Results
15 pairs of pre-post survey measures indicated that initial training was associated with increases in identification as an ACT therapist (Z=-2.12, p=0.035), perceived ability to demonstrate ACT (Z=-3.00, p=0.002), and a trend toward increased use of ACT (Z=-1.90, p=0.055). Qualitative analyses were consistent with the existing literature on facilitators and barriers to EBP adoption in community mental health. ACT use in a recent one-month window was evidenced with 7.9% of progress notes documenting use of ACT (baseline before implementation: 0%) and 32% of eligible clinicians documenting ACT use in progress notes (initial baseline: 0%). Evidence for use of 21 of the 73 ERIC implementation strategies was documented. The strategies are distributed across all 9 concept mapping clusters, with the Train and Educate Stakeholders cluster most represented (5 of 11 strategies). Three key individuals were identified.

Conclusions
Practitioner-led implementation is feasible. Implementation strategies can inform practitioner efforts.

References

Lisa Sanetti\textsuperscript{1}, Alexandra Pierce\textsuperscript{1}, Michele Femc-Bagwell\textsuperscript{1}, & Alicia Dugan\textsuperscript{1}
\textsuperscript{1}University of Connecticut

A chronic and increasing challenge to employee wellness in schools is teacher stress [1]. Teachers are tied with nurses as having the highest rates of daily stress among occupations [2]. Chronic high levels of teacher stress are associated with (a) increased rates of physical and psychological health problems, including anxiety, depression, cardiovascular disease, and poor sleep quality; (b) poor job performance, including absenteeism, negative interactions, poor relationships with students, and poor classroom management, and (c) poor student outcomes, including low rates of academic achievement, lower levels of social adjustment, and increased rates of problem behavior [1,3]. Further, chronic teacher stress is the primary factor associated with the high rate of teachers leaving the profession for reasons other than retirement, which has nearly doubled over the past 25 years, constituting the primary cause of teacher shortages nationwide [4]. A critical need to address teacher health and wellbeing exists, yet, on average, only 31.4% of schools offer workplace health and wellness promotion programs; most of these programs are top-down, one-size-fits-all approaches that are either ineffective or unsustainable [5]. The purpose of this mixed methods study was to implement the Healthy Workplace Participatory Program (HWPP), an evidence-based approach that engages front-line employees (i.e., teachers) and supervisors (e.g., administrators) in a collaborative, iterative design of workplace health and wellness interventions [6]. This participatory approach allows for (a) identification of health and wellness issues most salient to employees; (b) development of a wider range of interventions as employees are more aware of complex interactions between their work organization, workplace, and lifestyle; and (c) identification of potential intervention barriers and facilitators; (d) increased buy-in to problem definition and intervention design; and (e) establishment of a supportive organizational culture and processes for a self-correcting and sustainable health and wellness promotion program. The HWPP has been shown to effectively increased employee health and wellbeing in a wide range of worksites [6]; this is the first implementation effort in schools. Results of focus groups as well as formative and summative data related to implementation and intervention processes, strategies, and outcomes across EPIS phases in two 3rd-5th grade elementary schools in the Northeast will be presented.

References
Session B3 - Creating Bridges: The Role of Intermediary Organizations

Location: Room 214

Chair: Sapana Patel¹,²
Discussant: Robert Franks³

¹Columbia University, ²The New York State Psychiatric Institute, ³Judge Baker Children’s Center/Harvard

Talk 1: Assessing Intermediary Organization Capacity for Active Implementation Support: Development and Collaborative Early Usability Appraisal of an Intermediary Organization Capacity Assessment Tool

Robin Jenkins¹, William Aldridge¹, & Rebecca Roppolo¹

¹University of North Carolina at Chapel Hill

Background
Many evidence-based practices (EBPs) rely on multiple dissemination supports to assist scaling to achieve population benefits. Intermediary organizations (IOs) are often key in leveraging critical functions in the overall support system to enhance diffusion strategies [1-3]. Despite the prevalence of intermediaries as important accelerators of evidence-based practices, little is known about which IO strategies are most effective in ensuring implementation and scaling success or how strategies link to existing IO capacities [3]. Further, there is a dearth of information regarding IO capacity assessments relative to their capabilities to effectively diffuse EBP’s or to perform active implementation support.

Materials and Methods
Working with a public-private partnership (state government agencies and private funders) to scale Triple P statewide in North and South Carolina, both states have selected IOs to enhance statewide Triple P implementation. To assess IO capacity for planning and delivering implementation supports, a tool was needed to establish baseline capacity and to guide support planning. The Intermediary Organization Capacity Assessment (IOCA) was developed as an IO capacity assessment tool aligned with Mettrick et al.’s five observed functions.

Results
Early capacity assessment data and collaborative qualitative usability feedback from partners indicate that the tool is demonstrating practical utility toward capacity assessments and planning for ongoing support. The IOCA appears to align well with Mettrick et al.’s functional groups of IO support activities. Early feedback suggests that use of the tool also aids in transferring knowledge of implementation science-informed strategies to IO partners in functionally informative, practical ways.

Conclusions
The IOCA is demonstrating good alignment with known classes of IO support functions. It is also providing practical usability relative to understanding baseline IO capacity to deliver ongoing supports for scaling of EBPs. IOs that have experience with the tool report improved understanding of implementation science-informed strategies and tools that can better guide them in their support activities.

References
2. Mettrick J, Harburger DS, Kanary PJ., Lieman RB, Zabel, M. Building cross-system implementation centers: a roadmap for state and local child serving agencies in developing Centers of Excellence (COE). Baltimore, MD:
Talk 2: A Tailored Implementation Approach to Improving PTSD Care in Military Treatment Facilities: Integrating Practice-Based Knowledge and Implementation Science

David Riggs¹, Katherine Dondanville², Elisa Borah³, & Craig Rosen⁴
¹Center for Deployment Psychology, ²University of Texas Health Science Center at San Antonio, ³University of Texas at Austin, ⁴National Center for PTSD

Background
The panel will discuss integration of practical lessons learned from clinicians and administrators with principles of implementation science to develop a program to increase use of evidence-based psychotherapy (EBP) for PTSD in military treatment facilities (MTFs). Despite efforts to train military providers in EBPs, only a minority of service members receive them [1]. Implementation barriers likely vary across MTFs, which differ in size, resources, command structure, and implementation climate. Increased use of EBPs likely requires a tailored approach that aligns implementation strategies to local conditions [2].

Materials and Methods
The Targeted Assessment and Context-Tailored Implementation of Change Strategies (TACTICS) program combines needs assessment, a rubric for aligning implementation strategies to local barriers and facilitators, and external facilitation to help clinics enact a collaboratively developed implementation plan. Through experience working with MTFs, the Center for Deployment Psychology (intermediaries) identified common implementation barriers and potential context-specific strategies to address them. These were augmented with additional relevant strategies from the Expert Recommendations for Implementing Change project [3] and input from experienced implementers. Barriers and facilitators in the resulting TACTICS rubric were then mapped back to domains of the Consolidated Framework for Implementation Research [4].

After getting leadership approval and identifying a site champion, the five-month TACTICS process involves conducting needs assessment interviews with relevant staff and reviewing clinic data to identify barriers and facilitators, using the TACTICS rubric to identify potential change targets and strategies to address local conditions, and meeting with staff to develop the implementation plan. This is followed by weekly coaching calls (external facilitation) to support the champion in enacting changes to increase use of evidence-based psychotherapy.

Results
TACTICS rubric development is completed and is being pilot tested at one site. After this development phase, TACTICS will be tested in a stepped-wedge randomized trial in eight military treatment facilities.

Conclusions
Development of the TACTICS program was informed by intermediaries’ practical knowledge from military clinicians, implementation experience, and by implementation science frameworks. If successful, TACTICS provides a barrier-to-solution tailoring framework informed by implementation practitioners, researchers and local staff.

References


Talk 3: Rubber Meets the Road: How One Intermediary Organization Uses Implementation Science to Inform Training and Implementation Supports for a Large State System of Behavioral Health

Sapana Patel¹² & Lisa Dixon¹²
¹Columbia University; ²The New York State Psychiatric Institute

Background
At federal, state, and local levels, stakeholders are focused on developing, disseminating, and implementing evidence-based practices (EBPs). Intermediary organizations are entities that help agencies or systems develop, implement, and sustain evidence-based practices [1]. Little is known about how implementation science frameworks, strategies and tools that are used by intermediary organizations charged with scaling evidence-based practices for a large state system of behavioral health.

Materials and Methods
The Center for Practice Innovations (CPI), at Columbia Psychiatry and the New York State Psychiatric Institute, is an intermediary organization whose mission is to support the New York State Office of Mental Health in the use of EBPs throughout community-based mental health agencies in New York State. CPI’s role includes: (a) public awareness, and education; (b) scalable dissemination of training in EBPs; (c) implementation support through learning collaboratives; (d) quality improvement; and (e) outcome evaluation. We will describe empirical approaches to the development, dissemination of scalable training and implementation support for a range of initiatives at CPI.

Results
Grounded in the Consolidated Framework for Implementation Research [2], we will present on the CPI practice change model and how the CFIR assists in planning for post-training implementation support and the identification of barriers and facilitators to implementation. Using the published taxonomy, Expert Recommendations for Implementing Change [3], we will describe a range of implementation strategies (e.g., instructional design methods, user-centered design, stakeholder engagement) that inform the development of scalable online training and identify targets for post-training implementation activities. Lastly, we will provide examples of online training evaluation [4] and challenges faced in reporting on the impact of implementation strategies [5-6] within a large system of behavioral healthcare.

Conclusions
Although a balancing act, it is possible for intermediary organizations to remain flexible, efficient, and rapid in response to the mission of real-world dissemination and implementation of EBPs and use empirically-driven distance and E-learning and implementation science approaches. There are opportunities for mutual learning, synergy and collaboration to advance the field of implementation science for researchers and practitioners.
Talk 4: Utilization of Train-the-Trainer Programs to Support the Sustainability of Evidence-Based Trauma-Informed Interventions: The Perspectives of Model Developers, Trainers, and Intermediary Agencies within the National Child Traumatic Stress Network

Shannon Chaplo¹, George Ake¹², Lisa Amaya-Jackson¹², Byron J. Powell³, & Ginny Sprang⁴

¹Duke University Medical Center, ²National Center for Child Traumatic Stress, ³Washington University in St. Louis, ⁴University of Kentucky

Background

Train-the-Trainer programs (TTTs) refer to “a program or course where individuals in a specific field receive training in a given subject and instruction on how to train, monitor, and supervise other individuals in the approach [1].” TTTs are implementation strategies intended to increase the reach and sustainment of evidence-based interventions in mental health agencies, and address other challenges such as therapist attrition and developer succession planning [2-3]. Several trauma-informed interventions for children have TTTs; however, there is no standardized protocol for developing or delivering TTTs. As the need to disseminate and sustain trauma-informed interventions grows, the need to develop guidelines for TTTs becomes imperative. The objective of this project is to better understand the state of TTTs for trauma-informed interventions utilized by members and consumers of the National Child Traumatic Stress Network (NCTSN).

Materials and Method

Duke University study staff partnered with members of the NCTSN Implementation Advisory Committee to develop a survey exploring TTTs in the NCTSN. The survey was designed to gather the perspective of developers of treatments, practices, and curricula; professionals that become trainers through TTTs; and agency training directors that serve as consumers of TTTs. Developers will answer a series of questions about the development and implementation of their TTT program. Trainers and agency directors will be asked about their experience participating in a TTT program. All respondents will be asked about the components of their TTTs, barriers to using or developing TTTs, and facilitators of developing or using TTTs.
ABSTRACTS

Results
No results are currently available. The study has secured IRB approval and the survey will launch in April 2019. Results will be analyzed in summer 2019.

Conclusions
Surveying each of these audiences will help us to better understand the varying components of TTTs, and barriers and facilitators of their use within the NCTSN. We plan to use the survey results for training purposes and resource development to enhance the use of TTTs within the NCTSN (and in other relevant settings) to implement and sustain trauma-informed interventions.

References

Session C1 - The Intersection of Behavioral Economics, Participatory Design, and Implementation Science

Location: Room 334
Chair: Briana Last1
Discussant: Gregory Aarons2
1 University of Pennsylvania, 2 University of California, San Diego

Though implementation science has advanced considerably, implementation strategies are still rarely developed systematically using causal theories or with stakeholder perspectives. As a result, implementation strategies are often poorly matched to the intervention to be implemented or to the setting where they are applied and are not substantiated by a causal theory. Participatory methods and theoretically informed approaches increase the likelihood that strategies will be efficacious and offer scientists a better understanding and explanation of how and why implementation succeeds or fails. Behavioral economics, which draws insights from cognitive science, social psychology, and economics, offers promising methods to increase the implementation of evidence-based practices (EBPs). This symposium will present studies that incorporate insights from behavioral economics and participatory design in the implementation of behavioral health EBPs. Consistent with the conference theme, this symposium presents collaborative work that applies implementation science in real world settings.

First, Last will present data from a study to increase universal depression screening in primary care settings. The study utilizes an innovation tournament, a method that crowdsources ideas from front-line clinicians and staff, to generate implementation strategies.

Second, Quanbeck will present data from a study introducing mobile health technology in 3 clinics offering primary and behavioral healthcare services. The study describes a novel decision-framing model, drawn from game theory and behavioral economics, that elicits stakeholders’ perceived gains and losses when faced with the decision of
whether to adopt an evidence-based mHealth intervention.

Third, Beidas will present data from a study to increase the implementation of EBPs in community mental health clinics in the city of Philadelphia. The study utilizes several participatory methods, including an innovation tournament and a system-wide survey, to design stakeholder-generated implementation strategies.

Fourth, Mandell will present data examining one-to-one aides who work with children with autism in 5 community agencies in the city of Philadelphia. This study employs participatory and novel behavioral economic methods including an innovation tournament and a time-and-motion study to observe how one-to-one aides make decisions regarding best practices surrounding data collection.

Dr. Gregory Aarons, an expert clinical and organizational psychologist, will serve as the discussant.

**Talk 1: Nudge Yourself: Stakeholder Design of Implementation Strategies that Leverage Insights from Behavioral Economics**

Briana S. Last¹, Courtney Benjamin Wolk¹, & Rinad S. Beidas¹

¹University of Pennsylvania

**Background**

Though several evidence-based practices (EBPs) exist for depression, only a fraction of individuals receive treatment. One major challenge to treatment is the identification of individuals in need of care. In response to this need, health care systems such as the University of Pennsylvania (Penn) have mandated universal screening of depression in primary care settings based on evidence. However, adherence to the mandate at Penn is much lower than anticipated (only 40% of eligible patients are screened). In our study, we partnered with front line clinicians and staff to increase depression screening at Penn using innovative approaches from implementation science and behavioral economics.

**Materials and Methods**

This project will engage in a participatory process with key stakeholders to design implementation strategies to increase universal depression screening in primary care. In particular, we will focus on designing a subset of implementation strategies—nudges, as they are called in behavioral economics [1]—that alter the choice architecture, or the way options are presented to optimize choices. First, we began by conducting an innovation tournament, a crowdsourcing technique [2], with physicians, nurses, medical assistants, behavioral health clinicians, and front-desk stuff currently involved in administering the electronic depression screener, the two-item Patient Health Questionnaire (PHQ-2) at their practices. The tournament will generate ideas on how to increase the implementation of the PHQ-2. Next, we will fine-tune the ideas generated from the innovation tournament with a team of stakeholders, behavioral economists, and implementation scientists using behavioral economic theory [3]. The product of this project will be a toolkit of implementation strategies, that are theoretically motivated and acceptable to a range of relevant stakeholders, a subset of which will be later refined through a more rigorous piloting process.

**Results**

The innovation tournament closes mid-April, 2019. Ideas from the tournament will be refined into a toolkit of implementation strategies by September 2019.

**Conclusions**

Our study responds to the need for interdisciplinary, theoretically informed, and participatory approaches to designing implementation strategies. The results from our work will shed light on whether these approaches show promise.
Talk 2: Using Stakeholder Values to Promote Implementation of an Evidence-Based mHealth Intervention for Addiction Treatment in Primary Care

Andrew Quanbeck

University of Wisconsin – Madison

Background

The majority of evidence-based practices do not find their way into clinical use, including mobile health (mHealth) technologies. This presentation describes a novel decision-framing model that gives implementers a method for eliciting the perceived gains and losses that different stakeholder groups trade off when faced with the decision of whether to adopt an evidence-based mHealth intervention.

Materials and Methods

The decision-framing model integrates insights from behavioral economics [1-2] and game theory [3]. The approach was applied retrospectively in a parent implementation research trial that introduced an mHealth system to 268 patients in three U.S. clinics offering primary and behavioral healthcare services. The mHealth system, called Seva, supports patients with addiction. Individual and group interviews were conducted to elicit stakeholder considerations from 23 clinic staff members and 6 patients who were involved in implementing Seva. Considerations were used to construct “decision frames” that traded off the perceived value of adopting Seva vs. maintaining the status quo from each stakeholder group’s perspective. The face validity of the decision-framing model was assessed by soliciting feedback from the stakeholders whose input was used to build it.

Results

Primary implementation considerations were identified for each stakeholder group. Clinic managers perceived the greatest potential gain to be providing better care for patients, and the greatest potential loss to be cost, expressed in terms of staff time, sustainability, and opportunity cost. All clinical staff considered time their foremost consideration—primarily in negative terms (e.g., cognitive burden associated with learning a new system) but potentially positively (e.g., if Seva could automate functions done manually). Patients considered safety (anonymity, privacy, and coming from a trusted source) to be paramount. When considerations were compiled into decision frames that traded off the gains and losses associated with adopting Seva, only one stakeholder group—patients—expressed a positive overall value, and these were the stakeholders who used Seva most.

Conclusions

This paper presents a systematic method of inquiry to elicit stakeholders’ considerations when deciding to adopt a new technology. Stakeholder considerations may be used to adapt mHealth interventions and tailor implementation, potentially increasing the likelihood of implementation success for evidence-based practices and technologies.

References

Talk 3: Applying Insights from Participatory Design to Design Implementation Strategies

Rinad S. Beidas¹, Nathaniel Williams² & Rebecca Stewart¹
¹University of Pennsylvania, ²Boise State University

Background
Public behavioral health systems have increasingly invested in the implementation of evidence-based practices (EBPs), including Philadelphia’s Department of Behavioral Health. Training and technical assistance continue to be the most commonly used strategies to increase use of EBPs, despite findings that organizational barriers matter. Few organizational implementation strategies exist and little is known about how to best design organizational strategies to increase implementation of EBPs using participatory design approaches. We partnered with front line clinicians to develop organizational implementation strategies to improve EBP implementation in community mental health clinics.

Materials and Methods
We engaged in a three-step process to design organizational implementation strategies. First, we launched an innovation tournament to engage clinicians employed within the Philadelphia public behavioral health system to crowd-source how their organizations can support them to use EBPs. We held a community-facing event during which the 6 clinicians who submitted winning ideas presented their ideas to 85 attendees representing a range of stakeholders. Second, we worked with behavioral scientists to refine the ideas to optimize their effectiveness. Third, we launched a system-wide survey targeting approximately 300 stakeholders to elicit preferences for the clinician generated organizational implementation strategies.

Results
We report on the outcomes of the innovation tournament and system-wide survey. A total of 65 ideas were submitted in the innovation tournament by 55 participants representing 38 organizations. The most common categories of ideas pertained to training (42%), compensation (26%), clinician support tools (22%), and EBP-focused supervision (17%). Using an innovation tournament to generate ideas for implementation strategies was feasible and acceptable as demonstrated by the high levels of engagement. However, we also identified barriers (e.g., ensuring that the stakeholder voice was adequately represented throughout all stages). The system-wide survey will be launched in March, 2019; and will close April, 2019.

Conclusions
The approach that we took in designing implementation strategies is promising. Research is needed to test whether strategies developed via these methods are more effective than strategies developed through competing approaches.

Talk 4: Leveraging Normative Pressure to Increase Data Collection among Therapists Working with Children with Autism

David S. Mandell¹, Heather Nuske¹, & Emily Becker-Haimes¹
¹University of Pennsylvania

Background
Evidence-based practices for children with autism generally follow the principles of applied behavior analysis, which require frequent, systematic data collection. In Philadelphia, as in many systems, children with autism often are accompanied by a one-to-one aide, who is responsible for collecting these data as part of implementing a treatment plan. Direct observations and interviews with these aides and their supervisors confirm that aides rarely collect data in a rigorous manner. These aides often work in isolation and rarely receive consistent supervision, which may lead to the perception that data collection is not expected of them, nor do people in their position collect data in this
manner. We use participatory methods combined with innovative methods borrowed from industry that incorporate the principles of behavioral economics to design implementation strategies to increase aides’ data collection.

**Materials and Methods**

We partnered with five community agencies and used time-and-motion study methods, an observational technique drawn from scientific management, to understand how one-to-one aides collect data. This process involved querying aides about the decisions they made regarding data collection in the moment. We used participatory design strategies, including an innovation tournament—a method to crowdsourcing strategy ideas from stakeholders—and a rapid-cycle approach—a method that involves iterative testing and refining implementation strategies—to increase one-to-one aides’ data collection. We applied theoretical principles from behavioral economics to refine the implementation strategies generated from the innovation tournament and to test them using our rapid cycling approach.

**Results**

Data collection is ongoing. Here we present on the time-and-motion studies and results of our innovation tournament. We provide a framework for the rapid-cycle process that is ongoing at the time of this presentation.

**Conclusions**

This method of data collection in the service of identifying implementation strategies and rapidly testing them holds promise.

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**Session C2 - Designated Implementation Drivers in Action to Achieve Programmatic Goals**

**Location:** Room 332

**Chair:** Gracelyn Cruden

**Discussant:** Sara J. Landes

1University of North Carolina at Chapel Hill, 2Behavioral Health QUERI, Central Arkansas Veterans Healthcare System, 3University of Arkansas for Medical Sciences

**Talk 1: Applications of Standardized Patient Methodology to Measure Fidelity in an Implementation Trial of the Teen Marijuana Check-Up**

Bryan Hartzler¹, Denise Walker¹, Aaron Lyon¹, Kevin King¹, Lauren Matthews¹, Tara Ogilvie¹, Devon Bushnell¹, & Katie Wicklander¹

1University of Washington

**Background**

A cornerstone of medical education, standardized patients (SPs) are increasingly incorporated in implementation trials for behavior therapies as a highly valid, advantageous approach to fidelity measurement [1]. Such methodological benefits extend to SP involvement in behavioral rehearsal activities often included to support therapy training processes [2]. An ongoing implementation trial examining the Teen Marijuana Check-Up (TMCU) [3], a school-based adaptation of motivational enhancement therapy, incorporates SPs for both purposes [4].

**Materials and Methods**

In this trial, a set of SPs portray marijuana-using adolescent characters in dyadic interactions with participating school-based staff. As components of TMCU training, two SP-involved training cases—each offering consequence-free opportunities for staff to receive performance-based trainer feedback—supplemented an initial workshop.
As components of pre- and post-training outcome assessments, two more SP interactions provided behavioral outcome measures. All four SP interactions involved travel to staff workplaces to record a simulated TMCU session, later scored for the following fidelity indices: ratio of reflective listening statements to questions (R:Q), percentage of 'open-ended' questions (%OQ), and percentage of 'complex' reflective listening statements (%CR).

Results
Recruited from seven high schools, twenty staff completed all four SP interactions. Pre-training SP interactions revealed variable staff performances, with two staff members achieving a TMCU proficiency standard by exceeding benchmarks for all three fidelity indices. In SP-involved training cases, this proficiency standard was achieved by eight staff in an initial case, and by six staff in a more challenging latter case. In eventual post-training SP interactions, five staff met the TMCU proficiency standard. As for mean training impact, Cohen’s d effect sizes suggest small-to-medium effects on R:Q (d=.20), %CR (d=.36), and %OQ (d=.43), and documented expected needs for subsequent support of TMCU implementation via purveyor coaching as a targeted form of post-training technical assistance.

Conclusions
This trial—wherein SP methodology further extends to monitoring of TMCU fidelity in biannual assessments for two years after training—includes SP roles in outcome assessment and training. Fidelity data from the collective SP interactions evidence sensitivity to hypothesized changes in staff learning, further supporting the use of SPs as means to measure and monitor fidelity in trials examining behavior therapy implementation.

References

Talk 2: A Hybrid Type 1 Design to Facilitate Rapid Testing and Translation of an Emergency Department-Based Opioid Use Disorder Intervention through an Academic-State Government Partnership

Dennis Watson1, Alan McGuire2,3, Rebecca Buhner4, & Krista Brucker5
1University of Illinois at Chicago, 2Richard L. Roudebush VAMC, 3Indiana University, 4Indiana Division of Mental Health and Addiction, 5Indiana University School of Medicine

Background
The gravity of the opioid epidemic requires innovative and promising solutions that can be rapidly scaled [1]. Hybrid type 1 designs can speed the translation of such interventions by accomplishing the dual tasks of (a) establishing effectiveness of interventions as they are being rolled out under real-world conditions and (b) identifying determinants of implementation that can assist with planning of future scaling activities [2-3]. The current study aims to accomplish just such a task through the replication and testing of Project Planned Outreach, Intervention, Naloxone, and Treatment (POINT), an ED-based peer support intervention aimed at connecting people with opioid use disorder to medication assisted treatment (i.e., methadone-, buprenorphine-, or naltrexone-facilitated...
treatment). This study is funded by a unique federal mechanism that aims to improve rapid translation of research to practice through academic-state partnerships. In this presentation, we will provide an overview of our pragmatic hybrid design before focusing on results of the study’s 6-month pilot phase.

**Materials and Methods**
The researchers partnered with the Indiana Division of Mental Health and Addiction to carry out this study. Per the project’s funding mechanism, success of the pilot was to be determined by the achievement of 3 milestones, including our ability to successfully replicate the POINT intervention with 75% fidelity to previously identified critical components within a new implementation context.

**Results**
Overall implementation of the study protocols was successful, with only minor refinements to proposed procedures being required in light of challenges with (a) data access, (b) recruitment, and (c) identification of the expansion hospitals. All three milestones were reached, including 77% fidelity to the original POINT programs’ components. Challenges in implementing protocols and reaching milestones resulted in refinements that improved the study design overall. The subsequent trial will add to the limited but growing evidence on ED-based peer supports.

**Conclusions**
Capitalizing Indiana’s current efforts in order to study an already scaling and promising intervention is likely to lead to faster and more sustainable results with greater generalizability than traditional, efficacy-focused clinical research.

**References**

**Talk 3: Evaluating Associations between Implementation Barriers, Strategies, and Program Performance: Data from 140 Substance Abuse Treatment Programs in an Integrated Healthcare System**

Eric Hermes¹ & Ilse Wiechers¹²

¹Yale University, ²Department of Veterans Affairs Office of Mental Health and Suicide Prevention

**Background**
Associations between contextual barriers, implementation strategies, and program performance can be evaluated using data from ongoing quality improvement programs in healthcare operations [1]. The Psychotropic Drug Safety Initiative (PDSI) is a system-wide program guiding quality improvement for psychotropic prescribing in 140 Veterans Health Administration (VHA) facilities. In 2017, PDSI began a program to increase medication assisted therapy (MAT) for Opiate Use Disorder (OUD) and Alcohol Use Disorder (AUD). This analysis characterizes perceived barriers, providing a foundation for analyzing associations between barriers, implementation strategies, and program performance.

**Materials and Methods**
Among six core policies, PDSI provides metrics of local MAT use and requires facilities to identify a champion. Facility assessments are submitted, which identify disorder focus (AUD and/or OUD) and perceived barriers
(including 18 barriers previously identified by key informants as well as free text) [2]. Barriers are characterized by Consolidated Framework for Implementation Research (CFIR) construct, selection frequencies, intercorrelations, and associations with facility characteristics [3].

Results
All 140 VHA facilities responded: 74 (52.9%) focused on AUD, 47 (33.6%) on OUD, and 19 (13.6%) on both. Frequently selected barriers, including free text, clustered in the “individual characteristic” and “inner setting” CFIR domains: “Patients frequently refuse treatment or referral” (107 [76.4%]) and “Providers have too many competing demands” (98 [70.0%]). Neither disorder focus nor frequency of barrier identification varied significantly with level of MAT use at the facility. There was moderate intercorrelation of selected barriers (Chronbach’s alpha = 0.67). The barriers of “Not enough x-waiver providers” and “MAT required enrollment in intensive treatment programs” were selected more frequently in OUD-focused programs. Associations with specific improvement strategies used and program performance will be reported in June 2019.

Conclusions
The most frequently perceived barriers to increasing MAT were characteristics of patients, providers, and the local organization. Associations between barriers, disorder focus, and MAT use were weak. Data suggest a disconnect between perceived barriers and knowledge of organization performance. Linking program barriers, implementation strategies, and performance may be an implicit assumption of healthcare improvement programs. Analyzing these links demonstrates intersections between implementation science research, quality improvement practice, and health system policy.

References

Talk 4: Setting the Foundation for Successful Engagement with Implementation Strategies: Multilevel Perspectives from Substance Use Treatment Agencies
Chariz Seijo¹, Kendal Reeder¹, Kristine Carandang¹, Marisa Sklar¹, Mark Ehrhart², Cathleen Willging³, & Gregory Aarons¹
¹University of California, San Diego, ²University of Central Florida, ³Pacific Institute for Research and Evaluation

Background
A foundation of basic supports and resources is required for the successful implementation of evidence-based practices (EBPs). Inner and outer context determinants for this foundation remain unclear. As part of a cluster randomized trial testing the Leadership and Organizational Change for Implementation (LOCI) intervention for motivational interviewing (MI) implementation across substance use treatment agencies [1], we use qualitative methods to explore experiences of agency executives, supervisors, and providers regarding the multilevel determinants of strategic implementation.
**Materials and Methods**

Preliminary data from 29 individual interviews and 15 focus groups with 10 executives, 23 supervisors, and 80 providers across five agencies were examined. Notes from coaching calls conducted with supervisors randomized to the LOCI condition were explored to further contextualize engagement in the implementation strategy and MI implementation over time. The Framework Method [2] was used to synthesize data within- and between-agencies and identify emergent themes in accordance with the Exploration, Preparation, Implementation, Sustainment (EPIS) framework [3] and Edgar Schein’s organizational culture change model [4].

**Results**

Determinants of LOCI engagement and MI implementation included the structural make-up of the agency and/or clinic, timing of state-wide policy initiatives, and professional role at the agency. Agency executives, supervisors, and providers all agreed that inadequate staffing and high turnover limited the time available for LOCI engagement and MI implementation. Participants detailed how the lack of basic resources, such as not having therapy rooms, negatively impacted their ability to participate in LOCI and implement MI. Additionally, all agreed that changes in policy introduced new requirements (e.g., new EHR, billing and reporting requirements) that interfered with LOCI participation.

**Conclusions**

In order for organizations to engage effectively in implementation strategies like LOCI, a foundation of basic supports and resources is needed. The introduction of such strategic initiatives are held to be a secondary priority after basic organizational needs such as fiscal and operational viability are met. Therefore, understanding the determinants for establishing a foundation for successful EBP implementation in real-world practice is necessary to ensure that implementation strategies are successful and implementation outcomes are achieved. Implications for improving implementation strategies to target these determinants are discussed.

**References**


Session C3 - Applications of Implementation Science: Where the Rubber Meets the Road in Healthcare Settings
Location: Room 214
Chair: Sheena McHugh
Discussant: Beth Prusaczyk
1University College Cork, 2Washington University in St. Louis

Talk 1: Involving Patients, Practitioners, and Policy Makers to Develop a Theory-Based Implementation Intervention to Increase the Uptake of Diabetic Retinopathy Screening

Fiona Riordan1, Emmy Racine1, Susan Smith2, Aileen Murphy1, John Browne1, Patricia Kearney1, & Sheena McHugh1
1University College Cork, 2Royal College of Physicians in Ireland

Background
Despite evidence that diabetic retinopathy screening (DRS) is effective [1], uptake remains sub-optimal in many countries, including Ireland [2-5]. Implementation strategies to enhance uptake of interventions like DRS, are not always a good fit for the context in which they are used, or do not align with stakeholder preferences [6]. We report a systematic process combining theory, stakeholder consultation and existing evidence to develop an implementation intervention to increase DRS uptake.

Materials and Methods
Target behaviours were identified through stakeholder interviews (n=19), and an audit of screening attendance in two primary care centres. Using patient (n=48) and health care professional (HCP) (n=30) interviews, barriers and enablers were coded using the Theoretical Domains Framework and mapped to behaviour change techniques. The APEASE (affordability, practicability, effectiveness, acceptability, side effects, equity) criteria were used to select intervention components. Effectiveness of components and delivery modes was determined through a rapid evidence review. Feasibility, local relevance and acceptability were determined through a collaborative process; consensus meetings with patients (n=15) and HCPs (n=16), and key stakeholder consultations, including the national DRS programme.

Results
Three target behaviours were identified; patient registration by HCP, patient consent for the programme to hold their details, and patient attendance. Patient barriers included confusion between screening and routine eye checks, forgetting, and fear of a negative result. Enablers included a recommendation from friends/family or HCPs, recognising screening importance, and ownership over their condition. HCP barriers included the time to register patients impeded or supported by practice resources, and a lack of readily available information on uptake in their local area/practice. Consensus meeting participants agreed HCP-endorsed reminders and patient information leaflets were acceptable. They felt certain delivery modes (i.e. in-person, phone and letter) were feasible and equitable, while others may exclude some practices and patients (e.g., text messages). The final intervention comprises reimbursement, training, audit/feedback and electronic prompts for HCPs, and HCP-endorsed patient reminders with an information leaflet.

Conclusions
A collaborative process involving multiple stakeholder consultations helped shape an intervention deemed acceptable to both patients and HCPs. The feasibility of intervention delivery in real world primary care will be evaluated through a pilot trial.
ABSTRACTS

References

Talk 2: Results from a Randomized Trial Comparing Strategies for Helping CHCs Implement Guideline-Concordant Cardioprotective Care
Rachel Gold1, Arwen Bunce2, Stuart Cowburn2, James V. Davis1, Joan Nelson2, Deborah J. Cohen3, James Dearing4, & Michael A. Horberg5
1Kaiser Permanente - Center for Health Research, 2OCHIN, 3Oregon Health & Science University, 4Michigan State University, 5Kaiser Permanente - Mid-Atlantic Permanente Research Institute

Background
Statins can reduce cardiovascular disease (CVD) risk in patients with diabetes (DM), but prescribing often lags behind recommendations. We compared how three increasingly intensive implementation support strategies impacted community health centers’ (CHCs) adoption of electronic health record (EHR) clinical decision support tools targeting guideline-concordant statin prescribing in DM [1-3]. The tools (the ‘CVD Bundle’) were adapted from a previously successful intervention [4].

Materials and Methods
In this mixed methods, pragmatic trial, 29 CHCs with a shared EHR were randomized to 3 Arms that received implementation support: 1) Implementation Toolkit (CVD Bundle use instructions; Quality Improvement practice change techniques); 2) Toolkit + in-person training with follow-up webinars; or, 3) Toolkit, training, webinars, + offered practice facilitation. All study CHCs also identified a Champion to oversee related clinic activities. Statin prescription rates were compared across Arms, and with those in >300 additional CHCs which received no implementation support, a non-randomized comparison group. Prescribing (per national guidelines) was measured from 12 months pre-intervention through 36 months post-intervention. We gathered qualitative data from the randomized CHCs via on-site observations, interviews, and phone calls.

Results
Statin prescribing increased pre- to post-intervention for all Arms; only Arm 2 demonstrated a statistically significant change relative to comparison CHCs. Prescribing rates improved more in the study CHCs (7%, 8%, and 5% for Arms 1, 2 and 3 respectively) than the comparison CHCs (3%). These differences were not additive – CHCs that received more intensive implementation support did not have greater improvements in prescribing rates. Qualitative data suggest numerous clinic- and intervention-level factors underlying these results. Implementation strategies were not always applied as planned: the Toolkit was infrequently used, webinar attendance was poor, staff turnover...
was substantial, and few Arm 3 clinics were able to fully benefit from the offered practice facilitation.

Conclusions
This is one of the first studies to directly compare implementation strategies. The strategies employed here were associated with small improvements in the study CHCs’ guideline-concordant prescribing. Level of implementation support was less impactful than clinic ability to make changes. Guideline dissemination efforts should evaluate adopters’ needs / preferences so that subsequently deployed implementation strategies are well-received.

References

Talk 3: Main Findings from the Substance Abuse Treatment to HIV Care (SAT2HIV) Project: A Type 2 Effectiveness-Implementation Hybrid Trial

Bryan Garner¹, Stephen Tueller¹, Steve Martino², Heather Gotham³, Kathryn Speck⁴, Michael Chaple⁵, Denna Vandersloot⁶, Michael Bradshaw¹, Elizabeth Ball¹, Alyssa Toro¹, Marianne Kluckmann¹, Mathew Roosa⁷, & James Ford⁸

¹RTI International, ²Yale University, ³Stanford University, ⁴University of Nebraska, Lincoln, ⁵NDRI, Inc, ⁶University of Washington, ⁷Roosa Consulting, ⁸University of Wisconsin, Madison

Background
Improving the integration of substance use services within HIV service settings is an important public health concern [1]. To help understand how best to improve the integration of substance use services within HIV service settings, the National Institute on Drug Abuse funded a type 2 effectiveness-implementation hybrid trial entitled the Substance Abuse Treatment to HIV Care (SAT2HIV) Project [2-3]. This presentation focuses on the SAT2HIV Project’s main findings.

Materials and Methods
Using a cluster-randomized design, 39 HIV service organizations and their staff were randomized to either implementation-as-usual (IAU) or IAU plus Implementation & Sustainment Facilitation (IAU+ISF). As part of the IAU condition, staff received training, feedback, and coaching in a motivational interviewing-based brief intervention (BI) for substance use. As part of the IAU+ISF, staff received the IAU strategy, as well as participated in external facilitation meetings with an ISF coach. Within each HIV service organization, eligible and consenting clients were randomized to usual care (UC) or UC plus BI (UC+BI). The analytic sample included 678 clients (82% follow-up rate), nested within 78 BI staff, nested within the 39 HIV service organizations. The preparation-phase outcome was staff time-to-proficiency (i.e., a staff-level measure of the number of days between completing the initial training and demonstrating BI proficiency). Implementation-phase outcomes were: staff implementation effectiveness (i.e., a
staff-level measure of the consistency and quality of BI implementation) and client substance use at follow-up (i.e., a client-level measure of past-28 day primary substance use).

Results
The ISF strategy reduced time-to-proficiency (β = - .66), but this reduction was not significantly less (p < .05) than what was achieved by staff in the IAU condition. However, the ISF did significantly improved implementation effectiveness (β = .73, p < .001) beyond what was achieved in the IAU condition. Moreover, the ISF strategy did significantly improved the BI’s effectiveness for reducing client substance use (β = -2.25, p < .05).

Conclusions
Training, feedback, and coaching was sufficient for helping staff demonstrate proficiency in a motivational interviewing-based BI for substance use. However, the ISF strategy was found to help significantly improve implementation effectiveness and help significantly reduce client substance use.

References

Talk 4: The Integrative Systems Practice for Implementation Research (INSPIRE) Model: Application to Context-Appropriate Design of a Cervical Cancer Screening Program in the Peruvian Amazon

Valerie Paz-Soldan, Magdalena Jurczuk, Margaret Kosek, Anne Rositch, Graciela Meza, Prajakta Asdul, Laura Nervi, J. Kathleen Tracy, Javier Vasquez, Renel Lopez, Reyles Rios, Joanna Brown, Sandra Soto, & Patti Gravitt

The Integrative Systems Practice for Implementation Research (INSPIRE) Model is a multifaceted strategy that blends together existing theoretical frameworks and defines specific tools for use at each phase. INSPIRE is a participatory, iterative process involving four phases: system understanding, finding leverage, acting, and learning/
adapting. Mixed methods are used to create the shared understanding of the screening system and to facilitate identification of leverage points for change. A systems modeling tool was designed to compare alternative screening systems to facilitate the decision-making process in a design workshop setting and working groups were formed to design new system processes.

Results
Through phases 1-3 of the INSPIRE model, we engaged more than 90 multi-level stakeholders in the design of a new and improved screen and treat system. Elaboration of system process maps through triangulation of the mixed-methods data served to create a shared reference of the current system in participatory discussions. Significant leverage opportunities were identified, including reducing fragmentation, inefficiency, and a lack of standardization to increase women’s acceptability of screening and adherence to continuum of care. A variety of interventions were evaluated and ultimately, stakeholders recommended adoption of HPV testing/self-sampling to increase coverage and ablative treatment of all HPV-positive women to reduce loss to follow up.

Conclusions
Continued success in engagement of stakeholders in shared decision making, including current development of a detailed implementation plan using similar user-centered design, suggests that using a SPF in designing implementation strategies increases a sense of ownership in the process, which may lead to more sustainable screening programs in LMIC compared with ‘top-down’ approaches.

References

Session C4 - Driving the School Bus: Exploring Applications of Implementation Science in School and Community Settings

Location: Room 145
Chair: Elizabeth Connors¹
Discussant: Lisa Sanetti²
¹Yale School of Medicine, ²University of Connecticut

Talk 1: A Secondary Analysis of Longitudinal State-Level Support for School-Based Health Centers Mental Health Services

Tatiana Bustos¹, Amy Drahota¹, & Kaston Anderson-Carpenter¹
¹Michigan State University

Background
More than 20% of children in the U.S. experience mental health difficulties, with only about 30% receiving adequate mental health (MH) treatment. Moreover, MH service disparities are disproportionate among children who live in low-income areas [1-2]. School-based health centers (SBHCs), a comprehensive service delivery model integrating physical and MH services within school settings, reduce healthcare access barriers by functioning as medical centers for children in low-income areas. While many SBHCs in the U.S. offer some type of MH service, not all centers are equipped to provide needed MH services. MH service variations may be attributed to state-based policies, including funding, oversight support and standards. These outer contextual factors are thought to influence MH service provision by contributing to expansion and sustainment of services over time [3-7]. This study aimed to examine how state-based outer contextual variables influence the number of SBHC-reported MH services over time.
ABSTRACTS

Materials and Methods
The external policy and incentive domains of the Consolidated Framework for Implementation Research (CFIR) were used to organize the secondary data analysis of the State Policy Survey, a survey administered to policymakers knowledgeable of SBHC criteria within each state. Specifically, state-based policymakers reported state support for SBHC funding, oversight and policies over four time-points: 2005, 2008, 2010, and 2014, while SBHC personnel reported the number of MH services at these time-points. A total of 4,232 SBHCs within 41 states were included in the study. To account for inter-dependent groups of SBHCs within states, a linear mixed model analysis (LMM) was conducted to identify key variables within the domain of external policy and incentives that were significantly related to the number of SBHC-reported MH services from 2005-2014.

Results
Results indicated significant variations in the number of SBHC-reported MH services, accounted by state and time. Notably, most outer contextual variables, with the exception of state general funds on substance use treatment and referral services, were significantly associated with more MH services over time. Findings suggest that there are significant relationships between external policies and the number of MH services being delivered by SBHCs. However, these outer contextual variables had differential impacts depending on MH service type.

References

Talk 2: Teacher Perspectives on the Development of the Beliefs and Attitudes for Successful Implementation in Schools for Teachers (BASIS-T)
Andrew Thayer1, James Merle1, Madeline Larson1, Jenna McGinnis1, Clayton Cook1, & Aaron Lyon2
1University of Minnesota, 2University of Washington

Background
Implementation barriers exist at all levels of service provision within an organization, yet implementation is ultimately dependent on individuals [1]. Converging lines of research have demonstrated that individual beliefs
and attitudes are associated with implementation outcomes [2-3]. Active-implementation strategies targeting individuals can be effective for preventing implementer drift, yet they occur after implementation is underway. Pre-implementation strategies occurring prior to uptake may be effective in aligning beliefs and attitudes resulting in positive shifts in individuals’ contemplation and intention for implementation [4]. Historically, pre-implementation strategies have produced low implementation outcomes, especially when lacking a strong theoretical foundation [5]. The purpose of this study was to collect stakeholder feedback on the development of a blended pre-implementation strategy, Beliefs and Attitudes for Successful Implementation in Schools for Teacher (BASIS-T), to precede an evidence-based training in classroom management.

Materials and Methods
Twenty-two teachers and support staff from three Midwest school districts of diverse urbanicity engaged in a 3.5 hour demonstration of BASIS-T, which is grounded in the Theory of Planned Behavior [4], thus targeting teachers’ attitudes, social norm perceptions, and self-efficacy beliefs. Throughout the demonstration, teachers rated each segment for its acceptability and impact on shifting beliefs and attitudes. Participants completed pre- and post-ratings of their own beliefs, attitudes, and intentions, engaged in a nominal group process to elicit feedback for revising the strategies, and answered open-ended questions.

Results
Participant feedback from nominal group processes highlighted modifications to the pre-implementation strategy to improve its impact on beliefs, attitudes and implementation. Participants identified a need for more evocative and engaging activities to better encode the importance of EBP implementation, bolster their self-efficacy, and address social norm perceptions. Average ratings indicated BASIS-T content was highly impactful and acceptable. Relatively lower-rated segments were considered for revision.

Conclusions
Pre-implementation strategies represent potentially useful techniques for aligning providers’ beliefs and attitudes prior to implementation to facilitate better adoption. Stakeholder feedback is an effective method for informing the development of these strategies. The results of this demonstration study provided several recommendations and guidelines for how to build effective, school-based pre-implementation strategies to boost EBP adoption.

References
ABSTRACTS

Talk 3: Understanding Successful Implementation of School-Based Behavioral Health Services: A Longitudinal Study of Implementation Barriers and Facilitators

Enya Vroom¹, Amanda Weston¹, & Oliver Massey¹
¹University of South Florida

Background
Frequently, effective programs are not readily adopted and there are often significant barriers to the translation of theoretically sound best practices into workable programs in the field [1-2]. Evaluating the implementation of large-scale behavioral health initiatives within schools is essential for identifying the factors that are fundamental to success as well as the barriers that cause challenges to implementation. While research and evaluation has begun to identify the challenges associated with successful implementation of large-scale programs, there is a sparsity of evaluation that has tracked implementation overtime, between organizational levels, and how barriers and challenges to implementation change as program efforts mature.

Materials and Methods
Capitalizing on a national evaluation of a school-based behavioral health (SBBH) initiative, the purpose of this study was to analyze qualitative interview data to assess unique barriers and facilitators that arise across time and organizational levels in the implementation of a SBBH initiative. From a total of 153 qualitative interviews, eight interviews from each of the three years and two organizational levels were randomly selected from the three-year evaluation (n=48). Trained raters independently coded qualitative transcripts. Thematic analysis was used to create codes based on a priori interview protocol themes and themes that emerged from the data.

Results
Twelve transcripts were randomly selected to assess inter-rater reliability. Percent agreement indicated good to excellent inter-rater agreement (87%) [3]. Major themes that remained significant over time and between organizational levels were collaboration/communication, state and local level policies and systematic barriers, workforce issues, and funding. Certain themes, such as data informed decision-making and sustainability, rose or fell in significance over time. While several themes remained important over time and between levels, certain themes such as communication, collaboration, and funding changed significantly in the way they were conceptualized.

Conclusions
The results will advance understanding of how implementation issues change over time and organizational level and provide insight regarding the factors that promote successful integration of SBBH initiatives. This study informs practitioners and researchers regarding the process by which implementation occurs in the real world and enables us to better address barriers and facilitators for a more effective and efficient implementation process.

References
Talk 4: Randomized Trial to Optimize a Brief Online Training and Consultation Strategy for Measurement-Based Care in School Mental Health

Aaron Lyon¹, Freda F. Liu¹, Jessica I. Coifman¹, Heather Cook¹, Kevin King¹, Kristy Ludwig¹, Amy Law¹, Shannon Dorsey¹, & Elizabeth McCauley¹
¹University of Washington

Background
Pragmatic and streamlined implementation strategies are necessary for efficient quality improvement [1]. Training and post-training consultation are cornerstone implementation strategies [2], but are often lengthy and resource-intensive [3]. Further, few studies have evaluated their mechanisms of action [4]. Development and optimization of these strategies requires attention to (a) user experience, to ensure that the strategy is compelling and easy to use; and (b) strategy effectiveness, to ensure that the strategy influences its targeted mechanisms of action. This presentation will present findings from a project that designed and tested a brief, multifaceted online training and post-training consultation strategy to target each strategy’s putative mechanisms of action and support measurement-based care (MBC) practices among school-based mental health clinicians.

Materials and Methods
Iterative development of the online training and post-training consultation strategies involved gathering stakeholder input via four rounds of usability testing and two group cognitive walkthrough sessions with representative clinician users. This culminated in randomized trial in which 77 geographically diverse school-based mental health clinicians were randomized to (1) implementation as usual (IAU; no training or consultation, n = 40), or to online training plus one of three consultation dosages: (2) 2 weeks, (3) 4 weeks, or (4) 8 weeks. Consultation included live consultation video calls (once every two weeks) and asynchronous message board discussion. Following training, training mechanisms (knowledge, attitudes, skill), consultation mechanisms (collaboration, responsiveness, accountability), and self-reported clinician MBC practices were tracked for 16 weeks.

Results
Preliminary analysis (multilevel modeling) showed that online training led to an immediate increase in MBC knowledge relative to controls (β= .06, p<.05). Following consultation, participants demonstrated greater growth in self-reported MBC skills (β=.028, p<0.01) and attitudes (e.g., perceived benefit of MBC, β=.028, p<0.05) and superior MBC practices (e.g., use of standardized and individualized assessments, β=.013, .032, respectively, p<0.01). Clear consultation dosage effects have yet to emerge from preliminary analyses with 16 (of 32) weeks of follow-up data. It is possible that the consultation groups may become more disparate with longer follow-up.

Conclusions
Few studies have examined implementation strategy mechanisms of action. The current findings suggest that the online training and consultation package influenced many of its target mechanisms and also lead to higher MBC practices among school mental health clinicians than IAU. Thus far, preliminary results suggest that shorter durations of consultation may be comparable to longer durations.

References
IGNITE SESSION - The Winding Roads of Implementation Science in Action
Location: South Ballroom

IGNITE 1 - Implementing Service Cascade Models with Fidelity: A Case Study of Cross-System Collaboration Strengths and Challenges
Alicia Bunger¹, Christy Kranich¹, Susan Yoon¹, & Lisa Juckett¹
¹Ohio State University

Service cascade models move individuals across systems through a sequence of screening, assessment, referral, treatment, and monitoring activities. Successful implementation depends on strong collaboration and change across systems, but these models have received limited empirical attention. This case study examines fidelity of a cascade model implemented across child welfare and mental health systems (intended to improve children’s access to specialty mental health care), and identifies collaboration strategies and challenges at each stage. Fidelity to initial mental health screening and assessment was high and attributed to service co-location, collaborative workflow planning, and linked data systems. However, fidelity to referral/treatment components was low and associated with case planning challenges, contract disruptions, and workforce shortages. Our findings suggest that fidelity breakdowns at any point in the service cascade can negatively affect clients’ access to services, especially during key service transitions. Implementing these models likely depends on cross-system collaboration approaches that align front-line practice and agency operations at each stage of the model.

References

IGNITE 2 - A Pragmatic Method for Costing Implementation Strategies Using the Time-Driven Activity-Based Costing
Zuleyha Cidav¹, Jeffery Pyne², Geoffrey Curran², David Mandell¹, Rinad Beidas¹, Jennifer Mautone¹, Ricardo Eiraldi¹, & Steven Marcus¹
¹University of Pennsylvania, ²University of Arkansas for Medical Sciences

Strategies to implement evidence-based practices consume scarce resources and incur costs. Although critical for decision makers with constrained budgets and limited resources, such resource use and cost information are not typically reported. This is at least partly due to a lack of clearly defined and standardized costing methods for use in implementation science. This study presents a pragmatic approach to systemically estimating resource use and costs of implementation strategies using a well-established business accounting system. The method is demonstrated by estimating the first-year implementation costs of a group-based cognitive behavioral therapy program for students with externalizing disorders in six Philadelphia schools.

Time-driven activity-based costing (TDABC) is combined with the existing guidelines for implementation strategy
specification and reporting. Implementation protocol, measures, project notes and key personnel interviews were used to map the implementation process by specifying the strategies with their actors, specific action steps, temporality, and dose. The dose is defined for each action step as the person-hours invested in its completion, and accounts both for frequency and intensity of the action step. Implementation strategy dose is the sum of person-hours on each action step that constitute the strategy. Project resources are identified, and the price per unit person-hour is calculated as per the TDABC. Costs of action steps, strategies and implementation project is reported from a payer perspective.

Estimated total cost was $63,842; $10,640 per school. The largest cost incurred was for the communication efforts ($30,691), which involved in-person meetings, phone calls, and email exchanges. Next largest costs were for the stakeholder engagement, consultation/coaching, and supervision, which comprised 19%, 15%, 12% of total costs, respectively. Assessment/evaluation and training constituted the smallest costs, at 4% and 3% respectively.

This method allows for inclusion of implementation costs in the efforts of strategy specification, tracking and reporting. It serves as a pragmatic tool to operationalize the conduct of the implementation activities, track the resources consumed and estimate associated costs. It could facilitate the routine incorporation of cost analysis and economic evaluations into implementation research. It provides granular cost information which could be used to identify and address the inefficiencies in the implementation process.

References

IGNITE 3 - Shared Goal, Different Languages: Communication between Implementation Researchers and Social Entrepreneurs
Enola Proctor¹, Rachel Tabak¹, Cole Hooley¹, Virginia McKay¹, & Emre Toker²
¹Washington University in St. Louis, ²Arizona State University

Background
Implementation science and social entrepreneurship share a common objective of maximizing the uptake of new practices and innovations. Both disciplines offer complementary tools which could be leveraged to improve the ultimate impact of innovations, their scale-up, and sustainment. For example, entrepreneurship’s focus on market assessment, financial outlook, etc. can be coupled with implementation science use of data, models, and methods. However, communication between these fields has been limited. To explore how these complementary groups might learn from each other, this paper presents data about how implementation researchers understand and respond to the kinds of questions entrepreneurs ask about innovation roll-out.

Materials and Methods
We conducted one-on-one cognitive interviews [1] with 15 dissemination and implementation researchers recruited from training programs in implementation science to capture their ability to understand and answer key questions
ABSTRACTS

from entrepreneurs and refine a tool to support dialogue. Participants were guided through the tool item-by-item. Prompts from the interviewer helped identify problems with question clarity and comprehension. A summary of the responses was developed to identify problematic elements and identify revisions necessary to improve clarity. The discussions tapped the researchers' perception of demand for the innovation, estimates of benefit, knowledge of who would pay, sustainment challenges, and comfort working with business and entrepreneurial partners.

Results

Implementation researchers understood and were able to answer questions about the problem their innovation seeks to solve, their roll-out plans, and stakeholders and team members involved. They reported the following types of questions as easy to understand but hard to answer: who would pay for the innovation, numbers of people who would benefit, and how to sustain the innovation once adopted. Researchers varied in their comfort with technology supports and business/entrepreneurial partnerships.

Conclusions

Entrepreneurial partnerships can provide important supports to successful implementation and sustained delivery of interventions, including technology supports, market analysis, and financial investment. Implementation researchers understand the types of questions entrepreneurs pose about their projects, but find those questions difficult to answer, suggesting the importance of establishing interface between these fields. Tools to prepare researchers to interact with entrepreneurs could take these factors into account to facilitate communication between audiences.

References


IGNITE 4 - Making it Happen: Implementation Efforts for Systems Level Change in Child Welfare

Melissa Bernstein1, Brent Crandal1, Gregory Aarons2, & Kimberly Giardina3
1Rady Children’s Hospital, 2University of California San Diego, 3County of San Diego Health and Human Services

If diffusion is “letting it happen,” and dissemination is “helping it happen,” implementation is the business of “making it happen” (NIH Collaboratory, 2016). To make change happen within large systems, relationships between implementation scientists, intermediaries, and system leaders are created. These relationships, which serve as the vehicle for translating science into practice, are often understated and under examined. This panel presents two initiatives designed to implement best practices within a large child welfare service system focused on all three perspectives: system leadership, presented by Kimberly Giardina, MSW; implementation science, presented by Greg Aarons, PhD., and intermediary implementation, presented by Brent Crandal, PhD., and Melissa Bernstein, PhD.

The two system changes that will provide context for this panel include, first, the Advancing California’s Trauma Informed Systems (ACTS) Initiative. ACTS was developed to create collaborative partnerships with child-welfare county leaders across California to advance trauma- and evidence-informed system change through implementation planning, followed by technical assistance, training, outcome monitoring, and sustainment planning. Second, the Community-Academic Partnerships for the Translational Use of Research Evidence (CAPTURE) project explores how research can be used to improve child welfare policy, programs and practices through a partnership between the University of California at San Diego (UCSD) and the County of San Diego, Health and Human Services Agency, Child Welfare Services. Using a mixed-methods research design, CAPTURE examines
the processes that shape instrumental and conceptual use of research evidence (URE) and investigates how change mechanisms influence URE.

Guided by the Exploration, Preparation, Implementation, Sustainment (EPIS) implementation framework, we will highlight the translation of implementation science into concrete strategies used to create change within a child welfare system, including leadership engagement, team development, data utilization, stakeholder involvement, quality improvement methods, and the use of consultation.

References:

IGNITE 5 - A Multiple Case Study of a Tailored Approach to Implementing Measurement-Based Care for Depression

Byron Powell¹, Meredith Boyd², Hannah Kassab³, & Cara Lewis⁴

¹Washington University in St. Louis, ²University of California, Los Angeles, ³Ohio University, ⁴Kaiser Permanente Washington Health Research Institute

Introduction
Tailoring implementation strategies to site-specific determinants (barriers and facilitators) is a promising way of improving implementation and clinical outcomes.¹ However, more empirical work is needed to determine whether tailored approaches to implementation are more effective than standard multifaceted strategies, and to develop optimal methods for linking implementation strategies to identified determinants.² The NIMH-funded “Implementing Measurement-Based Care (iMBC) for Depression in Community Mental Health” study addressed these gaps by comparing a standard multifaceted strategy to a tailored approach to implementation in a dynamic cluster randomized trial.³ This study draws upon data from the intervention group (i.e., tailored condition) of the iMBC study to 1) describe how clinics tailored implementation strategies to site-specific barriers, and 2) evaluate the extent to which the implementation strategies they used could plausibly address identified determinants.

Materials and Methods
The six clinics in the tailored condition were compared to each other using a multiple case study design. Descriptions of each clinic’s approach to tailoring, the determinants they attempted to address, and the implementation strategies they used were derived from recordings and notes from implementation team meetings across five months. Determinants were deductively coded using the Consolidated Framework for Implementation Research (CFIR) [⁴] and implementation strategies were deductively coded using an established taxonomy [⁵]. Plausibility of linkages between barriers and strategies was determined in two ways. First, two authors independently rated plausibility using a 5-point Likert scale. Second, each strategy-determinant linkage was compared to the results of a previous study that established preliminary linkages between CFIR determinants and implementation strategies [⁶].

Results
Four of the six clinics prioritized barriers identified quantitatively during the needs assessment phase of the study, and explicitly selected implementation strategies to address them. Clinics reported using an average of 39
implementation strategies, which were categorized into 26 of the 68 discrete implementation strategies identified by Powell et al. [7]. Plausibility of the linkages between barriers identified and strategies selected will also be presented.

Conclusions
This study contributes to implementation science and practice by highlighting strengths and weaknesses of community mental health clinics’ approaches to tailoring implementation strategies, and by suggesting ways in which methods for tailoring could be improved.

References

IGNITE 6 - Systematic Adaptation of Evidence-Based Interventions: An Intervention Mapping Approach

Maria Fernandez1, Cam Escoffery2, Maya Foster1, & Patricia Mullen1
1University of Texas School of Public Health, 2Rollins School of Public Health, Emory University

Evidence-based public health translation of research to practice is essential to improving the public’s health. Adaptation of evidence-based interventions (EBIs) to promote health and prevent disease is an essential process for implementation and dissemination research and practice. Challenges faced in practice include identifying EBIs that are suitable for new populations and settings and adapting them to fit needs. A recently published scoping review by our team summarized 13 adaptation frameworks and identified common steps to guide the adaptation process [1]. We also conducted a systematic review of adapted interventions and described reasons for adaptation according to previously identified categories [2-3]. These studies have shown that while many examples and adaptation models exist, they provide only limited guidance on how to make decisions about what should change and what should remain the same.

We present a framework based on the Intervention Mapping protocol that provides step-by-step guidance on
selection and adaptation of EBIs [4-5]. The process includes the development of a logic model of change (LMC) based on the community assessment. A LMC is a diagram of what that describes the relationship between changes needed in determinants, behavior and environment to bring about improvements in health and quality of life. The LMC is then compared with the basic features of available EBIs (determinants addressed, resources needed, etc.) to assess potential fit with the new population or setting. Following selection, planners further examine the internal logic of the EBI including the behaviors and environmental conditions that were the targets of the original EBI, the determinants addressed, and the change methods and/ or strategies used. Planners then compare the EBI features to the LMC to determine what needs to be adapted while maintaining change methods used in the original intervention since these often represent the intervention’s core elements. We describe the development and testing of an online tool (I M ADAPT) for finding and adapting evidence based interventions for cancer control. We also describe how we are applying Intervention Mapping and the online tool in a project to improve the use of interventions from the National Cancer Institute’s Research Tested Intervention Programs (RTIPs) resource.

References

IGNITE 7 - Co-Creation of Change in Policy and Practice: The Community Academic Partnership for Translational Use of Research Evidence (CAPTURE)

Gregory Aarons¹, Kimberly Giardina², Danielle Fettes³, Margo Fudge², & the CAPTURE Steering Committee

¹University of California, San Diego, ²Child Welfare Services - County of San Diego Health & Human Services Agency, ³Child and Adolescent Services Research Center

Background
Youths in the child welfare (CW) system face a myriad of poor outcomes with regard to social/emotional development and behavioral health. While there is research evidence relevant for CW services, integration and use of such evidence in policy, planning, and service delivery is limited. The Community Academic Partnership for Translational Use of Research Evidence (CAPTURE), is a community-academic partnership to increase use of research evidence in policy, programs, and practice. Guided by the Exploration, Preparation, Implementation, Sustainment (EPIS) framework, CAPTURE engages outer context system level stakeholders, inner context organizational stakeholders and academic partners in a bidirectional partnership. The aims of CAPTURE are: 1) To establish and test the use of a partnership model to increase use of research evidence (URE) in policy, program, and practice, and 2) To identify key mechanisms by which CAPTURE operates including - but not limited to - cultural exchange between researchers and community partners, leadership and organizational change, and use of quality improvement methods to test and put goals into practice.
Materials and Methods
Mixed-methods will provide a detailed and nuanced understanding of the process of collaboration and URE in a large public sector service system, and describe the complexity of instantiating URE across system and organization levels. Quantitative data assessing cultural exchange, leadership and climate for URE are being collected by online surveys of providers and stakeholders. Qualitative methods include interviews, focus groups, observation of CAPTURE meetings, and document review.

Conclusions
Community-academic partnerships are a promising approach to improving collaboration and integrating research evidence in decision making for policy and practice. A better understanding of ways to develop and establish community-academic partnerships can help to promote their use in other settings.

References

IGNITE 8 - Developing a Strategic Implementation Research Plan Within an Integrated Healthcare System
Sara J. Landes1,2, JoAnn Kirchner1,2, Mark Bauer1,3, Christopher Miller1,3, Mona Ritchie1,2, & Jeffrey Smith1,2
1Behavioral Health QUERI, 2Central Arkansas Veterans Healthcare System, 3VA Boston Healthcare System

Background
The US Department of Veterans Affairs (VA) Quality Enhancement Research Initiative (QUERI) funds quality improvement and program evaluation studies to support implementation and evaluation efforts needed to improve healthcare for our nation’s veterans [1]. QUERI funds programs that focus on areas of care and/or implementation strategies. The Behavioral Health QUERI program, one of 15 currently funded programs, has developed a structured method for strategic planning to match program priorities and implementation research projects with priorities of stakeholders and the healthcare system. Embedded with the organizational structure of the Behavioral Health QUERI are a Stakeholder Council (SC) comprised of veterans of all eras, family members, providers, and local and regional leadership; and a Strategic Advisory Group (SAG) comprised of national healthcare leaders.
inside and outside of VA and veteran representatives.

Materials and Methods
The strategic planning methods are iterative and include stakeholders from multiple levels of the national healthcare system (e.g., providers, leadership at various levels, veterans, and subject matter experts). The strategic planning methods include identification of priorities of the healthcare system, creation of a planning committee, development of a key stakeholder interview, and identifying key informants. Stakeholder interviews are conducted across multiple layers of the organization (e.g., veterans, local medical center, network level, and national leadership). Qualitative data are synthesized across key question domains and findings are matched to existing initiatives and/or research opportunities by the planning committee. Priorities and potential projects are identified and prioritized with the SC and SAG. These are vetted with a sample of the initial key informants.

Results
Behavioral Health QUERI is currently conducting strategic planning. VA priorities have been identified by the SC and SAG. Stakeholder interviews have been completed with three network leaders and three national leaders (mental health operations, suicide prevention, and technology). Results of themes will be presented, with a focus on how to conduct strategic implementation research planning in collaboration with a variety of stakeholders.

Conclusions
Strategic implementation research planning is critical to developing a research plan that both helps the healthcare system move forward in its goals and advances implementation science.

References
Session D1 - Bridging the Implementation Research to Practice Gap: Exploring Collaboration and Solutions Between Researchers, Policy-Makers and Funders, Implementation Supports and Implementing Organisations

Location: Room 214

Chair: Jacque Brown

Discussant: Aaron Lyon

Panelists: Byron Powell, Jenna McWilliam, & Arthur Evans

1Families Foundation, 2University of Washington, 3University of North Carolina, Chapel Hill, 4Triple P International, 5American Psychological Association

The intersection between the various perspectives is critical in influencing the extent to which implementation science can be translated into implementation practice. At this juncture of the development of implementation science it is critical that we develop the capacity to integrate the knowledge from each perspective to ensure that implementation science achieves its ultimate goal of “bridging the gap”. Collaboration will promote the awareness, understanding and ability to consider all perspectives whilst further developing the science and supports for application of implementation science.

Having explored the “constructive tension” between implementation researchers/intermediaries/purveyors/implementing organisations at GIC 2017, at which themes were identified that reflected the challenges between implementation science and implementation practice, the themes were furthered discussed at Global Evidence and Implementation Symposium, 2018. Greater insight was generated into the challenges for each perspective and how they might be addressed.

The panel proposed for SIRC 2019, with active participation from the attendees, will build on the previous discussions. This participatory discussion will focus on solutions, exploring and developing potential next steps to address identified barriers, and build on existing partnerships across perspectives.

The session will open with a brief reference to information gathered at the previous two sessions. Each panelist will then offer thoughts from their perspectives on what might promote greater integration between each perspective.

Following the brief presentations, the floor will be opened for a facilitated discussion framed around three questions:
1) What are the actions we can take to increase the collaboration between the various contributors to implementation science and practice?
2) What are the barriers you experience that might interfere with these actions?
3) What are the opportunities/enablers you could use to promote collaborative development of implementation science and practice? The session will close with a summary from the discussant.

The objectives for the panel discussion include:
1) Increasing awareness of the needs, challenges and opportunities for collaboration across perspectives
2) Identifying priorities for research and partnerships for action
3) Confirm 3 areas for action for 2019 - 2021

This is a single theme symposium with brief presentations from the panelists followed by open-floor discussion.
Session D2 - The Intersection of Implementation Science and Healthcare Policy and Systems

Location: Room 332

Chair: Madeline Larson
Discussant: Erin Finley

1University of Minnesota, 2South Texas Veterans Health Care System, 3University of Texas Health Science Center at San Antonio

Talk 1: HealthLinks: Evaluation Challenges and Learnings from Three Organisational Perspectives

Norm Good & Philippa Niven

Health care systems across the developed world are currently facing a similar set of challenges. Populations are ageing and chronic illnesses are becoming more prevalent. A relatively small subset of complex patients with chronic medical conditions account for a large proportion of hospital re-admissions and consume a significant number of hospital resources [1]. HealthLinks Chronic Care (HLCC) is an initiative undertaken by the Victorian Department of Health and Human Services (DHHS) to provide a flexible funding model for participating hospitals to convert projected inpatient costs towards new or improved patient centred models of care with the aim of reducing unplanned hospital admissions. Six health services within Victoria, Australia have implemented a new or improved model of care unique to their health service needs and the demographic profile of their patient population with an extra three acting as controls. DHHS contracted the Commonwealth Scientific and Industrial Research Organisation (CSIRO) to work on a cosponsored system level evaluation of HLCC. The evaluation is based on the RE-AIM framework [2] and uses a comprehensive mixed methods approach including analysis of routinely collected hospital data using a BACI design [3], a quality of life patient survey, workforce interviews and costings data.

The overall aim of the HLCC evaluation is to determine if flexible funding enables health services to develop and implement alternative models to inpatient acute care that provide better experiences and outcomes for patients with chronic conditions, at equal or lower cost. This session will provide an overview of HLCC and aims to describe key challenges and learnings of the trial from three different perspectives:

- DHHS - policy developers/funders: Implications of a pragmatic approach to implementation will be discussed, including the pros and cons of having implemented the trial at several health services and allowing tailored intervention models.
- Health Services - implementers: Results from qualitative focus groups assessing workforce perceptions of key barriers and enablers to implementation will be presented.
- CSIRO - evaluators: The feasibility of evaluation frameworks in a data driven environment will be discussed, including how data lags, data availability and outcome measures impact reporting and short-term policy decisions.

References

Kimberly Pratt¹, Briana Todd¹, Angela Gray¹, & Jorielle Houston¹
¹Psychological Health Center of Excellence, Defense Health Agency

Background
Integrating evidence-based practices into clinical care is essential for mission readiness. However, research demonstrates, that despite the availability of effective clinical interventions, service members frequently do not receive guideline-concordant care that reflects the uptake of the most recent scientific advancements [1]. To improve the access, quality, effectiveness, and efficiency of psychological healthcare for veterans and service members, the Department of Defense (DoD) established the Practice-Based Implementation (PBI) Network. The PBI Network engages healthcare administrators and providers in implementation pilots to evaluate the feasibility and acceptability of DoD-wide implementation of an evidence-based clinical practice, and develops solutions to any implementation challenges that could impede successful uptake and sustained use of the practice change. The purpose of this presentation is to review the PBI Network’s process for mapping implementation strategies to barriers in the Military Health System (MHS).

Materials and Methods
This presentation will review a case study showcasing the PBI Network’s efforts to partner with DoD leadership, clinicians, and researchers to enhance access to evidence-based practices in the MHS. The case study will demonstrate the PBI Network’s use of Intervention Mapping (IM) [2] guided by the Consolidated Framework for Implementation Research (CFIR) [3] and the Integrated Promoting Action on Research in Health Services (i-PARIHS) [4] frameworks to develop an implementation program that strategically addresses the unique challenges facing military health providers and leaders.

Results
Time constraints, multiple competing demands, and limited resources [5-6] are significant barriers to the uptake and adoption of evidence-based practices in the MHS. Many implementation strategies can be leveraged to overcome these barriers and effectively implement evidence-based practices in the MHS.

Conclusions
Implementation of evidence-based intervention is a complicated process. It has been suggested that implementation strategies should be selected and tailored to address the contextual needs of specific efforts; however, there is limited guidance as to how to do this. The PBI Network’s experiences provide insight into methodologies for mapping implementation strategies to address the complex barriers to implementation in the MHS which may have broad application to other similar complex healthcare systems.

References
Talk 3: Measuring the Fidelity of Implementation Facilitation in a Primary Care Integrated Pain Support (PIPS) Program

Steve Martino¹², Amanda Midboe³, Alicia Heapy¹, Sarah Krein¹⁵, Fenton Brenda¹, Robert Kerns¹, & William Becker¹

¹ Yale University, ² VA Connecticut Healthcare System, ³ VA Palo Alto Health Care System, ⁴ VA Ann Arbor, ⁵ University of Michigan

Background
Implementation of Primary Care Integrated Pain Support (PIPS) – a pharmacist-primary care provider collaborative care program to support reduction of high-risk medication regimens and use of non-pharmacological pain treatment – entails an implementation facilitation approach that includes an external facilitator, internal facilitators and champions. We developed an implementation facilitation fidelity measure for use in a PIPS hybrid effectiveness-implementation trial being conducted at three VAs.

Materials and Methods
Members of the research team compiled and operationalized a list of implementation strategies planned for use in PIPS from the Expert Recommendations for Implementing Change project. Internal facilitators and champions reviewed and revised the list with the research team until consensus was reached. Internal facilitators and champions were trained on the measure and then independently rated eight vignettes prepared by the research team, varying in the presence or absence of 14 implementation items. We calculated the proportion of correct item identification per rater within and across vignettes and the sensitivity and specificity of the raters’ judgment for each item. We also tracked the use of implementation facilitation strategies over the course of PIPS implementation.

Results
The final consensus-based measure consisted of 5 items that capture interactions among the external facilitator, internal facilitators, and champions (e.g., team calls, engaging the external facilitator) and 9 items that detail specific implementation strategies, which might be used to implement PIPS (e.g., problem-solving, providing technical assistance). Three internal facilitators and four champions across three sites rated the vignettes. The proportion of items correctly identified across all vignettes was good to excellent per rater (73-93%) and consistent between raters within each vignette. Sensitivity and specificity was good for most items (> 75%). Problem-solving dominated implementation facilitation throughout the PIPS trial.

Conclusions
A broad-based implementation facilitation approach is widely-used in the VA. Reliable and valid measurement of implementation strategies during a trial is critical to ascertain what occurred within an implementation facilitation approach and how the strategies relate to implementation outcomes. Our fidelity measure is a promising tool for tracking the use of implementation strategies within an implementation facilitation approach over time.

References
Talk 4: Applying Implementation Science Frameworks to Evaluate the Whole Health System of Care Transformation in VA: Measuring the Highway While It's Being Built

Barbara Bokhour1, Justeen Hyde1, & Steven Zeliadt2

1VA Center for Healthcare Organization and Implementation Research, 2Seattle-Denver Center of Innovation for Veteran-Centered & Value-Driven Care

The US Department of Veterans Affairs (VA) is implementing a complex intervention to radically change how healthcare is delivered to our nation’s Veterans. This novel Whole Health System of Care (WHS) aims to shift care from a disease-focused ‘find-it, fix-it’ model to person-focused care driven by patients’ personal health goals. It gained momentum in 2016 when the WHS was incorporated into the strategic plan providing alternative treatment for chronic pain as VA’s response to the Comprehensive Addiction and Recovery Act. The VA’s Office of Patient Centered Care and Cultural Transformation (OPCC&CT) developed three components of the WHS: 1) Peer-led programs to help Veterans identify their personal health goals; 2) Complementary integrative health and whole health coaching to help Veterans build skills for self-care; and 3) Clinical Care focused on treatment aligned with patients’ personal health goals. Understanding the impact of the WHS requires the use of implementation science frameworks and concepts to examine transformations in care and associated outcomes. Implementation studies are often focused on discrete interventions; however, in this complex system-level intervention, the goal is to transform the entire culture of the VA to provide proactive, personalized, patient-driven care. We are conducting a mixed-method evaluation of this constantly evolving complex intervention at 18 flagship VA medical centers. Critical to this endeavor is understanding patient, provider and system level outcomes in the context of varying levels of WHS implementation. In this panel, we will describe this large-scale evaluation and the challenges presented in measuring a program as it’s being built. We will 1) provide a conceptual model for WHS and describe how OPCC&CT’s plan for implementation aligns with proven implementation strategies (Barbara Bokhour); 2) describe the evaluation design to understand the impact of WHS implementation on patient, provider and system level outcomes (Barbara Bokhour); 3) present findings from the study of WHS implementation based on the stages of implementation completion framework (Justeen Hyde); and 4) present findings from a study of the impact of WHS implementation on cost and healthcare utilization (Steven Zeliadt). Rani Elwy will then lead a discussion about the role of implementation science in evaluating policy-driven innovations.

References
Talk 1: Hybrid Implementation Trials as a Platform for Adapting a Mental Health Intervention for Latinx Children with ASD in Publicly-Funded Mental Health Services

Eliana Hurwich-Reiss\textsuperscript{1,2}, Colby Chlebowski\textsuperscript{1,2}, Kassandra Martinez\textsuperscript{1,2}, & Lauren Brookman-Frazee\textsuperscript{1,2}

\textsuperscript{1}University of California, San Diego, \textsuperscript{2}Child and Adolescent Services Research Center,

Background
Fit of evidence-based interventions (EBIs) with community stakeholders is a key determinant of implementation outcomes. Systematic adaptations are important for enhancing acceptability and sustainability without compromising effectiveness. Ethnic minorities are less likely to receive EBIs and have higher premature termination. Disparities for Latinx children with Autism Spectrum Disorder (ASD) indicate that adapting EBIs for this population may be needed. Hybrid implementation trials offer a platform to identify adaptation targets and test adaptations on implementation outcomes [4]. This presentation aims to: 1) describe adaptation targets for Latinx families from qualitative methods in a Hybrid Type-1 effectiveness trial; 2) describe the community-partnered adaptation process; and 3) provide quantitative pilot data on identified targets from the follow-up Hybrid Type-3 implementation trial.

Materials and Methods
Qualitative data to identify adaptation targets were collected in the context of a community effectiveness trial of AIM HI (An Individualized Mental Health Intervention for Children with ASD), a mental health intervention for children with ASD. Participants included 17 therapists and 29 parents participating in focus groups and interviews. Quantitative data from 35 therapists were collected from a pilot study embedded within a hybrid implementation trial.

Results
The following adaptation targets were identified through qualitative data from the effectiveness trial: increase parents' ASD knowledge, improve therapist confidence/competence delivering AIM HI to Latinx parents, and strengthen the parent-therapist relationship. Findings were used in a community-partnered process to create the AIM HI EQUIPO toolkit, which includes enhancements to therapist training, intervention materials and implementation. Baseline data from the pilot trial of EQUIPO enhancements, embedded within the implementation trial showed low therapist (0 not at all – 4 extremely) knowledge and confidence (M=1.81; SD=.95; M=1.79; SD=.89) delivering psychotherapy to families with limited English and moderate parental ASD knowledge (M=69% correct; SD= 18%).

Conclusions
This study incorporated stakeholder perspectives through a sequential mixed-method approach to enhance AIM HI for Latinx families. This presentation highlights how Hybrid Type-1 trials can be used to inform adaptations that can later be evaluated within Hybrid Type-3 trials. Next steps are to look at changes in intervention targets and implementation outcomes for standard AIM HI and AIM HI + EQUIPO.
Talk 2: Optimizing Public Health Interventions by Using Mechanistic Evaluations: A Case Example from a School-Based Physical Activity Implementation Trial

Hopin Lee¹, Nicole Nathan², Kirsty Hope², & Luke Wolfenden²

¹University of Oxford, ²University of Newcastle

Background
Public health implementation strategies often comprise of multiple components that are combined and delivered as a complex intervention [1]. Within a complex social-ecological system, there are multiple mechanisms by which an intervention could have its effect on the distal implementation outcome. To successfully implement health policies, the implementation strategy must collectively have a causal effect on the mechanisms that drive successful implementation [2]. Understanding these mechanisms are critical to optimizing and scaling complex implementation strategies [3]. The study aim was to understand the mechanisms of a complex implementation strategy on increasing physical activity minutes scheduled by school teachers in New South Wales, Australia [4].

Materials and Methods
We conducted a causal mediation analysis [5-6] of a cluster randomised controlled trial conducted in 62 primary schools. Schools were randomly allocated to receive either a complex implementation strategy that included; obtaining executive support, provision of tools and resources, implementation prompts, reminders and feedback; or usual practice. The primary trial outcome was the average minutes of physical activity scheduled by teachers across the school week at 12 months. We estimated path specific effects and average indirect and direct effects of the implementation strategies through four putative mechanisms.

Results
The analysis included 62 schools comprising of 215 teachers in the intervention arm and 181 teachers in the control arm. The intervention had a positive effect on knowledge (0.30 [95% CI: 0.15 to 0.46]), environmental context and resources (0.50 [0.31 to 0.69]), social influences (0.18 [0.01 to 0.35]) but did not have an effect on beliefs about consequences (0.07 [-0.03 to 0.17]). All putative mediators were not associated with the primary outcome.

Conclusions
Although the implementation strategy caused meaningful improvements in scheduled minutes of physical activity, this effect was not mediated by targeted mechanisms. Future research should explore the role of other potential mechanisms and evaluate system-level mechanisms informed by an ecological framework.

References
ABSTRACTS


Talk 3: Experimental Designs for Building Effective Adaptive Implementation Interventions

Daniel Almirall1, Shawna Smith1, Andrew Quanbeck2, & Amy Kilbourne1

1University of Michigan, 2University of Wisconsin-Madison

Effective implementation of evidence-based practices (EBPs) often requires a tailored, sequential approach to intervening with clinics and providers. In this approach, implementation strategies designed to improve the uptake, delivery or sustainment of EBPs are tailored at program entry based on the initial characteristics of the provider/clinic, and over time based on the changing needs of the provider/clinic. This approach is consistent with the notion of precision implementation, which acknowledges that (even within the same system) (i) there is great heterogeneity in the initial and ongoing levels of implementation support required across providers/clinics, and (ii) in many settings, it is prohibitively costly to offer all providers/clinics high levels of support. Adaptive implementation interventions (AIIs) help guide the provision of these tailored strategies via a sequence of pre-planned intervention decision rules. These decision rules specify whether, how, or when—and importantly, based on which measures—to alter the intensity, type, or delivery of implementation strategies at critical decision points during implementation. AIIs also facilitate the business case of implementation strategies to health care providers and systems as they help health system leaders determine when and where to invest in support for treatment settings with different implementation support needs. AIIs thus promote cost-effective implementation by providing tailored levels of implementation support. Recently, there has been a surge of interest in building effective AIIs via randomized trials in order to rigorously assess the impact of different levels of implementation support. This talk defines and describes the components of an AI; and it describes different types of clustered randomized trial designs that are useful for building effective AIIs. These include enhanced non-responder randomized trials, and sequential multiple assignment randomized trials (SMARTs). For each type of trial design, we discuss the types of scientific questions motivating its use, trial design principles, and sample size considerations. We illustrate ideas using two ongoing NIH R01 trials: one to develop an AI for improving the uptake of cognitive behavioral therapy in over 100 high schools across Michigan, and another to develop an AI for improving opioid prescribing practices in 38 primary care clinics in Wisconsin.

References


Session D4 - From the Dealership to the Driveway: The Impact of Implementation Science on Public Policy Development and Practice

Location: Room 106
Chair: Dani Adams
Discussant: Joanna Moullin
¹University of Chicago, ²Curtin University

Talk 1: How Policy Mandates for Evidence-Based Practices Filter into Clinical Routines: A Mixed Methods Study

Lorella Palazzo¹, Peter Mendel², Kelli Scott², & Cara Lewis¹
¹Kaiser Permanente Washington Health Research Institute, ²RAND Corporation, ³Brown University School of Public Health

Background
Federal and state policies mandating evidence-based practice (EBP) implementation in community mental health settings are increasingly common. Measurement based care (MBC), the use of progress/outcome monitoring measures to guide treatment [1], is one such EBP mandated for use. It is crucial to understand the process by which mandates are received by organizations, as contextual factors may influence mandate implementation success. The goal of this study is to employ mixed methods to characterize how a mandate plays out in community mental health settings that implement MBC using the Patient Health Questionnaire-9 (PHQ-9).

Materials and Methods
We utilized data from a cluster randomized trial comparing tailored vs standardized approaches to implementing the PHQ-9 in community mental health settings in two states [2]. Qualitative data were collected through semi-structured interviews with community mental health clinicians (N = 36). Interview questions covered MBC domains (e.g. clinicians’ attitudes towards and usage of MBC practices with the PHQ-9). Quantitative data were obtained from clinician surveys and included demographics and contextual constructs (e.g. norms, structures, processes) known to influence implementation.

Results
Data have been collected and are undergoing case-based analysis that relies on: 1. Qualitative thematic analysis to capture clinician descriptions of mandate implementation; 2. Cross-case analysis of qualitative and quantitative data to derive site-level indicators; 3. Qualitative Comparative Analysis (QCA) to identify contextual factors associated with mandate implementation outcomes. [3]

Conclusions
Organizations implementing policy mandates for EBPs should consider how site-specific contextual drivers may interact with implementation efforts, affect mandate outcomes, and need to be addressed through targeted implementation strategies.
References

Heather L. Bullock¹, John N. Lavis¹, Michael G. Wilson¹, Gillian Mulvale¹, & Ashleigh Miatello¹
¹McMaster University

Background
The fields of implementation science and knowledge translation have evolved somewhat independently from the field of policy implementation research, despite calls for better integration [1]. As a result, implementation theory and empirical work do not often reflect the implementation experience from a policy lens nor benefit from the scholarship in all three fields. This means policy makers, researchers and practitioners may find it challenging to draw from theory that adequately reflects their implementation efforts.

Materials and Methods
We developed an integrated theoretical framework of the implementation process from a policy perspective by combining findings from these fields using the critical interpretive synthesis method [2]. We began with the compass question: how is policy currently described in implementation theory and processes and what aspects of policy are important for implementation success? We then searched 12 databases as well as grey literature and supplemented these documents with other sources to fill conceptual gaps. Using a grounded and interpretive approach to analysis, we built the framework constructs and used our findings to consider improvements to existing theory.

Results
A total of 7850 documents were retrieved and assessed for eligibility and 34 additional documents were identified through other sources. Eighty-two unique documents were ultimately included in the analysis. Our findings indicate that policy is described as: 1) the context; 2) a focusing lens; 3) the innovation itself; 4) a lever of influence; 5) an enabler/facilitator or barrier; or 6) an outcome. Policy actors were also identified as important participants or leaders of implementation. Our analysis led to the development of a two-part conceptual framework, including process and determinant components. We also used our findings to modify the Interactive Systems Framework for Dissemination and Implementation [3]. Finally, we provide an example of how the framework can be applied using a policy implementation case from Ontario, Canada.

Conclusions
This framework begins to bridge the divide between disciplines and offers a new way of thinking about implementation processes at the systems level.

References


Talk 3: Evidence-Based Policymaking to Prevent Youth Substance Misuse: Where the Rubber Slams into the Evidence-Based Program Implementation Road

Brittany Cooper¹, Adam Darnell², Angie Funaiole³, Kevin Haggerty⁴, & Sarah Mariani³

¹Washington State University, ²Washington State Institute for Public Policy, ³Washington State Division of Behavioral Health and Recovery, ⁴University of Washington

Evidence-based policymaking is “the systematic use of evidence to guide government policy and funding decisions.” In substance use prevention, calls for using this approach have grown louder; in some states, programs are now required to show a return on the public’s investment – with the monetary benefits associated with outcomes like increased high school graduation and reduced criminal justice involvement, for example, outweighing the program training, infrastructure, and implementation costs [1]. Cost-benefit evaluation of prevention programs is an evolving science [2] however, and yet federal and state governments strive to use this research to inform long-lasting decisions about how to address serious community problems, like the opioid epidemic and youth substance use. Implementation researchers have made advances in understanding the multi-level factors, including policy and financial incentives, involved in effective evidence-based program implementation [3], but direct, concrete guidance and tools for applying this information is lacking and desperately needed.

This panel brings together researchers and policymakers who have been collaborating to address one specific example of evidence-based policymaking in Washington State. In 2012, Initiative 502 legalized recreational use of cannabis for individuals 21 years-old and older. In an attempt to minimize the potential negative impacts on youth substance use, the legislation mandated that a certain proportion of the 37% excise tax revenues go to state agencies for prevention and reduction of substance misuse. State legislation mandates that the Division of Behavioral Health and Recovery, for example, use 85% of their allocation on evidence-based or research-based prevention programs – and that by 2021, it must be spent on cost-beneficial programs. The Washington State Institute for Public Policy (WSIPP) has been a leader in the development and implementation of the cost-benefit analysis model used to inform these decisions, however, a number of logistical barriers have emerged when trying to apply them to real-world program implementation. Representatives from WSIPP and DBHR, along with researchers from Washington State University and University of Washington, will present on the collaborative approach they have used to address these barriers and provide recommendations for how other researchers, policymakers, and practitioners can use cost-benefit evaluation data to inform on-the-ground implementation decisions.

References


Talk 4: Integrating Research, Policy, and Practice to Implement the Largest Suicide Risk Identification Strategy in a United States Healthcare System

Bridget Matarazzo¹, Nazanin Bahraini¹, Suzanne McGarity¹, Megan Harvey¹, & Lisa Brenner¹
¹Rocky Mountain MIRECC for Suicide Prevention

Research suggests that a significant number of individuals who died by suicide were not identified as psychiatric patients nor were they receiving mental health care; rather, they were often seen in primary care, ED or other medical settings before their death [1-3]. In response to these findings and a Joint Commission Sentinel Event Alert [4], in October 2018, the Department of Veterans Affairs (VA) launched the VA Suicide Risk Identification Strategy (VA Risk ID), the largest population-based screening and evaluation strategy in any United States healthcare system. Successful implementation of VA Risk ID relies on collaboration between researchers, policy makers, and supervisors and providers within the field.

Consistent with the Evidence-Based System for Innovation Support Logic Model [5], the VA Risk ID implementation team combined tools, training and technical assistance (TA) with a quality assurance measure to develop a robust support system for implementation. Proactive TA is delivered via weekly conference calls (~250 attendees/week) and a support email address (~250 emails/month). A SharePoint site which houses a variety of tools developed for VA Risk ID is also utilized. The team also conducted a webinar series, offering training on the overall strategy and practice components, which was converted into VA online learning system trainings. A fallout report was developed for quality assurance, which provides information about patients who did not receive indicated levels of the screening and evaluation process.

The above strategies allowed the implementation team to get real-time feedback from the field, which was then communicated directly to VA policy makers on a weekly basis. As a result, major alterations have been made to the VA Risk ID implementation timeline and requirements. The presenters will discuss how VA Risk ID implementation serves as a rich and useful example of how research, policy, implementation science and practice inform one another to result in the successful implementation of the largest suicide risk screening and evaluation strategy in any United States healthcare system.

References
Session D5 - The Role of Implementation Science in Achieving Health Equity

Location: South Ballroom

Chair: Amanda Farley
Discussant: Lisa Saldana

Panelists: Allison Metz, Ana Baumann, Leopoldo Cabassa, Kimberly DuMont, Beadsie Woo, JD Smith, Inger Burnett-Zeigler, Juan Villamar, Carlos Gallo, Hendricks Brown, & Moira McNulty

1University of North Carolina, Chapel Hill, 2Washington University at St. Louis, 3William T. Grant Foundation, 4Annie E. Casey Foundation, 5Northwestern University, 6University of Chicago, 7University of Birmingham, 8Oregon Social Learning Center

Background
Inequities in healthcare are unfair differences between populations in the access, use, quality and outcomes of care. These inequities are persistent, detrimental and costly. Implementation science has great potential to improve the health of communities and individuals that experience disparities. Equitable implementation occurs when strong equity components (including explicit attention to culture, history, values, and needs of the community) are integrated into the principles and tools of implementation science to facilitate quality implementation of effective programs for a specific community or group of communities.

Materials and Methods
This presentation includes two approaches to using implementation methods and frameworks to address healthcare inequities. The first approach uses Proctor et al. [1] framework to reframe five elements of implementation science to: 1) focus on reach from the very beginning; 2) design and select interventions for vulnerable populations with implementation in mind; 3) implement what works and develop implementation strategies that can help reduce inequities in care; 4) develop the science of adaptations; and 5) use an equity lens for implementation outcomes.

The second approach discusses three innovative implementation method paradigms to improve scientific and health equity: 1) making efficient use of existing data by applying epidemiologic and simulation modeling to understand what drives disparities and how they can be overcome; 2) designing new research studies that include, but do not focus exclusively on populations experiencing disparities in such areas as cardiovascular disease and co-occurring mental health conditions; and 3) research that focuses exclusively on populations that have experienced high levels of disparities.

Results
Conceptual approaches will initiate a much-needed dialogue on how to critically infuse an equity approach in implementation science to proactively address healthcare inequities. These approaches raise numerous barriers for implementation research and how they can exacerbate disparities [2]. This work extends examples in behavioral health [3].

Conclusions
Discussion will center on themes for taking action to ensure implementation science amplifies equity. Themes were identified through structured facilitations with 21 researchers and include: employ strategies and build structures that elevate equity concerns; shift funding incentives to value practice expertise and questions; and promote exchanges between researchers and community members.

References

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The Triple Aim of health care is to improve patient care and maximize population health while minimizing per-capita cost. Implementation research has primarily sought to address the first two components through the adoption, scale-up, and sustainment of evidence-based practices, leaving cost issues to health economics and allied fields (e.g., public health). Yet constrained resources remain a critical barrier to successful implementation in practice and policy settings. When integrated into implementation research, economic and cost research methods can provide critical guidance to administrators and policymakers regarding the best possible allocation of resources to their implementation efforts.

This symposium will present a series of studies illustrating the use of various economic and cost-related methods in practice-based implementation research. First, Andria Eisman will illustrate the use of economic evaluation – comparing the economic costs and outcomes of different implementation strategies – in two large-scale adaptive studies of Enhanced Replicating Effective Programs and Facilitation in Veterans Affairs (VA) and community-based practices. Next, Ramzi Salloum will describe the application of discrete choice experiments – which elicit individuals’ stated preferences (i.e., health utilities) for various evidence-based practices or implementation strategies – using examples from cancer prevention and control (e.g., tobacco control and HPV vaccination). Third, Lindsey Zimmerman will discuss participatory system dynamics modeling – which can incorporate econometric techniques alongside stakeholder input to model decisions about investment in implementation – using the VA Modeling-to-Learn program for staffing decisions as an example. Finally, reviewing each of the above methods, Alex Dopp will present on how mixed-method approaches can incorporate detailed, context-specific qualitative data to tell the full story of the costs and economic impacts of implementation.

Following these presentations, the findings will be summarized and contextualized by our discussant, Ramesh Raghavan, whose expertise lies at the intersection of implementation science, health economics, and health policy. Dr. Raghavan’s discussion will provide perspectives on how implementation researchers can best use the methods covered in this symposium, within the context of strong collaborative relationships with administrators and policymakers, to advance the impact of implementation research on the quality, population impact, and cost of health care.

**Talk 1: Economic Evaluation of Implementation Strategies: Making the Business Case for Implementation Science in the Real World**

Amy M. Kilbourne$^{1,2}$, *Andria Eisman$^1$, & Daniel Eisenberg$^1$

$^1$University of Michigan, $^2$Quality Enhancement Research Initiative, U.S. Department of Veterans Affairs
Background
Implementation strategies are methods used to help provider organizations deploy evidence-based practices. To date, few studies have compared the effectiveness of different implementation strategies, and rarely have they assessed economic impact. Estimating costs of implementation strategies – and comparing those costs to value generated – is crucial if health care providers are to make informed decisions about investment in specific strategies to improve uptake of effective practices.

Materials/Methods
We describe two studies involving economic evaluations of the Replicating Effective Programs (REP) implementation strategy. Both studies had adaptive designs in which sites that did not respond to 6 months of REP were randomized to receive additional implementation support (i.e., Facilitation). First, Re-Engage was an adaptive implementation trial comparing REP alone to Enhanced REP (added External Facilitation) to enhance the uptake of a brief care management program for Veterans with serious mental illness among a national cohort of 88 VA facilities. Second, the Adaptive Implementation of Effective Programs Trial (ADEPT) was a cluster-randomized sequential multiple assignment randomized trial (SMART) trial that compared REP only to REP adding External Facilitation or External+Internal Facilitation to improve the uptake of a collaborative care model for mood disorders across 57 community practices in Michigan and Colorado.

Results
In the first study, the rate of Re-Engage uptake (number of attempted patient contacts) was greater for enhanced REP sites compared with standard REP sites (41% versus 31%, p=.01). An initial cost analysis found that the additional time cost of Facilitation was 7.3 hours per site, or ~$2500 per 6-month dose of Facilitation. In ADEPT, patients at sites receiving External Facilitation alone compared to External+Internal Facilitation had improved SF-12 and mood symptom scores and higher odds of receiving collaborative care. The added costs of Internal Facilitation did not lead to greater implementation value, suggesting that REP plus External Facilitation was the most cost-effective combination of implementation strategies.

Conclusions
We discuss strengths and limitations of the economic evaluations performed in these studies. We also highlight how adaptive and SMART designs are practical ways to assess the costs of implementation strategies and inform more efficient use of these strategies.

References

Talk 2: Use of Discrete Choice Experiments to Inform Stakeholder Decision-Making about Implementation
ABSTRACTS

Ramzi Salloum¹, Elizabeth Shenkman¹, Stephanie Staras¹, Jordan Louviere², & David Chambers³
¹University of Florida, ²University of South Australia, ³National Cancer Institute

Background
The discrete choice experiment (DCE) is a stated preference technique from health economics for eliciting individual preferences over hypothetical alternative scenarios. This dynamic approach can be used to systematically measure the health preferences of various stakeholders – such as patients, providers, and administrators – and thus engage those stakeholders’ perspectives in decisions about investing time, money, and resources into implementation. The purpose of this presentation is to discuss the application of DCEs as a stakeholder engagement strategy to inform implementation of evidence-based interventions in health.

Materials and Methods
This presentation will cover findings from a recent systematic review by Salloum et al. reporting on DCE applications in implementation research. In addition, the presentation will include examples of DCE applications from cancer prevention and control (e.g., tobacco control and HPV vaccination) that vary by application type. The presentation will discuss considerations for designing and conducting DCEs in implementation research at each of the following stages: (1) identify and characterize alternative scenarios; (2) experimental design to determine choices; (3) data collection; and (4) data analysis and interpretation.

Results
DCE applications in implementation research can be categorized into four types: (1) characterizing demand for therapies and treatment technologies; (2) comparing implementation strategies; (3) prioritizing interventions; and (4) incentivizing providers. An example of each application type will be presented. A variety of stakeholders can be engaged using DCEs, including healthcare providers, patients, caregivers, and healthcare administrators. DCEs can be conducted across settings and contexts, including clinical settings (inpatient and outpatient), community-based settings, and at the policy/population level.

Conclusions
The use of DCEs to inform implementation of health interventions has been growing in recent years. As DCEs are more widely used in health-related assessments, there is a wide range of applications for them in the area of stakeholder engagement. Using DCEs can inform stakeholder decision making and support successful investment into implementation of health interventions.

References

Talk 3: Modeling to Learn: Conserving Staff Time when Comparing Implementation Alternatives via Simulation

Lindsey Zimmerman¹, David Lounsbury², Tom Rust³, Craig Rosen¹, Rachel Kimerling¹, Jodie Trafton¹, Steven Lindley³, Andrew Holbrook¹, Stacey Park¹, Jane Branscomb⁶, Debra Kibbe⁶, James Rollins⁷, & Savet Hong¹
¹National Center for PTSD, ²Albert Einstein College of Medicine, ³Center for Healthcare Transformation, ⁴Program
ABSTRACTS

Evaluation Resource Center, 5Veterans Affairs Palo Alto Health Care System, 6Georgia Health Police Center, Georgia State University, 7Takouba Security LLC

Background
For over 15 years, VA has implemented national dissemination efforts to train providers in evidence-based addiction and mental health practices (EBPs). VA mandates EBPs and supports their implementation with substantial investment in infrastructure to support quality improvement (e.g., incentivized VA-wide quality measures), yet only 3-28% of the patient population receives the highest quality care. To improve EBP access, the National Center for PTSD developed a simulation-learning program designed to help frontline teams identify locally calibrated EBP improvement strategies [1]. We piloted participatory system dynamics (PSD) for improving EBP reach based on its effectiveness in business and engineering [2-3].

Materials and Methods
PSD synthesizes engagement principles and state of the science technologies for understanding and changing systems. As a systems science method, PSD demonstrates how causal system properties vary as a function of local resources (e.g., financial, personnel). Over the last four years, in partnership with patient, provider, and policy-maker stakeholders, we co-developed a PSD program entitled Modeling to Learn (MTL). MTL supports multidisciplinary frontline teams of providers to address high priority areas (e.g., Suicide Prevention, Access to Care, Opioid Misuse, PTSD) by conserving local staff time in simulation learning models that evaluate and compare implementation scenarios.

Results
MTL helped two pilot clinics increase EBP reach with existing local staff resources. Preliminary statistical process control analyses indicate pilot clinics demonstrated a three standard deviation increase in EBP reach and maintained improvement for 12 and 8 months, respectively. We will present example simulation experiments for different VA clinics, highlighting how simulation helps staff optimize local staff resources to meet patients' needs.

Conclusions
Most cost analysis in implementation research focuses on the costs of EBP adoption. But, VA-adopted EBPs and VA budgets facilitate/constrain the resources needed to expand reach. We posit that MTL created greater consensus about change (front-end optimization) and guided more effective investment decisions within local system resources (back-end optimization). Additional study of the MTL national rollout is underway: a multisite cluster randomized trial will test the superiority of MTL over audit-and-feedback for its effectiveness improving the reach of EBPs.

References

Talk 4: Mixed-Method Approaches to Strengthen Economic and Cost Research Methods in Implementation Science

Alex R. Dopp1, Peter Mundey2, Lana O. Beasley3, Jane F. Silovsky2, & Daniel Eisenberg4
1RAND Corporation, 2University of Oklahoma Health Sciences Center, 3Oklahoma State University, 4University of Michigan
Background
Guidance on the costs and economic impacts of implementing evidence-based practices is critical to informing investments in implementation efforts. However, the results of traditional methods – such as economic evaluations, discrete choice modeling, and participatory system dynamics modeling – are limited by a remaining “qualitative residual” of contextual information and stakeholders’ perspectives. This residual, which is particularly prevalent in implementation research, cannot be fully captured by the quantitatively-based analyses and models used in these methods. The emergence of qualitative methods for studying economics and costs offers a promising solution.

Methods/Results
We recommend that researchers maximize their contributions related to economics and costs within implementation science by embracing a mixed-methods research agenda that merges traditional quantitative approaches with innovative, contextually grounded qualitative methods. Such studies are exceedingly rare at present. To assist implementation scientists in making use of mixed methods in this research context, we will present an adapted taxonomy that describes the structure and function mixed-method studies relevant to economic and cost research. We will then illustrate the application of mixed methods in exemplar studies that used economic evaluation, discrete choice modeling, or system dynamics methods to study implementation. The examples presented will emphasize the breadth of qualitative methods for data collection (e.g., interviews, focus groups, site visits, review of records, ethnography) and analysis (e.g., content analysis, thematic analysis, grounded theory, case studies) that can be incorporated into studies of implementation costs and economics. Finally, we will review reporting guidelines for these methods (e.g., Consolidated Health Economic Evaluation Reporting Standards) with an emphasis on how to incorporate mixed methods into existing guidelines.

Conclusions
By incorporating qualitative methods, implementation researchers can enrich their research on economics and costs with detailed, context-specific information to tell the full story of the economic impacts of implementation. We will end by providing suggestions for building a research agenda in mixed-method economic evaluation, along with more resources and training to support investigators who wish to answer our call to action.

References
Session E2 - Moving Beyond “to Adapt or Not?”: Understanding and Optimizing Adaptations for Maximum Impact in Real-World Implementation

Location: Room 332
Chair: Julia Moore1
Discussant: Sarah Walker2
1The Center for Implementation, 2University of Washington

Background
Adaptations are the norm as evidence-based programs (EBPs) are being spread and scaled up to maximize impact. How can we move beyond research that classifies adaptations and provides guiding principles and start to develop tools and approaches to teach people how to adapt without losing the “secret sauce”? The three presentations in this symposium will present the audience perspectives on engaging in adaptation on the ground (presented from the perspective of both a researcher and a practitioner), as well as a consolidated adaptation framework that can guide discussion and decision-making around real-world adaptations.

Presentations
To shift the conversation, this symposium will first present a consolidated adaptation framework – the Adaptation-Impact Framework, which has combined three implementation frameworks. The framework will be presented in a manner that it can be applied by both researchers (to answer implementation science questions) and practitioners (who want to use it to guide their own implementation and adaptation efforts). This framework is novel in that it helps researchers and practitioners systematically consider tradeoffs and “ripple effects” of adaptations (e.g., an adaptation that may improve acceptability have a negative impact on feasibility.

Following the presentation of the new Adaptation-Impact Framework, we will have two presentations with adaptation data from real-world implementation efforts. Presenters will include both the researcher and the implementation practitioner perspective. Data from 28 Strengthening Families Program implementations will highlight not only what adaptations are being made, but how and why they are being made. This research is the basis for a theoretically- and empirically-grounded tool to track real-world adaptations and their impacts in order to enhance the guidance provided to program implementers.

Discussion & Conclusions
By addressing the reality that adaptations are made when spreading and scaling up EBPs, we can move beyond philosophical questions to provide practical guidance to researchers studying adaptations and the intermediaries and local implementation teams responsible for implementing EBPs.

Talk 1: Developing the Adaptation-Impact Model and Translating It for Use in Practice
M. Alexis Kirk1, Julia E. Moore2, Byron J. Powell3, & Sarah Birken1
1University of North Carolina at Chapel Hill, 2The Center for Implementation, 3Washington University in St. Louis

Background
Implementation science is shifting from qualifying adaptations as good or bad towards understanding nuances of adaptations and their impact. Existing adaptation classification frameworks are largely descriptive (e.g., who made the adaptation) and geared towards researchers. They do not help practitioners in decision-making around adaptations – is an adaptation likely to have negative impacts? Should it be pursued? Moreover, they lack constructs to consider potentially disparate impact on intervention and implementation outcomes (e.g., whether an adaptation might improve implementation outcomes but weaken intervention outcomes).
Materials and Methods
We consolidated two adaptation frameworks [1-2] and one intervention-implementation outcome framework [3]. We reviewed each framework to refine constructs and group them into domains. We then coded qualitative descriptions of 14 adaptations from an existing intervention being adapted to a new context to test fit of our framework. To bridge the research-practice gap, we then developed guidance to help practitioners in the field apply this framework to adaptation efforts.

Results and Conclusions
Our framework has 3 domains and our applied guidance for each domain is as follows:

- Criteria for making adaptations: useful in considering whether adaptations will have a positive or negative impact to help decide whether to move forward with the adaptation. Systematic adaptations with a positive valence are more likely to have a positive impact.

- Impact of adaptations: useful in considering adaptations’ impact on intervention outcomes (intervention effectiveness) and implementation outcomes (acceptability, cost, etc.) to help anticipate and mitigate negative consequences of adaptations (e.g., plan for implementation of an adaptation that might improve intervention effectiveness but decrease acceptability).

- Adaptation Typology: classifies adaptation attributes (e.g., type, nature of adaptation), providing consistency in reporting

Our guidance takes a consolidated framework developed for research and translates it to be helpful to practitioners. Our guidance helps practitioners “back-up” and re-think adaptations suspected to have negative impacts and helps practitioners think through “ripple effects” and tradeoffs of adaptations to plan accordingly (e.g., put in place an implementation strategy to monitor/boost fidelity if an adaptation is suspect to have positive impacts on acceptability, but negative impacts on fidelity).

References

Talk 2: Striking the Right Balance: Tracking Adaptations to Community-Based Prevention Programs to Enhance Guidance to Implementers

Brittany Cooper¹, Garrett Jenkins¹, & AnaMaria Diaz Martinez¹
¹Washington State University

Background
The adoption of effective programs is insufficient for achieving positive youth and family outcomes community-based organizations seek; high quality implementation is also critical. However, making decisions about dosage, content, and structure of an evidence-based program as it was originally designed (i.e., fidelity) while adapting to local contexts is challenging and complex, especially under resource strain. Implementers are often left to make these decisions without much empirically-based guidance.
Materials and Methods
We used data from an ongoing, large-scale evaluation of Strengthening Families Program (SFP; a 7-week substance use prevention program with youth 10-14 years old and their parents) implemented in natural contexts across Washington State. Our previous work applied and extended two multidimensional coding systems [1-2] to 154 implementer-reported adaptations of SFP [3]. Based on these results, we designed a quantitative measure to track the extent to which implementers modified, added, and deleted program content/processes; the most common types and reasons for adaptations; and the extent to which adaptations proactive or reactive.

Results
Preliminary results from 28 SFP implementations show that over half report modifying the program content/processes “a little”, but 60% report “not at all” when asked about addition or deletion of content/processes. The most commonly reported modifications were made to games and activities/icebreakers, and the most commonly reported reason was lack of time/competing demands on time. “Need for a more culturally appropriate program” was reported by 24% despite 39% of implementations being delivered in Spanish or bilingually. Planning in advance “some” or “a lot” for adaptations was reported by 37%, whereas 15% reported “some” or “a lot” for making reactive adaptations.

Conclusions
These results help describe the adaptations being made and how/why they are being made. Future analyses will examine links between these dimensions of adaptation and participant engagement, which increasingly is shown to be a critical mediator/moderator between adaptations and program outcomes. Ultimately, this work will help develop a theoretically- and empirically-grounded tool to track real-world adaptations and their impacts, in turn enhancing program implementation guidance on how to strike the right balance between program fidelity and adaptation.

References

Talk 3: Rapid Adaptation: Making Adaptations Work for Real World Systems, Services, and Science
Sarah Cusworth Walker1 & Michael Graham-Squire2
1University of Washington, 2Neighborhood House

Background
To reach scale, public health agencies and researchers will need to partner in new ways to meet the prevention needs of diverse and dynamic communities. Building from concepts proposed in the Dynamic Adaptation Framework [1], common elements [2], and adaptation models [3], we present preliminary results from a codesign process developed to provide tailored, rapid guidance for delivering more culturally congruent prevention services. We present data from a six-month codesign demonstration project in Seattle, WA between the University of Washington and a local social services agency with over 100 years of delivering social welfare and prevention services. The model is proceeding in four stages with distinct data capture at each phase: 1) Identify areas of strain; 2) Derive Core Elements; 3) Develop guidance; 4) Test acceptability.
Materials and Methods
We present data on the need for adaptation and the feasibility of the codesign model from the 21 facilitator respondents and the feasibility of the codesign process from community and research participants. Strain was assessed through surveys distributed to 21 GGC facilitators. The surveys asked respondents to score each activity in the curriculum for ease of delivery and need for adaptation. Qualitative responses were coded using the theoretical framework of structure and content adaptations [3].

Results and Conclusions
The fidelity of delivery to specific activities within GGC varied significantly, with some activities rarely delivered according to manualized instructions and other always or almost always delivered as written (range of 2.05-4.48 on a 5-point scale with 5 keyed to “always”). Activities rarely delivered as written were more likely to be experiential activities (e.g., group sculpture or scavenger hunt). Activities delivered as intended but rated as poor on cultural responsivity included videos and scripted content delivered by facilitators. A number of structural and content adaptations needs were indicated, including the need to address divergent cultural views about some core assumptions of the GGC model.

References
Talk 1: Advancing Evidence Synthesis from Effectiveness to Implementation: Recommendations for the Integration of Implementation Measures into Evidence Synthesis Approaches

Aaron Tierney\textsuperscript{1,2}, Marie Haverfield\textsuperscript{1,2}, Mark McGovern\textsuperscript{1,2}, & Donna Zulman\textsuperscript{1,2}
\textsuperscript{1Stanford University School of Medicine, \textsuperscript{2}Ci2i, VA Palo Alto Healthcare System}

Background
In order to close the gap between discoveries that could improve health, and the widespread application of those findings, there is a need for greater attention to the factors that influence dissemination and implementation of evidence-based practices. Evidence synthesis projects could contribute to this effort by collecting and synthesizing data relevant to dissemination and implementation. The objective of this paper is to recommend implementation measures and outcomes to consider in evidence syntheses of intervention studies. We illustrate the application of these recommendations through a systematic review of clinician-patient communication interventions.

Results
Drawing on the implementation science literature [1-3], we suggest 10 implementation measures that should be considered when conducting a systematic review: acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, intervention complexity, penetration, reach, and sustainability. We describe opportunities to assess these constructs in current literature and illustrate these methods through a case example of a systematic review of 29 studies of interventions aimed at improving clinician-patient communication in clinical settings [4-32].

Conclusions
To fully understand the potential value of a health care innovation, it is important to not only consider its effectiveness, but also the process, demands, and resource requirements involved in downstream implementation. While there is variation in the degree to which intervention studies currently report implementation factors, there is growing demand for this information. Abstracting information about these factors may enhance the value of systematic reviews and other evidence synthesis efforts, improving the dissemination and adoption of interventions that are effective, feasible, and sustainable across different contexts.

References

**Talk 2: What Fidelity Data Don’t Say: Types of Adopters and Resisters in an Implementation Trial in Early Care and Education Classrooms**

Taren Swindle¹, Julie Rutledge², & Geoffrey Curran¹
¹University of Arkansas for Medical Sciences, ²Louisiana Tech University

**Background**
Together, We Inspire Smart Eating (WISE) is a nutrition promotion intervention designed for delivery by early care and education teachers. Data from a prior implementation of WISE showed suboptimal fidelity to its four, key evidence-based practices (i.e., hands-on exposure to fruits and vegetables (FV), use of mascot to promote FV, positive feeding practices, and role modeling). We are currently testing strategies to support uptake of WISE. This study presents preliminary findings on the behaviors observed by teachers.

**Materials and Methods**
A two-arm implementation trial is ongoing in 40 classrooms to implement WISE with a focus on its evidence-based practices. All classrooms are observed on a quarterly basis for fidelity by data collectors trained to 85% reliability. Classrooms in the treatment condition (i.e., enhanced support, N = 17) receive targeted implementation support based on their observed fidelity, which included facilitation. After the first and second quarter of the school year, 5 classrooms from the pool of poorest fidelity performers in the enhanced condition were randomly selected for semi-structured interviews. To date, the second quarter of data collection, 6 months of enhanced support, and both rounds of interviews are complete. Facilitators derived types of adopters and resisters based on analysis of observational and interview data.

**Results**
Four types of adopters and resisters were identified: enthusiastic adopters (35%), over-adapting adopters (24%), soft resisters (17%), and hard resisters (24%). Enthusiastic adopters exhibited positive attitudes towards WISE and moderate to strong fidelity. Over-adapting adopters, while exhibiting positive attitudes toward WISE, made fidelity-inconsistent adaptations that were potentially detrimental (i.e., using mascot to shame children). Soft resisters demonstrated poor to moderate fidelity and showed lack of interest in adopting WISE or receiving facilitation support. Hard resisters were vocal about their complaints in adopting WISE and/or noticeably against receipt of facilitation support; most, but not all, hard resisters had poor fidelity.

**Conclusions**
There are nuances in low fidelity not captured by quantitative scores. Different types of resisters may be best served with different implementation strategies. For example, hard resisters may benefit from strategies to enhance motivation whereas over-adapting adopters may need support for goal setting and/or appropriate adaptations.

**References**
Talk 3: Implementation Outcome Instruments Used in Healthcare Settings and Their Measurement Properties: A Systematic Review

Zarnie Khadjesari1, Sabah Boufkhed2, Silia Vitoratou2, Laura Schatte2, Alexandra Ziemann3, Christina Daskalopoulou2, Eleonora Uglik-Marucha2, Nick Sevdalis2, & Louise Hull2

1University of East Anglia, 2King’s College London, 3City, University of London

Background
The importance of using validated instruments to measure the implementation of evidence-based interventions and services is gaining recognition [1-2]. However, researchers continue to develop ad hoc instruments rather than use, adapt and improve existing instruments that have undergone psychometric testing. The aim of this systematic review was to identify and critically appraise studies that assess the measurement properties of quantitative implementation outcome instruments used in healthcare settings [3].

Materials and Methods
The following databases were searched from inception to March 2017 (update almost complete) with no language restrictions: MEDLINE, EMBASE, PsycINFO, HMIC, CINAHL and the Cochrane Library. Eligible studies assessed measurement properties of implementation outcome instruments in physical healthcare settings. Implementation outcomes were selected from Proctor et al’s Implementation Outcomes Framework: acceptability, appropriateness, feasibility, adoption, penetration, implementation cost and sustainability. Methodological quality was evaluated using the COnsensus-based Standards for the selection of health Measurement INstruments (COSMIN) checklist. The robustness of the methods and the corresponding results were evaluated using a newly developed Contemporary Psychometrics (ConPsy) checklist.

Results
6,586 titles and abstracts and 313 full papers were screened independently by two reviewers. More than 50 papers were included and over half measured acceptability. Less than 10 studies measured each of the other implementation outcomes (figures pending update). Most studies reported a limited number of measurement properties, with only one study assessing all measurement properties. Most studies assessed content and structural validity and the majority were rated as having either excellent, good or fair methodological quality. All studies (except one) that assessed reliability were rated as having poor methodological quality. The instruments also rated poorly using the ConPsy checklist. Methodological limitations will be discussed to help shape the future development of the field.

Conclusions
This review provides a valuable repository of appraised implementation outcome instruments used in healthcare settings. Our findings highlight the need for further psychometric testing of acceptability measures, and the development and validation of measures of other implementation outcomes. There is an urgency to standardise measures of implementation to enable cross-study comparisons and implementation evidence synthesis; and aid interpretation of research findings, ultimately accelerating translation of research into practice.

References


**Talk 4: Development of an Instrument for Evaluating Implementation Efforts and Benchmarking Regarding Person Centred Care**

Helena Fridberg¹, Lars Wallin¹², Catarina Wallengren², Henrietta Forsman¹, Anders Kottorp³, & Malin Tistad¹

¹Dalarna University, ²Gothenburg University, ³Malmö University

**Background**

Policy makers across Sweden are pushing implementation of person centred care (PCC) in health care settings as a way to promote high quality health care across the country [1]. However, there is a lack of valid and reliable instruments to measure and compare patients’ experiences of PCC across health care settings and patient groups. As part of a research project aimed at investigating implementation strategies of PCC at a regional level, we set out to develop a generic instrument to measure patients’ experiences of PCC as an outcome of the implementation efforts [2, 3]. In this project, we collaborate with the Swedish association of local authorities and regions (SALAR) who are responsible for the administration of the largest patient survey in Sweden. When complete, the instrument will be available to healthcare regions for evaluating implementation and development of the PCC approach.

**Materials and Methods**

A mixed methods design is used, entailing the following phases: construction of a preliminary questionnaire based on questions from SALAR’s existing item pool, content validation of items via experts (patients, healthcare practitioners and researchers) in a Delphi study, cognitive interviewing with patients, data collection and psychometric evaluation through Rasch analyses. The last two phases are repeated in two rounds. Finally, the instrument will be handed over to SALAR who will be responsible for translation into seven languages, design of web and paper-based surveys, and procedures for recruitment of patients.

**Results**

Data collection for the first psychometric evaluation will end by mid-April. Preliminary results from the first phase of Rasch analyses are expected by the end of May. The results from the second phase are expected by the end of August. The finalized instrument will be launched by SALAR in the beginning of 2020.

**Conclusions**

We set out to develop a robust and psychometrically sound instrument to measure patients’ perceptions on PCC. The collaboration with SALAR has been fruitful and will greatly expand survey opportunities. We expect the instrument to be widely used for evaluating implementation efforts and benchmarking regarding PCC.

**References**


ABSTRACTS

Session E4 - Highways and Byways: Implementation Factors in Action across Multiple Settings

Location: Room 106

Chair: Callie Walsh-Bailey
Discussant: Alicia Bunger

1University of Washington in St. Louis, 2Ohio State University

Talk 1: Implementation Practice Track: Where the Rubber Meets the Road-- Novel Applications and Adaptations of Implementation Tools and Strategies in Real World Settings

Robert Franks1 & Jonathan Scaccia2

1Judge Baker Children’s Center/Harvard, 2Wandersman Center

There are many implementation and dissemination frameworks to help to bridge the gap between research and practice. As implementation science has grown, we must avoid the paradoxical gap between implementation research and implementation practice. This presentation will describe the collaboration between researchers and practitioners in the development and application of organizational readiness and the continued use of the R=MC2 heuristic in research, evaluation, and practice.

We will first briefly describe the development of a new definition and conceptualization of Organizational Readiness for understanding and facilitating the implementation of innovations into new settings. Derived from work in the Interactive Systems Framework, the R=MC2 model proposes that readiness is not a singular, static condition, but rather a collection of dynamic constructs that includes motivation, general capacity, and innovation-specific capacity. Readiness can be used to monitor and facilitate implementation over time. The Wandersman Center developed a measure (the Readiness Diagnostic Tool) with good initial psychometric validity to help gather comprehensive information about facilitators of a change effort.

A goal in the development of the RDT was that it could be used in multiple settings and for different interventions. Therefore, in this joint presentation between a researcher and a practitioner, we will also briefly describe the adaptation and design process for using the RDT in distinct settings and a new study to rigorously validate the measure. The potential to adapt the readiness measure is key for the application of implementation science constructs in real-world conditions. We will talk about how practitioners negotiate tradeoffs in making implementation constructs more specialized and application to their specific setting. Using the RDT as an example, we will share how we collaboratively worked through these adaptation issues.

The adaptation process and lessons learned were bidirectional. We will discuss how applied findings in real world settings informed changes in the underlying theory and measure, specifically about what and how the constructs were useful. This presentation will highlight how theory and practice can inform one another in an iterative manner to help to move the science forward while promoting a deeper understanding of implementation facilitators.

References


Talk 2: How Can Implementation Quality be Evaluated? An Example from a Pilot Initiative in Australian Child and Family Services

Vanessa Rose

Centre for Evidence & Implementation

Background
High-quality program implementation is a pre-condition to program effectiveness. However, evaluation of the implementation process is rare, resulting in uncertainty around interpretation of impact evaluations with null effects (i.e. was the program ineffective, or implemented poorly?). We report on an implementation evaluation of the Victorian Government’s pilot of five manualized therapeutic programs for vulnerable families (four developed in the USA) across seven service provider agencies; the first evaluation of this nature and scope in Australia. The aim was to provide an indication of the comprehensiveness, pace and quality of program implementation to inform government decisions about if/how such programs should be funded, implemented, supported and scaled.

Materials and Methods
A real-world mixed-methods observational study design was used. The Stages of Implementation Completion checklist assessed implementation pace and comprehensiveness [1]. Theory-based structured interviews were conducted with agency staff (N=29) to explore program appropriateness, acceptability and feasibility [2]. Implementation strategies were explored with manualized program purveyors [3]. Fidelity data were extracted from agency databases.

Results
Most agencies (n=6) were still in early implementation, having not yet achieved sustainability. Highly-concentrated and overlapping implementation activity was observed, reflective of funding pressures, putting implementation quality at risk. The programs were generally well-accepted, perceived as high-quality and a good fit. While most agency staff ‘believed in’ the programs, perceived appropriateness was compromised by the lack of adaptability for Aboriginal and Torres Strait Islander communities. Threats to feasibility included high demands on practitioners and lack of Australian-based implementation support (trainers, consultants). It was too early for valid fidelity assessments.

Conclusions
Policy-makers should afford agencies more time/resources to incorporate initiatives into ‘business as usual’. Ongoing monitoring of implementation outcomes is highly recommended to facilitate data-driven decisions about when to start impact evaluation (i.e. when sustainability is achieved, and fidelity has been demonstrated).

References
Talk 3: Implementation Science for Depression Interventions in Low- and Middle-Income Countries: A Systematic Review

Bradley Wagenaar1, Wilson Hammett1, Courtney Jackson1, Dana Atkins1, Jennifer Belus2, & Christopher Kemp1
1University of Washington, 2University of Maryland

Background
Interventions to treat depression are demonstrating effectiveness across a range of low-resource settings globally. Significant investments are being made to decrease the gap between this evidence and its application at scale. Our objectives were to systematically review implementation research targeting depression interventions in low- and middle-income countries (LMICs) and critically assess coverage and scientific gaps.

Materials and Methods
PubMed, CINAHL, PsycINFO, and EMBASE were searched for evaluations of depression interventions in LMICs reporting at least one implementation outcome. Study- and intervention-level characteristics were abstracted.

Results
A total of 7,034 studies were screened, 589 were assessed for eligibility, and 59 studies published between 2003 and 2017 met inclusion criteria. Most studies were conducted in Sub-Saharan Africa (n=24; 40.7%), followed by South Asia (n=17; 28.8%), and Latin America and the Caribbean (n=12; 20.3%). The majority of studies (n=41; 69.5%) reported outcomes for a depression intervention that was implemented at the pilot/research phase. The majority of studies (n=35; 59.3%) focused on depressive interventions delivered at the facility level, with 22 (37.3%) delivered in the community. Thirty studies (50.9%) utilized non-specialized healthcare workers as the implementing agent. Primary depression intervention modalities were individual psychotherapy (n=20; 33.9%) and multicomponent interventions (n=20; 33.9%). Only 19 studies (32.2%) tested an implementation strategy, with the most common implementation strategy being revising professional roles (n=8; 42.1%). The most common implementation outcomes reported were acceptability (n=39; 66.1%), followed by feasibility (n=22; 37.3%), and fidelity (n=16; 27.1%). No study reported penetration, and only 3 (5.1%) reported adoption or sustainability.

Conclusions
Implementation research for depressive interventions in LMICs has focused largely on early-stage implementation outcomes. Most studies have the primary aim of testing evidence-based interventions under pilot researcher-controlled implementation. Future implementation research could prioritize the development and testing of implementation strategies to promote delivery of evidence-based depression interventions in routine care. This would include increased consideration of contextual factors, as well as later-stage implementation outcomes such as cost, penetration, and sustainability. Certain regions, such as Middle East and North Africa, East Asia and Pacific, and Europe and Central Asia could be prioritized for investments given the paucity of research.

References
Talk 4: Predicting Quality Improvement Sustainability with Artificial Neural Networks

Tim Rappon\textsuperscript{1}, Erica Bridge\textsuperscript{2}, Alyssa Indar\textsuperscript{2}, & Whitney Berta\textsuperscript{2}

\textsuperscript{1}University of Toronto, \textsuperscript{2}University of Toronto, Institute of Health Policy, Management and Evaluation

Background

Quality Improvement (QI) initiatives are proposed as key vehicles to shift our health system from disease-focused, episodic care to comprehensive care for older adults living with chronic conditions. With the proportion of older Canadians set to double over the next two decades, the need for QI is pressing, yet there is a dearth of research on whether QI yields long-term changes in practice (sustainment) or benefits (sustainability) for older patients and residents [1]. Our study responds to Proctor et al.’s (2015) call to “test theories, frameworks and models for their ability to explain and predict sustainability” [2].

Materials and Methods

We employed a Kohonen self-organizing map (SOM) [3] (an artificial neural network) to identify factors associated with sustainment and sustainability for QI interventions. To create our training dataset, we searched Medline, PsychINFO and CINAHL for articles which reported on the long-term (1+ years post-implementation) sustainability of QI programs targeted to older adults. After screening 3127 abstracts, 54 articles were selected. Two coders independently extracted study characteristics, including organizational & clinical context, implementation & post-implementation strategies, and adaptations. We performed leave-one-out cross-validation using the extracted variables to assess the sensitivity and specificity of the self-organizing map’s predictions of sustainment and sustainability.

Results

The SOM achieved 38% sensitivity and 73% specificity for sustainment and 89% sensitivity and 42% specificity with respect to sustainability. The diagnostic odds ratio was not significant for sustainment but was 5.2 (statistically significant p<0.05) for sustainability. We also estimated the relative contribution of different determinants to the prediction of sustainment and sustainability by observing how their omission affected the predictive power of the SOM. Clinical targets, adaptations, post-implementation (sustainability) strategies, and organizational context were all significant predictors of sustainability; however, a larger training set would be required for a predictive model of sustainment and to generalize the SOM beyond QI initiatives in health care for older adults.

Conclusions

Our study presents a novel method for investigating relationships between (post-)implementation factors and sustainability, which could be extended (with a larger training dataset) to produce predictions of—and tailored recommendations for intervention sustainment and sustainability.

References


ABSTRACTS

Session F1 - Psychometric and Pragmatic Properties of Inner and Outer Context Measures in Implementation Science

Location: Room 214
Chair: Byron Powell
Discussant: Laura Damschroder

Inner and outer setting determinants are prominently featured in many of the most frequently cited implementation frameworks, including the Consolidated Framework for Implementation Research. However, enhancing our understanding of how these determinants influence implementation processes and outcomes will require measures that are both psychometrically strong and pragmatic. In this symposium, we will report findings from the NIMH-funded R01 titled, “Advancing Implementation Science through Measure Development and Evaluation” (Lewis, PI). We will accomplish the following aims: 1) demonstrate how researchers can assess psychometric and pragmatic properties, 2) report psychometric properties for measures of key inner and outer setting constructs, and 3) identify opportunities for improving measurement in implementation science and practice. The first presenter will set the stage by highlighting the importance of carefully considering the psychometric and pragmatic properties, reporting findings from four studies that were conducted to develop a stakeholder-driven operationalization of pragmatic measures, and describing the development and application of the Psychometric and Pragmatic Evidence Rating Scale (PAPERS). We will then transition into three systematic reviews of inner and outer setting determinants as conceptualized by the Consolidated Framework for Implementation Research. The second presenter will share findings from a systematic review of measures related to readiness for implementation, including leadership engagement, available resources, and access to knowledge and information. The third presenter will convey findings from a systematic review of organizational culture and implementation climate, including related constructs: tension for change, compatibility, relative priority, organizational incentives and rewards, goals and feedback, and learning climate. Finally, the fourth presenter will detail findings from a systematic review of measures of outer setting determinants, including patient needs and resources, cosmopolitanism, peer pressure, and external policies and incentives. Each of the systematic reviews highlights promising measures that have been applied in behavioral health contexts, and points to areas in which further measurement development and/or psychometric and pragmatic evaluation of existing measures is needed. The developer of the Consolidated Framework for Implementation Research will serve as our discussant, and will highlight ways in which both the conceptualization and measurement of inner and outer context factors need to be sharpened.

Talk 1: Pragmatic Measures for Implementation Research: Development of the Psychometric and Pragmatic Evidence Rating Scale (PAPERS)


Background
The incorporation and use of reliable, valid measures in implementation practice, outside of research, will remain limited if measures are not pragmatic. Previous research has identified the need for pragmatic measures, though the pragmatic properties identified were developed using only expert opinion and literature review. Our team carried out four studies with the goal of developing a stakeholder-driven pragmatic rating criteria for implementation
measures. We previously published Studies 1 (populating the dimensions of the pragmatic construct via a literature review + stakeholder interviews) and 2 (clarifying the internal structure via concept mapping) that yielded 47 terms and phrases across four categories: Useful, Compatible, Acceptable, and Easy that were culled to 17 terms. This study presents the results of Studies 3 and 4: a Delphi to ascertain stakeholder-prioritized dimensions and a pilot study applying the dimensions as rating criteria.

Materials and Methods
Stakeholders (practitioners and implementation intermediaries; N=26) participated in an online modified Delphi and rated the relevance of 17 terms and phrases to the pragmatic construct. The investigative team pruned the list further and developed anchors for the pragmatic properties based on all available data sources (i.e., stakeholder interviews, literature review, concept mapping ratings, Delphi ratings). The final criteria were piloted with 60 existing implementation measures utilizing both empirical and grey literature.

Results
The Delphi methodology confirmed the importance of all identified pragmatic measure properties, but provided little guidance on relative importance. Following the Delphi, investigators removed/combined 6 more terms to obtain the final set of 11 criteria across four categories (Useful, Acceptable, Easy, Compatible) and assigned a 6-point rating system to each criterion. Application of the final rating criteria demonstrated sufficient variability across items; the grey literature did not add critical information.

Conclusions
This work produced the first stakeholder-driven rating criteria by which measures can be judged to be pragmatic. The Psychometric and Pragmatic Evidence Rating Scale (PAPERS) was developed by combining these pragmatic criteria with psychometric rating criteria from our previous work. Use of PAPERS can inform development of new implementation measures and to assess quality of existing measures.

Talk 2: Psychometric and Pragmatic Evaluation of Measures of Readiness for Implementation
Bryan J. Weiner¹, Caitlin N. Dorsey², Kayne D. Mettert², & Cara C. Lewis²
¹University of Washington, ²Kaiser Permanente Washington Health Research Institute

Background
Systematic measure reviews can facilitate advances in implementation research and practice by locating reliable, valid, pragmatic measures; identifying promising measures needing refinement and testing; and highlighting measurement gaps. Sponsored by Society for Implementation Research Collaboration (SIRC), with funding from the National Institute of Mental Health (NIMH), this review identifies and evaluates the psychometric and pragmatic properties of measures of readiness for implementation and its sub-constructs as delineated in the Consolidated Framework for Implementation Research: leadership engagement, available resources, and access to knowledge and information.

Materials and Methods
The systematic review methodology is described fully elsewhere [1]. Consistent with SIRC’s mission and NIMH’s priorities, the review focused on measures used in mental or behavioral healthcare. The review proceeded in three phases. Phase I, data collection, involved search string generation, title and abstract screening, full text review, construct assignment, and measure forward searches. Phase II, data extraction, involved coding relevant psychometric and pragmatic information. Phase III, data analysis, involved two trained specialists independently rating each measure using PAPERS (Psychometric And Pragmatic Evidence Rating Scale) [1]. Frequencies and central tendencies summarized information availability and PAPERS ratings.
ABSTRACTS

Results
Searches identified nine measures of readiness for implementation, 24 measures of leadership engagement, 17 measures of available resources, and 6 measures of access to knowledge and information. Information about internal consistency was available for most measures. Information about other psychometric properties was often not available. Ratings for internal consistency were “adequate” or “good.” Ratings for other psychometric properties were less than “adequate.” Information was often available regarding cost, language readability, and brevity. Information was less often available regarding training burden and interpretation burden. Cost and language readability generally exhibited “good” or “excellent” ratings, interpretation burden generally exhibiting “minimal” ratings, and training burden and brevity exhibiting mixed ratings across measures.

Conclusions
Measures of readiness for implementation and its sub-constructs used in mental health and behavioral healthcare are unevenly distributed, exhibit unknown or low psychometric quality, and demonstrate mixed pragmatic properties. This review identified a few promising measures, but targeted efforts are needed to systematically develop and test measures that are useful for both research and practice.

References

Talk 3: Measuring Organizational Culture and Climate: A Systematic Review
Byron J. Powell1, Kayne D. Mettert2, Caitlin N. Dorsey2, Mark G. Ehrhart3, Gregory A. Aarons4, Bryan J. Weiner5, & Cara C. Lewis2

1Washington University in St. Louis, 2Kaiser Permanente Washington Health Research Institute, 3University of Central Florida, 4University of California San Diego, 5University of Washington

Background
Organizational culture and climate have a long history in management research, and have been shown to impact implementation and clinical outcomes in mental health service settings. The purpose of this systematic review is to identify and evaluate the psychometric properties of measures of these constructs as they are defined by the Consolidated Framework for Implementation Research. Specifically, we aim to review measures of organizational culture, climate, and its subconstructs including tension for change, compatibility, relative priority, organizational incentives and reward, goals and feedback, and learning climate.

Materials and Methods
This systematic review was conducted as a part of a larger study, and the full protocol is published elsewhere [1]. The review proceeded in three phases. Phase I, data collection, involved search string generation, title and abstract screening, full text review, construct assignment, and measure forward searches. Phase II, data extraction, involved coding relevant psychometric and pragmatic information. Phase III, data analysis, involved two trained specialists independently rating each measures’ psychometric properties. Frequencies and central tendencies summarized information availability and psychometric ratings.

Results
Searches identified 65 measures or subscales assessing molar organizational culture or climate, 6 measures of implementation climate, 4 of which were subscales of other measures; and a number of other subscales for constructs related to the CFIR’s conceptualization of implementation climate, including: 2 assessing tension for change; 6 assessing compatibility; 2 assessing relative priority; 3 assessing organizational incentives and rewards;
3 assessing goals and feedback; and 2 assessing learning climate. Information about internal consistency and norms was available for most measures. Information about other psychometric properties was often not available. Ratings for internal consistency were most often “adequate” or “good.” Ratings for other psychometric properties were typically lower.

Conclusions
This review suggests some promising measures of organizational culture, climate, and related constructs; however, it also suggests a lack of conceptual clarity with respect to the differentiation between molar organizational culture and molar organizational climate. Implications for measure development and refinement will be discussed.

References

Talk 4: A Systematic Review of Outer Setting Measures in Behavioral Health
Sheena McHugh1, Eric J. Bruns2, Jonathan Purtle3, Caitlin N. Dorsey4, Kayne D. Mettert4, & Cara C. Lewis4
1University College Cork, 2University of Washington, 3Drexel University, 4Kaiser Permanente Washington Health Research Institute

Background
One of the main challenges to measurement of implementation-relevant constructs is the mismatch between the level of measurement and the level of analysis [1-2]. This alignment is particularly challenging when measuring constructs relating to the outer setting, given the predominance of self-report in implementation science. The objective of this review is to assess the reliability, validity, and practicality of measures of outer setting and its CFIR-delineated constructs used in mental or behavioral healthcare.

Materials and Methods
This review of outer setting measures follows the same study protocol as the other systematic reviews initiated through this larger project [3]. Phase I, data collection, occurred in five steps: a) search string generation, b) title and abstract screening, c) full text review, d) construct assignment, and e) measure forward searches. Particular to this review, during search string generation an additional level was included for each of the CFIR constructs [4]; 1) Patient needs and resources, 2) Cosmopolitanism, 3) Peer Pressure, and 4) External Policy & Incentives. Phase II, data extraction, consisted of coding relevant information to the nine psychometric rating criteria using the Psychometric And Pragmatic Evidence Rating Scales (PAPERS) [3]. Phase III, data analysis, is underway. For each construct, frequencies will be used to summarize the availability of psychometric information for each PAPERS criterion for the measures for that construct. The median and the range of final ratings for each psychometric PAPERS criterion will be used to summarize the psychometric strength of the measures for that construct.

Results
Electronic searches yielded four measures of outer setting; four measures of patient needs and resources; eight measures of cosmopolitanism; one measure of peer pressure and six measures of external policy and incentives. Five of these measures were unsuitable for rating. Analysis of the psychometric properties of the remaining measures if ongoing.

Conclusions
The outer setting is the CFIR domain with the fewest measures identified. This paper advances implementation science and practice through consideration of how the outer setting should be conceptualized and measured. Outer setting constructs may be more appropriately assessed at a system rather than individual level, and by using direct
measurement instead of latent variables.

References

Session F2 - Where The Rubber Meets the Road in Clinical Mental Health Settings
Location: Room 332
Chair: Ana Baumann
Discussant: Shannon Wiltsey Stirman
1University of Washington in St. Louis, 2National Center for PTSD

Talk 1: Applying the Theory of Planned Behavior and the Consolidated Framework for Implementation Research to Understand Therapists’ Perceived Barriers and Facilitators to Using Trauma Narratives
Hannah Frank, Briana Last, Reem AlRabiah, Jessica Fishman, Brittany Rudd, Hilary Kratz, Colleen Harker, Sara Fernandez-Marcote, Kamilah Jackson, & Rinad Beidas
1Temple University, 2University of Pennsylvania, 3La Salle University

Background
Trauma narratives (TN) are a critical component of trauma-focused cognitive-behavioral therapy (TF-CBT; [1]) yet therapists report using TNs infrequently [2]. One causal theory that may explain the infrequent use of TNs is the Theory of Planned Behavior (TPB; [3]). The TPB states that intentions, which are informed by attitudes, subjective norms, and self-efficacy, are the strongest predictor of actual behavior. The TPB also acknowledges that certain contextual factors need to be present in order for intentions to translate into actual behavior. Implementation science frameworks, such as the Consolidated Framework for Implementation Research (CFIR; [4]), provide insight into the types of contextual factors that may affect clinician behavior (e.g., organizational variables). This study aimed to identify barriers to TN use by integrating a causal theory of behavior change (TPB) and a widely used contextual framework (CFIR).

Materials and Methods
Sixty-five mental-health therapists working in community settings and trained through a city-wide TF-CBT initiative participated by completing a survey about their use of and beliefs about TNs. Content analysis was conducted to identify common beliefs about TNs. A subset of participants (n=17) completed in-depth qualitative interviews focused on perceptions of TNs. Qualitative interviews were analyzed using an integrated approach informed by the CFIR.
Results
While most participants reported high intentions to use TNs, nearly half reported that they did not use TNs in the last six months. The initial survey identified beliefs related to TPB constructs, including clinician attitudes (e.g., TN may worsen symptoms), norms (e.g., caregivers may disapprove), and self-efficacy (e.g., insufficient training). CFIR-informed qualitative interviews yielded themes related to client and family characteristics (e.g., client reluctance, instability in caregivers) and organizational factors (e.g., brief sessions).

Conclusions
Results indicate a discrepancy between intentions and TN use. Responses to the survey and qualitative interviews indicate that there are contextual factors that may moderate the relationship between intentions and behaviors. For example, organizational constraints, such as time limitations, may prevent TN use even among therapists with high intentions. Results from this study highlight the importance of integrating theories that address multiple determinants of clinician behavior to identify potential targets for implementation strategies.

References

Talk 2: The Relationship between Therapist-Driven Adaptations to Evidence-Based Practices (EBP) and the Extensiveness of EBP Strategy Delivery in Community Implementation

Stephanie H. Yu1, Lauren Brookman-Frazee2, Joanna J. Kim1, Miya L. Barnett3, & Anna S. Lau1
1University of California, Los Angeles, 2University of California, San Diego, 3University of California, Santa Barbara

Background
Community therapists adapt evidence-based practices (EBPs) to enhance fit for their complex settings and clients when implemented [1]. Yet, few studies have examined the potential implications therapist-driven adaptations have for the quality of EBP delivery [2]. We examined the extent to which different types of therapist-reported adaptations were associated with the extensiveness of EBP strategy delivery in a system-driven implementation of multiple EBPs.

Materials and Methods
Data were drawn from an observational study investigating the sustainment of six EBPs for youth in the Los Angeles County Department of Mental Health [4]. Community therapists (n=103) provided descriptions of any adaptations they made in 680 sessions with 273 clients. Trained coders rated the extensiveness of EBP strategy delivery via the EBP Concordant Care Assessment (ECCA) from session recordings [4]. We examined how different types of therapist adaptations were associated with ECCA extensiveness ratings. Adaptations were categorized as: 1) modifying presentation, 2) integrating (integrating components, combining practices, providing psychoeducation), 3) extending (repeating components, lengthening), 4) reducing (removing, reordering, or shortening components), and 5) other (adaptations that could not be coded within our framework due to lack of fit) [3]. Furthermore, we examined these relationships through an augmenting (modifying presentation, integrating, extending) vs. reducing (removing, reorder, shortening) vs. “other” framework [3].
ABSTRACTS

Results
Preliminary analysis revealed that the overall number of therapist adaptations did not significantly predict extensiveness ratings ($\beta = .067$, $p = .059$). However, specific adaptations were related to extensiveness. Modifying presentation was associated with higher extensiveness ($\beta = .098$, $p = .046$), while “other” adaptations were associated with lower extensiveness ($\beta = -.119$, $p = .034$). When compared through an augmenting vs. reducing vs. “other” framework, “other” adaptations predicted lower extensiveness ($\beta = -.127$, $p = .023$).

Conclusions
Quality of EBP delivery may be robust to some types of therapist-driven adaptations. In fact, adaptations that tailor the presentation of interventions were associated with more extensive EBP delivery. In contrast, “Other” adaptations were more likely to be associated with lower EBP extensiveness and thus may represent “drift.” Additional analyses to further characterize the content of the “other” adaptations will be included in the proposed presentation.

References

Talk 3: One Size Does Not Fit All: Clinician Intentions to Implement Cognitive-Behavioral Therapy Vary by Specific Component

Emily Becker-Haimes¹, Jessica Fishman¹, Torrey Creed¹, Courtney Benjamin Wolk¹, Nicholas Affrunti¹, Danielle Centeno¹, & David Mandell²

¹University of Pennsylvania

Background
Developing implementation strategies to increase clinicians’ use of evidence-based practices (EBPs) is important for improving the quality of mental health care. Our prior work with school-based services for youth with autism demonstrated that studying practitioners’ intentions to use specific EBP components rather than their intentions to use broader intervention protocols, may point to levers by which to tailor implementation strategies as a function of the specific EBPs themselves (e.g., their salience, complexity) [1]. We extend this work by examining variability in community clinicians’ intentions to use different components of cognitive-behavioral therapy (CBT). CBT has long been a target of implementation efforts [2-3] yet remains underutilized in community settings [4-5]. CBT comprises multiple, distinct components that vary in their complexity, ranging from relatively simple (e.g., homework review) to more complex interventions (e.g., cognitive restructuring). Examining how intentions vary across specific CBT components may yield insights into how to tailor implementation strategies to increase CBT use in community settings.
Materials and Methods
Community mental health providers (N=149, mean age = 40.8 years, 57.7% female) who had received intensive training and consultation in CBT were surveyed about their intentions to use six key elements of CBT interventions (exposure therapy, cognitive restructuring, behavioral activation, planning homework, reviewing homework, and agenda-setting) for seven different clinical presentations. Clinicians also reported on their intentions to use “EBP” broadly. Demographic and clinical background characteristics also were collected.

Results
Analyses are ongoing. Nearly all clinicians reported high intentions to use “EBPs” broadly across all seven clinical presentations. However, intentions varied widely when clinicians reported on specific CBT components. In general, higher intentions were observed for CBT components that were simpler and part of the session structure (e.g., reviewing homework vs. exposure therapy). Additional analyses will examine clinician characteristics as predictors of intentions.

Conclusions
Findings highlight variability in clinician intentions across specific elements of CBT and suggest that CBT implementation strategies may need to be tailored as a function of specific intervention components. Results also suggest that implementation efforts may benefit from dismantling complicated interventions, highly specifying the practitioner behavior of interest, and tailoring implementation strategies to each one.

References

Talk 4: A Comparison of Consultant Effects, Activities, and Perceptions on Therapist Fidelity and Patient Treatment Outcomes
Heidi La Bash1, Norman Shields2, Tasoula Masina3, Kera Swanson1, Jiyoung Song1, Clara Johnson1, Matthew Beristianos1, Erin Finley4,6, Vanessa Ramirez5, Jeanine Lane1, Michael Suvak6, Candice Monson3, & Shannon Wiltsey Stirman1

1National Center for PTSD, VA Palo Alto Health Care System, 2Veterans Affairs Canada, 3Ryerson University, 4South Texas Veterans Health Care System, 5University of Texas Health Science Center at San Antonio, 6Suffolk University

Research has demonstrated that workshops alone do not lead to sufficient skill in delivering evidence-based psychotherapies (EBP), and that strategies such as follow-up consultation are needed. Yet, there is little research to inform how to best provide consultation to ensure sustained, high-quality delivery of EBPs. The parent randomized controlled implementation trial assessed the impact of three post-cognitive processing therapy (CPT) training workshop conditions (No consultation, Standard consultation without session audio review, Consultation with audio review) on the patient (N=188) PTSD treatment outcomes of participating therapists (n=134) in over 30 routine care settings in Canada. The current mixed-methods study examines associations between consultation activities
and therapist fidelity and patient treatment outcomes, as well as the accuracy of consultant perceptions of the skill and engagement of therapist consultees. Consultation occurred weekly for six months. After each recorded call, consultants (n=5) completed a post-call checklist of strategies and rating of perceived levels of enthusiasm, skill, and participation for each consultee. A subset of therapists (n=30) were interviewed at the end of the consultation phase. While there was variability, three primary categories of activities emerged: case conceptualization and intervention planning, feedback on fidelity, and distractions/technical difficulties. Similarities and differences in consultant and therapist perceptions of consultation activities will be presented. Additionally, analyses revealed evidence of a consultant effect on therapist treatment adherence (B=0.439, SE=0.171, p=.012), but not competence (-B=0.341, SE=0.247, p=.168). This will be explored in relation to consultation condition and strategies, including whether different consultants engaged in specific activities more frequently. Finally, we found that while consultants perceived overall improvements over the course of consultation (b = 0.03, t = 6.12, p < .01), their ratings of therapist skill did not predict clinician adherence (b = 0.03, t = 0.46, p = .65), competence (b = 0.03, t = 0.31, p = .76), or patient PTSD symptom change (b = -.12, t = -0.31, p = .76). It is possible that cognitive biases (e.g., halo effect) may reduce the accuracy of consultant perceptions. Practical implications of this and the other study findings will be presented in a broader discussion of barriers/facilitators of EBP sustainment.

References

Session F3 - From Coaching to Machine Learning: Strategies to Address the Bumps and Potholes of Implementation

Location: Room 145
Chair: Amber Haley
Discussant: Lisa Saldana

1University of North Carolina at Chapel Hill, 2Oregon Social Learning Center

Talk 1: From Blank Page to Local Optimization: Participatory Systems Modeling to Improve Local Evidence Based Practice Implementation

David Lounsbury, Debra Kibbe, James Rollins, & Lindsey Zimmerman

1Albert Einstein College of Medicine, Yeshiva University, 2Georgia Health Police Center, Georgia State University, 3Takouba Security LLC, 4National Center for PTSD, Veterans Health Administration

Background
This panel is for implementation practitioners interested in systems science and participatory modeling approaches to evidence-based practice (EBP) implementation. Panelists will review participatory development of “Modeling to Learn (MTL),” a program for improving EBP implementation in the Veterans Health Administration (VA) [1-2]. Study of MTL is underway to determine its effectiveness increasing delivery of evidence-based addiction and mental
health care (R01DA046651). Preliminary statistical process control analyses indicate pilot clinics demonstrated a three standard deviation increase in EBP reach and maintained improvement for 12 and 8 months, respectively (R21DA042198).

Materials and Methods
Using the MTL example, this panel answers commonly asked questions about systems science approaches to implementation through demonstration. Four years ago, panelists began learning with frontline multidisciplinary teams about determinants of local reach of evidence-based psychotherapies and pharmacotherapies (EBPs). Support for modeling to identify locally tailored implementation plans grew among VA stakeholders, and each panelist joined the project to contribute systems modeling expertise: Dr. Lounsbury as an NIH-funded researcher, Ms. Kibbe as a public health facilitator, and Col. Rollins (Ret.) as an online simulation user interface developer.

Results
Panelists will present participatory modeling activities, linking them to free, online open science resources. Dr. Lounsbury will describe initial qualitative group model building exercises, developed in the field of system dynamics [4-5]. These activities illustrate how to determine the right modeling problem via participatory engagement. Ms. Kibbe will describe the participatory principles and pragmatic constraints used to refine MTL online facilitation resources for teams to develop systems thinking skills at national scale [3]; this includes the MTL session guides and fidelity checklist. Col. Rollins will describe design iterations to produce an interface for frontline teams to simulate improvement scenarios using team data. Attendees will be provided access to a demonstration website developed to help users understand how simulation makes local EBP barriers and facilitators more transparent and locally manageable.

Conclusions
As discussant, Dr. Zimmerman will synthesize the activities described by panelists in relation to the learning objectives, to help implementation practitioners and intermediaries get started with participatory modeling.

References

Talk 2: Building Implementation Capacity through Development of a Coaching Network
Kristen Miner1, Emily Bilek1, Jennifer Vichich1, Shawna Smith1, & Elizabeth Koschmann1
1University of Michigan

Background
Mood and anxiety disorders affect approximately 30% of youth. Cognitive Behavioral Therapy (CBT) is an evidence-based treatment for these disorders, but only a fraction of adolescents in need have access to high
quality treatment. Access could be substantially increased if school professionals (SPs) were trained to deliver CBT. However, typical professional development and clinical training opportunities are often unsuccessful because they lack post-training support necessary for producing sustained behavioral change. TRAILS is an implementation and training model designed to increase utilization of CBT among SPs. In addition to clinical training and resources, TRAILS is unique in that it also provides in-person coaching to support SPs as they co-lead student CBT skills groups.

Materials and Methods
To build capacity for large-scale and sustainable implementation of CBT, TRAILS established a statewide network of expert “coaches”, recruiting primarily from Community Mental Health (CMH) agencies across Michigan. Participation was incentivized via provision of training and CEUs at no cost to potential coaches and up to 10 (non-coaching) clinicians per partner agency. Coaches participated in a daylong CBT training, followed by 12 weeks of individual case consultation from an expert clinician. Coaches were assessed pre- and post- consultation and successful completers were recommended for subsequent training in the TRAILS coaching protocol.

Results
TRAILS trained five cohorts of coaches over the course of two years. Of 125 trainees completing consultation, 108 were recommended for coaching based on clinical skill, and 84 were ultimately trained in the TRAILS coaching protocol. TRAILS Coach training led to improvement in CBT expertise (p<0.001) and frequency of use (p<0.001), with 87% of coaches reporting feeling “extremely satisfied” with their training. TRAILS Coaches now span 63 of Michigan’s 83 counties and have been paired with 47 schools across Michigan as part of a NIMH clinical trial.

Conclusions
Large-scale implementation efforts often require development of new infrastructure to ensure capacity to support implementation strategy deployment and long-term sustainability. By creating a statewide network of coaches, TRAILS has built the infrastructure necessary to support SPs in learning and delivering CBT to students in need and provides one model for feasible creation of statewide implementation infrastructure.

References
Talk 3: The Parent Engagement in Evidence-Based Services Questionnaire: Advancing Our Understanding of Parental Intentions for Engaging in Evidence-Based Practice

Spencer Choy¹, Jaime Pua Chang¹, & Brad Nakamura¹
¹University of Hawaii at Manoa

Background
The Parent Engagement in Evidence-Based Services (PEEBS) [1] is a newly developed questionnaire that aims to assess parent consumer perspectives about evidence-based practices through the theory of planned behavior, a widely-applied model that suggests parental attitudes, perceived behavioral control (PBC), and subjective norms (SN) shape behavioral intentions. Towards the larger goal of better understanding factors associated with parental behavioral intentions for utilizing such services, we present data with a community parent sample of the PEEBS’ factor structure, internal consistencies, and relations with related instruments.

Materials and Methods
351 parents (75.8% female; M = 40.4 years old, SD = 7.6; 62.3% Asian) recruited from 15 community outreach efforts in Hawaii completed the PEEBS, the Family Empowerment Scale (FES) [2], and the Parental Attitudes Toward Psychological Services Inventory (PATPSI) [3]. Exploratory factor analysis was conducted with principal axis factoring and oblique rotation, Cronbach alpha coefficients were used to calculate internal consistencies, and Pearson correlations were computed to investigate convergent validity.

Results
Exploratory factor analysis suggested a five-factor structure (50 items, alpha = .86). Items grouped along the dimensions of SN (11 items, alpha = .80), treatment barriers (10 items, = .71), treatment knowledge (6 items, alpha = .72), evidence-informed action (11 items, alpha = .83), and PBC (12 items, alpha = .83), that accounted for 38.07% of the total variance. Regarding Pearson bivariate correlations, PEEBS’ PBC was significantly and positively associated with evidence-informed action (r = .50, p < .01) and SN (r = .35, p < .01). As expected, the FES family scale was significantly and positively associated with the PEEBS’ knowledge factor (r = .42, p < .01), PBC (r = .32, p < .01), and evidence-informed action (r = .17, p < .01). PATPSI’s help-seeking intentions were significantly and positively correlated with the PEEBS’ PBC (r = .37, p < .01), evidence-informed action (r = .33, p < .01), knowledge (r = .29, p < .01), and subjective norms (r = .22, p < .01).

Conclusions
Based on promising psychometric results, the PEEBS appears to be a potentially useful instrument to understand parent consumers.

References
ABSTRACTS

Talk 4: What Works Best in Practice? The Effectiveness of ‘Real-World’ Facilitation Strategies in Overcoming Evidence-Based Barriers to Implementation

Lydia Moussa1, Katarzyna Musial1, Simon Kocbek1, & Victoria Garcia Cardenas1

1University of Technology Sydney

Background
Research has shed light into factors affecting the implementation of innovations in practice as well as facilitation strategies that can be utilised during the implementation of these innovations. Change facilitators, however, often use a ‘trial and error’ approach when determining the best strategy to overcome the particular barrier identified. This leads to loss of time, resources and a team’s reduced motivation to successfully implement the innovation. To overcome this challenge, we developed a machine-learning tool that connects evidence-based barriers with the most effective, pragmatic change facilitation strategies, as trialled by change facilitators in the real world.

Materials and Methods
A 2-year change program was facilitated across 19 pharmacies around Australia by six facilitators. Facilitators identified barriers to implementation and recorded the strategies they used to overcome these barriers. The barriers were coded according to implementation factors from the Consolidated Framework of Implementation Research [1] and the Theoretical Domains Framework. Strategies were coded according Dogherty et al. facilitation strategy taxonomy [2]. To determine the most effective facilitation strategies, a decision forest [3] algorithm was developed.

Results
We collected 1131 data points from six facilitators, which were categorised into 36 barriers to implementation and 111 unique change facilitation strategies. The Decision Forest algorithm highlighted the effectiveness of the facilitation strategies according to the strategy ‘resolve rate’ (RR). The most frequent barrier in the pharmacy practice setting was the ‘inability to plan for change’ (n=184). The strategies used to overcome this barrier were to: a) ‘Manage the different the requirements of each discipline/ role and create ownership’ (RR= 84.23%), b) ‘Provide training’ (RR= 83.30%) c) ‘Adapt area of focus to change’ (RR= 81.17) d) ‘Assist the group to develop ideas and solve problems’ (RR= 80.64%).

Conclusions
By understanding that the most prevalent barrier to implementation was an ‘inability to plan for change’, this provides pharmacy practice policy makers, tertiary educators, researchers and change facilitators an idea of where to target strategies to not only overcome, but prevent this barrier from occurring. This tool can be reproduced to understand implementation barriers specific to other industries and the most effective strategies to overcome these.

References
Session F4 - Going the Distance: Co-creation, Collaborative Partnerships, and Innovation to Expand Reach

Location: Room 106
Chair: Oscar Fleming
Discussant: Alison Hamilton

1University of North Carolina at Chapel Hill, 2University of California, Los Angeles, 3VA Greater LA Healthcare System

Talk 1: Implementation Strategies of a Co-Designed Physical Activity Program for Older Adults

Erica Lau1, Joanie Sims-Gould1, Samantha Gray1, & Heather McKay1
1University of British Columbia

Background
Despite the known health benefits of physical activity (PA), 87% of Canadian older adults do not meet recommended PA guidelines. Community-based PA interventions show promise, but few were scaled-up. With partners, the Active Aging Research Team (AART) co-created Choose to Move (CTM), a 6-month, choice-based health promotion intervention that aims to improve older adults’ social connectedness and mobility through PA. During small scale-up, two community delivery partner organizations delivered 56 CTM programs in 26 urban communities across BC. We previously demonstrated that CTM effectively improved PA, mobility and social connectedness in 458 older adults [1]. The objective of this study was to evaluate effectiveness of CTM implementation strategies to guide broad scale-up (175 programs) of CTM.

Materials and Methods
Grounded in implementation frameworks (e.g., QIF [2], Powell et. al. [3]), CTM adopted eight key implementation strategies: 1. develop strong community partnerships; 2. develop an implementation blueprint; 3. ongoing implementation monitoring; 4. promote adaptability; 5. provision of program materials and tools; 6. centralized training and technical assistance; 7. convene advisory committees, and 8. a staged implementation scale-up approach. To assess effectiveness of implementation strategies, we measured four implementation outcomes (reach, participant responsiveness, quality, and delivery partners’ perceptions of the strategy). We administered surveys and conducted interviews with CTM participants (n=42) and delivery partners across four levels of influence (19 decision makers, 6 recreation managers, 27 recreation coordinators, 23 activity coaches) at mid- and post-intervention.

Results
CTM implementation strategies were effective across all levels of evaluation. Of 458 participants, 82% attended ≥75% of group meetings; 95% completed ≥70% of check-ins (reach); 75.3% were satisfied with CTM (participant responsiveness). From interviews, CTM was implemented with quality. Participants’ had very positive perceptions of their ACs. Delivery partners noted that intervention materials were appropriate and CTM was flexible and easy to implement. Central support (e.g., training, integration) provided by AART was instrumental to effectively implementing CTM.

Conclusions
Implementation strategies must be adapted to provide “best fit” for the delivery context. Our findings support a suite of implementation strategies that promoted scale up a health promotion intervention that other interventions can adopt, modify and evaluate in future.
References

Talk 2: Innovative Funding to Achieve Reach: Pay for Success
Suzanne Kerns1 & Mollie Bradlee2
1University of Denver, 2Colorado Office of Children Youth and Families

Background
Large scale dissemination and implementation of evidence-based interventions is limited by funding. Further, agencies are often required to shoulder the burden of costs while monetary benefits are realized in other service sectors. Thus, novel funding strategies are warranted. Pay for Success (PFS), also known as social impact bonds, is one such strategy [1]. Under PFS, governments may leverage private or philanthropic upfront capital to fund interventions, and subsequently repay those funders based on outcomes. However, there are notable considerations as it relates to implementation of this strategy, as described by Lowe et al. (2019) [2]. According to their model, it is easier to achieve agreement at the macro-policy levels, but challenges arise in meso- and micro-levels.

In 2015, the Colorado state legislature approved a law that enabled the state to enter into PFS arrangements. Shortly thereafter, a “Call for Innovation” was released from the Governor’s Office to identify potential PFS projects to improve outcomes for at-risk teens. The present project was one of three selected, and focuses on bringing an evidence-based intervention, Multisystemic Therapy [3], to under-served regions of the state. This presentation includes the perspectives of a state partner and the University-based entity implementing the project.

Materials and Methods
The Lowe et al. (2019) [2] framework is used to contextualize the PFS structuring of the initiative, which required alignment of funders, state partners, evaluators, and the project-based implementation team. This is the first PFS initiative that partnered with a non-profit, private university as the primary fiscal agent.

Results
This presentation describes the successful launch of the Colorado-based PFS initiative in December, 2018. Three cohorts, each containing two MST teams, are being rolled out over the next two years. The evaluation, on which the success payments are connected, uses a propensity score matching procedure because of the relatively lower population density in the service areas. Over the course of the project, we anticipate over 600 families to be served.

Conclusions
Although complicated to enact, PFS may become an important strategy to support large scale dissemination. Strategies to simplify the contracting process and support the meso- and micro-policy tensions is necessary for broad-scale uptake.

References

**Talk 3: Implementation of Systems-Level Interventions to Expand Rural Access to Medication-Assisted Treatment (MAT) for Opioid Use Disorders**

Claire Snell-Rood¹, Cathleen Willging², & Robin Pollini³
¹University of California, Berkeley, ²Pacific Institute for Research and Evaluation, ³West Virginia University

**Background**
The “hub and spoke” model was established as a systems-level intervention in Vermont to expand access to medication-assisted treatment (MAT) for opioid use disorders (e.g., methadone, buprenorphine), particularly in rural areas with extensive need but few MAT providers [1-2]. Ideally, hub and spoke systems (HSS) build relationships between central hubs (e.g., methadone clinics) and spokes (e.g., primary care-based buprenorphine providers) that facilitate a continuum of care in a region, offer technical assistance for MAT, and support MAT implementation. As this model is scaled throughout the United States, understanding the systems-level facilitators and barriers to implementation will be critical to support HSS across rural settings with varying behavioral health resources.

**Materials and Methods**
Using a case study design, we conducted qualitative interviews with rural substance abuse treatment providers (N=26) and systems-level stakeholders (N=15) in five of California’s 17 hub and spoke sub-systems halfway through the state’s federally-funded HSS rollout. We undertook iterative textual analysis of interview transcripts, identifying and coding themes related to both rural service delivery environments and implementation constructs from the Dynamic Sustainability Framework [3].

**Results**
Though the HSS intervention was designed for a predominantly rural setting (Vermont), most participants questioned its appropriateness for rural California. Like Vermont, California’s HSS positioned methadone clinics as hubs. Participants doubted the relevance of this intervention design for rural areas in California that have few established methadone clinics, arguing that it should be adapted to strategically marshal the expertise of existing rural buprenorphine providers. Geographic barriers in California’s large rural regions and scarce behavioral resources limited the development of working relationships between hubs and spokes that would link acute care in hubs to chronic care in spokes. Finally, while HSS was intended to offer financial resources to improve MAT implementation across sites (e.g., provision of drug counseling), differing models of reimbursement and policy constraints at local levels impacted the degree to which spokes could employ this funding to address needs.

**Conclusions**
Implementation of systems-level interventions in rural settings must address contextual features of local service delivery environments, including provider/resource availability, geographical considerations, and policy/regulatory factors that affect financing for behavioral health care.

**References**

Thomas Engell¹, Benedicte Kirkæn¹, Karianne Thune Hammerstrøm¹, Hege Kornør², Kristine Horseng Ludvigsen¹, & Kristine Amlund Hagen³
¹Regional Centre for Child and Adolescent Mental Health, ²Norwegian Institute of Public Health, ³Norwegian Center for Child Behavioral Development

Background
Implementation and sustainment of effective interventions remains a struggle across public services, especially in settings with limited readiness for implementation. Increasing the implementability of interventions can facilitate more successful implementation. There is growing interest in identifying and studying discrete elements that are common across interventions for the purpose of hypothesis generation, intervention optimization and re-design, and implementation in practice. We combine common elements methodology with collaborative design approaches to develop and test implementable evidence-informed interventions tailored to individual and contextual needs. This session will present preliminary results from a common elements-based academic intervention for children in child welfare.

Materials and Methods
We used common elements methodology to identify common practice-, process-, and implementation elements in systematically reviewed academic interventions for children at risk. We compared frequencies of the most common elements and combinations in effective interventions with frequencies in ineffective interventions. Using facilitated co-creation with stakeholders, practitioners and user-representatives, we aimed to unify perspectives of researchers, implementers, managers, practitioners, and end-users to develop an implementable academic intervention based on the identified common elements. We developed dynamic fidelity monitoring encouraging flexible use of elements and adaptations, and we co-created blueprints for implementing, evaluating, and sustaining the intervention. We are now conducting a mixed-methods hybrid pragmatic trial where we assess the child welfare contexts’ readiness for implementation, intervention implementability (feasibility, appropriateness, acceptability, usability), implementation quality, and intervention effectiveness.

Results
We included 30 effective and 6 ineffective academic interventions for children at risk in a systematic review. We identified 62 practice elements, 49 process elements, and 34 implementation elements used in the interventions. Frequency count values (FVs; inclusion in effective vs ineffective interventions) were calculated for each element and commonly used combinations of elements. Elements and combinations with the highest FVs were used in facilitated co-creation to develop the intervention Enhanced Academic Support (EAS). Preliminary mixed methods results on the implementability of EAS and associations with readiness will be presented at the conference.

Conclusions
Combining common elements methodology with collaborative approaches for intervention design can be a viable approach for developing implementable interventions tailored to individual and contextual needs.

References
Examining the Relationship Between Client Engagement Challenges and Community Therapists’ Delivery of Evidence-Based Strategies to Youth and their Caregivers

Blanche Wright¹, Anna Lau¹, Joanna Kim¹, Resham Gellatly¹, Mary Kuckertz², & Lauren Brookman-Frazee²

¹University of California, Los Angeles, ²University of California, San Diego

In the delivery of youth-focused evidence-based practices (EBPs), high levels of client engagement have been positively associated with improved clinical outcomes [1]. In the literature, engagement has been primarily indexed by attendance [2], and more refined qualitative measures of engagement are needed. Thus, in the current study, we used an observational coding system to examine specific in-session client engagement challenges within a county-wide implementation of multiple EBPs in youth mental health services. The aims of the study were twofold: (1) characterize the frequency of client engagement challenges and (2) examine whether these challenges are associated with the extent to which community therapists deliver EBP strategies. Extensiveness of EBP strategies was measured via therapist-report and observer-ratings. The sample included 103 therapists who provided recordings of 680 sessions in which they delivered an EBP to 273 youths (Mean age=9.75 years). Using observational coding, in-session youth and parent engagement challenges (i.e., client expressed concerns, refusal to participate in activities) were measured with good reliability (Mean ICC=.64). Across both youth only and youth + parent sessions, 66.29% of sessions had ≥ 1 engagement challenge occur. In parent only and youth + parent sessions, engagement challenges were observed in fewer sessions (30.47%). When examining the association between engagement challenges and therapist delivery of EBP strategies, there was no significant association with occurrence of youth engagement challenges and EBP strategies delivered (indexed by both observer or therapist report). For parent challenges, the relationship was nonsignificant using therapist-reported EBP delivery. In contrast, parent engagement challenges were positively associated with observer-rated therapist delivery of EBP strategies (b=.15; p=.04). This relationship seems to be driven by parents expressing concerns about the relevance/acceptability/helpfulness of the EBP. Overall, these findings imply that youth/parent behaviors that we may conceptualize as engagement challenges do not necessarily derail therapists from EBP delivery in session. Future analyses will further examine the relationship thematically by types of engagement challenges. Discussion will focus on therapist perceptions of client behaviors as engagement challenges, and whether they can be deemed opportunities for alliance building.

References
ABSTRACTS

Poster Group - COMMUNITY MENTAL HEALTH

Therapist Characteristics as Predictors of Perceptions of Evidence-Based Assessment (EBA)
Kenny Le¹, Lauren Brookman-Frazee¹, Joyce Lui¹, Mary Kuckertz², & Anna Lau¹
¹University of California, Los Angeles, ²University of California, San Diego

Background
Evidence-based assessment (EBA) can improve clinical outcomes, and it is embedded in many evidence-based practices (EBP) [1]. However, EBA is not well implemented in community practice due to perceived low usefulness [2]. Additionally, therapist characteristics such as non-psychology disciplines and years of practice may be associated with negative EBA attitudes [3]. Research is needed on factors that predict EBA use in community practice and how attitudes change with exposure to EBP. The current study examined how therapist characteristics, use of EBA within the delivery of EBPs, and interactions between these variables may be associated with subsequent perceptions of EBA.

Materials and Methods
Therapists (n=117) in an initial survey reported on their use of clinical dashboards, an EBA strategy for repeated assessments of client outcomes to inform treatment planning. They reported on their perceptions of EBA in another survey approximately 10 months later. Separate linear regression models were conducted for each of the four dimensions of EBA perceptions: clinical utility, practicality, benefit to clients and treatment, and harm to clients.

Results
Results showed that dashboard use significantly predicted perceptions of clinical utility (b=-0.100, p=0.006). Theoretical orientation moderated the relationship between dashboard use and clinical utility (b=0.107, p=0.028). For therapists who did not identify as having a cognitive/behavioral orientation in their practice, more extensive dashboard use predicted lower perceptions of clinical utility of EBA. For other EBA perceptions, years of practice significantly predicted perceived practicality (b=0.037, p=0.020), where longer years of practice predicted positive perceptions of EBA. Therapist discipline also significantly predicted perceived harm of EBA for clients (b=-0.495, p=0.022), where having a psychology discipline predicted lower perceived harm relative to other disciplines.

Conclusions
These results replicate therapist characteristics as important predictors of EBA perceptions and suggest that on-the-job use of EBA strategies can predict future perceptions. However, for some clinicians (non-cognitive/behavioral), mandated use of EBA may further entrench negative perceptions. Non-psychologists and less experienced therapists perceived EBA as burdensome and more harmful to therapeutic process perhaps due to inefficient training or support. Future studies could examine implementation strategies that may promote positive perceptions of EBA and positive outcomes of EBA use for clients.

References
Looking Beyond the Clinic Door: Examining the Relationship Between Clinic Neighborhood Characteristics and Therapist Emotional Exhaustion in a Large-Scale Implementation Effort

Mary Kuckertz\textsuperscript{1}, Anna Lau\textsuperscript{2}, Teresa Lind\textsuperscript{1}, Kenny Le\textsuperscript{2}, Mojdeh Motamedi\textsuperscript{1}, & Lauren Brookman-Frazee\textsuperscript{1}

\textsuperscript{1}University of California, San Diego, \textsuperscript{2}University of California, Los Angeles

Background

In an effort to increase the use of evidence-based practices (EBPs) in community mental health settings, large-scale implementation efforts are becoming increasingly common, prompting efforts to better understand determinants of implementation \cite{1-2}. While much attention has been given to the inner and outer organizational and leaderships contexts that influence implementation efforts, \cite{3-4} there has been less focus on the links between therapist factors and the community neighborhood in which they work. Clients from high risk neighborhoods have been shown to present with more severe symptoms \cite{5} and an increased number of emergent life events that can impact the treatment process \cite{6}. This may influence implementation efforts in the form of therapist burnout, which is linked to higher turnover \cite{7}.

Materials and Methods

The current study utilized survey data from therapists in Los Angeles County collected within the context of a system-driven multiple EBP implementation effort as well as publicly available data published by the Los Angeles Times “Mapping L.A.” project \cite{8} (e.g., mean income, race/ethnicity, home ownership, education etc.). Clinic addresses were used to identify the neighborhood of the clinic as determined by the “Mapping L.A.” project, and neighborhood characteristics were collected and matched to survey data. Multilevel modeling was used (level 1=therapist, level 2=program, level 3=neighborhood) to examine the relationship between therapist emotional exhaustion and characteristics of the community of the clinic.

Results

Analyses showed population density ($\beta=.14, p<.05$), median income ($\beta=-.30, p<.05$), and home ownership ($\beta=.30, p<.05$) of the neighborhood surrounding the clinic to be significant predictors of therapist emotional exhaustion.

Conclusions

Results can help target specific implementation supports towards clinics with therapists at higher risk of emotional exhaustion, thus potentially improving the implementation of EBPs.

References

Poster Group - COMMUNITY MENTAL HEALTH

Monitoring Treatment Engagement: How Do Providers Know When Youth and Families Are Engaged in or Disengaged from Treatment?

Ellie Wu¹, Kimberly Becker¹, Anna Hukill¹, & Bruce Chorpita²

¹University of South Carolina, ²University of California, Los Angeles

Background
Poor engagement of youth and families in mental health services is a significant barrier to implementing psychosocial interventions, given that more than 50% of youth drop out of services before the completion of treatment. Detecting engagement problems early is a critical step in preventing premature termination and promoting successful implementation of psychosocial interventions in community settings. Despite this, little is known about how providers assess client engagement in therapy in the absence of structured feedback. The current study examines the indicators that providers use to detect engagement and disengagement in a variety of community mental health settings.

Materials and Methods
As a part of a training workshop, 39 mental health providers were asked to report a case example that represented an engagement challenge, a case example that represented an engagement success, and indicators used to assess engagement for each case. Participating providers worked primarily in schools, as well as community mental health centers, juvenile detention centers, and private practices. Case examples and described indicators were coded based on five domains of engagement (relationship, expectancy, attendance, clarity, and homework; Becker et al., 2018).

Results
Frequencies of coded engagement indicators were examined across engagement challenge and engagement success case examples. Results showed that low attendance was the most commonly reported indicator of disengagement, making up 75% of the indicators coded in the engagement challenge case examples. On the contrary, homework completion was the most commonly reported indicator of positive engagement, making up 69% of the indicators in the engagement success case examples. A figure will show the distribution of the other engagement domains across coded indicators of engagement and disengagement.

Discussion
The purpose of this study was to investigate how providers detect engagement during treatment. While these results are limited due to small sample size and reporting single case examples, our study suggests that providers focus on attendance when assessing client disengagement, and homework completion when assessing client engagement. These results highlight an opportunity to train providers in understanding the multidimensional nature of engagement, so that they may address signs of attitudinal disengagement before they lead to disruptions in attendance and treatment dropout.
Poster Group - COMMUNITY MENTAL HEALTH

Lay Counselor Burnout and Turnover Across Systems: Are There Differences that are Important for Implementation of Task-Sharing Approaches?

Leah Lucid¹, Prema Martin¹, Christine L. Gray², Rosemary Meza¹, Augustine I. Wasinga³, Kathryn Whetten³, & Shannon Dorsey¹

¹University of Washington, ²Duke University, ³ACE Africa

Less than 1% of children in low- and middle-income countries (LMICs) with mental healthcare needs will receive treatment, in part due to a dearth of trained providers. Task-sharing, in which lay counselors deliver treatment, is an implementation solution; however, more research is needed on counselors’ experience in this role. Although providing trauma treatment has been linked to provider burnout in the US, to our knowledge no one has examined this question with lay counselors in LMICs. The present study compares burnout and turnover between lay counselors in two systems in Kenya. Lay counselors included 60 teachers and community health volunteers (CHVs) delivering group-based Trauma-focused Cognitive Behavioral Therapy (TF-CBT) as part of a large NIMH-funded trial. These lay counselors embedded in different systems, with differing supports, role definitions, and time demands, may have differing experiences of adding a counseling role to their existing one (as teacher or CHV). Immediately after completing TF-CBT training, the lay counselors reported their baseline job burnout and turnover intention for their original role as either a teacher or CHV. Approximately six months later, after leading two rounds of TF-CBT groups, they completed post-implementation surveys assessing constructs of interest. Analyses used independent samples t-tests to determine if there were significant differences between teacher and CHV reports. At baseline, CHVs reported significantly higher burnout in their original role than teachers (p<.001) but there was no difference in turnover intention. Post-implementation, teachers reported significantly higher counseling-specific burnout (p=0.005) and compassion fatigue (p=0.007). They also reported higher job turnover intention (p=0.003) than CHVs. There were no differences for post-implementation compassion satisfaction (p=0.91) or intention to continue their counselor role (p=0.04). Our findings contribute to the limited literature on the lived experience of lay counselors providing mental health treatment to families in LMICs. Some aspects of experience differ by system, and these differences may suggest points for intervention to retain lay counselors for scale-up and sustainment or to determine which systems may be more viable for “adding” a counseling role. Retaining lay counselors after investing in their training is critical for efforts aimed at reducing the substantial treatment gap in LMICs.

References
Maintaining Community Partnership and Program Fidelity while Replicating a Community-Based Mental Health Intervention: A Case Study of the New Haven MOMS Partnership® Replication in Bridgeport, Connecticut, New York City, and Washington D.C.

Sonia Taneja¹ & Megan Smith¹
¹Yale School of Medicine

Background
The Mental health Outreach for MotherS (MOMS) Partnership is a community-academic partnership in New Haven responsible for developing a maternal mental health intervention – a cognitive behavioral group therapy course co-led by a clinician and a community mental health worker at a convenient, neighborhood hub site. MOMS is in the process of expanding to Bridgeport, Connecticut; New York City; and Washington D.C. This expansion highlights the interplay of two common paradigms of program replication – designing program components using community-based participatory research methods and implementing programs with a high degree of fidelity. These two goals are often seen as contradictory, but successful programs are known to appraise both. Our first objective is thus to describe MOMS replication through community partners, identifying which components have been malleable based on community feedback and which were static. Our second objective is to provide the framework to measure program fidelity to the original model.

Materials and Methods
Three case studies are presented: the first two discuss lessons learned from early program development in Bridgeport and New York, beginning with iterative co-design of a needs assessment. The third examines D.C. MOMS beginning with the needs assessment distributed through the Technical Assistance for Needy Families (TANF) program. Results of a structural fidelity assessment in D.C., which operationalizes fidelity components including content and process, participant engagement, adherence to goals and needs assessment and theory of change, and acceptability of programs, are also provided.

Results
Insights from these case studies span issues of fostering and maintaining positive relationships with community groups, identifying government partners through which replication can be sustainable, but still acceptable to community members, managing capacity constraints particularly in environments that are saturated with nonprofit programming, navigating issues of population representation, and overcoming unforeseen challenges based on context.

Conclusions
Centering community nuance while replicating successful mental health interventions is an essential, iterative, and difficult process. Experiences of the early career investigators at MOMS while replicating program in three new cities provide reflections on lessons learned when entering new communities ethically and effectively, learning how to work towards program fidelity while valuing responsiveness to community need.

References
Applying a Causal Model to the Implementation of Evidence-Based Practice for Autistic Adults in Community Settings

Brenna Maddox1, Rinad Beidas1, Jessica Fishman1, Samantha Crabbe1, & David Mandell1

1University of Pennsylvania

Background
Cognitive-behavioral therapy (CBT) can improve anxiety and depression in autistic adults [1], who frequently struggle with these co-occurring psychiatric conditions [2]. Most autistic adults do not receive CBT, however, because of a lack of clinicians who are willing and able to treat them. We applied the Theory of Planned Behavior (TPB) [3], a leading model of behavior change, to examine malleable factors that may influence community clinicians’ use of CBT for autistic adults with anxiety or depression. These factors can be targeted with tailored implementation strategies to improve implementation of evidence-based practice [4].

Materials and Methods
One hundred clinicians completed an online survey. We used standardized procedures from social psychology to measure clinicians’ intentions, attitudes, norms, and self-efficacy, [5] and adapted them to focus on using CBT with adult clients (both autistic and non-autistic) who present for anxiety or depression treatment.

Results
Clinicians reported weaker intentions (p = .001, d = .34), less favorable attitudes (p < .001, d = .69), less descriptive normative pressure (p < .001, d = .39), less injunctive normative pressure (p < .001, d = .66), and worse self-efficacy (p < .001, d = .81) to start CBT with autistic adults than with non-autistic adults. The only significant predictor of intentions to begin CBT with clients (both autistic and non-autistic) who present for anxiety or depression treatment was clinicians’ attitudes (p < .001), with more favorable attitudes predicting stronger intentions.

Conclusions
For the purposes of this study, attitudes refer to the clinicians’ perceived advantages and disadvantages of starting CBT with their adult clients with anxiety or depression. This concept is similar to the implementation science constructs of “acceptability” and “appropriateness” [4,6]. Knowing that clinicians’ attitudes strongly predicted intentions is valuable for designing effective, tailored implementation strategies to increase clinicians’ adoption of CBT for autistic adults. For example, an implementation strategy targeting attitudes could include message content to change thinking around the perceived fit of CBT with autistic adults. Social psychologists have successfully used this type of approach to change attitudes about complex behaviors, [5] but it has not yet been applied to improving the implementation of evidence-based practice for autistic adults.

References
ABSTRACTS


Poster Group - COMMUNITY MENTAL HEALTH

Harnessing Implementation Science with Community-Based Social Service Organizations to Address Depression and Social Isolation for Older Adults Living in Poverty

Lesley Steinman

University of Washington

Background
Late-life depression (LLD) is a major public health issue that impacts older adults, families, communities, and health systems. Often unrecognized or undertreated among older populations, those living in poverty experience disparities in access to LLD care. PEARLS is a home-based collaborative care model (CCM) for LLD developed with social service community-based organizations (CBOs) to reach underserved older adults. Since demonstrating effectiveness via RCT in 2004, [1] we have partnered with CBOs to apply implementation science (IS) tools and strategies to improve PEARLS delivery. One of our current projects is to evaluate whether and how PEARLS may help address the recent “epidemic” of social isolation [2] in five US sites.

Materials and Methods
The PEARLS Connect Study is a concurrent mixed methods evaluation. Implementation data will be collected via surveys and semi-structured interviews with 10 CBO administrators and 30 PEARLS practitioners. The interview guide asks about implementation strategies, determinants, adaptations, and outcomes. We will use framework analysis [3-4] to map text data to a priori domains from IS frameworks – ERIC implementation strategies, [5] EPIS implementation determinants (Aarons), QUERI Adapted Stirman [6] Adaptation Framework (QASAF) [7] and implementation outcomes [8]. We will also use inductive thematic analysis to pull out any other key implementation themes that emerge from the conversations with practitioners.

Results
Data are currently being collected (Spring 2019) and will be analyzed in Summer 2019. We will report on implementation strategies (planning, educating, financing, restructuring, quality management, policy); practitioner, organization, and contextual determinants influencing implementation; local adaptations (what, when, how, why, by whom, where, and what impact the modification had). We will also share whether PEARLS is acceptable, feasible, and appropriate as an intervention to increase social connectedness. Local CBO partners will share how partnering with implementation scientists has impacted their practice and policymaking, including facilitators, barriers and opportunities to partnership and application of IS.

Conclusions
Many of the IS frameworks applied in this study have been developed with clinical or public mental health settings. This scaling-out [9] evaluation will share learnings from researchers and practitioners who are applying IS to improve practice and equity [10] for older adults living in poverty.
References
Putting Partners First: Implementation Research Driven by Partner Strategic Goals

Paige Denison¹, Christine Kava², Marlana Kohn², Miruna Petrescu-Prahova², & Maureen Pike³

¹Sound Generations, ²University of Washington, ³YMCA of the USA

Background
The University of Washington Health Promotion Research Center (HPRC), YMCA of the USA (Y-USA) and Sound Generations partnered to design and test an intervention to increase capacity at YMCA associations to conduct outreach with physical therapists to increase referrals to EnhanceFitness (EF), an evidence-based [1] physical activity program for older adults (PT-REFER trial). The purpose of this presentation is to describe the long-standing partnership among HPRC, Y-USA, and Sound Generations, collaborative development and implementation of PT-REFER, and to present key recommendations for mutually supportive partnerships in implementation research.

Materials and Methods
Sound Generations is a senior-serving not-for-profit agency in Seattle, WA [2]. Involved in the original development and testing of EF, Sound Generations is the owner, licensor and trainer for the nationwide program. Y-USA is the national resource office for the not-for-profit YMCA organization [3] and supports the adoption and delivery of EF at local YMCAs under a national license with Sound Generations. HPRC is a CDC Prevention Research Center that partners with communities to conduct research that is incorporated into community practice [4]. Sound Generations, Y-USA and HPRC collaborated on the grant proposal to CDC, study design planning, recruitment, formative work, intervention development, and trial execution. The PT-REFER intervention is a toolkit with monthly activities and technical assistance calls, and was tested in a randomized controlled trial among 20 YMCA associations.

Results
The PT-REFER trial is completed. The partners are working to adapt and disseminate the toolkit broadly to YMCAs and other community-based organizations. Without ongoing funding to finance partnership and dissemination activities, some key factors that contribute to partnership strength and sustenance are: (1) HPRC following the lead of community partners’ strategic priorities and pursuing research funding that is mutually supportive; (2) shared ownership of the research process including decision making, resource sharing and commitment to community-based participatory research; and (3) flexibility in the face of changing practice and policy landscapes.

Conclusions
Strong academic-community partnerships can help researchers move beyond research development into implementation and dissemination in practice environments. These partnerships can advance the priorities of all partners, including publications (academic and non-academic), practice-based tools, and other resources supporting broader implementation.

References
Reflections on a Decade of Policy/Practice-Driven Implementation Research: Strategies for Meaningful Collaboration

Sarah Kaye¹

¹Kaye Implementation & Evaluation, LLC

This presentation aims to discuss three questions of interest to the Society for Implementation Research Collaboration (SIRC) at the 2019 conference: (1) What can implementation researchers, practitioners and intermediaries learn from each other? (2) How can we adapt lessons learned from implementation science in ways that are culturally and contextually appropriate? (3) What are examples of strategies for collaboration between policy makers/funders and implementation experts?

Two-way communication between the research world and the real world is vital to minimizing the gap between research and practice. Understanding the needs of policy makers and practitioners is critical to producing research findings that are relevant to the users that studies are intended to support. Moreover, research projects benefit from acknowledging policy, practice, and community expertise—and recognizing community members’ meaningful contributions to a better understanding of implementation strategies, processes, and causal mechanisms.

Drawing on principles from community-engaged research [1] and research/evaluation capacity-building [2], this presentation offers strategies that implementation researchers might consider when partnering with communities. Examples of these strategies include:

- Co-designing a theory of change for the intervention(s) and implementation;
- Utilizing sequential explanatory research designs [3] through a process of read, listen, share, discuss, adapt;
- Offering community empowerment opportunities through voice and choice about design, measures, and theories/frameworks;
- Addressing questions and requirements that are critical to policy makers and practitioners;
- Identifying dissemination strategies that meet the needs of communities.

References
Engaging Stakeholders in the Development of an Intervention to Systematically Tailor Implementation Strategies

Amber Haley¹, Sheila Patel¹, Jamie Guillergan¹, Lisa Amaya Jackson², Mellicent Blythe³, Beverly Glienke³, Alicia Sellers⁴, Jennifer Grady⁴, & Byron Powell⁵

¹University of North Carolina at Chapel Hill, ²Duke University, ³NC Child Treatment Program, ⁴National Center For Child Traumatic Stress, ⁵Washington University in St. Louis

Stakeholder engagement is often considered critical to implementation science [1]. This study illustrates the value of engaging a wide variety of stakeholders in the development of an implementation intervention. This project was funded by the National Institutes of Mental Health to develop and pilot the Collaborative Organizational Approach to Selecting and Tailoring Implementation Strategies (COAST-IS). The COAST-IS intervention will equip organizations to use Intervention Mapping to select and tailor implementation strategies to address site-specific determinants of treatment implementation and sustainment [2]. Intervention Mapping is a multistep process that incorporates theory, evidence, and stakeholder perspectives to ensure that intervention components effectively address key determinants of change [3]. The first year of the grant focused on engaging national and local experts, organizational leaders, clinicians, caregivers, and youth in the development of COAST-IS for a trauma-focused treatment. The approaches to engagement in this project range from full partnership to stakeholder consultation. The project is being conducted in partnership with leadership from the UCLA-Duke National Center for Child Traumatic Stress (NCCTS) and the North Carolina Child Treatment Program (NC CTP). NCCTS and NC CTP continue to shape project planning and intervention development through continuous feedback on intervention structure, organizational assessment, and dissemination planning. The research team worked with NC CTP to convene an Organizational Advisory Board (OAB) to solicit the perspectives of organizational stakeholders similar to potential research participants. OAB members reviewed draft intervention materials and provided feedback on the structure and content of the COAST-IS intervention. They continue to influence intervention material development. To incorporate the perspectives of families and youth during intervention development, NCCTS leadership connected the research team with two existing client groups. The Family and Youth Insight Advisory Group and the Youth Task Force met with the research team to discuss barriers to their engagement in trauma-focused treatments and recommend strategies to address these barriers. The research team synthesized these recommendations to share with future intervention participants to promote client-focused implementation. This study illustrates the potential impact of engaging diverse stakeholders in the development of implementation interventions. The study team will continue engagement efforts during intervention testing, planning for future research, and dissemination.

References
Building Capacity in Advance Care Planning: An Example of Collaboration Amongst Policy-Makers, Care Providers, Community Organizations, and Implementation Researchers

Robin Urquhart

1Dalhousie University

Background
Advance care planning (ACP) is the process by which patients, alongside their healthcare providers, consider options about future healthcare decisions. Although ACP is associated with improved outcomes as people near end-of-life [1-3], many providers report discomfort with ACP and subsequent goals-of-care (GOC) conversations [4]. There are also many organizational, community, and system barriers to these conversations [5-6]. Changing practice, and ultimately improving patient/family outcomes, will require collaborative efforts from multi-level/sector partners. Through collaboration amongst government, the provincial cancer agency, care providers, a community-based organization, and an implementation scientist, we sought to develop provider capacity in initiating, and increase the frequency of, ACP/GOC conversations with cancer patients.

Materials and Methods
Informed by the knowledge-to-action framework [7] and data gathered from various sources, including formal research studies and local context, we co-designed an intervention (communication skills training workshop, clinician guides and documentation tools, and patient/family guide). We tested the intervention with 51 providers in oncology, palliative, and primary care; evaluated it using post-workshop surveys, focus groups, and chart reviews; and adapted it via iterative team dialogue and debriefing.

Results
Data from the first two (of five) workshops revealed that most providers were uncomfortable with ACP/GOC conversations and it was premature, at that point, to expect them to complete documentation. Thus, we focused on refining/enhancing the workshop and encouraging use of the clinician/patient guides. Our findings demonstrated increased provider confidence across most ACP/GOC domains and an increased number of ACP/GOC conversations with patients, and provided critical insight for scale-up (e.g., train-the-trainer strategies, integration with existing education events). The adapted intervention was subsequently implemented province-wide. Team reflection and debriefing revealed at least 6 factors critical to successful implementation: 1. underpinned by research and local evidence; 2. driven collaboratively by multi-level/sector stakeholders; 3. guided by a plan but a willingness to adapt as needed; 4. ongoing evaluation; 5. clinical champions; and 6. a dedicated coordinator to bring to all together.

Conclusions
Collaboration amongst multi-level/sector stakeholders has the potential to change clinical practice. Evidence from multiple sources is critical to designing an evidence-based, locally-adapted intervention and convincing a myriad of stakeholders to support it.

References
ABSTRACTS


Poster Group - PARTNERSHIPS, COLLABORATION, AND STAKEHOLDERS

Comparing State Mental Health Agency and State Insurance Agency Directors’ Perspectives on the Benefits and Barriers to Inter-Agency Collaboration Related to Implementation of Federal Mental Health Parity Policy

Katherine Nelson¹ & Jonathan Purtle¹
¹Drexel University

Background
There is substantial state-level variation in the implementation of federal mental health parity policy—which requires that insurance companies provided equal coverage for mental and physical health care [1]. One possible reason for this variation could be differences in how state mental health and insurance agencies are collaborating to support implementation [2]. This study aimed to: characterize perceptions of the benefits and barriers to inter-agency collaboration related to implementation of federal parity policy, and compare how these perceptions differ between state mental health agency and state insurance agency directors.

Materials and Methods
Web-based surveys of state mental health agency directors (n=43, response rate= 84%) and state insurance agency directors (n=34, response rate= 67%) were conducted in 2017. One item assessed the perceived benefit of collaboration between the two agencies and five items assessed specific barriers to collaboration. All items were explicitly about implementation of federal mental health parity policy. Bivariate analyses assessed differences in the perceptions between state mental health agency and state insurance agency directors.

Results
A significantly higher proportion of state mental health agency directors thought that there would be a benefit to inter-agency collaboration than state insurance agency directors (95.4% vs. 67.7%, χ² p= .001). A significantly higher proportion of state mental health agency directors identified different agency culture (e.g., “norms, values”) (51.2% vs. 24.2%, χ² p= .017) and different agency terminology (51.2% vs. 18.2%, χ² p=.003) as major barriers to inter-agency collaboration than state insurance agency directors. For all five barriers to inter-agency collaboration, the proportion of respondents identifying each as a major barrier was higher among state mental health agency directors that state insurance agency directors.
ABSTRACTS

Conclusions
State mental health agency directors believe that there is more benefit to inter-agency collaboration related to the implementation of federal mental health parity policy than state insurance agency directors, but also believe that there are more barriers to collaboration. Implementation strategies such as consensus discussions, facilitation between state mental health agencies and state insurance agencies, and the development of an implementation glossary could improve inter-agency collaboration and enhance the implementation of federal mental health parity policy [2-3].

References

Poster Group - MENTAL HEALTH INTEGRATION IN PRIMARY CARE

A Rapid Review to Inform Implementation of a Behavioral Health Intervention in Primary Care: Methods and Outcomes
Madeline Larson¹, Mimi Choy-Brown¹, & Scott Marsalis¹
¹University of Minnesota

Background
Current methods or approaches used in scientific practice have failed to rapidly and rigorously integrate cultivated knowledge into feasible and sustainable real-world practices and policies [1]. Continuing to use traditional scientific approaches runs the risk of implementation science falling short of expectations [1]. Different methods are needed to foster the rapid integration of science and practice while maintaining rigor [1]. The purpose of this study is to conduct a rapid review of the literature to identify implementation determinants and strategies that impact adoption, implementation, and sustainability of family-based mental health interventions in primary care.

Materials and Methods
A rapid review will be conducted that involves a primary literature search of Medline, Embase, PsycInfo, CINAHL databases to identify existing implementation strategies used to foster the uptake and use of family-based interventions in primary care settings. A secondary search will be performed as an iterative process and included bibliographic and grey literature searches of reference lists, authors and specifically the journal, Implementation Science. A systematic approach to data extraction will be used to illuminate key determinants, strategies, and outcomes related to implementation.

Results
The results of the rapid review will be presented along with method parameters (e.g., time to complete, cost and resources, streamlining processes). Findings will directly inform an actionable plan to implement the intervention in primary care settings. Results will be used to inform stakeholder decisions regarding implementation supports provided during a multi-site rollout of FBCI in integrated primary care settings throughout the USA.
Conclusions
Rapid reviews can be used to integrate implementation research into practice or policy. While it is not exhaustive, rapid reviews provide a pragmatic and systematic approach to synthesizing evidence to inform decision-making in real-world efforts. Future work will compare results of rapid review to results of a gold-standard systematic review.

References

Poster Group - MENTAL HEALTH INTEGRATION IN PRIMARY CARE

Rural Primary Care Organizational Change Toward Trauma-Informed Integrated Primary Care through Community Partnerships

Deborah Moon¹, Eve-Lynn Nelson², Michelle Johnson-Motoyama³, Shawna Wright⁴, & Becci Akin⁴
¹University of Pittsburgh, ²University of Kansas Medical Center, ³University of Ohio State, ⁴University of Kansas

Background
Rural children are frequently exposed to adverse experiences, which are associated with negative long-term health outcomes [1-2]. Trauma-informed integrated primary care provides a model of care that takes into account the impact of social determinants of health both at the prevention and treatment levels [3]. Developing into trauma-informed integrated primary care involves complex organizational change processes that are challenging for rural primary care facilities burdened with multiple priorities [4]. Community partnership presents capacity building opportunities for rural primary healthcare clinics in such processes [5-6]. The purpose of this study was to examine facilitators and barriers in rural primary care organizational changes toward Trauma-Informed Integrated Primary Care based on theoretical frameworks of organizational change and implementation science, with an emphasis on partnering as a key process of the organizational change efforts.

Materials and Methods
This study was a community engaged organizational case study funded by HRSA, Doris Duke Foundation, and NY Community Trust Fund. The study was conducted in collaboration with a Federally Qualified Health Center in a rural community of a midwestern state, a non-profit organization, and an academic research and development center. Data collection involved key informant interviews, surveys, direct observation of formal and informal interactions with key stakeholders. Data analyses focused on identifying facilitating and/or interfering contexts and mechanisms in the organizational change efforts. This poster focuses on contexts and mechanisms pertaining to the partnering aspect.

Results
Facilitating contexts included shared mission and values, commitment to learning and innovation, increased awareness of social determinants of health among leadership, core work group, and transparent communication. The key facilitating mechanisms were leveraged resources and shared expertise that positively influenced change readiness. Major interfering contexts included limited understanding of the workflow, adaptability, and performance measurement. The key interfering mechanism was the culture clash that negatively influenced engaging key stakeholders.

Conclusions
Partnering is a key process in rural primary care capacity building to meet the complex healthcare needs of children in under-resourced communities through trauma-informed integrated care. Understanding facilitating and interfering
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contexts and mechanisms in partnering can inform the process of building strategic partnerships for collective actions toward building a healthy community in under-served regions.

References


Poster Group - MH INTEGRATION IN PRIMARY CARE

Providers’ Perspectives on Implementing a Multiple Family Group for Children with Disruptive Behavior

Emily Hamovitch¹, Kate Lambert¹, Mary Acri¹, Lindsay Bornheimer², Idan Falek¹, Madeline Galler¹, & Mimi Choy-Brown¹

¹New York University, ²University of Michigan, ³University of Minnesota

Background

The difficulty in concretizing research-supported treatments (RST) as standard practice is an issue of concern within behavioral health. The field of implementation science theorizes that the adoption of RSTs is contingent upon multiple, interactional levels. Provider-level factors (e.g., sociodemographic factors and attitudes toward RSTs) have been shown to be critical to uptake. The purpose of this study is to examine the relationship between sociodemographic factors, attitudes, and perceived barriers/facilitators to implementation through a comparative approach involving practitioners trained to facilitate a multiple family group intervention for children with disruptive behavior.

Materials and Methods

This study is part of a larger National-Institute of Mental Health study examining a multiple family group model entitled the 4Rs and 2Ss for Strengthening Families. Providers were eligible for inclusion if they agreed to administer and received training in the model. Demographic characteristics were collected via a socio-demographic questionnaire addressing provider age, race/ethnicity, education and credentials. Barriers and facilitators were assessed via open-ended questions as well as a scale, developed by the authors and guided by the Consolidated Framework for Implementation Research that explored provider views regarding the intervention, the systemic and organizational context, experience facilitating groups and involving families in treatment, and feelings toward involving families in treatment. Between group analyses were conducted to examine demographic and characteristic differences of providers by implementation status. Independent samples t-tests for continuous characteristics and chi-square tests for categorical characteristics were used. Responses to open-ended questions
were compiled, reviewed, and coded, and frequencies and percentages were calculated.

**Results**

Twenty-seven (29.7%) providers implemented the 4Rs and 2Ss, and 64 (70.3%) providers did not. Significantly more providers who implemented the intervention had prior experience in facilitating groups. Providers who implemented the intervention reported more positive attitudes towards the intervention (M = 28.7, SD = 3.5) compared to those who did not implement it (M = 26.0, SD = 4.4; t(76)= -2.66, p < .01). Qualitative data revealed that common barriers to implementation included having an ineligible caseload and clinicians feeling unqualified to deliver the intervention. Further attention on improving recruitment rates and promoting adequate training and supervision is needed.

**References**


The Impact of New National and State Insurance Policy on Implementation of the Collaborative Care Model for Perinatal Depression; the Rubber Hits the Road for Government Policy to Support Behavioral Health Integration

Ian Bennett\textsuperscript{1}, Ashok Reddy\textsuperscript{2,3}, Anna Ratzliff\textsuperscript{1}, Stephanie Shushman\textsuperscript{4}, & Jay Wellington\textsuperscript{5}

\textsuperscript{1}University of Washington, \textsuperscript{2}Centers for Medicare and Medicaid Services Innovation Center, \textsuperscript{3}VA Puget Sound Medical Center, \textsuperscript{4}Community Health Plan of Washington, \textsuperscript{5}UW Medicine Neighborhood Clinics

Background
The collaborative care model (CoCM), is a highly evidence based complex intervention for management of common mental disorders in primary care. Despite decades of effort to disseminate and implement this model penetration into clinical practice is modest. A major obstacle is the lack of reimbursement for team care activities. In January 2018, a new mechanism for payment of the work of a CoCM team (G and CPT billing codes) was introduced by the US Centers for Medicare & Medicaid Services for Medicare recipients. Washington State has extended this mechanism to Medicaid recipients (Managed Care and fee for service). Perinatal depression (depression in pregnancy and the year postpartum), is the most common clinical maternal disorder. Untreated depression is associated with poor persistent developmental, learning, and mental health outcomes for children. Medicaid funds approximately 50% of perinatal care making the new CoCM codes a viable means of funding care for perinatal depression in this vulnerable population. MinD-I (maternal infant dyad-implementation), is an NIMH funded (R01MH108548) implementation trial of CoCM for perinatal depression with five sites in Washington and thirteen outside.

Results
Despite the availability of CoCM CPT codes to support the work of team care for depression they have not been widely utilized even in settings with collaborative care already in place. The UW Neighborhood Clinic primary care network undertook steps needed to document and process these codes for billing. The availability of these billing codes was used to support implementation of CoCM for perinatal depression within four sites of this network. New administrative, work flow, and interdisciplinary elements of this care represented challenges. Conclusion: Members of the panel will describe the national and state health policy goals underlying the promulgation of these codes and the current rate of utilization of these codes. The impact of these codes on implementation of CoCM for perinatal depression will be explored from the health system and primary care clinic level provider perspectives. The panel will provide a unique multi-level perspective on the impact of a novel funding policy on the implementation of a highly evidence based complex intervention requiring change in practice organization.

References
ABSTRACTS

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Poster Group - IMPLEMENTATION STRATEGIES

Active Ingredients of Implementation: Examining the Overlap Between Behaviour Change Techniques and Implementation Strategies

Sheena McHugh¹, Justin Presseau², Courtney Leucking³, & Byron Powell⁴
¹University College Cork, ²Ottawa Hospital Research Institute, ³University of North Carolina at Chapel Hill, ⁴Washington University in St. Louis

Background
Efforts to generate an evidence base for implementation strategies are frustrated by insufficient description [1]. The ERIC compilation names and defines implementation strategies [2]; however, further work is required to operationalise strategies to clearly describe the specific actions involved [1]. The purpose of this project is to examine the extent to which strategies can be specified according to behaviour change techniques [3], ‘active ingredients’ of interventions with the potential to change behaviour.

Materials and Methods
The primary data source was the definitions of 73 strategies contained in the ERIC compilation [2]. The definition of each strategy was deductively coded using the BCT Taxonomy, [3] which contains 93 discrete techniques with the potential to change behaviour. A typology was developed iteratively to categorise the extent of overlap between strategies and BCTs. Three implementation scientists independently rated their level of agreement with and confidence in the categorisation.

Results
During preliminary analysis, 86 BCTs were linked to 73 strategies. Five types of overlap were identified. 1) In 6 instances, there was a direct overlap between strategies and BCTs (e.g., strategy: remind clinicians, BCT: prompts and cues). 2) In 36 instances, there was at least 1 BCT clearly subsumed under the strategy description which could be used to guide initial operationalisation (e.g., strategy: clinical supervision, BCT: restructure social environment). 3) In 42 instances, a BCT(s) was probably subsumed under the strategy given its definition and/or title, but other BCTs were possible depending on how the strategy was operationalised (e.g., strategy: visit other implementation sites, BCT: social comparison). For 8 strategies, there were no BCTs clearly indicated in the strategy definition or title (e.g., strategy: make training dynamic). Finally, 14 strategies did not focus on behaviour change to support implementation (e.g., strategy: access new funding).

Conclusions
Many implementation strategies rely on assumptions and inference on the part of the intervention developer, be it researcher or practitioner, to apply them in a setting. This study is the first step towards moving from general descriptions of implementation strategies to full and consistent descriptions of their active ingredients. This is essential to understanding the mechanisms by which implementation strategies exert their effects.
References

Poster Group - IMPLEMENTATION STRATEGIES

Unpacking and Re-Packing What We Know About Barriers and Facilitators Assessments
Sobia Khan¹, Julia Moore¹, & Byron Powell²
¹The Center for Implementation, ²Washington University in St. Louis

Background
Barriers and facilitators assessments (BFAs) are regarded as a key step in implementation, yet our understanding of how to conduct BFAs effectively has stalled. There is an abundance of literature on barriers and facilitators (BFs) to adopting a multitude of interventions and programs, but these studies do not offer any additional insight on how BFAs can be made more meaningful and rigorous. We argue that BFAs should be reconsidered in order to close important gaps in how barriers and facilitators impact intervention implementation.

Materials and Methods
We synthesized current approaches to conducting BFAs, and offered alternate methods and considerations for BFAs.

Results
BFAs published in the literature typically either report lists of BFAs without describing specific relationships between BFAs and implementation or clinical outcomes, or they report how the BFA contributed to program development, planning, adaptation, or evaluation (e.g., BFAs were used to select strategies to implement the program). However, these studies have substantial limitations and do little to better interpret BFAs, which is necessary to adapt programs and/or systematically develop implementation strategies. First, they are typically conducted before or after implementation, and do not explore the relationship between anticipated versus actual/experienced BFAs. Second, they rely primarily upon self-report, although individuals tend to have a poor understanding of their own behavior. Third, they fail to examine dependencies between BFAs (e.g., removing one barrier may uncover unintended consequences or "masked" barriers). BFAs would be enhanced by: 1) continuous assessment throughout implementation process; 2) considering their proximity to, and impact on, implementation; 3) integrating prioritization processes; 4) increased use of observation, qualitative, and mixed methods; and 5) integrating systems science methods that facilitate exploration of interdependencies.

Conclusions
Given the centrality of BFAs in implementation science, it is critical that we continue to examine how they can be improved methodologically and how they might yield more accurate and actionable data. This study advances the field by presenting concrete suggestions for how BFAs could be improved.
ABSTRACTS

Poster Group - IMPLEMENTATION STRATEGIES

Demonstrating the Value of Coincidence Analysis for Identifying Successful Implementation Strategies

Sarah Birken, Soohyun Hwang, Laura Viera, Emily Haines, Tamara Huson, Rebecca Whitaker, Lawrence Shulman, & Deborah Mayer

University of North Carolina at Chapel Hill, NC Tracs, University of Pennsylvania / Commission on Cancer

Background

Coincidence analysis (CNA) is a configurational comparative method similar to qualitative comparative analysis, designed for causal inference when combinations of co-occurring conditions determine outcomes and multiple paths to one outcome may exist – as is often the case in implementation research. To demonstrate its usefulness in implementation research, we will use CNA to identify the strategies that cancer programs have used to develop comprehensive approaches to survivorship care plan implementation. The Commission on Cancer (CoC) requires cancer care providers to develop and deliver survivorship care plans (SCPs) to survivors and their primary care providers (PCPs). Cancer programs’ approaches to implementing SCPs in practice substantially vary, ranging from cursory (i.e., developing SCPs to meet requirements without delivering them to survivors or PCPs) to comprehensive (i.e., promoting adherence to screening and health behavior guidelines and recommended utilization of follow-up care).

Materials and Methods

We have characterized cancer programs’ approaches to implementing SCPs using semi-structured telephone interviews with providers/staff in 48 CoC-accredited cancer programs. We are using template analysis, combining a priori and emergent codes, and calibrating qualitative data for CNA purposes (e.g., the presence of a formal survivorship implementation committee). By the time of the conference, we will have used CNA to identify strategies that are unique to cancer programs with comprehensive approaches to implementing SCPs, using cancer programs with cursory approaches as a comparison group. The outcome of CNA will be a parsimonious list of strategies that are associated with comprehensive approaches to SCP implementation.

Results

Preliminary qualitative analyses suggest that programs varied in their approaches to SCP implementation. Key variables included human and financial resources and infrastructure, including standing committees and mechanisms of communication and garnering leadership support and provider buy-in. We will present CNA results at the conference.

Conclusions

CNA is a promising method for implementation research, where outcomes may be explained by combinations of co-occurring conditions, and when multiple paths to one outcome may exist. CNA findings are policy-relevant since they identify multiple combinations of strategies that diverse organizations may deem appropriate; findings from this study will inform more than 1500 CoC-accredited cancer programs with recommended SCP implementation strategies.

References

Describing Audit and Feedback in Practice: A Multi-Site Exploration of Ward Monitoring Audit and Feedback

Michael Sykes¹, Richard Thomson¹, Tracy Finch¹, Niina Kolehmainen¹, & Louise Allan³

¹Newcastle University, ²Northumbria University, ³Exeter University

Background
Patients do not always get best care [1]. Hospitals use audit and feedback to improve care. Audit and feedback is variably effective at improving care [2]. Understanding how audit and feedback is done might identify opportunities for enhancement.

Materials and Methods
A multiple case-study design involving six hospitals (c4750 beds) purposively sampled for difference in size, association with a university and regulator rating. Semi-structured interview participants (n=32), observations (n=36) and documentary analysis were purposively sampled. Framework analysis was used for each source of data.

Interim analysis was iteratively presented to a co-production group of carers, clinicians and audit leads for challenge and to identify further components to explore.

Results
Each site undertook monthly audit and feedback at a ward level. The audit process was designed by the nursing leadership at each site. The audit covered topics including infection control, nutrition and documentation. The data suggests regulatory motivation to implement the audit.

Audit data was collected by record review and interview by ward-based staff. The assessment involved interpretation of the audit standard and clinical record. The submitted data may not reflect the assessment of care. Participants were fearful of consequences from the results. Feedback focused on results that are scored ‘red’ or ‘amber’. Positional leaders provided feedback that many recipients experienced as punitive. There was evidence that punitive feedback was sometimes replicated in a communication chain from the director of nursing to the ward team. Those who designed the audit sought to balance fear and complacency. If initial feedback did not lead to a change in results, the feedback delivery changed to someone more senior.

There was awareness across levels that the data may not represent care. The presence of a monitoring mechanism that met regulatory expectations may be more important to positional leaders than the results.

Conclusions
Audit and feedback may be perceived as punitive. This may lead to resistance in the recipient, making the feedback less actionable [3]. Loss of data validity hinders the ability to target interventions. The co-production group will use this description, evidence and theory [4] to identify potential enhancements to current practice.

References


Poster Group - ORGANIZATIONAL OR SUPERVISOR FACTORS

Exploring Variability in Implementation Leadership and Climate Across Organizational Level

Melina Melgarejo¹ & Jessica Suhrheinrich¹

¹San Diego State University

Background
Nationwide, 576,000 students were served for Autism Spectrum Disorder (ASD) during the 2014-15 school year, an increase of 51% from 2007-08 [1]. Given the significant increase in demand for educational services for students with ASD, there is urgent demand to improve implementation and sustainment of evidence-based practices (EBP) in school settings. However, the organizational and leadership structure for school-based services for ASD is complex and involves a team of providers to account for the complexity of care needed [2-3].

Organizational culture and leadership have been found to impact EBP use in a variety of settings, but less is known about their impact in schools. As a first step toward tailoring implementation intervention for this context, the current proposal explores implementation leadership and implementation climate in relationship with provider factors.

Materials and Methods
Participants were 340 school-based providers and administrators who are involved in supporting students with ASD. Participants included 19 High-level administrators (Special Education Directors, District-level Administrators), 112 Mid-level specialists (Autism Specialist, Behavior Specialist, Program Specialist) 15 School-site principals or administrators, 153 Teachers and direct service providers (DSP) and 33 Mental health providers (school psychologist, MFT).

To explore the leadership structure within school-based services for ASD and the effect on implementation processes, a survey including the Implementation Climate Scale (ICS) [4] and the Implementation Leadership Scale (ILS) [5] was distributed to participants.

Results
Implementation climate and implementation leadership varied by profession.

For the Selection for Openness domain on the ICS, Mental health providers (B=-2.28, p=.022), Mid-level specialists (B=-2.09, p=.020), and Teachers/DSP (B=-2.55, p=.004) all reported lower ratings than High-level administrators. For the Educational Supports domain on the ICS, Mental health providers (B=-2.08, p=.035), Teachers/DSP (B=-2.16, p=.010), and School-site principals/administrators (B=-2.70, p=.029) all reported lower ratings than High-level administrators, while Teachers/DSP also reported lower ratings than Mid-level specialists (B=-.99, p=.018).

For the Proactive Leadership domain on the ILS, Mental health providers (B=-2.39, p=.003), Mid-level specialists (B=-2.12, p=.002), and Teachers/DSP (B=-1.64, p=.016) all reported lower ratings than High-level administrators.

Conclusion
Implementation leadership and implementation climate vary across participants suggesting variability more broadly. Implications for implementation and sustainment of EBPs in school-based services will be discussed.
References


Poster Group - ORGANIZATIONAL OR SUPERVISOR FACTORS

A Survey of Supervisors’ and Managers’ Practices and Needs to Support Evidence-Based Practice Implementation in Large Behavioral Health Care System in New York State

Sapana Patel1,2, Andrea Cole2, Paul Margolies1,2, Nancy Covell1,2, Amy Anderson-Winchell1, & Lisa Dixon1,2
1Columbia University, 2The New York State Psychiatric Institute, 3Access Supports for Living

Background
 Managers and supervisors are the lynchpin of success to practice change within any organization. In a time when behavioral health organizations are being asked to shift culture, practice and delivery of care from volume to value, manager and supervisor roles are moving towards ensuring quality of evidence-based practice (EBP) implementation. We developed a survey to assess supervisor and manager experience with and needed supports for EBP implementation in community mental health agencies.

Materials and Methods
 We created surveys using the implementation science literature [1-3] and guidance provided by the Center for Practice Innovations [4] provider advisory committee. In March 2019, behavioral health agency leadership (N=4) across New York State invited their managers and supervisors to take part in the survey. Both surveys queried level of commitment and preparedness (scored on a Likert scale, e.g., 1 = not at all committed/prepared to 5 = very committed/prepared) to implement EBPs along with needed tools and supports to implement EPBs to fidelity. Surveys also included questions about EBP topics for additional training.

Results
 Data collection will finish in June 2019. Of the 23 survey respondents (supervisors: n of 13; managers n of 10) half are social workers (n=12). Supervisors report that, although they are highly committed to EBP implementation (M = 4.42, SD = 1.11), they are only moderately prepared to implement EBPs (M = 3.92, SD = 1.11). Needed resources included example case conceptualizations, and workbooks to use with consumers. Managers’ reports were similar: highly committed to EBP implementation (M = 4.80, SD = .40) and moderately prepared to implement EBPs (M = 4.10, SD = .83). Needed resources include worksheets for role modeling and train the trainers to support EBPs. Managers and supervisors identified trauma informed care and shared decision making as EBP topics that they need more training in.
Conclusions
Managers and supervisors’ commitment to EBP implementation is necessary, but far from sufficient. Managers and supervisors report feeling only moderately prepared to implement EBP and would benefit from training focusing on their roles in implementation, as well as tools and resources designed to help them.

References

Poster Group - ORGANIZATIONAL OR SUPERVISOR FACTORS

Examining Therapist Characteristics as Moderators of Change in ASD Knowledge and Confidence in a Hybrid Effectiveness/Implementation Trial
Kassandra Martinez¹, Eliana Hurwich-Reiss², & Lauren Brookman-Frazee³
¹SDSU/UCSD Joint Doctoral Program in Clinical Psychology, ²Child and Adolescent Services Research Center, ³University of California, San Diego

Background
Provider attitudes, including knowledge-of and confidence using evidence-based interventions (EBIs), are important outcomes of training interventions and potential mechanisms of EBI delivery. This study utilized data from a Hybrid Type-1 effectiveness trial of AIM-HI (An Individualized Mental Health Intervention for Children with ASD), an intervention to reduce challenging behaviors in children with Autism Spectrum Disorder (ASD). The following objectives were addressed: 1) examine the effectiveness of AIM-HI training/consultation on changes in therapists’ perceived knowledge and confidence (K&C) of ASD strategies, and 2) examine therapist demographic and professional characteristics as moderators of training effects.

Materials and Methods
Data were extracted from a cluster randomized trial. Therapist/client dyads were randomized to AIM-HI or usual care. AIM-HI therapists received training/consultation for 6 months. Therapists (N=156) reported K&C at baseline and 6 months. Three K&C subscales were used in analyses: ASD Knowledge (ASD), Knowledge of EBI ASD strategies (KNOW), and Confidence in EBI ASD strategies (CONF). Repeated-measures ANOVAs were used in analyses*. 
Results
A main effect of AIM-HI training was found for all K&C constructs; AIM-HI therapists reported greater increases compared to usual care therapists (p<.001). For AIM-HI, therapist role (Staff vs. Trainee) moderated changes in ASD (F(1,154)=4.72, p<.05), KNOW (F(1,154)=11.19, p<.01), and CONF (F(1,154)=6.60, p=.01); trainees reported greater increases than staff. Therapists’ perceived ASD expertise moderated changes in ASD (F(1,154)=11.00, p<.001) and KNOW (F(1,154)=16.29, p<.001); therapists who did not consider themselves ASD specialists reported greater increases than their counterparts. Ethnicity moderated changes in CONF (F(1,154)=7.73, p<.05); minority therapists made more gains compared to White therapists. For usual care therapists, role moderated changes in ASD K&C (F(1,154)=7.4, p<.05); staff therapists reported increases in ASD knowledge, while trainees reported decreases.

Conclusions
Therapists who received AIM-HI training reported greater changes in K&C compared to those in usual care. Additionally, for those in AIM-HI, therapist’s cultural (ethnicity) and professional (role and ASD expertise) characteristics moderated the effect of training on K&C. Next steps include combining results with qualitative data to inform adaptations to improve intervention fit and maximize outcomes.

*Results from multiple level modeling accounting for the nested structure of the data will be reported.

References

Poster Group - TRAINING AND D&I COMPETENCIES

Implementation Specialists: What Competencies Do We Need?
Bianca Albers1, Allison Metz2, Pauline Goense3, Katie Burke4, Laura M. Louison2, Leah Bartley2, Leah Bührmann1,5, Pia Driessen6, & Cecilie Varsi7

1European Implementation Collaborative, 2University of North Carolina at Chapel Hill 3ZonMw – The Netherlands Organisation for Health Research and Development, 4Centre for Effective Services (CES), Ireland, 5Vrije Universiteit Amsterdam, Netherlands, 6European Alliance Against Depression (EAAD), 7Oslo University Hospital

Background
The shortage of individuals trained in the practice of implementation has been cited as a reason for failure to optimize the use of evidence to improve population outcomes [1]. In response to this challenge, there is increasing interest in the competencies of implementation specialists supporting others in the implementation of evidence [2-4].

Materials and Methods
This study uses a multi-step, multi-method design to identify the competencies of implementation specialists including a content validation survey and a systematic scoping review.

34 representatives from 16 intermediary organizations [5] operating in North America, Europe, and Australia (n=34) were surveyed to gather feedback on an initial set of principles and core components that operationalize implementation specialist competencies.
A systematic scoping review [6-8] of the peer-reviewed and grey literature was conducted to examine what is known about implementation specialists, including their roles and responsibilities, work characteristics, and training.

**Results**

Preliminary survey findings demonstrate that the majority of respondents (94-100%) reported the operationalization of the competencies was clear and comprehensive and affirmed the importance of developing a shared set of competencies to support workforce development.

As part of the scoping review, 2,716 records are currently being screened for eligibility, and 50 grey literature sources examined for relevant publications to further inform the development of implementation specialist competencies.

**Conclusions**

The findings from this project will be discussed in the light of needs for and experience with implementation competencies coming from ZonMw – The Netherlands Organization for Health Research and Development. ZonMw promotes and funds health research and innovation with the goal of enabling health care impact. The active use of knowledge created through its research activities is key in achieving this goal and has implications for the competencies it requires from internal staff, external reviewers and from those applying for research funding. The discussion will then be opened to the floor.

**References**


How Do You Apply Implementation Science in Practice? Core Competencies for Implementation Practitioners

Julia Moore¹, Diana Kaan², Louise Zitzelsberger², & Sobia Khan¹
¹The Center for Implementation, ²Health Canada

Background
The field of implementation science has advanced in recent years, but unfortunately this has coincided with a growing divide between the science and practice of implementation. One strategy to bridge this gap is training implementation practitioners to apply implementation science to their initiatives in a thoughtful and proactive way. Effective implementation capacity building should be based on core competencies - the knowledge, skills, attitudes, and behaviors needed to apply implementation science. There a growing body of literature on core competencies for implementation scientists, but same progress has not been made for core competencies for implementation practitioners. Building applied implementation science capacity at the practitioner level can foster better implementation and overall improved population-level impacts; therefore, understanding the core competencies for applying implementation science at the front line is paramount. The goal of this project was to extrapolate and synthesize core competencies for implementation practitioners.

Materials and Methods
We scanned the published and gray literature to identify core competencies for implementation practice. Six documents outlining (or including components of) core competencies for implementation practice were retrieved. Two analysts reviewed each document using a content analysis approach. Competencies relevant to implementation practice were extracted into an abstraction form and consolidated into a list of common competencies. The refined list of competencies was then grouped thematically into overarching implementation “activities” (e.g., understanding the problem, facilitating implementation).

Results
We identified 40 core competencies which we categorized into 10 implementation activities: Inspiring Stakeholders and Developing Relationships; Building Implementation Teams; Understanding the Problem; Using Evidence to Inform all Aspects of KT; Assessing the Context; Facilitating Implementation; Evaluation; Planning for Sustainability; Brokering Knowledge; and Disseminating Evidence. Additionally, we identified 5 values or guiding principles for implementation practice, which emerged from the document review. We are building an Implementation Practice Core Competency Tool which will be finalized by September.

Conclusions
This presentation will briefly highlight the methods and then focus on how to prioritize and select relevant core competencies for projects and individuals. The competencies can be used as a guide to prioritize capacity building efforts.

References
ABSTRACTS


Poster Group - TRAINING AND D&I COMPETENCIES

Implementation Practitioners: What Knowledge, Skills and Abilities Do They Need?

Jenna McWilliam¹ & Jacquie Brown²

¹Triple P International, ²Families Foundation

Background
The increased influence of implementation science has prompted an important question: if an organisation does not have personnel who are fluent in implementation science how do they apply it? Often an implementation expert, intermediary organisation or consultant is engaged. But who are they and what knowledge, skills and abilities must they have?

There is limited literature on the core competencies of implementation practitioners including a lack of common terminology and title. However, there is emerging literature on the role, knowledge, skills and abilities that contribute to effective consultation for implementation [1-2].

This presentation draws on this literature, our experience developing the implementation support capabilities of a purveyor/intermediary organisation (Triple P International) [3] learnings from Triple P International Implementation Consultants (TPI-ICs), who for over five years have supported organisations in the application of implementation science and with implementing organisations and practitioners.

The presentation will use data from experience and the competencies and coaching literature to promote discussion about required competencies for implementation practitioners.

Materials and Methods
A review was undertaken to examine the role and responsibilities of the TPI-ICs. This included a review of existing literature; a survey of TPI-ICs (n=27) and a review of internal support systems and processes.

Results
The following areas were identified as areas of significance for competencies: Partnering with implementing organisations; determining fit; establishing relationships and roles; facilitating implementation planning; monitoring and evaluating; establishing the innovation as usual practice.

Results from the survey identified self-reported levels of confidence and competence in knowledge, skills and abilities related to implementation consultation. The review of existing systems and process identified areas for improvement and increased structure to support desired outcomes. Results were then used to inform the development of TPI-IC Competencies, and a comprehensive IC Management and Support Process.
Conclusions
The presentation will describe knowledge-base, processes and characteristics for IC Competencies, IC Management and Support Process. It aims to promote discussion on future areas of practice development as well as exploring ways that additional research could help advance our understanding and further develop the field.

References

Poster Group - TRAINING AND D&I COMPETENCIES

Barriers to Implementation of Evidence-Based Treatments for Posttraumatic Stress Disorder at 12-Months Post Training
Mariya Zaturenskaya1, Sebastian Bliss1, Katherine Dondanville2, Brooke Fina1, Vanessa Jacoby1, Jeremy Karp1, & Arthur Marsden1

1University of Texas Health Science Center at San Antonio, 2UT Health San Antonio

Background
Despite rigorous efforts to disseminate evidence-based treatments (EBTs) for posttraumatic stress disorder (PTSD) in community settings and major medical systems such as the Veterans Health Administration, penetration rates for these treatments have been suboptimal [1-2]. Understanding of provider-related and client-related barriers and challenges to EBT implementation is crucial to improving EBT reach with community mental health settings. This is a naturalistic study of perceived implementation barriers and challenges for EBTs for PTSD in a sample of community providers who were trained in cognitive processing therapy or prolonged exposure for PTSD by the STRONG STAR Training Initiative (SSTI), a comprehensive competency-based training program designed to disseminate EBTs.

Materials and Methods
To date, 42 community-based mental health providers completed a survey 12 months after completing an in-person SSTI training workshop. The follow-up survey assessed the barriers to initiating evidence-based treatments as well as the challenges with implementing EBTs with PTSD clients.

Results
At 12-month post-training, 64% of providers endorsed at least one client-related barrier, while 19% reported at least one therapist-related barrier to initiating an EBT with clients diagnosed with PTSD. The most common barrier to initiating treatment was client’s declining the use of an EBT (57% of providers). The barrier endorsed the least was discomfort introducing EBTs (0%). When looking at challenges to implementing EBT for PTSD, 83% of providers reported at least one challenge, with 55% of providers reporting 1-2 challenges, and 29% reporting 3 or more. The most common challenges to implementing an EBT included: client disinterest in engaging in EBT (50%), a difficulty
obtaining an appropriate referral (45%), a lack of clients with PTSD on caseload (31%), and a difficulty taking time away from regular work to attend consultation call (14%). The challenge endorsed the least was the lack of motivation to use a new treatment (2%).

Conclusions
The results of this study suggest that the majority of community providers report experiencing challenges with both, EBT initiation and implementation. Understanding barriers to initiation and implementation can guide trainers and organizations in addressing provider concerns thereby improving dissemination and implementation efforts.

References

Poster Group - TRAINING AND D&I COMPETENCIES

Supporting Practitioners through Workforce Development: How Do Training Strategies Impact Implementation Outcomes?

Jonathan Olson¹, Philip Benjamin¹, Sarah Kopelovich¹, Lydia Chwastiak¹, Maria Monroe-Devita¹, Marianne Kellogg¹, Alya Azman¹, Taylor Berntson¹, & Eric Bruns¹
¹University of Washington

Background
Implementation theory stresses the importance of workforce development as a mechanism to promote uptake of evidence-based practices [1]. The Consolidated Framework for Implementation Research (CFIR) suggests that such efforts are influenced by characteristics of interventions, individual practitioner attributes, planning processes, and inner and outer settings [2-3]. In this study, we examined how several of these constructs influence implementation outcomes following workforce development trainings conducted by the Northwest Mental Health Technology Transfer Center (NW-MHTTC), which is part of a national SAMHSA-funded network that supports dissemination and implementation of evidence-based behavioral health practices.

Materials and Methods
For each NW-MHTTC training, post-event (n = 204) and follow-up (n = 37) survey data assessing an array of implementation determinants and outcomes are collected using established measures [4-6]. Preliminary analyses focused on links among implementation outcomes and select CFIR constructs, including intervention characteristics (perceived intervention usability), individual characteristics (personal mastery, perceived training importance), and inner setting (organizational barriers, follow-up support, challenges to organizational practices).

Results
Regression analyses of post-event data suggest that intention to implement practice-level changes was associated with perceived usability of the targeted intervention (B = .204, SE = .105, β = .130, p = .05), importance of the training (B = .068. SE = .035, β = .129, p = .05), and challenge to current organizational practices (B = .132, SE
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Since follow-up data collection is underway, follow-up analyses were initially limited to bivariate relations. Results suggest small to moderate positive linear relations among the above constructs, although only follow-up support reached statistical significance (r = .35, p = .03). Regression models will be tested as the follow-up sample grows in the coming weeks.

Conclusions
These findings suggest that constructs within three CFIR categories are associated with impact of trainings: Intervention characteristics (perceived usability), individual characteristics (perceived importance of trainings), and inner setting (challenge to current practice, follow-up support). Such findings suggest that efforts to promote workforce development depend not only on individual and intervention characteristics, but also on structures and support available within inner settings in which participants are embedded.

References

Poster Group - TRAINING AND D&I COMPETENCIES

Training Future Mental Health Professionals in Managing and Adapting Practice, an Evidence-Informed System of Care

Julia Cox & Michael Southam-Gerow

High quality mental health services do not reach the youth who need them, leading to efforts to implement effective treatments more broadly. One focus of these efforts concerns training the mental health workforce, of which masters-level social workers represent a large proportion. However, the curricula of master’s in social work (MSW) programs do not often emphasize evidence-based approaches. One possible solution is Managing and Adapting Practice (MAP; PracticeWise, LLC), a system that allows clinicians to (1) identify clinically indicated evidence-based programs by searching a growing evidence-base of randomized controlled trials (RCTs) and (2) build individualized evidence-informed treatment plans by focusing on common practice elements. MAP may also address the concerns about manual-based programs (e.g., inflexibility). Although some MSW programs have integrated MAP, the benefits of MAP training within MSW education have not yet been evaluated. This project evaluated multiple mechanisms of training [1] in a semester-long MSW-focused MAP course relative to curriculum-as-usual control at a large public university.
Participants were advanced MSW students (mean age = 27, SD = 5.8; 92.3% women; 59% white) either enrolled in the MAP course (n = 17) or enrolled in curriculum-as-usual (n = 22). The MAP course was co-taught by an expert MAP trainer and a MAP-trained social worker. Pre- and post-semester, participants completed a battery that included: (1) role-plays with standardized patients that were videotaped and coded using the Therapy Observational Coding System of Child Psychotherapy – Revised Strategies scale [2]; (2) a written task that was subsequently coded to assess participants’ clinical decision-making skills during different phases of a standardized case; and (3) attitudinal factors that may be predictive of future MAP usage, such as attitudes toward evidence-based practice [3] and the acceptability and feasibility of MAP [4]. Results indicate significant uptake of cognitive and behavioral therapeutic strategies in the MAP condition. Overall, participants endorsed positive attitudes toward evidence-based practice broadly and MAP specifically. Findings may be used to inform the development of more effective evidence-informed curriculum for masters-level clinical programs and future workforce training initiatives. Methodological considerations may inform advances in instrumentation to measure multidimensional training outcomes.

References

Poster Group - TRAINING AND D&I COMPETENCIES

Lessons Learned: A Data-Driven Approach to Supervision and Training of Stakeholders
Stephanie Moore1, Laura Clary1, Kimberly Arnold1, Steven Sheridan1, & Tamar Mendelson1
1Johns Hopkins University

Background
Few evidence-based practices (EBPs) are successfully installed into school settings [1]. Integrating implementation considerations into early stages of intervention evaluation and collaborating with relevant stakeholders are recommended to reduce the gap between EBP evaluation, adoption, implementation, and sustainability [2-4]. As part of a school-based prevention trial, school stakeholders participated in intervention training and implementation with a goal of sustaining the intervention at the schools after the study’s conclusion. This presentation explicates lessons learned via the study of stakeholder involvement, which in-turn informed subsequent implementation and evaluation efforts.

Materials and Methods
Over three years, 20 urban public schools were recruited for a randomized trial assessing two wellness programs, one targeting eighth graders’ emotion regulation and decision-making (RAP Club) and the other health education (Healthy Topics). At each school, middle-school teachers and school-based mental health providers were recruited as intervention “co-facilitators in training.” One school mental health provider per school received training in RAP
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Club, and one middle school teacher per school received training in Healthy Topics (N = 40 across all schools). Stakeholder attendance and engagement during intervention training, supervision calls, and intervention sessions were recorded. School characteristics (e.g., organizational health), stakeholder interviews, and process notes further informed our investigation of stakeholder engagement in training and implementation.

Results
Most stakeholders attended intervention training; however, attendance on supervision calls was limited. Two-thirds of school personnel were regularly present during intervention sessions, but fewer than half actively participated. Stakeholder participation and engagement increased each year of the trial. Individual- and school-level factors were related to participation in training, supervision, and implementation. Findings will be used to refine personnel training and supervision (e.g., augmenting structure, explicating goals) for the final year of trial implementation.

Conclusion
Evaluating stakeholder involvement in intervention training and implementation has been critical in informing this research team’s approach to stakeholder training and supervision to support implementation and sustainability. Our findings illustrate both challenges and opportunities for increased stakeholder involvement in implementation. Factors influencing stakeholder participation, assessed during controlled trials, can be leveraged to inform subsequent evaluations, as well as program adoption, implementation, and sustainability.

References

Poster Group - TRAINING AND D&I COMPETENCIES

Who Takes Advantage of Training Initiatives: Are We Just Preaching to the Choir and Whistling in the Wind?
Brigid Marriott¹, Jack Andrews¹, & Kristin Hawley¹

¹University of Missouri

Background
Numerous implementation initiatives have endeavored to bridge the research-to-practice gap [1-2]. However, the reach of these implementation initiatives has rarely been studied. In the current study, we describe a county-wide youth mental health (MH) initiative supported by a voter-approved sales tax. This initiative aims to improve access to effective youth MH services by providing free training, consultation, and support in evidence-based practices.
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(EBPs) to MH service providers. The current study has three aims: 1) describe the providers reached by the initiative, 2) examine which training activities providers engage in (i.e., formal workshops; learning collaboratives; individual consultation), and 3) explore differences in providers (e.g., discipline; attitudes; knowledge) who do and do not invest in training activities.

Materials and Methods
Participants (N = 523) were community MH providers who completed a web-based baseline assessment prior to registering for the EBP trainings. Measures included demographics, clinical practice information, self-reported confidence, organizational climate [3], and EBP knowledge [4], attitudes [5], and practice [6].

Results
The initiative reached over 500 providers who were part of over 100 different organizations and private practices. Registered providers were predominantly master’s level (N = 277, 53.06%), representing social work (N=178, 34.10%), counseling (N=140, 26.82%), psychology (N=61, 11.69%), and other MH disciplines (N=143, 27.34%). Some 159 (34.40%) were fully licensed MH providers, 69 (13.19%) post-degree but unlicensed, 119 (22.75%) student trainees, and 176 (33.65%) none or other types of licensure (e.g., RN, MD). Providers on average had been providing MH services for 8.13 years (SD = 8.52, range = 0 to 45). Registered providers participated most frequently in formal workshops (69.79%, N=365,) and less often in small group learning collaboratives (7.07%, N=37) and individual consultation (6.88%, N=36). Initial findings showed significant, positive associations between baseline EBP attitudes (r=.11, p=.01) and knowledge (r=.13, p<.01) and the number of formal workshops attended. Conclusions The initiative reached a high proportion of MH providers and organizations; however, far fewer actually participated in any training activities. The more in-depth, personal training and support components were the least utilized. Implications for voluntary implementation initiatives within community MH care will be discussed.

References
Expanding Hybrid Designs for Implementation Research: Intervention, Implementation Strategy, and Context

Christopher Kemp¹, Bradley Wagenaar¹, & Emily Haroz²
¹University of Washington, ²Johns Hopkins University

Background
Successful implementation reflects the interplay between intervention, implementation strategy, and context [1]. Hybrid effectiveness-implementation studies allow investigators to assess intervention effects on patient health alongside implementation strategy effects on implementation outcomes [2-4], though the role of context as a third independent variable (IV) is incompletely specified. Our objective is to expand the hybrid effectiveness-implementation framework to include mixtures of all three types of IVs: intervention, implementation strategy, and context.

Results
We propose to use I to represent the IV of intervention, IS to represent implementation strategy, and C to represent context. The expanded framework specifies nine two-variable hybrid designs: I/i, I/IS, IS/i, IS/c, IS/C, C/i, I/C, and I/c. We describe four in detail: I/i, IS/c, IS/C, and C/is. We also specify seven three-variable hybrid designs that follow from the two-variable designs. We argue that many studies already meet our definition of two- or three-variable hybrids.

Conclusions
Our proposal builds naturally from the typology proposed by Curran et al. [2], but offers a more complete and clear specification of designs that might be of interest to implementation researchers. We need studies that are designed and powered to measure the implementation-related effects of variations in contextual determinants, both to advance the science and to optimize delivery of interventions in the real world. Prototypical implementation studies that evaluate the effectiveness of an implementation strategy, in isolation from its context, risk perpetuating the persistent gap between evidence and practice, as they will not generate essential context-specific knowledge around implementation, scale-up, and de-implementation.

References
The Use of the PARIHS Framework in Implementation Research and Practice – A Citation Analysis of the Literature

Anna Bergström, Anna Ehrenberg, Ann Catrine Eldh, Ian Graham, Kazuko Gustafsson, Gillian Harvey, Alison Kitson, Jo Rycroft-Malone, & Lars Wallin

1Uppsala University, 2Dalarna University, 3Linköping University, 4University of Ottawa, 5University of Adelaide, 6Flinders University, 7Bangor University

Background
The Promoting Action on Research Implementation in Health Services (PARIHS) framework was developed two decades ago and conceptualizes successful implementation (SI) as a function (f) of the evidence (E) nature and type, context (C) quality and the facilitation (F), [SI = f (E,C,F)]. Despite a growing number of citations of theoretical frameworks including the PARIHS, details of how theoretical frameworks are used remains largely unknown. This review aimed to enhance the understanding of the breadth and depth of the use of the PARIHS framework.

Materials and Methods
This citation analysis departed from four core articles representing the key stages of the framework’s development. The citation search was performed in Web of Science and Scopus. After exclusion, we undertook an initial assessment aimed to identify articles using PARIHS and not only referencing any of the core articles. To assess this, all articles were read in full. Further data extraction included capturing information about where (country/countries and setting/s) PARIHS had been used, as well as categorizing how the framework was applied. Also, strengths and weaknesses, as well as efforts to validate the framework, were explored in detail.

Results
The citation search yielded 1,163 articles. After applying exclusion criteria, 1,059 articles were read in full, and the initial assessment yielded a total of 259 articles reported to have used the PARIHS framework. These articles were included for data extraction. The framework had been used in a variety of settings and in both high-, middle- and low-income countries. With regards to types of use, 28% used the PARIHS in planning and delivering an intervention, 49% in data analysis, 55% in the evaluation of study findings, and/or 46% in any other way. Further analysis showed that its actual application was frequently partial, and generally not well elaborated.

Conclusions
In line with previous citation analysis of the use of theoretical frameworks in implementation science we found a rather superficial description also of the use of the PARIHS. Thus, we propose the development and adoption of reporting guidelines on how framework(s) are used in implementation studies, with the expectation that it enhances the maturity of implementation science.

References
How are Health Policy Implementation Outcomes Measured Quantitatively? A Review Protocol

Peg Allen¹, Cole Hooley¹, Meagan R. Pilar¹, Cara C. Lewis², Kayne D. Mettert¹, Caitlin N. Dorsey², Jonathan Purtle¹, Stephanie Mazzucca¹, Alexandra B. Morshed³, Ana Baumann¹, Maura M. Kepper¹, & Ross C. Brownson¹

¹Washington University in St. Louis, ²Kaiser Permanente Washington Health Research Institute, ³Drexel University

Background
Evidence about effective strategies in clinical care and population health is growing, with a number of evidence-based policy approaches now recommended in the Community Guide [1] and other systematic reviews. But understanding lags on how best to implement recommended policies to reap the full population health benefits. Information is limited on how to quantitatively measure policy implementation outcomes [2]. To address this gap a systematic review has begun to identify and rate quantitative measures of health policy implementation outcomes and predictors.

Materials and Methods
We are reviewing published academic journal articles to identify the state of quantitative measurement of health policy implementation. To guide the systematic measures review, we combined two frameworks impacting policy implementation: 1) for internal context, the Consolidated Framework for Implementation Research; [3] and 2) for external context, Bullock's policy implementation determinants framework (under review).

We are applying Lewis et al.’s measures review protocol and PAPERS rating system.4 We searched these databases: CINAHL Plus, Medline, PsychInfo, PAIS, ERIC, and Worldwide Political. The four search strings included multiple search terms for: health, public policy, implementation, and measurement. We will code measures to implementation outcomes5 and predictors. Inclusion criteria: 1) empirical study of the implementation of public policies already passed or approved addressing physical or behavioral health; 2) quantitative self-report or archival measures utilized; 3) peer-reviewed journal publication 1995 through April 2019; and 4) English language text.

Results
We will screen abstracts April-June 2019. In July-August 2019 we will review and extract full texts. We will present yields, characteristics of included articles, and description of several identified quantitative policy implementation outcome measures. We will show plans for fall/winter 2019 pragmatic measure rating, summarization, and web-based posting. We seek feedback from policy implementers and researchers on remaining procedures. We especially want feedback on design of a publicly available web-based summary of identified measures and pragmatic properties to ensure usefulness to policy implementers and researchers. We are collaborating with SIRC on methodology and dissemination.

Conclusions
The measures summary is intended to stimulate further assessment of health policy implementation outcomes and predictors to help practitioners and researchers spread evidence-informed policies to improve population health.

References
ABSTRACTS


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Poster Group - MEASUREMENT

Development and Evaluation of an Instrument to Measure Fidelity to Implementation of Collaborative Care in Primary Care Clinics

Erin LePoire¹, Anna Ratzliff¹, Diane Powers¹, & Deborah J. Bowen¹

¹University of Washington

Background
Collaborative Care (CoCM) has been shown to be an effective way to treat depression and other mental illness in primary care and other settings. Evaluating whether or not clinics that receive training and technical assistance to implement CoCM maintain fidelity to the core components proven in other research to predict better patient outcomes has received little attention. A scalable measure clinics can use to measure fidelity is needed. This analysis discusses the creation and evaluation of an instrument specifically designed to measure multiple domains of CoCM fidelity. Methods: Development of the CoCM fidelity tool occurred in three steps. Step one was development of a rubric that was utilized during in-person site visits with a group of HRSA-funded clinics. In Step two the rubric domains were adapted based on the outcomes of these site visits and incorporated into a qualitative interview guide administered to care managers trained in CoCM within the preceding six months to assess fidelity. Step three focused on converting the rubric to a self-administered format so it can be used by organizations to self-assess fidelity to core CoCM components.

Results
In Step one, clinics had an average rubric score of 3.09 “core features Implemented” (range 2.16-4.59) out of a possible 5.0 which indicates “exceptional Implementation.” Step two transcript data from qualitative interviews revealed that care managers are able to link their clinic’s current CoCM processes to core CoCM concepts in the fidelity rubric. Findings from development of the rubric and qualitative interviews will be presented. The Step three self-administered rubric will be tested in 24 clinics across the United States participating in a CoCM implementation. We will compare this data to clinic outcomes in order to determine validity. Conclusion: A self-administered instrument to assess CoCM fidelity in primary care clinics is feasible and further evaluation will allow us to connect use of the rubric to patient-level clinical outcomes and provider-level outcomes among all members of the CoCM team (care manager, primary care provider, psychiatric consultant).
ABSTRACTS

Poster Group - MEASUREMENT

Measurement of Implementation Strategies for Pharmacy Benefits Management MUET Initiatives to Optimize Medication Management

Anju Sahay¹, Francesca Cunningham², Peter Glassman², Von Moore², Muriel Burk², Parisa Gholami¹, Shoutzu Lin¹, Brian Mittman³, & Paul Heidenreich¹,⁴

¹MedSafe QUERI Program, Palo Alto VA Health Care System, ²VA Office of Pharmacy Benefits Management Services, ³Kaiser Permanente, ⁴Stanford University

Background
Effective implementation strategies are critical for understanding and improving outcomes. VA's Office of Pharmacy Benefits Management Service (PBM) has a national Medication Use Evaluation Tracker (MUET) web application designed to provide close to real-time summary-level patient data (monthly to quarterly) to reduce potentially unsafe or unnecessary medication. Focusing on the developmental phase of formative evaluation, in the context of five current MUET initiatives, we collaborated with PBM to understand their use, and the value of seven pre-identified strategies to implement them: provider education, academic detailing, electronic reminders, patient specific care plan, draft orders, patient mailings and calling patients.

These five MUET initiatives were Dimethyl Fumarate (DMF), New Mineralocorticoid Receptor Antagonist (MRA), Prasugrel or Ticagrelor Treatment Duration >12 months (PRAT), Women of Childbearing Age on Warfarin (WoW) and Direct Oral Anticoagulants (DOAC).

Methods
In collaboration with PBM, in 2017 for the DMF initiative (n=143) and in 2018 for the remaining four initiatives (n=142) all VISN Pharmacy Executives (VPEs) emailed web-based surveys to a designated pharmacist at each of their facilities. Goal was to understand which among the seven strategies were being used by the facilities to implement the specific MUET initiative, and their perceived value. We also assessed barriers for facilities not using the implementation strategies. Response rates were as follows: 2017 (n=127, 89.0%) and 2018 (n=131, 93.2%).

Results
The most commonly used implementation strategies by pharmacists were provider education (26.6%), patient mailings (23.5%), using electronic reminders (21.2%) and entering draft orders (14.3%). Comparatively, pharmacists perceived provider education as being most useful (27.6%) along with having patient specific care plans (24.6%) and using electronic reminders (18.8%).

Pharmacists at facilities which did not implement one or more strategies reported barriers like time-consuming/not enough staff (43.6%), they didn’t believe this would work (22.7%), to implement they needed help from other services/departments (18.6%) and some pharmacists believed this was inappropriate work for a pharmacist (14.9%).

Conclusions
Pharmacists perceived provider education as the most useful strategy to monitor medication safety for their patients. Formative evaluation focuses on the identification and adoption of best practices to improve medication safety for the Veterans.
Defining and Developing Measures to Assess Public Health Program Sustainability

Sarah Moreland-Russell¹, Rebecca Vitale¹, & Elizabeth Zofkie¹
¹Washington University in St. Louis

Many recent Dissemination and Implementation Science studies have neglected to observe what happens to programs once they have been implemented. This has contributed to the lack of a cohesive and succinct definition of sustainability for public health programs. While certain studies define sustainability as the continuation of programmatic activities over time, others conceptualize sustainability as the continued delivery of benefits to target populations and the maintenance of collaborative structures within communities. Ultimately, conflicts between these definitions disrupt the continuity of program sustainability research and focus. With public health funding in perpetual jeopardy, a cohesive, solidified definition of program sustainability has never been more necessary.

The study began with an extensive systematic literature review of program sustainability research, including empirical research, case studies, fieldwork, and commentaries. This process outlined various proposed definitions of sustainability and cataloged organizational metrics tied to sustainability outcomes. The target audience for the current study utilized evidence-based state tobacco control (TC) programs. Therefore, the second part of the methodology included consultations and interviews with key tobacco control specialists, sustainability experts, academics, and practice-oriented professionals. These interviews were then cross-referenced with the literature to find commonalities between theory and practice. Finally, the study team collected and analyzed federal progress reports submitted annually by these TC programs. The items outlined in these reports were referenced back to the previously identified sustainability metrics. The organizational metrics described in the literature were aligned to the evidence-based Program Sustainability Framework. This framework defines the internal and external factors operationalized into eight domains that affect a program’s capacity for sustainability.

Through this process, institutionalization emerged as the primary measure of sustainability found in both the literature and dialogue. To this effect, the establishment of a program through formal organizational rules and funding was widely perceived to ensure the delivery of continued program initiatives and benefits. The results further distinguish between programmatic, organizational, community-level factors, and funder support, suggesting sustainability planning must account for institutional scope. This concise definition will enable valid, empirical comparisons of sustainability across programs in various public health contexts.

References
Pragmatic Measurement of the Quality of Healthcare Provider Patient-Centered Behavior Change Counseling Using the Behavior Change Counseling Index (BECCI)

Doyanne Darnell¹, Kaylie Diteman¹, Dylan Fisher¹, Lea Parker¹, Allison Engstrom¹, & Christopher Dunn¹
¹University of Washington

Background
Training healthcare providers in Motivational Interviewing or similar patient-centered behavioral interventions is increasingly popular [1]; however, gold-standard methods to assess skill acquisition and ongoing quality assessment are laborious and impractical in busy healthcare settings. We examined the utility of a brief measure requiring modest training, the Behavior Change Counseling Index (BECCI) [2], to pragmatically capture provider skill in patient-centered alcohol counseling.

Materials and Methods
The present study includes a multidisciplinary sample of routine trauma center providers (N = 69) trained to counsel trauma patients about risky alcohol use as part of a 25-site National Institutes of Health-funded pragmatic trial of a collaborative care intervention [3]. Providers were predominantly White (79%) females (87%) with at minimum a bachelor’s degree. Providers completed a pre-training 20-minute standardized patient role-play in which they counseled a patient actor about alcohol use. At the end of the role-play, the standardized patient actor completed the brief (<5 minute) 12-item BECCI measure. Audio recordings of the role-plays were subsequently coded by an objective rater using the Motivational Interviewing Treatment Integrity Scale (MITI), a longer gold-standard measure that requires intensive training [4]. No previous studies have directly compared the BECCI and the MITI. We examined correlation coefficients (Spearman’s rho for skewed MITI variables) between overall BECCI scores and MITI empathy and summary scores.

Results
The overall BECCI scores were highly and statistically significantly (p < .05) correlated with key patient-centered counseling style MITI scores (empathy r = .70, spirit r = .74, MI-adherent r = .51) and the behavioral count scores of percent open questions. (rs = .56) and reflection-to-question ratio (rs = .60). BECCI scores were moderately and statistically significantly correlated with percent open questions (rs = .33).

Conclusions
The BECCI is a pragmatic measure of patient-centered behavior change counseling that may be useful for routine use in healthcare settings to assess counseling quality. Given that the BECCI does not require extensive training it may be used by either a trainer/supervisor or peer to pragmatically assess various training sessions (e.g., behavioral rehearsal [5]) as well real patient interactions (live or audio-recorded).

References
ABSTRACTS


Poster Group - MEASUREMENT

Getting to Fidelity: Identifying Core Components of Implementation Facilitation Strategies

Jeffrey Smith

VA Quality Enhancement Research Initiative for Team-Based Behavioral Health

Background
To ensure appropriate transfer of successful implementation strategies from research to policy and practice, it is important to use tools or processes to measure and support fidelity to a given strategy’s core components. Unfortunately, this aspect of implementation science is underdeveloped and infrequently applied. Implementation facilitation (IF) is a dynamic strategy involving interactive problem-solving and support to help clinical personnel implement and sustain a new program or practice that occurs in the context of a recognized need for improvement and a supportive interpersonal relationship. Identifying core components of IF is a foundational step in efforts to develop tools to assess fidelity to the strategy.

Materials and Methods
First, we conducted a scoping literature review to identify the range of activities applied in IF strategies. PubMed, CINAHL, and Thompson Scientific Web of Science databases were searched for English-language articles that included the term “facilitation” or other commonly used terms for the strategy published from January 1996 – December 2015. Initially, 1,489 citations/abstracts were identified and screened for relevance by two independent reviewers. Ultimately, 135 articles (from 94 studies) were identified for abstraction of data on facilitator characteristics and roles/activities, clinical setting, patient population, clinical innovation targeted for implementation, and implementation outcomes. Next, we engaged an Expert Panel in a rigorous 3-stage modified Delphi process to develop consensus on core IF activities for high complexity and low complexity clinical innovations in three implementation phases (pre-implementation, implementation, sustainment).

Results
Based on review of the literature for the 94 studies, 32 distinct IF activities were identified. The Expert Panel identified 8 of the 32 IF activities as core for the Pre-Implementation Phase, 8 core IF activities for the Implementation Phase, and 4 core IF activities for the Sustainment Phase. A prototype IF Fidelity Tool based on the core activities has been developed for piloting.

Conclusions
Core IF activities were identified based on a comprehensive literature review and a rigorous consensus development process with an expert panel. Effective transfer of successful IF strategies from research to policy and practice requires tools to help ensure fidelity to core components of the strategy.

References
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Poster Group - SUSTAINABILITY

Implementation Fidelity and Sustainability of Midwife-led Antenatal Consultation: Preliminary Results

Anja Siegle1, Friederike zu Sayn-Wittgenstein2, & Martina Roes3

1University of Witten Herdecke, 2University of Applied Science Osnabrück, 3German Centre for Neurodegenerative Diseases

Background
All over the world medical interventions in child-birth are increasing [1]. Since 2014, in Germany, there exists a national nursing expert standard to promote physiological child-birth, which demands antenatal consultation conducted by midwives who are employed by a hospital. National expert standards define an evidence-based and practitioners consented quality level using Donabedian’s model of structure, process and outcome criteria [2]. During the pilot implementation period (6 month in 2015) in 13 German hospitals, the antenatal consultation was not evaluated. Thus, to what extent antenatal consultation was implemented and how implementation success looks like remained unclear. The aim of this study is to investigate implementation fidelity (adherence, participant responsiveness) [3] and sustainability (benefits, institutionalization, development) [4] of antenatal consultation in two hospitals.

Materials and Methods
A mixed-methods design has been chosen, including a quantitative content analysis of consultation documents (n=154) and 34 qualitative semi structured interviews with midwives, pregnant women, physicians and managers in two hospitals in Germany. A descriptive analysis was undertaken for the documents. The interviews were analyzed using framework analysis [5].

Results
Adherence is higher in hospital B, which had a longer timeframe for implementation than hospital A. Furthermore, hospital B had already experience in consultations. Participant responsiveness was very positive in both hospitals. In both hospitals, the interviewed persons saw benefits. Institutionalization is also given in both hospitals, but differs regarding time frame and consultation process. A need for evaluation of the change over time of the needs of women and tailoring interventions to these needs was seen in hospital B, but not in hospital A.

Conclusions
Implementing antenatal consultation in German hospitals is feasible but it needs more time than the pilot implementation of 6 month. Based on the study, it seems that a longer time period (~ 12 months) and a positive attitude to adapt to new developments increases implementation outcomes. Furthermore, flexibility in applying the 4-step implementation model, securing resources, and convincing all stakeholders might have had an impact on feasibility. Additionally, there is a need to evaluate antenatal consultation after the woman gave birth.
ABSTRACTS

References

Poster Group - SUSTAINABILITY

Preventing Facilitator Burnout: Strategies for More Sustainable Process Improvement

Tanya Olmos-Ochoa\textsuperscript{1}, David Ganz\textsuperscript{1,2}, Jenny Barnard\textsuperscript{1}, Lauren Penney\textsuperscript{3,4}, & Neetu Chawla\textsuperscript{1}

\textsuperscript{1}Veterans Affairs Greater Los Angeles, \textsuperscript{2}University of California Los Angeles, \textsuperscript{3}South Texas Veterans Health Care System, \textsuperscript{4}University of Texas Health Science Center

Background
A substantial evidence base supports the use of practice facilitation as an effective strategy to enable implementation of evidence-based practices and related quality improvement (QI) efforts in learning healthcare systems. Yet, challenges with implementing and maintaining facilitation exist and may impede efforts to grow and sustain an experienced facilitator workforce. This study identifies potential challenges facilitators may experience when working with QI teams in real world settings and recommends strategies to address these challenges.

Materials and Methods
The Coordination Toolkit and Coaching (CTAC) project is a VA-funded QI initiative to improve patient experience of care coordination in primary care. Using a cluster-randomized design, 12 primary care clinics were randomized to either a passive strategy (access to the CTAC online toolkit) or an active strategy (distance-based coaching plus access to the toolkit). Over a 12-month period, two facilitators delivered weekly, one-hour coaching calls to six clinics implementing a QI project of the clinic’s choice. Data sources included facilitator reflections catalogued after all coaching calls (n=232) and notes from debrief sessions between facilitators.

Results
We identified nine facilitation stressors: lack of progress/follow-through; changes to the coached team; emotion/frustration directed at the facilitator; mismatched expectations between the facilitator and coached team; managing project timeline and deliverables; supporting QI methods and data collection; managing team dynamics; promoting effective communication; and documenting implementation and facilitation processes. Given these stressors, we recommend that facilitators: continually re-assess process improvement activities and QI methods (e.g., aligning goals with project timeline); moderate discussions to help anticipate and resolve common challenges to process...
improvement (e.g., staffing turnover, within-team conflict); support teams with appropriate data collection and analysis; and set aside time to self-reflect (e.g., debrief sessions), discuss (e.g., with a co-facilitator), and make necessary adjustments to their facilitation process.

Conclusions
Understanding how facilitation affects facilitators and providing facilitators with tools to address stressors are essential for sustainability of QI and other process improvement efforts, and for continued use of facilitation as an implementation strategy. Identifying facilitation stressors and strategies to overcome them may enhance the development and maintenance of an experienced facilitator workforce to support the next generation of process improvement.

References

Poster Group - SUSTAINABILITY


Grace Woodard1, Noah Triplett1, Christine Gray2, Rosemary Meza1, Prema Martin1, Leah Lucid1, Kathryn Whetten2, Gabrielle Jamora1, Augustine Wasonga1, Cyrilla Amany1, & Shannon Dorsey1

1University of Washington, 2Duke University, 3ACE Africa- Kenya

Evidence suggests mental health interventions can be effectively delivered via task-sharing in low-resource settings with high need for mental health interventions; [1–3] however, research is needed to identify approaches to sustain the delivery in these settings. [4] We examine qualitative reports of lay counselors experienced in delivering group-based trauma-focused cognitive behavioral therapy (TF-CBT) for orphaned children and adolescents in western Kenya. We analyze implementation policies and practices (IPPs) associated with delivering TF-CBT in the health and education sectors in order to determine impactful and feasible IPPs to sustain task-sharing delivery in a low-resource setting. Eighteen teachers and 18 community health volunteers (CHVs; N = 36) participated in qualitative interviews after delivering two groups of TF-CBT. Thematic coding for IPPs was conducted by a team including one PI. Interviews were double-coded and discussed to consensus; a third coder was consulted when discordant. Less than half (n = 17) of the interviews were in Swahili and were coded by a member of the study team fluent in Swahili and English; then, all Swahili interviews were translated verbally and discussed to consensus with a PI. Workload adjustment emerged as a critical and feasible IPP for sustaining task-sharing in the education sector: 83% of teachers (n = 15/18) indicated that limited or no workload adjustment was a barrier to implementation. However, it was minimally important in the health sector, with only 17% of CHVs (n = 3/18) indicating workload adjustment was a barrier. Teachers at urban schools (n = 6) were more likely to report workload adjustment as a facilitator than teachers at rural schools (n = 12). Examples of workload adjustments include adjustments of individual schedules (68% urban teachers versus 0% rural teachers), adjustment of school schedules (50% versus 8%), and exemption from meetings (50% versus 17%). Sustainable implementation strategies are needed to address large-scale health inequities in low-resource settings. [5] We found differential use and importance of workload adjustment in two
sectors (both unique and overlapping), which enables tailored implementation support depending on the sector and setting (urban, rural). Our results can inform future implementation and sustainment of task-sharing interventions in low resource settings.

**References**


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**Poster Group - SUSTAINABILITY**

**Sustaining Coordinated Care: a Qualitative Study Exploring the Potential Sustainability of Interorganizational Relationships in Health Links**

Sobia Khan¹, Jennifer Gutberg², Reham Abdelhalim², Jenna Evans², Walter Wodchis², & Agnes Grudniewicz³

¹The Center for Implementation, ²University of Toronto, ³University of Ottawa

**Background**

A key challenge in health systems worldwide is caring for people who have complex needs, and therefore require intensive health and/or social care management with increased need for coordination across care providers. To address this challenge, models of coordinated care are being piloted; however, little is known about their sustainability. Relationships are the foundation of coordinated care, but they are rarely the focus of research studies. Understanding more about how interorganizational relationships (IORs) can be maintained may lend insight on how to sustain coordinated care models overall. In this study, we explore the potential sustainability of IORs in Health Links (HLs), a coordinated care initiative implemented in Ontario, Canada.

**Materials and Methods**

We conducted a qualitative study of three HLs within a broader evaluation of HLs. Sampling occurred at two levels: 1) the HL, and; 2) organizations comprising the HL. We selected HLs that were diverse in geography and lead agency type. Within each selected HL, we recruited leaders and providers involved in HL design, planning and care delivery. We conducted one-on-one semi-structured telephone interviews, and analyzed data using a framework approach. Factors related to the sustainability of IORs in the health system served as the analytical framework for this study.

**Results**
Multiple sustainability factors were discussed by participants in each HL. Participants described variable levels of shared governance and meaningful organizational roles in care delivery processes; HLs whose participants described higher levels of each of these factors also described higher levels of involvement and commitment to HL activities. Threats to sustainability included limited resources and a changing system context that affected organizational membership to the care coordination network.

Conclusions
This study is one of the first to explore sustainability of coordinated care from an IOR perspective. Many opportunities for further research in this area exist. Given the complexity of coordinated care, it is imperative to understand these collaborative initiatives from perspectives that account for social structures and processes in addition to clinical processes and system outcomes.

References

Poster Group - ADAPTATION

The Benefits of Ad Hoc Adaptations in Implementation Science: Community-Based Practices Can Support Delivery of a Family Therapy Intervention in Eldoret, Kenya

Bonnie Kaiser¹, Julia Kaufman², Johnathan Taylor Wall³, Elsa Friis-Healy², Byron Powell⁴, David Ayuku⁵, & Eve Puffer²

¹University of California San Diego, ²Duke University, ³Duke Global Health Institute, ⁴Washington University in St. Louis, ⁵Moi University

Background
A key question in implementation science is how to balance adaptation and fidelity in translating interventions to new settings. Most psychological interventions carried out in low-and-middle-income countries (LMICs) were originally developed in high-income countries. There is growing consensus regarding the importance of, and processes for, planned adaptations so that interventions are delivered in contextually sensitive ways. However, little research has examined ad hoc adaptations, or those that occur spontaneously in the course of intervention delivery. A key question is whether ad hoc adaptations ultimately contribute to or detract from intervention effectiveness. This study aimed to (a) identify ad hoc adaptations made during delivery of a family therapy intervention and (b) assess whether they promoted or hindered intervention goals.

Materials and Methods
Tuko Pamoja (Swahili: “We are Together”) is an evidence-based family therapy intervention aiming to improve family dynamics and mental health, being delivered in Eldoret, Kenya. Tuko Pamoja is delivered by lay counselors, who are afforded a degree of flexibility in the way they present intervention content and the practices they use in therapy sessions. This study used transcripts of therapy sessions with 14 families to develop a taxonomy of ad hoc adaptations used by counselors. We first identified and characterized these adaptations. Then, we evaluated to what extent they were in the spirit of the intervention or went against the goals of the intervention.
Results
Ad hoc adaptations included the incorporation of metaphors and proverbs, religious content, self-disclosure, examples and role models, discussing interpersonal relationships outside of the family, and community dynamics and resources. For the most part, practices were Tuko Pamoja-promoting, though Tuko Pamoja-contrary practices were also identified.

Conclusions
Identifying helpful ad hoc adaptations and incorporating them into interventions could improve acceptability, feasibility, and effectiveness.

References

Poster Group - ADAPTATION

Adaptations to an Evidence-based Health Promotion Practice Implemented Nationally in Routine Mental Health Settings
Kelly Aschbrenner¹, Gary Bond², Sarah Pratt¹, & Stephen Bartels³
¹Geisel School of Medicine at Dartmouth, ²Weststat, ³Massachusetts General Hospital

There is increasing recognition that local program adaptations may be instrumental to sustaining evidence-based interventions in routine clinical practice. However, few empirical studies have documented naturally occurring adaptations made during the implementation process by providers and agencies in health settings. Our research directly addresses the SIRC conference theme, “Where the Rubber Meets the Road,” by identifying and categorizing provider-initiated adaptations to an evidence-based health promotion practice implemented nationally in routine mental health care settings.

Our team conducted semi-structured telephone interviews with program staff from 35 behavioral health organizations 24 months after they implemented InShape, a manualized evidence-based health promotion practice for persons with serious mental illness, within the context of an NIMH-funded implementation study. The interview protocol included questions that assessed core fidelity components of the InSHAPE model, with probes used to explore any adaptations made to core components. An adaptation was defined as a change to the intervention content or method of delivery that was not specified in the original treatment manual. We explored the reasons...
why an adaptation was made as well as who initiated it at the agency. Two investigators independently reviewed interview transcripts to identify adaptations to the program.

Adaptations to InSHAPE included hybrid individual and group programs, home-based exercise programs, technology-based enhancements, such as mobile fitness apps and wearable activity trackers, and use of peer support specialists to deliver program components. The next level of analysis will involve classifying adaptations as fidelity-consistent (i.e., changes that do not significantly alter core model elements) and fidelity-inconsistent adaptations (i.e., changes that reduce the delivery of core model elements), [2] and categorizing the drivers of adaptations (e.g., client-driven, financially-driven). We will then evaluate the impact of these adaptations on client-level health outcomes.

Evidence-based practices are often modified by agencies when translated from research environments to real world health care settings. [3] However, the impact of these adaptations on client health outcomes is not well understood. By identifying and characterizing site-specific adaptations, we will be able to explore the relationship of adaptations to program-and participant-level outcomes and sustainability of the InSHAPE program at the completion of the study.

References

Poster Group - ADAPTATION

Preparing to Scale-Up: Adaptations to a Physical Activity Program for Older Adults
Samantha Gray1, Heather McKay1, Christa Hoy1, Erica Lau1, & Joanie Sims-Gould1
1University of British Columbia

Background
Physical activity is a modifiable lifestyle factor that promotes healthy aging. Despite the irrefutable benefits of an active lifestyle, older adults remain the least physically active Americans. To counter this trend, physical activity interventions for community-dwelling older adults have been implemented. While many demonstrated promising results, very few were effectively scaled-up (defn. expanded beyond research settings while retaining effectiveness). Although adapting interventions to local context to improve ‘fit’ is critical to success at scale-up, we know little about adaptation for scale-up. In 2015 we engaged government (BC Ministry of Health) and community organizations to co-design and implement a flexible, scalable physical activity intervention (Choose to Move, CTM) for older adults. In Phases 1 and 2 delivery (2016-17; 56 programs; n=458) CTM effectively enhanced physical activity, mobility, and social connectedness [1]. For Phase 3, with partners we will scale-up CTM across BC (2018-2020; 175 programs; n>2000). This provides us a unique opportunity to study the ‘dynamic tension’ between adaptation and fidelity [2] while implementing CTM at large scale.

Purpose: To describe the process and outcome of adapting program components and implementation strategies to
support CTM scale-up across BC.

**Materials and Methods**
We adopted a 9-step adaptation process: 1) identify stakeholders; 2) conduct needs assessment; 3) develop prototype of recommended adaptations; 4) validate prototype with stakeholders, 5) create adapted program; 6) pilot test adaptations, 7) modify adapted program, 8) implement adapted program; and 9) evaluate effectiveness of adapted program. Here we describe steps 1-6 and organize the data within Stirman’s [3] adaptation coding system.

**Results**
CTM model content, context, and training adaptations were adapted to suit the local context. For example, older adults and delivery partners sought opportunities for CTM participants to socially connect. Thus, we added more group meetings, reduced phone check-ins, and integrated strategies to support social connectedness into provider training.

**Conclusions**
PA models are more likely to be effective if they are flexible enough to be adapted for implementation at scale; impact that rivals smaller effectiveness trials. There is a need for studies that describe adaptation processes to support replication and scale-up of health promoting PA interventions.

**References**

**Poster Group - DE-IMPLEMENTATION**

**The Role of Clinical Evidence in De-Implementing Low Value Clinical Practices**

Chris Gillespie¹, Krysttel Stryczek¹, George Sayre¹,², David Au¹,², & Christian Helfrich¹,²

¹Department of Veterans Affairs, ²University of Washington

**Background**
One of the most challenging areas of practice change is de-implementing/discontinuing low value or ineffective practices. Evidence disseminated through peer reviewed literature, seminars or training, and expert guidelines is the primary method relied on to facilitate providers’ on-going practice improvement. It is critical to understand how changing evidence actually impacts clinical practice.

**Materials and Methods**
Semi-structured qualitative interviews were conducted with 47 providers and clinical staff as part of three distinct quality improvement projects testing de-implementation interventions designed to improve the safety and value of care for Veterans receiving care at Veterans Health Administration (VHA) medical facilities. We explored respondents’ knowledge and attitudes about the evidence related to de-implementation efforts. Cross-project inductive thematic analysis focused on respondents’ perceptions and knowledge of evidence, and the sources of evidence they consult to inform their clinical practice.
Results
Providers explained that it is difficult to keep up with changes or advances in clinical evidence that might require de-implementation of practices. In some cases, providers and staff were not aware of changes in the evidence or about new or updated practice guidelines. They rarely kept apprised of the literature, but often relied on other sources for information as they made clinical decisions. These included colleagues with whom they worked in clinic, and clinical specialists such as pulmonologists, radiologists, or clinical pharmacists. They also looked to aggregators such as up-to-date or other clinical guidance, while also noting that this is not always feasible in the clinical encounter. Seminars and other training and education efforts were also cited as sources of knowledge about emerging evidence.

Conclusions
Providers find it difficult to keep up with emerging literature, and often rely on other clinicians and sometimes expert panel guidelines or educational outreach to stay informed. Thus, traditionally disseminated evidence is unlikely to lead to discontinuing low value or ineffective practices. Future research is needed to understand how effectively disseminate timely clinical evidence to providers.

References

Evidence-Based Quality Improvement for Accelerating Patient-Centered Medical Home Implementation: Impact on Patient-Provider Communication

Alexis Huynh¹, Danielle Rose¹, Martin Lee¹, Catherine Chanfreau-Coffinier¹, Karleen Giannitrapani¹, Lisa Rubenstein¹, & Susan Stockdale¹

¹Veterans Health Administration

Background
High-quality patient-provider communication is foundational to patient-centered care and a core component of the Patient-Centered Medical Home (PCMH). The PCMH model could disrupt patient-provider communication by shifting communication responsibilities to non-provider PCMH team members. We introduced Evidence-Based Quality Improvement for PCMH transformation (EBQI-PCMH) at seven Veterans Affairs (VHA) primary care practices. Quality improvement (QI) methods to address PCMH implementation challenges included improving patient-provider communication. This paper examines EBQI-PCMH effectiveness for improving patient-provider communication over time, compared with standard PCMH implementation (PCMH-only).

Materials and Methods
We used a non-randomized stepped wedge design in which sites entered in three phases, 6-8 quarters apart. We compared Veterans’ experiences at 10 VHA practices (seven EBQI-PCMH versus three PCMH-only) on patient-provider communication. In PCMH-only transformation, providers and staff in all primary care sites received training in motivational interviewing and patient-centered communication. In EBQI-PCMH sites researchers partnered with
clinical leaders to support local development of QI projects addressing patient-provider communication. We used repeated cross-sections of nationally-administered patient experience surveys from 2009-2015 to assess EBQI-PCMH impacts (N=34,193). Outcome measures included patient ratings of four provider communication skills: 1) explaining information (EXPLAIN), 2) listening (LISTEN), 3) showing respect (RESPECT), and 4) spending enough time (TIME), and rated as optimal for scores 9-10 vs lower. Predictors included time, EBQI-PCMH implementation, and length of exposure to EBQI-PCMH. We compared EBQI-PCMH to PCMH-only practice sites using multi-level, multivariate modelling controlling for patient and site characteristics and weighted for non-response.

Results
Patient ratings of all provider communication skills improved with longer exposure to EBQI-PCMH, adjusting for patient and site characteristics. Each additional quarter of exposure to EBQI-PCMH was associated with improved odds of optimal communication: 2.75% increase in EXPLAIN, 2.95% increase in LISTEN, 2.70% increase in RESPECT, and 2.29% increase in TIME. For example, over the span of the evaluation period (23 quarters), the predicted probability of higher rating for EXPLAIN was 76%, 73%, and 68%, for EBQI-PCMH for Phase 1, 2, 3 versus 63% for PCMH-only.

Conclusions
EBQI-PCMH that engages leaders, providers and staff in researcher-supported QI to accelerate patient centered transformation can be effective in improving patient-provider communication.

References

Poster Group - QUALITY IMPROVEMENT AND PROGRAM EVALUATION
Facilitators’ Perspectives on Facilitation Successes and Challenges in a Quality Improvement Initiative
Neetu Chawla¹, David Ganz¹, Jenny Barnard¹, Lauren Penny², & Tanya Olmos-Ochoa¹
¹VA Greater Los Angeles, ²Veteran’s Health Administration South Texas

Background
Quality improvement efforts and implementation science use facilitation as an effective implementation strategy. Limited work has examined the successes and challenges of this strategy from the facilitator’s perspective, which could shed light on evaluation of facilitation effectiveness and success of implementation efforts [1-2].

Materials and Methods
We conducted thematic analysis on qualitative data from the Coordination Toolkit and Coaching (CTAC) project, a multi-site quality improvement initiative within the VA healthcare system. Two CTAC facilitators (“coaches”) logged their perceptions of the successes and challenges in a “reflection” template completed after each weekly one-hour coaching call over the 12-month project period. Given CTAC is ongoing, this analysis examines the successes and challenges identified for one coached site (n=41 reflections). Two members of the project team independently
coded the reflections to identify common themes related to successes and challenges resulting from the coaching process.

**Results**

We identified 15 total themes related to successes or challenges, of which six were categorized as both a success and a challenge: Project participation and engagement; Communication between coach and coached team members; Managing team dynamics; Conflict resolution; Time management; and Call productivity (e.g., progress on CTAC deliverables, project tasks, or products). For example, for the theme of moderating team dynamics, coaches described obtaining “buy-in from all the stakeholders and facilitating the discussions between them” as a success but simultaneously noted that “balancing nursing priorities/frustrations with administrative staff’s priorities/frustrations” was a challenge. Similarly, for the theme of communication, coaches noted “encouraging more people to speak up” as a success but also “getting them to be more verbal during the call” as a challenge.

**Conclusions**

Facilitation is increasingly used as an implementation strategy, yet the successes and challenges experienced by facilitators during the facilitation process are not well-defined [3]. Given that effective facilitation may lead to positive implementation outcomes, facilitation success should be examined carefully. Our findings indicate that some aspects of coaching can be assessed as both successes and challenges, highlighting the complexity of the facilitation process. Better understanding facilitation effectiveness will support a more nuanced conceptualization of how implementation efforts that use facilitation either fail or succeed.

**References**


**Poster Group - QUALITY IMPROVEMENT AND PROGRAM EVALUATION**

**Building an Impactful Implementation Support Model to Scale-Up a Quality Improvement Program in Long-Term Care**

Andrea Chaplin¹ & Sam MacFarlane¹

¹Public Health Ontario

**Background**

A provincial agency is working to scale an organizational improvement program that supports long-term care homes overcome barriers to aligning with evidence based practices related to the assessment and management of urinary tract infections [1-2]. These practices, if addressed, could help reduce the overuse of antibiotics that are contributing to antibiotic resistance and increased risk of antibiotic side effects. The initial pilot of this program involved agency staff delivering in-person support to an implementation team that was established in 12 long-term care homes. With over 600 long-term care homes in the province of Ontario, a more efficient implementation support model was needed. The purpose of this phase of the project was to apply best practices
from implementation science to develop and evaluate a new implementation model that could be used to scale-up the program.

**Materials and Methods**
The Quality Implementation Framework [3] and evidence-based system for innovation support [4] were used to inform the development of implementation supports at the agency and long-term care home level. Five agency staff conducted readiness conversations and delivered group-based online implementation training sessions to leads from 44 long-term care homes. Two online surveys were administered to the leads from each home to assess fidelity to the program recommendations and to gather feedback on the quality of the training sessions.

**Results**
Participation rates were variable, with only 29% of long-term care homes attending all three scheduled sessions. Of the homes that continued with the program, over 70% had adopted implementation strategies designed to support readiness and buy-in for the practice changes. In April, data from the final survey will be analyzed to describe what program strategies were used by participating homes based on a fidelity measurement tool established for the program.

**Conclusions**
An online and group-based implementation support model has proven to be efficient in reaching more homes; however, there is a need to assess the implications of this higher touch approach on program fidelity. This model has raised questions about how an intermediary can support stakeholders secure buy-in, plan for sustainability, and be inspired to adopt approaches from implementation science.

**References**
Early Lessons from Formative Evaluation of an Implementation Intervention to Improve Reach of Evidence-Based Psychotherapies for PTSD

Princess Ackland\(^1,2\), Shannon Kehle-Forbes\(^1,2,3\), Matthew Yoder\(^4\), Robert Orazem\(^1\), Nancy Bernardy\(^3,5\), Jessica Hamblen\(^3,6\), Craig Rosen\(^3,6\), Siamak Noorbaloochi\(^2\), Barbara Clothier\(^1\), Sean Nugent\(^1\), Paula Schnurr\(^3,5\), & Nina Sayer\(^1,2\)

\(^1\)Minneapolis VA Health Care System, \(^2\)University of Minnesota, \(^3\)National Center for PTSD, \(^4\)Medical University of South Carolina, \(^5\)Dartmouth College, \(^6\)Stanford University,

Background
We used toolkit-guided external facilitation to improve access to evidence-based psychotherapies (EBPs) for PTSD in two outpatient PTSD clinics with low reach of EBPs (≤15% Veterans with PTSD) at baseline. The Promoting Action on Research Implementation in Health Services framework informed the implementation strategy and evaluation [1]. The objective of this study is to describe preliminary results from the formative evaluation.

Materials and Methods
Developmental evaluation data included pre-site visit interviews with 4-6 key informants and baseline data on the primary implementation outcome—EBP reach, defined as the percentage of unique patients who receive a session of Prolonged Exposure or Cognitive Processing Therapy in the PTSD clinic. Implementation-focused evaluation data was extracted from a facilitation log used to track facilitation activities, time spent in these activities and contact with the champion and other local staff. Progress-focused evaluation data included monthly audit and feedback reports on EBP reach, based on administrative data, and narrative review of goal attainment recorded in the site-specific guide. Interpretive evaluation data included post-intervention interviews with the same key informants interviewed at baseline. Interviews were analyzed using rapid turn-around approach [2].

Results
EBP reach more than doubled during the 6-month intervention period in both clinics. Clinic A achieved its reach goal of 20% in month 2 and continued to increase linearly to 36% at month 6. Clinic B’s reach increased slightly then plateaued until month 6 when it achieved its goal of 25%. External facilitation hours were 70% greater in Clinic A. Clinic A implemented organizational changes consistently over the 6 months while Clinic B enacted significant changes shortly before the 6-month reach increase. Clinic A’s champion was more committed and empowered to make organizational changes compared with Clinic B’s champion. Implementation strategies associated with reach at both sites included audit and feedback reports, an in-person site visit at project launch, and toolkit resources.

Conclusions
Improvement trajectories may not be consistent across sites. Implementation interventions should vary in duration according to local champion characteristics. Toolkit-guided external facilitation accompanied by a strong local champion has the potential to help clinics reorganize to improve reach of EBPs to patients.

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Poster Group - QUALITY IMPROVEMENT AND PROGRAM EVALUATION

Addressing Social Disconnection among Frequent Users of Community Hospital Emergency Departments: A Statewide Implementation Evaluation

Rani Elwy1, Elisa Koppelman1, Victoria Parker2, & Chris Louis1
1Boston University, 2University of New Hampshire

Background
Chapter 224 of the Commonwealth of Massachusetts Acts of 2012 [1] authorized Massachusetts to establish the Community Hospital Acceleration, Revitalization, and Transformation (CHART) investment program. The Massachusetts Health Policy Commission (HPC) oversees the CHART program, which awarded $120 million to 27 community hospitals to develop innovations aimed at enhancing the delivery of efficient, effective care, and readying them for value-based care [2].

Objective: Through a contract with the HPC, we conducted an implementation evaluation of CHART innovations between 2016-2018. Through this evaluation, we examined how CHART stakeholders described social disconnection, a public health priority, and which levels of a social connection framework CHART innovations addressed (structural, functional, quality or multilevel) [3] among frequent emergency department (ED) users.

Methods
Qualitative interviews with 236 stakeholders (hospital managers, CHART providers, staff, and community partners) one year post CHART implementation were audiorecorded and transcribed verbatim. Interviews were analyzed using a directed content analysis approach. (4) We assessed reliability and validity of our coding frame through joint coding by four analysts on two transcripts. Data were then mapped to the levels of the social connection framework. Each coded transcript was discussed in depth until consensus on coding definitions was reached. Following this process, six analysts independently coded between 30-40 transcripts. Data were checked and entered into the NVivo software package for ease of organization and reporting.

Results
Social disconnection, described as “loneliness” and “social isolation” by stakeholders, led patients to the ED for problems not always related to their physical health. These definitions mapped to the structural level of the social connection framework. Innovations involving home visit programs, elder services interventions, work flow changes in the ED, and regular telephone follow-ups provided functional level emotional and tangible support. Stakeholders did not mention relationship distress or quality of relationships in describing social disconnection or hospital innovations.

Conclusions
Innovations to address high ED use, according to stakeholders, provided functional level emotional and tangible support to address structural level definitions of social disconnection. Future work should examine the sustainability of these innovations in a value-based healthcare climate, and the effectiveness of these programs on reducing ED utilization.

References
3. Holt-Lundstadt J, Robles TF, Sbarra DA. Advancing social connection as a public health priority in the United
Evaluation of The Implementation Game©: A Learning and Planning Resource

Melanie Barwick¹

¹The Hospital for Sick Children

**Background**

The presentation will share evaluation findings for a new planning and learning resource to support implementation of evidence into care. Implementation is a complex process with many moving parts, and many practitioners and organizations struggle to do it successfully. The Implementation Game© (TIG) supports autonomous, self-direct implementation by simplifying the process into five main components to provide an implementation planning experience for an identified scenario or implementation endeavor. The Implementation Game is relevant to any discipline because the concepts are high level. The Game components include a game board, playing cards, and an implementation worksheet to capture the plan. The goal is either to learn, or to plan, or both. The presentation will provide an overview of the Game and preliminary evaluation data.

**Materials and Methods**

An online survey has been shared with 36 (and counting) individuals who either purchased or received a copy of The Implementation Game© beginning in December 2018. The survey captures evidence of use, usefulness, spread, quality, and satisfaction.

**Results**

Currently in data collection.

**Conclusions**

Evaluation results will be used to refine the Game and to inform a prototype for an online software platform that is under development by the author.

**References**


Understanding when Consultation Supports Teachers in Implementing a Prevention Program in South African High Schools: Moderators and Outcomes

Mojdeh Motamedi¹, Linda Caldwell²,³, Edward Smith²,³, Lisa Wegner¹, & Joachim Jacobs³

¹University of California, San Diego, ²The Pennsylvania State University, ³University of the Western Cape

Background

Despite implementation research on supporting evidence-based prevention programs in high-income countries, research is lacking on consultation support in schools in low-resourced countries like high schools surrounding Cape Town, South Africa [1]. This study is part of a larger factorial design implementation trial of HealthWise, a teacher taught program for preventing youths’ risky sexual and substance use behaviors [2].

Materials and Methods

After initial randomization, 22 schools with 33 teachers received the consultation condition while 26 schools with 41 teachers did not. The consultation condition included three meetings between the consultant and a teacher representative per school, text message reminders, support kits with prepared HealthWise materials, and lesson plans integrating HealthWise content. Teachers self-reported how much content they delivered and adapted, and students’ interests in HealthWise lessons during 9th grade. Observer coded videos captured teachers’ fidelity to HealthWise curriculum. School risk was calculated using publically available data on school and community safety, poverty, density and geographical location. Post-intervention qualitative interviews with the consultant, 11 teachers and 4 principals expand on quantitative findings and broader policy and community priorities.

Results

Based on as-treated regression analyses, teachers in the consultation condition reported delivering more HealthWise content (B = .13, p < .01) but did not differ in their observed fidelity. Moderation analyses found teachers with lower educational degrees who received the consultation condition reported more student interest in HealthWise (B = -.17, p < .01), and teachers in higher risk schools that received the consultation condition reported more adaptation (B = .22, p < .01). Initial qualitative findings suggest there was a need to adapt, especially to address higher risk school needs. Additionally, the consultant’s interview suggested racial, educational, and gender differences may play a role in teachers’ receptivity to consultation.

Conclusions

Findings suggest even a low dose of consultation support can facilitate implementation outcomes in this context. As this study occurred during South African education policy changes regarding teaching life skills in high schools [3], we will discuss how consultation can support implementation to meet community, teacher and student needs in the context of policy changes, as well as potential shortcomings of consultation.

References

Adoption of Trauma-Focused Interventions within Rural Schools

Heather Halko¹, Kaoru Powell¹, Erika Burgess¹, Cameo Stanick², Kaitlyn Ahlers¹, & Anisa Goforth¹
¹University of Montana, ²Hathaway-Sycamores Child and Family Services

Background
High rates of childhood trauma exposure (over 68%) create significant concern given the negative outcomes associated with trauma-related symptoms [1-2]. Numerous trauma-focused evidence-based practices (EBPs) have been developed; however, little is known about why school systems, especially those serving rural areas, adopt (or do not adopt) trauma-focused EBPs. This qualitative study explored factors that might influence the adoption of trauma-focused interventions among clinicians working in rural schools using two implementation science frameworks: the Consolidated Framework for Implementation Research (CFIR) and the Implementation Outcome Framework (IOF) [3-4].

Materials and Methods
A semi-structured protocol was used to interview school-based clinicians (N = 12) about their knowledge, views, and adoption of trauma-focused interventions. Specific attention was given to IOF outcomes known to influence innovation adoption (i.e., acceptability, appropriateness, and feasibility) [5]. Transcripts were double coded using a deductive content analysis approach and a CFIR- and IOF-based coding manual.

Results
Every participant (100%) reported adopting some form of mental health intervention to treat symptoms of posttraumatic stress within their school setting, though only 25% had adopted a trauma-focused EBP. One participant (8.33%) was also working in a school that declined an opportunity to adopt the practice of delivering trauma-focused care. Thematic analyses revealed that most participants reported the same acceptability and appropriateness factors as both facilitators and barriers to adoption of trauma-focused interventions in rural schools. Nine participants (75%) believed that it was not feasible to implement trauma-focused EBPs within their current school system. Several CFIR constructs (e.g., cosmopolitanism, structural characteristics, leadership engagement, access to knowledge and information, available resources, relative priority, self-efficacy) were commonly identified as influencing the feasibility of implementing trauma-focused interventions within a rural school.

Conclusions
The acceptability and appropriateness of delivering trauma-focused care within school settings appears to positively influence the adoption of trauma-focused interventions within rural schools. However, limited feasibility of implementing trauma-focused EBPs within rural schools might be negatively influencing adoption. These results have the capacity to inform a targeted approach to select implementation strategies that could enhance the adoption of trauma-focused EBPs within schools, thereby increasing the accessibility of trauma-focused care in rural areas.

References
3. Damschroder LJ, Aron DC. Keith RE, Kirsh SR, Alexander JA, Lowery JC. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science.


**Poster Group - SCHOOL SETTING**

**The Impact of Stakeholder Alignment of the Organizational Implementation Context in Schools**

Elissa Picozzi¹, Chayna Davis¹, Jill Locke¹, Mark Ehrhart², Eric Brown³, Clay Cook⁴, & Aaron Lyon¹

¹University of Washington, ²University of Central Florida, ³University of Miami, ⁴University of Minnesota

**Background**

Organizational factors are critical to successful implementation of evidence-based behavioral health interventions. Previous research has demonstrated that the alignment or misalignment between leadership and providers on organizational constructs (e.g., implementation leadership) impacts successful implementation [1]. In particular, positive misalignment, which occurs when leaders rate the implementation context significantly lower than the staff, may facilitate the successful implementation of evidence-based practices, and negative misalignment may hinder these processes. This paper examines alignment between school administrators and their staff on implementation leadership (i.e., specific leadership behaviors that support or inhibit effective implementation) and implementation climate (i.e., shared norms and expectations among staff related to implementation).

**Materials and Method**

The OASIS study collected data for alignment in 35 schools (6 school districts in 3 states). Leadership (n=35) and staff (n=289) were asked to rate the implementation leadership (IL) and implementation climate (IC) of their site. Alignment and directionality of alignment (i.e., a positive relationship between leadership and staff ratings, or negative misalignment) between these two groups was calculated as less than a half standard deviation in the difference between mean scores [2-3]. Fidelity assessments for two universal behavioral health prevention programs were then conducted, and further analysis will determine if alignment directionality affects implementation fidelity.

**Results**

A significant proportion of sites reported negative misalignment between leadership and staff. 37.1% of sites reported negative misalignment on overall perceptions of IL, and 51.4% reported negative misalignment on overall perceptions of IC. Additionally, negative misalignment across the seven IL subscales (i.e., proactive, knowledgeable, supportive, perseverant, communication, vision, and availability) ranged from 25.7% to 51.4%, and negative misalignment across the seven IC subscales (i.e., focus, rewards, use of data, integration, existing support, recognition, and educational support) ranged from 34.3% to 60.0%.

**Conclusions**

This paper illuminates important findings with implications for implementation research and practice. First, negative misalignment was found for over half of the schools, indicating a likely need to improve communication and collaboration across levels. Second, although fewer in number, positive alignment and positive misalignment was noted, indicating opportunities to study the factors associated with optimal alignment on key organizational implementation constructs.
References

Poster Group - SCHOOL SETTING

LIFT Together with Boys Town: An Implementation System Bridging Schools, Providers, and Researchers
Jasney Cogua1 & W. Alex Mason2
1Boys Town - LIFT Together, 2Boys Town Child and Family Translational Research Center

For over 100 years, Boys Town has provided services for children who have suffered adverse experiences, trauma, and other challenges [1]. Since 2012, Boys Town has been working to implement a comprehensive prevention strategy that goes beyond serving individual youth and families to impacting targeted populations to build well-being through the LIFT Together program [2].

LIFT Together is a community-based implementation system that convenes schools, service providers, and researchers to facilitate the delivery of a multi-tier, multi-component intervention package. The intervention package uses school [3] - and family-based [4-6] programs to generate school-wide impact. Outcomes are measured at the school population level (such as preventing and reducing school disciplinary referrals or increasing parental engagement at schools), instead of upon individual children and families. This intervention system is being implemented within highly vulnerable communities in three sites: South Omaha, Nebraska; North Las Vegas, Nevada; and Pawtucket, Rhode Island.

This presentation will include:
1) A brief explanation of the LIFT Together System (processes, components, and outcomes).
2) A description of the lessons learned and challenges faced in the implementation of LIFT Together from the perspectives of the school, collaborating providers, and researchers. Examples include developing a common understanding of the goals and processes, establishing protocols for access to the critical populations, and implementing practices for school engagement.
3) A description of data collection processes for the evaluation of LIFT Together implementation and goals (e.g., integrating school and service provider data to evaluate outcomes).

This presentation provides an illustration of implementation practice in real-world settings in the delivery and evaluation of a systematic, community-based system for mobilizing schools to address student concerns with a tiered package of school- and family-based programs. This presentation will not only illuminate the specific nature of LIFT Together, but it also will elucidate contextual factors for local success and highlight the types of expertise and knowledge needed to facilitate local partnerships and implement initiatives that benefit vulnerable youth and families in community settings.
References

Poster Group - SCHOOL SETTING

Engaging Underserved Communities in Implementation Research: Strategies for Success in the Adaptive School-based Implementation of CBT (ASIC) Trial

Amy Rusch1, Jennifer Vichich1, Kristen Miner1, Seoyoun Choi1, Michael Prisbe1, Elizabeth Koschmann1, Celeste Liebrecht1, Amy Kilbourne1, & Shawna Smith1

1University of Michigan

Implementation studies are often criticized for engaging only early adopter sites, thus limiting study generalizability. Better implementation science requires understanding optimal tactics for engaging stakeholders in implementation research. Adaptive School-based Implementation of CBT (ASIC) is a large-scale randomized trial designed to test different implementation strategies to support school professional (SP) delivery of cognitive-behavioral therapy (CBT) in high schools across Michigan [1]. We analyzed methods used to recruit SPs at more than 100 diverse schools for ASIC participation and describe successful strategies used in this large-scale implementation study across different settings [2] and stages of change [3]. Schools were recruited to ASIC over a 6-month period. A post-hoc process evaluation of recruitment was conducted. Metrics collected include quantitative measures (e.g., number of attempts) and qualitative feedback from recruiters on successful recruitment strategies. Following recruitment, data were analyzed to identify patterns in successful recruitment efforts and codify effective strategies for recruiting SPs to ASIC.

With a goal of recruiting 100 schools, ASIC reached out to 272 schools identified as candidates and ultimately, SPs at 114 schools were recruited over 6 months. The average SP required 5 contacts before agreeing to participate (range: 1-16). Following early low recruitment numbers, the study team mobilized seven clinicians and research assistants with mental health service experience, as well as members of a statewide CBT coaching network to reach out to schools. Leveraging these existing community partnerships served to significantly increase recruitment success, with average number of schools recruited increasing from 6/month prior to coach involvement to 39/month after. Further, discussion with SPs about their concerns regarding participation also proved helpful, as most were related to implementation of CBT in their work, rather than study participation. Discussing the experiences of past
program participants, as well as program flexibility, helped assuage these concerns. Notably, SPs were generally not persuaded by discussion of study incentives ($330 over 18 months), but rather by empirical evidence related to student mental health improvement.

Engagement of community members and personalized recruitment efforts were necessary to overcome barriers to study participation among schools. This resulted in engaging SPs from diverse school settings and exceeding recruitment targets.

References

Poster Group - SCHOOL SETTING

The Role of Outer Context Factors in the State-Wide Implementation of Evidence-Based Practices for Students with Autism Spectrum Disorder

Allison Nahmias1, Melina Melgarejo2, Patricia Schetter1, Jessica Suhrheinrich2, Jennica Li1, Shaun Jackson1, & Aubyn Stahmer4

1UC Davis MIND Institute, 2San Diego State University

Background
Although evidence-based practices (EBPs) for children with Autism Spectrum Disorder (ASD) exist, there are significant challenges with implementing these interventions in community settings. The California Autism Professional Training and Information Network (CAPTAIN) is a statewide cross-agency implementation team with the goal of scaling up use of EBPs for ASD using train-the-trainer methodology. Data on model effectiveness and mechanisms of action are limited. This project investigates the role of outer context factors (organizational culture, leadership, structure, and resources) on implementation team member training performance using the EPIS [1] Framework.

Materials and Methods
101 directors from 87 Special Education Local Plan Areas (SELPAs, organizations that facilitate Special Education services in California) completed the Implementation Climate Scale (ICS), Implementation Leadership Scale (ILS), and ASD EBP Resource Assessment Tool. 194 CAPTAIN members reported on the frequency and quality of training and coaching. Generalized Estimating Equations were used to examine differences in implementation climate, leadership, and resources in regards to SELPA structure and size and their association with CAPTAIN member performance.

Results
ICS, ILS, and ASD EBP Resource scores varied by SELPA size. Large SELPA directors reported better implementation climate in regards to focus on EBPs and existing supports to deliver EBPs than small SELPAs, and better educational support for EBPs compared to medium SELPAs (p-values < .05). Large SELPA directors also reported higher proactive, supportive and perseverant implementation leadership than small SELPAs, and higher
knowledgeable and proactive implementation leadership than medium SELPAs (p-values < .05). Large SELPAs also reported greater partnerships with community stakeholders related to ASD EBP use than small SELPAs (p = .01). ICS scores varied by whether the SELPA consisted of one school district (single) or multiple school districts (multi), with multi-district SELPAs reporting higher selection for EBPs and selection for openness than single-district SELPAs (p-values < .02). Proactive leadership was a significant predictor of CAPTAIN performance (B = 3.77, p = .04).

Conclusions
Implementation leadership and climate vary across organizations suggesting variability more broadly. Proactive leadership relates to frequency and quality of EBP training and coaching in schools. Matching targeted implementation efforts to context and organizational functioning will be discussed.

References

Poster Group - SCHOOL SETTING

Do Student Characteristics Affect Teachers' Decisions to Use 1:1 Instruction?
Heather Nuske1, Melanie Pellecchia1, Viktor Lushin1, Keiran Rump1, Max Seidman1, Rachel Ouellette2, Diana Cooney1, Brenna Maddox1, Gwendolyn Lawson1, Amber Song1, Erica Reisinger1, & David Mandell1
1University of Pennsylvania, 2Florida International University

Background
One-to-one instruction is a critical component of evidence-based practices (EBPs) for students with autism spectrum disorder (ASD) [1], but is not used as often as recommended. As described in the Consolidated Framework for Implementation Research [2], an important outer setting characteristic when considering EBPs is clients' needs based on their characteristics. Indeed, student characteristics may affect teachers' decisions to select a treatment and/or implement one-to-one instruction [3]. This study examined whether teachers' reported use of one-to-one discrete trial training (DTT) and pivotal response training (PRT) was associated with students' clinical and demographic characteristics.

Materials and Methods
Participants were kindergarten-through-second-grade autism support teachers (n=80) and children aged 5-9 years with ASD (n=228). All teachers received training and consultation in the EBPs, and rated children in several symptom domains using the Pervasive Developmental Disorders Behavior Inventory. Children were assessed on cognitive and language abilities using the Differential Abilities Scales, and on self-regulation difficulties using the Behavioral Interference Coding Scheme. Each month, teachers reported on their use of two EBPs with each student during the past week.

Results
Children’s higher sensory symptoms, lower social approach, lower verbal skills and higher self-regulation difficulties were associated with more frequent 1:1 DTT and PRT; significant child symptom domains each explained 8-15% of the variance in reported receipt of treatment. Children’s age, sex and race were not statistically significant predictors of children’s receipt of these EBPs.
Conclusions
These results provide an example of a situation where client characteristics seem to influence providers’ use of EBPs. More obviously impaired students received more of each EBP. The findings beg the questions of whether teachers are accurate in their decisions regarding who benefits from 1:1 instruction, and whether children should be matched to specific types of 1:1 instruction based on their clinical characteristics. To the extent that experts think that less obviously impaired students would benefit from 1:1 instruction, those working with teachers should address practical, attitudinal and structural barriers to providing 1:1 instruction to a larger proportion of students. This study highlights the importance of considering client characteristics in the development and study of implementation strategies, across EBPs and contexts.

References

Poster Group - SCHOOL SETTING
Graduate School Training in Structured Cognitive Behavioral Therapy Protocols Predicts Greater Evidence Based Psychotherapy Reach
Jiyoung Song1, Hector Garcia2, Erin Finley3, & Shannon Wiltsey Stirman4
1National Center for PTSD, 2VA Texas Valley Coastal Bend Health Care System, 3University of Texas Health Science Center San Antonio, 4Stanford University
The Veterans Health Administration recommends that patients with PTSD receive either of the two evidence-based psychotherapies (EBPs), Cognitive Processing Therapy (CPT) and Prolonged Exposure (PE). However, in one survey, clinicians who completed the national PE training program reported that they only treated one or two patients at a time with PE (Ruzek et al., 2015). In another survey, 69% of the clinicians who were trained in CPT provided CPT “rarely” or “less than half the time” (Chard, 2014). Because underutilization of the EBPs leads to fewer patients receiving the optimal treatments, it is important to identify and remediate clinician-level barriers that lead to low reach. In our current study, we surveyed clinicians across the United States who primarily work on PTSD clinical teams (PCTs; Garcia, DeBeer, Mignogna, & Finley, 2019). They reported whether they received graduate school training (GST) in structured cognitive behavioral therapy (CBT) protocols and rated agreement to the following clinician-level barriers to EBPs: discomfort of exposing patients to distress during PE and concerns of patients’ difficulty understanding CPT. We conducted mediation analyses with bootstrapping between GST, EBP barriers, and EBP usage. We found that GST (b = -0.27, t(222) = -2.08, p = .04) led to lower discomfort of exposing patients to distress during PE, and in turn, lower discomfort (b = -6.84, t(222) = -4.83, p < .001) predicted greater PE usage. GST and PE usage had a significant average causal mediation effect (b = 1.83, 95% CI [0.00, 4.10], p = .05). Because GST (b = 0.13, t(222) = 0.82, p = .41) was not significantly associated with the CPT barrier, there was no statistical ground to test for the mediation between GST, CPT barrier, and CPT usage. Our results indicate that clinicians who used structured CBT protocols as part of their graduate school training are less likely to shy away from an EBP even when it might ask them of discomfort of exposing their patients to distress. To increase EBP reach, policy makers should promote for the inclusion of using structured CBT protocols in graduate school
Creating Academic and Organizational Synergy within Public Education to Support Statewide Scale Up of EBP for Students with Autism Spectrum Disorder

Jessica Suhrheinrich1,2, Patricia Schetter3,4, Ann England4,5, Melina Melgarejo1, Allison Nahmias1, & Aubyn Stahmer6

1San Diego State University, 2Child and Adolescent Services Research Center, 3UC Davis MIND Institute, 4California Autism Professional Training and Information Network, 5CA Department of Education

Nationwide, 616,234 students were served for Autism Spectrum Disorder (ASD) during 2017-18, an increase of 55% from 2007-08 [1]. Although evidence-based practices (EBPs) for individuals with ASD exist [2], use in community settings is limited. The California Autism Professional Training and Information Network (CAPTAIN) is a statewide cross-agency collaboration with the goal of scaling up use of EBPs for ASD. CAPTAIN has over 400 members representing 140 school and community agencies who commit to training, coaching and engaging in collaboration.

CAPTAIN began as a clinical initiative 6 years ago, then further developed under the influence of implementation science methodology. The Exploration, Planning, Implementation and Sustainment framework (EPIS) [3] has impacted targeted strategy use for statewide scale up of EBPs by informing the development of key partnerships, implementation goals, and collaborative processes within CAPTAIN.

The panel will highlight how education policy and implementation data have influenced CAPTAIN practices and procedures within a community-academic partnership. These factors will be presented by purveyors, intermediaries and implementation science researchers. The founding co-coordinator of CAPTAIN and a purveyor of this initiative will share information about the policies that have influenced the development of the network and how key partnerships have been formed. A fellow founding co-coordinator of CAPTAIN that serves as an intermediary in the CAPTAIN project will share how implementation science and the EPIS Model have informed the CAPTAIN implementation goals and procedures and how this information has been shared with state and local agencies through continuous improvement cycles. The research director for CAPTAIN will present current funded research initiatives involving CAPTAIN and will facilitate discussion.

Mixed-methods data will be presented, informed by an internal survey of CAPTAIN members (n=414), a statewide survey of educational professionals and administrators (n=1700), and qualitative focus group outcomes from providers and CAPTAIN members (n=30).

A subset of outcomes will be presented with a focus on multiple perspectives on barriers, implementation leadership and implementation climate, implementation strategy use, and the distribution of decision making across organizational levels.

References
Meta-Analysis of Implementation Strategy Effectiveness on General Education Teacher Adherence to Evidence-Based Practices

James Merle¹, Clayton Cook¹, Andrew Thayer¹, Madeline Larson¹, Sydney Pauling¹, & Jenna McGinnis¹

¹University of Minnesota

Background
Intervention research in education science has produced a plethora of evidence-based practices (EBP) to improve student social, emotional, and behavioral (SEB) outcomes [1]. To ensure students benefit from these practices, implementation strategies (techniques and methods to improve implementation outcomes) [2], have been developed to bolster school-based practitioners’ EBP treatment integrity. These include action planning, prompts and reminders, coaching, and performance feedback [3-6]. However, because these strategies are often delivered simultaneously, mechanisms by which they produce effects remains unknown, hindering further understanding of causal relationships and efficient service delivery. Therefore, the purpose of this study was to conduct a meta-analysis categorizing and analyzing the effectiveness of discrete school-based implementation strategies across service provision levels to inform limited school resource allocation and identify future directions for research.

Materials and Methods
Published studies of strategies used to increase teacher implementation of SEB EBPs were included. Effect sizes were calculated, and a robust variance estimation meta-regression model (RVE) was used to hierarchically analyze average effects and conduct moderator analyses [7]. Funnel plots and Egger’s test were used to assess publication bias [8].

Results
Preliminary results of 31 single-subject studies indicate that active-implementation strategies targeting performance deficits were effective overall for increasing teacher adherence to EBPs above baseline and pre-implementation training alone (Hedge’s g = 2.45). Maintenance strategies, such as dynamic fading of supports, while sparse, indicated effective sustainment of implementation behavior (g = 0.8). Performance-feedback was the most common strategy (n = 23; 74%), though preliminary results indicate it may not be the most effective strategy across all intervention tiers. Twenty group-design studies were included and analyses are underway.

Conclusions
Teacher treatment integrity improved with added supports; however, once supports were removed, implementation decreased in over 40% of the studies that collected follow-up data. As is true in the greater implementation literature, [9], further methods for sustaining implementation are needed. Gradual fading reduced implementer drift, and practitioners should consider it with active-implementation supports. This study contributes to the broader implementation literature by providing discrete strategy effectiveness of practitioner-level performance-based implementation strategies and informs future research categorizing and analyzing implementation strategies within existing frameworks [2].

References
ABSTRACTS

1. School psychology and special education researchers (n = 226) at Research Intensive institutions completed an online survey related to their dissemination practices. Respondents answered items pertaining to their most frequently used dissemination modalities, target audiences, barriers, and time dedicated to dissemination. Participants were also asked to rank which dissemination activities they perceived as having the greatest impact on education practice.

Results
Over half of sample (59.9%) reported spending less than two hours per week on dissemination activities targeting non-research audiences. Participants were asked to rank order their most frequently used dissemination practices and indicated that academic journal articles (rated as primary dissemination activity by 63% of sample) and conference presentations (rated primary activity by 15%) were the most frequently used modalities for dissemination. Although participants reported that they felt that professional development sessions, meetings with...
stakeholders, and practitioner-focused books have the greatest impact on educational practice, they were not as frequently utilized by respondents as peer-reviewed articles and conference sessions. Common barriers reported by respondents were limited time to dedicate to dissemination (rated as primary barrier by 37% of sample) and that dissemination is a low priority at institutions (rated as primary barrier by 20%).

Conclusions
Overall, respondents reported engaging in low rates of dissemination targeting applied, non-research audiences. With limited time, education researchers appear to focus their resources on activities associated with promotion and tenure (e.g., publishing peer-reviewed journal articles). Although participants valued the importance of dissemination targeting those in applied settings, they reported that these activities are largely not valued by their institutions.

References
1 Hoover SA. When we know better, we don’t always do better: facilitating the research to practice and policy gap in school mental health. Sch Ment Health. 2018;10(2):190-198.

Poster Group - SCHOOL SETTING
Extending Implementation Science to the Rural School Setting
Benjamin Ingman1,2 & Elaine Belansky1,2
1Center for Rural School Health & Education, 2University of Denver

Background
Children in rural America face unique health disparities compared to their urban counterparts, including higher substance use; sexual activity and teen pregnancy; and suicide rates [1-3]. While there are numerous evidence-based practices (EBPs) K-12 schools can implement to promote students’ physical, social-emotional, and academic well-being [4-11], little is known about the contextual factors that facilitate or inhibit rural school districts’ selection of EBPs.

Our center is currently facilitating 21 high-poverty, rural school districts through a strategic planning process to create comprehensive health and wellness plans that include EBPs for physical and mental health. The process is completed by a school district task force comprised of school administrators, teachers, students, parents, and community members under the guidance of an external facilitator.

In this study, we adapted the Consolidated Framework for Implementation Research (CFIR)[12] to the rural school context to understand the contextual factors associated with school districts’ selection of EBPs. We explore (1) the EBPs selected by these rural school districts, (2) the prevalence of contextual factors amongst districts, and (3) the association of contextual factors with EBPs selected.
Materials and Methods
We have developed (and are currently administering) an 81 item survey to evaluate the contextual factors of implementation for this initiative. This pen and paper survey, which was designed for rural schools completing the planning process, accounts for all 39 CFIR constructs. The survey is administered at the end of the final meeting of the process and completed by members of the 21 rural school district task forces. All survey data will be collected by May 2019.

Results
Results will reveal the prevalence and relationships of contextual factors and EBPs selected by rural school districts as a result of the process.

Conclusions
These results will be instructive concerning the importance of particular contextual factors as they apply to the selection of EBPs in rural schools. Additionally, the survey developed and administered provides an example of evaluating CFIR constructs in K-12 school settings, which contributes to the growing SIRC instrument review project.

References
Parent Coaching in Community-Based Early Intervention: Pilot for a Project ImPACT Group Consultation

Karis Casagrande1 & Brooke Ingersoll1

1Michigan State University

Background
Evidence-based parent training, which includes systematically coaching parents in intervention strategies, is considered best practice in early intervention (EI) [1] and is emphasized in the care of young children with or at-risk for Autism Spectrum Disorder (ASD) [2]. However, the application of parent training in EI has been challenging in part due to limited understanding of evidence-based definitions of parent training and limited training for professionals in intensive, evidence-based models [3]. This pilot study will evaluate the implementation of Project ImPACT, an evidence-based parent-mediated intervention for children with ASD or other social communication delays, using a group consultation model within EI.

Materials and Methods
Twelve special instructors, as well as 8 supervisors and administrations, from three EI agencies in an urban metropolitan area are participating in a 9-month, web-based group consultation. Prior to the consultation, providers participated in a 2-day workshop and agency leadership engaged in implementation planning meetings with Project ImPACT trainers. Survey data will be collected to evaluate the consultation sessions and various factors associated with implementation at intake (T1) and every three months (T2, T3, T4). Providers will submit 3 video tapes for fidelity review and participate in exit interviews.

Results
Data collection and analysis is ongoing. At T1, providers reported positive beliefs about Project ImPACT (M=4.30, SD=0.88; Scale: 1-5), had some confidence in their use of Project ImPACT techniques (M=6.84, SD=1.76; Scale: 1-10), and felt that consultations are a moderately effective learning tool (M=3.81, SD=0.57; Range: 1-5). Participants felt their agency’s implementation climate was mostly supportive (M=3.79, SD=0.79) and were somewhat confident about implementation pragmatics (M=6.32, SD=2.04; Scale: 1-10). Across the first three months, satisfaction with the consultation itself was high (M=4.28, SD=0.42; Range: 3.0-5.0). Additionally, 9 of the 12 providers enrolled at least one family in Project ImPACT.

Conclusions
Parent coaching is consistent with EI principles. Despite the challenges of using evidence-based parent coaching models in community EI setting, preliminary results show the potential benefits of using group consultations to implement new practices in an EI setting. Providers and agency leadership participating in this pilot rated the intervention, consultations, pragmatics, and implementation climate positively.

References
Community Mental Health Providers’ Use of Parent Training with Medicaid-Enrolled Families of Children with Autism

Diondra Straiton¹ & Brooke Ingersoll¹
¹Michigan State University

Background
Evidence-based parent training, in which providers systematically train parents to implement specific intervention strategies with their child, is an underutilized treatment for children with autism spectrum disorder (ASD) [1]. In 2012, Michigan passed the Medicaid Autism Benefit for Behavioral Health Treatment, which provides funds for Medicaid-enrolled children with ASD for applied behavior analysis (ABA) services, including parent training. However, a review of billing data shows that few parent training sessions have been billed under the Medicaid Autism Benefit, despite providers having the ability to bill for the service at a high reimbursement rate. To our knowledge, no other study to date has examined reasons for why parent training for ASD is underutilized within community mental health settings.

Materials and Methods
This mixed-methods project examined the use of parent training during ABA under the Michigan Medicaid Autism Benefit for children with ASD under age 21. Descriptive statistics and multiple regression were used to analyze Medicaid claims data for 879 children and survey data from 97 ABA providers. Content analysis was used to analyze open-ended survey items and thematic analysis was used to analyze interviews from a subset of 13 providers.

Results
Results demonstrated that: a) frequency of parent training encounters was very low, b) ABA providers’ conceptualization of parent training is inconsistent with the literature; c) providers report using evidence-based parent training strategies at a moderate-to-high level on the survey, but infrequently spontaneously mention those strategies in interviews; d) providers use sessions for other purposes; e) providers report having limited related training experiences; f) and providers report numerous barriers and facilitators which are related to their reported extensiveness of parent training.

Conclusions
Barriers and facilitators were identified at the family-, provider-, and organization-levels and map well onto the Consolidated Framework for Implementation Research, including outer setting (policy regarding Medicaid Autism Benefit), inner setting (agency-level characteristics), and the individuals involved (providers). Results from this study will be used to design an intervention to increase uptake of evidence-based parent training in this system.

References
Implementation Lessons from Two Self-Directed Parenting Prevention Interventions

Kevin Haggerty\textsuperscript{1}, Laura Hill\textsuperscript{2}, Britany Cooper\textsuperscript{2}, & Martie Skinner\textsuperscript{2}

\textsuperscript{1}University of Washington, \textsuperscript{2}Washington State University

We often lack tools to determine the external validity of evidence-based prevention programs as they are implemented in the real world. Factors at multiple levels (population, policy, organization, providers) determine implementation exposure. For evidence-based parenting programs, exposure to the program is a major obstacle in real world contexts. The goal of this presentation is to examine implementation successes and barriers from two different self-directed family-based preventive interventions. The presentation addresses an important question in prevention science: What are some of the biggest implementation challenges in prevention, and how do we address these. The first study, “Connecting: Implementation Successes and Barriers of a Prevention-Based Program with Foster Families,” presents implementation data from a self-directed workbook plus DVD program with foster families. We found that 88\% of families engaged in some program content, yet, the level of program completion was less than we had hoped, closer to 52\%, who completed 60\% or more of the 94 activities. The authors will describe how these data compare to non-foster program implementation, and they will discuss implications for implementation differences and similarities in targeted versus universal programs and self-directed versus in-person programs. The second study, “First Years Away from Home: Utilization, Engagement, and Usefulness, in a Self-Directed Handbook Program for Parents of Students Transitioning to College,” is also a self-directed program. We found that 85\% of parents reported they read the handbook and/or completed at least some of the activities. 62\% competed at least three quarters and 47\% completed all 22 activities. The authors will discuss baseline data predictors of participation rates (reading the handbook) versus dosage (the degree to which parents actively engaged with and used the material); they will also compare parent perceptions of handbook utility with their young adult children’s perceptions. In order to optimize the relevance of prevention, we need to understand what works, for whom, and under what conditions. Implementation barriers and successes that are similar across modalities or stages of research, as some were across these programs, provide useful information about scaling up evidence-based parenting programs effectively and efficiently.

References

A Multi-Component Home Visitation Program to Prevent Child Maltreatment: Effects on Parenting and Child Functioning

Elizabeth Demeusy1, Jody Manly1, Robin Sturm1, & Sheree Toth1  
1Mt. Hope Family Center, University of Rochester

No single approach can meet the multi-dimensional needs of impoverished, high-risk families. With this in mind, the Building Healthy Children (BHC) intervention program was designed as a collaborative community initiative to prevent child maltreatment and support healthy development in newborns of young mothers [1-2]. This inter-agency collaborative was comprised of medical, university and community partners, with a strong focus exporting evidence-based models and translating research to practice. BHC was designed as a home visitation program that employed a tiered model of service delivery based on families’ individual needs, in order to effectively and efficiently deliver outreach and evidence-based treatment models. These treatment models addressed parenting (Parents as Teachers), attachment (Child-Parent Psychotherapy), and maternal depression (Interpersonal Psychotherapy for Depression), and each has received substantial evidentiary support [3-6].

The current study utilizes a longitudinal follow-up design, to examine the effects of BHC on parenting and child behavior once the child is in elementary school (6-10 years old). The anticipated sample size is 100 children (45% male) and their biological mothers (baseline age, M=19). In addition, data is also being collected from the child’s teacher regarding child behavior in the classroom in order to provide a multi-informant perspective across settings. Thus far, data has been collected from approximately 50 families. Data collection is scheduled to conclude by 7/1/19. This presentation will examine the long-term effects of BHC on child maltreatment, out-of-home placement and harsh and inconsistent parenting, as well as positive parenting practices. In addition, it will examine the effects of BHC on child externalizing behavior and self-regulation.

The information gleaned from this study will help us to better understand how to develop effective inter-agency partnerships in order to increase accessibility to high-quality, evidence-based mental health services for vulnerable children and families. This effectiveness study provides information about implementing efficacious interventions within existing community infrastructure. Finally, the results of this study will help us to better understand how to prevent violence against children, and to foster a safe and healthy caregiving environment for children to grow and thrive.

References
Poster Group - PARENTING PROGRAMS AND INTERVENTIONS

Screening for Perinatal Depression and Anxiety: The Appalachian Provider’s Perspective on Current Practice and Barriers

Mira Snider¹ & Shari Steinman¹
¹West Virginia University

Background
Postpartum Anxiety (PPA) and Postpartum Depression (PPD) are common mental health issues that go largely undiagnosed and untreated in the United States [1]. There are no federal policies requiring screening of new mothers, and only thirteen states have passed legislature or convened task forces to promote screening for PPD in perinatal care. Similar efforts have not been made to promote PPA screening [2]. Although screening is recognized as a valuable practice that may increase new mothers’ access to mental health care, there is limited data available on how this legislature has translated to real-world screening and referral practice. The current study examines current screening and referral practices of perinatal providers in West Virginia -- a state that has taken legislative action to promote depression screening in perinatal women. Barriers to screening and referral that could be targeted by future implementation or advocacy efforts are also explored.

Materials and Methods
Approximately 50 perinatal providers in urban and rural settings across West Virginia will be recruited to complete an online survey. Current screening and referral practices for PPA and PPD, perspectives on best screening practices, and barriers to discussing mental health issues with patients will be assessed. Providers’ perceived feasibility, acceptability, norms, and intention to use screening tools or referrals with perinatal women will also be examined.

Results
Data collection for the current study is ongoing. Preliminary analyses on a small subset of providers have indicated that obstetrician/gynecologists in urban clinics screen a majority of patients for anxiety and depression symptoms, but providers do not consistently conduct screening at each visit. Approximately 4-5% of providers’ caseloads were referred for mental health care in the past year, and referral rates were higher for patients endorsing depression symptoms compared to patients endorsing anxiety symptoms. Providers reported limited time as a barrier to screening, and a lack of consistent screening as a barrier to providing mental health referrals to women.

Conclusions
Perinatal providers in West Virginia screen for depression and anxiety; however, screening and referral may be inconsistent across disorders. Having limited time to screen patients may interfere with mandated screening in perinatal care.

References
Factors Influencing Implementation of the Alma Program: Structured Peer Mentoring for Depressed Perinatal Spanish-Speaking Women

Rachel Vanderkruik¹, Sona Dimidjian¹, & Caitlin McKimmy¹

¹CU Boulder

Background
To address a critical gap in resources for depressed Latina pregnant and early parenting women in rural settings, we co-designed and evaluated the Alma Program utilizing an innovative model of “task-sharing” [1], where peers are trained to mentor perinatal women experiencing depression. In-depth examination of the extent to which contextual factors influence implementation outcomes has the potential to advance understanding of the relationships among contextual adaptation, success of a program, and dissemination to new settings.

Materials and Methods
We conducted a case study of the Alma program to identify the organizational, contextual, and cultural factors that served as barriers or facilitators to the implementation of the Alma program within a rural Colorado community. Key informants who participated in the case study included staff and administrators from partner organizations, members of the research team, local community members, and Alma peer mentors. All key informants (N=15) completed a survey that assessed the organizational and contextual factors known to influence the implementation of programs, developed using the Practical, Robust, Implementation and Sustainability Model (PRISM)[2]. All key informants were given the opportunity to participate in individual interviews or focus groups to explore qualitatively factors associated with the successful implementation of Alma, and to follow-up on findings from the survey.

Results
We will identify key facilitators and barriers that were identified at the following contextual levels: broader community/environment, organization, program, participant. For example, at the broader community/environment level, the most commonly reported facilitator for Alma program implementation (92.3% of the sample) was, “a need for mental health resources in the community and the most commonly reported barrier (38.5% of the sample) was, “poor communication streams in the community.”

Conclusions
The organizational and program characteristics were identified to be overall key facilitators for implementation of the Alma program in this setting, whereas the broader community and environment context was identified to be an overall barrier. Specific barriers and facilitators within each of these levels are identified, which could inform broader implementation and spread of the program to new sites.

References
ABSTRACTS

Poster Group - PARENTING PROGRAMS AND INTERVENTIONS

Fidelity to Motivational Interviewing and Caregiver Engagement in the Family Check-Up 4 Health Program: Longitudinal Associations in a Hybrid Effectiveness-Implementation Trial

Cady Berkel¹, J.D. Smith², Anne Mauricio¹, Jenna Rudo-Stern¹, Liz Alonso¹, Sara Jimmerson¹, & Lizette Trejo¹
¹Arizona State University, ²Northwestern University Feinberg School of Medicine

Background
This study examines fidelity to the Family Check-Up 4 Health (FCU4Health) in a randomized hybrid trial evaluating effects on the prevention of excess weight gain in pediatric primary care [1]. The program includes a comprehensive assessment, followed by a feedback and motivation session, in which Motivational Interviewing (MI) is used to engage families in follow-up parenting modules and community-based programs to address social determinants of health. The COACH observational rating system assesses fidelity to the FCU4Health. In a prior trial, COACH ratings have been associated with higher concurrent ratings of parent engagement, and in turn, longitudinal improvements in parenting and child behaviors [2]. Further, coordinators with more training had better MI skills, and this was positively linked with parent engagement [3] suggesting that MI skills are a core component of change. This study extends prior work to advance the science of fidelity assessment when implementing a preventive parenting program.

Materials and Methods
The trial includes families (n=240) with children ages 6-12 years identified in pediatric primary care with elevated body mass index (BMI) for age and gender (≥85th percentile). 68% of parents were Latino and 38% spoke Spanish. After completing the baseline assessment, families were randomized to the FCU4Health program (n=140) or usual care (n=100). The FCU4Health involved 3 feedback sessions, with parenting support sessions and referrals to community programs (e.g., nutrition, physical activity, social services, health/mental health programs), over a 6-month period.

Results
COACH coding of this sample is nearly complete. Analyses will be completed in July 2019. We first plan to examine the temporal associations between the FCU4Health coordinator’s use of MI in the 3 feedback sessions with caregiver engagement over time using a cross-lagged panel model. Second, using multiple regression, we will examine associations between ratings of MI skills with families’ engagement in community-based programs, accounting for salient family demographic factors such as income, insurance, parent health, and acculturation markers.

Conclusions
This study will inform the ways in which fidelity to MI is associated with behavior change in an evidence-based parenting program—adding valuable knowledge to the field that has implications for fidelity monitoring, coordinator training, and program development.

References
Poster Group - PARENTING PROGRAMS AND INTERVENTIONS

Disseminating Evidence-Based Treatments: Teen Psychopathology and Treatment History Moderate Caregiver Perceptions of EBT

Margaret Crane¹, Sarah Helseth², Kelli Scott², & Sara Becker²
¹Temple University, ²Brown University

Background
To effectively promote evidence-based practice (EBP), it is important to consider whether caregivers understand and view the concept favorably. Previous research found that caregivers with lower education, with lower SES, and from a minority racial group were less likely to correctly define EBP and had a less favorable view of EBP [1]. This study examined how caregivers define, value, and prefer to describe EBP, and how responses varied based on caregiver and teen psychopathology and treatment history.

Materials and Methods
Caregivers (N=411; 86% female; 88% non-Hispanic Caucasian) concerned about their teen’s (age 12-19) substance use completed an online survey as part of a larger study. Caregivers selected the correct definition of EBP, indicated their preference for describing EBP, and indicated whether they valued EBP treatment principles (proven vs. individualized treatment; treatment process vs. treatment outcome). Chi-square analyses evaluated caregiver responses by caregiver and teen treatment history, and teen mental health and substance use problems. Multivariate logistic regressions examined which variables were associated with the greatest likelihood of response selection.

Results
Most caregivers correctly defined EBP, preferred the concept of “therapy based on evidence”, preferred proven over individualized treatment, and valued the outcome over the process of therapy. Caregivers who had received mental health therapy were more likely to correctly define EBP (p<.01), and those whose teens had received mental health therapy less strongly valued the outcome over the process of therapy (p<.01). Multivariate analyses revealed that having a teen with legal problems and substance use problems significantly influenced how strongly caregivers preferred the term “therapy based on evidence”. Caregivers whose teens had internalizing problems and legal problems less strongly favored proven treatment over an individualized approach (ps<.01); only teen legal problems was significant in the multivariate analysis.

Conclusions
Although most caregivers correctly defined and valued EBP, caregiver and teen treatment history and teen psychopathology moderated this effect. Most notably, caregivers of teens with psychopathology symptoms and a therapy history were less likely to value principles of EBP. Caregivers of teens with substance use and legal problems also tended to prefer other terms over EBP.

References
Implementing a Child Mental Health Intervention in Child Welfare: CW Staff Perspectives On Feasibility and Acceptability

Geetha Gopalan¹, Kerry-Ann Lee², Tricia Stephens¹,³, Mary Acri⁴, Cole Hooley⁵, & Caterina Pisciotta⁴

¹Hunter College, ²University of Maryland, ³City University of New York, ⁴New York University School of Medicine, ⁵Washington University

Background
Children with behavior difficulties reared by child welfare (CW)-involved families often fail to receive needed mental health (MH) treatment due to limited service capacity and chronic engagement difficulties (Gopalan et al., 2010). Task-shifting strategies (World Health Organization, 2008) can increase MH treatment access by relocating treatment to alternative service platforms (e.g., CW service settings) and utilizing a non-specialized workforce (e.g., CW caseworkers) to deliver MH interventions while supervised by trained clinicians. In this study, an evidence-based, multiple family group intervention (The 4Rs and 2Ss Program for Strengthening Families [4R2S]; Chacko et al., 2015; Gopalan et al., 2015; Gopalan, 2016) to reduce child disruptive behavioral difficulties was modified so that it could be delivered by CW caseworkers without advanced MH training. This study examines the degree to which CW staff perceived delivering 4R2S in CW placement prevention services as feasible and acceptable, as well as those factors reported to facilitate or hinder feasibility and acceptability.

Materials and Methods
This mixed methods study collected quantitative and qualitative data from caseworkers (n=6), supervisors (n=4) and administrators (n=2). Quantitative and qualitative data focused on feasibility (e.g., participant flow, treatment fidelity, treatment attendance, CW staff perspectives on feasibility and appropriateness) and acceptability (CW staff perspectives on acceptability and attitudes towards evidence-based practices). Descriptive statistics compared quantitative data to pre-determined study benchmarks for high feasibility and acceptability. Qualitative data were coded into relevant a priori (feasibility, acceptability) and emergent themes. Mixed methods analytic strategies focused on integration at the analysis stage, comparing quantitative and qualitative findings side-by-side to identify points of convergence or expansion.

Results
Results indicate that CW staff perceived implementing a modified version of the 4R2S in placement prevention services as generally feasible and acceptable, with some exceptions (e.g., inconsistent family attendance). Factors facilitating feasibility and acceptability include agency and logistical support, provider characteristics, 4R2S content & strength-based focus, 4R2S ease of use, and perceived benefits for families and providers. Barriers to feasibility and acceptability included family characteristics, eligibility/recruitment procedures, logistical challenges, as well as issues with external supervision. Findings from these key stakeholders can inform similar efforts to implement child MH EBPs within CW services.

References
4. Gopalan G. Feasibility of improving child behavioral health using task-shifting to implement the 4Rs and 2Ss
Increasing Quality of Care in Norwegian Child Welfare Institutions: A Quantitative Analysis of Factors from the High Performance Cycle and a Test of Job Engagement

Per Jostein Matre¹, Rita Kylling², Pamela Waaler³, Hans Nordahl⁴, & Kitty Dahl³

¹Drammen Municipality, ²Metanoia Mestring & Utvikling, ³RBUP Øst og Sør, ⁴Norwegian University of Science and Technology (NTNU)

Background
Seventy-six present of youth living in child welfare institutions in Norway meet criteria for 1 or more psychiatric disorders [1]. This high prevalence of emotional distress presents a significant challenge for Norwegian child welfare services. In order to provide effective help, institutional employees must be motivated, trained, and engaged.

From 2011 to 2014, a systematic implementation called Module-Based Support (MBS) was adopted to increase the quality of institutional care through therapist training and supervision. The current study examines which program factors contributed to therapist development and job engagement.

Materials and Methods
A quantitative cross-sectional design was utilized. The independent variable was job engagement, and High Performance Cycle (HPC) factors [2] including: demands, performance, contingent rewards, consequences, and job satisfaction were the dependent variables. Employees and leaders in Norway’s Region North working day and/or evening shifts participated. In 2011, 320 employees and 12 leaders were recruited (62% women, 38% men). The number of participants decreased to 230 in 2013 due to organizational restructuring.

Participants completed the Empowered Thinking Questionnaire (ETQ) 3 times between 2011 and 2014. Question topics involved: leader support, goal orientation, self-efficacy, attachment to the organization, job engagement, job satisfaction, demands, and organizational practice [3].

Results
A Structural Equation Modelling (SEM) analysis was conducted to test the relationship between job engagement and the dependent variables. The analysis demonstrated a significant relationship between demands and performance (b = .54), performance and contingent rewards (b = .85), contingent rewards and job satisfaction (b = .94), contingent rewards and job engagement (b = .58), and job satisfaction and consequences (b = .88). However, significant relationships were not found between job engagement and self-efficacy (b = .04), nor job engagement and job satisfaction (b = .02).

Conclusions
The results from the SEM analysis suggest that there are significant relationships between job engagement and HPC factors, which indicates that the HPC model is a valid tool for improving care quality in Norwegian child welfare institutions. Future implementation of the HPC model has significant implications for future policy developments, institutional practitioners, and implementation researchers.
ABSTRACTS

References
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Poster Group - CHILD-FOCUSED
A Systematic Review of Organizational and Workforce Interventions to Improve the Culture and Climate of Youth Service Settings
Rachel Ouellette1, Allison C. Goodman1, Frances Martinez-Pedraza1, Kelly Cromer1, Xin Zhao1, Jacqueline O. Moses1, Jeffrey Pierre1, & Stacy L. Frazier1

1Florida International University

Background
Organizational social context has been robustly demonstrated to impact service quality and mental health outcomes across youth-service specialty and non-specialty settings. Organizational culture and climate can influence provider attitudes and behaviors regarding adoption of evidence-based tools [1], highlighting the role of organizational interventions towards improving implementation efforts. However, time and resource commitments required for organizational interventions can diminish their feasibility in settings with limited resources, multiple and conflicting job demands, and predictable turnover [2]. Therefore, there is a need to identify concrete and targeted organizational support components for improving an organization’s social context.

Materials and Methods
We are conducting a systematic review to synthesize the literature on organizational interventions and their impact on organizational culture and climate. Inclusion criteria include use of a pre and post measure of organizational culture, climate, or work attitudes; support or change efforts must be implemented at either the organizational or workforce level; and studies must be conducted in a community youth-service setting. Studies must be empirical in nature, but we did not restrict our search by year or language. We conducted our search in PsycINFO, ERIC, Web of Science, and PubMed, to capture studies across specialty and non-specialty (e.g., mental health, prevention, and medical) youth-service settings. Based on the inclusion and exclusion criteria described above, 9,223 total references were identified for the initial screening of abstracts. The coding of qualifying studies and corresponding aggregation of results will be guided by the Distillation and Matching Model (DMM) utilized to identify the common elements of evidence-based interventions [3]. Utilizing this model, we will assess the modularity of organizational interventions and the association between identified organizational support “kernels” and organizational culture and climate outcomes.

Results
We will finish screening abstracts in early-April, with full manuscript review and data abstraction completed by May. Review to be completed in June for submission to a special issue.

Conclusions
Through the approach outlined above, we hope to extract concrete and effective recommendations for improving organizational culture and climate in youth-serving contexts, increasing the ability to identify feasible and targeted
organizational supports to promote successful implementation efforts and service outcomes.

References

Poster Group - INTERNATIONAL WORK

Understanding Rewards to Facilitate Implementation: Perceptions of Rewards and Incentives Across Two Government-Supported Systems in Kenya

Noah Triplett¹, Grace Woodard¹, Christine Gray², Leah Lucid¹, Prema Martin¹, Rosemary Meza¹, Kathryn Whetten², Tyler Frederick¹, Cyrilla Amanya³, Augustine Wasonga³, & Shannon Dorsey¹

¹University of Washington, ²Duke University, ³ACE Africa Kenya

Background
Evidence suggests mental health interventions can be effectively delivered via task-sharing in low-resource settings [1]. However, research focused on how to embed evidence-based treatments in government-funded systems to enable population-level scale-up and sustainment is limited [2,3].

Materials and Methods
We examined implementation policies and practices (IPPs) associated with facilitating group-based trauma-focused cognitive behavioral therapy (TF-CBT) for children and adolescents within the health and education systems in Kenya. Eighteen teachers and 18 community health volunteers (CHVs) from each system (N = 36) participated in qualitative interviews after delivering 2 consecutive TF-CBT groups. Interviews examined several IPPs, including rewards and incentives. Thematic coding was conducted by a team including the study’s principal investigator. Interviews were double-coded and discussed to consensus; a third coder was consulted when discordant.

Results
Rewards and incentives were perceived differently between systems. Teachers highlighted rewards and incentives within their profession. Most teachers felt they were able to be more effective teachers due to participating in the intervention (72%), while only 44% of CHVs reported improvement in their role due to participation. As salaried professionals, teachers did not receive compensation for participation; however, as volunteers, the CHVs received a stipend, which was endorsed by 61% as a reward/incentive. Further, CHVs—often considered the health system’s extension into the community—perceived additional rewards and incentives in relation to their communities that teachers did not. Nearly half of CHVs (44%) reported receiving rewards and incentives from outside their job (e.g., gifts/acknowledgment from community members), whereas only 2 teachers (11%) reported rewards/incentives from outside their profession. CHVs reported benefit to their personal life slightly more frequently than teachers (56% v 44%).
Conclusions

Encouraging participation and sustaining task-sharing interventions requires understanding how rewards and incentives are perceived. For professionals, like teachers, emphasizing rewards and incentives related to their profession may encourage participation and enable sustainment. For non-salaried volunteers, highlighting rewards and incentives from their communities might be more beneficial. In both systems, counselors reported similar levels of personal benefit, like using skills to manage their own grief, suggesting participation goes beyond profession and stipend to add value to counselors’ personal lives.

References

Poster Group - INTERNATIONAL WORK

A Protocol for Building Mental Health Implementation Capacity for Malawian And Tanzanian Researchers and Policymakers

Christopher Akiba1, Vivian Go1, Victor Mwapasa2, Mina Hosseinipour1, Brad Gaynes1, Alemayehu Amberbir3, Michael Udedi4, & Brian Pence1

1University of North Carolina at Chapel Hill, 2University of Malawi College of Medicine, 3Dignitas International, 4Malawi Ministry of Health

Background

Mental health disorders in low and middle-income countries (LMICs) account for nearly the same disease burden as HIV/AIDS (Patel, 2007; Baxter et al., 2013). While efficacious mental health treatments exist, access is severely limited (Hanlon et al., 2014). This treatment gap is fueled by structural determinants rooted in a lack of research and policy capacity.

Materials and Methods

The goal of this abstract is to describe the capacity building procedures and preliminary results of the sub-Saharan Africa Regional Partnership (SHARP) for Mental Health Capacity Building. SHARP 1) strengthens implementation skills among Malawian and Tanzanian mental health researchers and policymakers to successfully apply research on evidence-based mental health programs into routine practice and 2) supports dialogue between researchers and policymakers leading to efficient and sustainable scale-up of mental health services. SHARP comprises five capacity building components for mental health researchers and policymakers including: 1) introductory and advanced short courses focused on implementation science, evidence-based mental health interventions, and grant writing; 2) a multifaceted dialogue platform; 3) an on-the-job training program; 4) annual pilot grants; and 5) mentorship courses. The impact of the program will be measured using dose, participant knowledge, participant satisfaction, and participant academic output.

Results

A group of 21 researchers and policymakers attended the introductory short courses (implementation science and evidence-based mental health interventions) in June 2018. Post-test knowledge scores increased by 87% and 15% respectively and received average user satisfaction ratings of 89% and 85%. Pilot grants focused on...
implementation science and mental health were awarded to 4 teams of one researcher and one policymaker in August 2018. Also, SHARP partners delivered 3 journal clubs to 41 researchers and policymakers in 2018.

Conclusions
Given the widespread lack of evidence-based mental health interventions brought to scale in LMICs, the experiences gained from the SHARP Capacity Building Program in Malawi and Tanzania will hold meaningful implications for a model of capacity building that could be replicated in other LMICs. If impactful, the SHARP Capacity Building Program could be used to sustainably increase the knowledge, skills, and mentorship capabilities of researchers and policymakers regarding evidence-based mental health treatment.

References

Poster Group - HEALTH EQUITY RESEARCH
The Health Equity Implementation Framework: Proposal and Preliminary Study
Eva Woodward¹, Monica Matthieu¹, Uchenna Uchendu², Shari Rogal³, & JoAnn Kirchner⁴
¹VA Center for Mental Healthcare Outcomes Research, ²Health Management Associates, ³VA Center for Health Equity Research & Promotion, ⁴VA Behavioral Health QUERI

Background
Researchers could benefit from methodological advancements to advance uptake of new treatments while also improving health equity. A determinants framework for healthcare disparity implementation challenges is essential to understand an implementation problem and select implementation strategies.

Materials and Methods
We integrated and modified two conceptual frameworks—one from implementation science and one from healthcare disparities research to develop the Health Equity Implementation Framework. We applied the Health Equity Implementation Framework to a historical health disparity challenge—Hepatitis C Virus (HCV) and its treatment among Black patients seeking care in the U.S. Department of Veterans Affairs (VA). A specific implementation assessment at the patient level was needed to understand barriers to increasing uptake of HCV treatment, independent of cost. We conducted a preliminary study to assess how feasible it was for researchers to use the Health Equity Implementation Framework. We applied the framework to design the qualitative interview guide and interpret results. Using quantitative data to screen potential participants, this preliminary study consisted of semi-structured interviews with a purposively selected sample of Black, rural-dwelling, older adult VA patients (N=12), living with HCV, from VA medical clinics in the Southern part of the United States.

Results
The Health Equity Implementation Framework was feasible for implementation researchers. Barriers and facilitators were identified at all levels including the patient, provider (recipients), patient-provider interaction (clinical encounter), characteristics of treatment (innovation), and healthcare system (inner and outer context).
Some barriers reflected general implementation issues (e.g., poor care coordination after testing positive for HCV). Other barriers were related to healthcare disparities and likely unique to racial minority patients (e.g., testimonials from Black peers about racial discrimination at VA). We identified several facilitators, including patient enthusiasm to obtain treatment because of its high cure rates, and VA clinics that offset HCV stigma by protecting patient confidentiality.

**Conclusions**
The Health Equity Implementation Framework showcases one way to modify an implementation framework to better assess health equity determinants as well. Researchers may be able to optimize the scientific yield of research inquiries by identifying and addressing factors that promote or impede implementation of novel treatments while also improving health equity.

**References**
Mental Health Disparities in CBT Implementation

Suh Jung Park¹, Hannah Listerud¹, Perrin Fugo¹, Emily Becker-Haimes¹, & Rinad Beidas¹
¹University of Pennsylvania

Background
The broader health care literature shows substantial racial and ethnic disparities in the implementation of evidence-based practices (EBPs), but there is a paucity of literature examining disparities in mental health care implementation. Cognitive-behavioral therapy (CBT) is a gold-standard EBP for multiple youth mental health conditions, yet it is variably implemented in community mental health settings. To date, little work has examined whether variability in CBT implementation differs as a function of client race and ethnicity; such findings would suggest the possibility of mental health disparities to target in future implementation research.

Materials and Methods
We examined the relationship between therapists’ fidelity to CBT and clients’ race and ethnicity in community mental health settings using data drawn from a larger study. Therapists (N=72, median age=34 years (IQR 29-44), 74% female, 69% white non-Hispanic) audio-recorded CBT therapy sessions for three unique clients. Sessions were coded for the extent to which therapists delivered six CBT interventions (psychoeducation, cognitive education, cognitive distortion, functional analysis of behavior, relaxation strategies, and coping skills; other CBT interventions were excluded due to low use rates across the sample) using the Therapy Process Observational Coding System for Child Psychotherapy-Revised Strategies Scale. We classified clients into two groups: non-Hispanic whites (N=53) and Hispanics and other racial minority (N=144) and examined whether therapist CBT scores differed as a function of client racial/ethnic minority status.

Results
Therapists used more relaxation strategies when treating racial/ethnic minority clients than when treating non-Hispanic white clients (t=-2.847, p=.005). No other differences were observed (all ps>.05).

Conclusions
Results did not suggest that therapists in community settings used CBT differentially based on clients’ race and ethnicity. Study limitations include an overall restricted range of CBT intervention use, regardless of client racial/ethnic minority status. Implications for CBT implementation will be discussed.

References
Poster Group - TECHNOLOGY

Putting it at Their Fingertips: Mechanisms for Increasing Adoption of a Technology-Based Performance Management Tool in a Community Mental Health Organization

Cameo Stanick¹, Janine Quintero¹, Amanda Gentz¹, Gina Perez¹, & Debbie Manners¹
¹Hathaway-Sycamores Child and Family Services

Research has demonstrated that simply giving providers progress data on their clients produces an effect size for clinically significant change [1-2]. However, the adoption of such innovations may be dependent on specific implementation constructs. Hathaway-Sycamores Child and Family Services (HSCFS) is one of the largest nonprofit community mental health and child welfare agencies in Los Angeles County serving thousands of youth and families. Within this context the current study describes a two-phase pilot project for evaluating the mechanisms underlying implementation of a performance management ‘dashboard,’ which allows key metrics to be tracked at multiple organizational levels (i.e., leadership to individual clinicians).

Participants in the first phase of the pilot included 11 staff and the second phase included 28 staff across two sites at HSCFS. In the first phase of the pilot, the dashboards were distributed weekly and created manually in Excel by agency staff. The second phase focused on identifying and implementing a technology tool for developing and distribution the dashboards using Microsoft’s Power BI, where data updated daily. To examine mechanisms that may impact implementation, Perceptions of Adopting an IT Innovation [3] and Readiness for Organizational Change [4] were administered before and after each phase.

Results of the implementation measures showed that participants in the second phase had positive attitudes toward adoption (M=5.3, SD=.83). They also indicated high leadership support for implementing the dashboard (M=5.2, SD=1.1). Based on the changes implemented in the second phase (automating the dashboard; changing training strategies), participants reported positive attitudes particularly regarding conveying the usefulness of the tool (M=5.7, SD=.86). Despite the positive attitudes utilization of the tool decreased in the second phase.

Understanding which mechanisms underlie technology innovation adoption is critical for identifying how to aid stakeholders ‘getting ready’ for practices that may be different from current behavior. Despite research demonstrating the impact of attitudes on clinician behavior5 positive perceptions of compatibility may not be enough to influence adoption at all levels. For instance, as this implementation launches agency wide, it will be important to address de-implementation of other tools. Limitations to the current project include a limited sample size and preliminary nature of the project.

References
ABSTRACTS

Poster Group - TECHNOLOGY

Implementing Internet-Based CBT as Part of a Digital Stepped Care Service in Australian General Practice

Isabel Zbukvic1, Elizabeth Hanley1, Fiona Shand1, Helen Christensen1, Nicole Cockayne1, Christiaan Viis2, & Josephine Anderson1

1Black Dog Institute, 2VU Amsterdam

Background
iCBT is an effective resource for GPs, who are often the first contact for people experiencing mental ill-health and psychological distress [1]. However, use of iCBT in primary care is not always routine. This study aims to improve GP and patient engagement with the evidence-based iCBT program myCompass [2], through tailored implementation of Black Dog Institute’s digital stepped care service StepCare [3]. This study forms part of the international implementation research project, ImpleMentAll [4].

Materials and Methods
StepCare is a digital mental health service designed for general practice. Using a smart tablet, patients screen for symptoms of depression, anxiety and alcohol misuse in the waiting room. Treatment recommendations based on symptom severity are sent from the tablet to the GP in real-time; patients with mild symptoms are recommended the self-guided iCBT program myCompass. Implementation-as-usual for the StepCare Service uses a train-the-trainer model, with collaboration between the PHN and Black Dog Institute. Implementers in IT, practice support, research, and project management operate within an integrated model of knowledge translation to roll-out the service using a phased approach.

Results
Data collection for this study is currently underway. Following a stepped-wedge trial design, a tailored implementation intervention (ItFits-toolkit) will be tested across 12 organizations in 9 countries over a period of 27 months. Longitudinal repeated-measures design will allow comparison of a baseline period of implementation-as-usual versus tailored implementation. Monthly implementation reporting captures activities commenced/stopped and barriers over time. Normalisation of GP use of myCompass as part of the StepCare service will be measured quarterly using the NoMAD and ORIC. Outcome measures will also include patient uptake of myCompass via StepCare as well as implementation costs. Implementer experience using the ItFits-toolkit will also be assessed at each site, along with a process evaluation of the ImpleMentAll trial.

Conclusions
The StepCare Service uses a technology solution to overcome known barriers to GP and patient engagement with online mental health care. This study will provide invaluable evidence on the effectiveness of tailored implementation strategies aimed at further improving engagement with iCBT in primary care.

References
Development of a Multicomponent Implementation Strategy for eScreening

James Pittman¹²³, Borsika Rabin¹³, Niloofar Afari¹²³, Elizabeth Floto⁴, Erin Almklov¹, & Laurie Lindamer¹
¹VA Center of Excellence for Stress and Mental Health, ²VA San Diego Healthcare System, ³University of California, San Diego, ⁴VA Roseburg Health Care System

Background

eScreening is a VA mobile health technology that provides customized and automated self-report health screening via iPad, clinical alerts, patient feedback and medical record integration [1]. eScreening supports early identification of health problems and measurement-based care initiatives. We set out to evaluate an implementation strategy for this technology-based, self-screening tool that has shown promise for improving the provision of healthcare services and patient outcomes. The Lean/Six Sigma Rapid Process Improvement Workshop (RPIW) and related playbook are commonly used in VA quality improvement efforts. We used this approach as an implementation strategy to prepare adopters of eScreening in VA facilities.

Materials and Methods

We adapted a Lean Six Sigma RPIW [2] to develop an implementation strategy. Our multicomponent implementation strategy consisted of a modified RPIW, a playbook (roadmap for programs to implement eScreening, including how to conduct their own RPIW), internal champions, and external facilitation through bi-monthly calls, a site visit, and technical assistance. We conducted a feasibility study in 2 VHA clinics to evaluate the impact of RPIW on implementation. We gathered qualitative data from site visits and consultation calls, and conducted post implementation interviews. Two of our team members independently reviewed qualitative data using a rapid analytic approach to identify challenges and solutions.

Results

The implementation strategy was used with slight variation across the two sites. One site conducted a comprehensive RPIW (Site 1) and the other relied on the other components of the implementation strategy (Site 2). Data from the pilot revealed three types of implementation challenges that occurred at both sites: technology-related, system level, and educational. Workflow and staffing resources were challenges only at Site 2. All four types of implementation barriers were resolved using the external facilitator and the playbook.

Conclusions

Findings suggest that the use of the modified RPIW may have solved workflow/staffing issues more efficiently than locally identified strategies. The modified RPIW to implement new programs in VA health care systems shows promise. External facilitation helped overcome challenges with or without the RPIW. Our findings support prior research highlighting the importance of considering multiple change mechanisms of implementation strategies in mental health services [3].

References
Implementation of an Automated Text Messaging System for Patient Self-Management in the Department of Veterans Affairs: A Qualitative Study

Vera Yakovchenko¹, Timothy Hogan¹, Lorilei Richardson¹, Beth Ann Petrakis¹, Christopher Gillespie¹, Derek Bolivar¹, & D. Keith McInnes¹

¹Department of Veterans Affairs

The Department of Veterans Affairs (VA) is currently deploying an automated texting system (ATS) to support patient self-management. Guided by the Non-adoption, Abandonment, Scale-Up, Spread, and Sustainability Framework (NASSS) which is intended to support the evaluation of novel technologies, we conducted a qualitative study to examine barriers and facilitators to national rollout of the ATS.

Semi-structured interviews were conducted with 33 providers and 38 patients at formative and summative stages of ATS implementation. Interviews explored the roles of site personnel in ATS implementation, processes for enrolling patients, and ATS user experiences. Interviews were recorded and transcribed verbatim. Data were analyzed via qualitative content analysis using emergent coding and a priori codes based on the NASSS framework.

We identified themes across NASSS domains: 1) Condition: perceptions of patient appropriateness for the ATS were guided by texting experience and health complexity rather than potential benefit; 2) Technology: for providers, although the ATS resides outside the electronic health record, use was generally not considered laborious; 3) Value Proposition: patient-driven demand for the ATS was limited; 4) Adopters: providers recommended more efficient ATS enrollment processes to reduce workload; 5) Organization: providers did not have observable results from the ATS early in the implementation phase, noting that such evidence of patient progress/use could enhance uptake among other providers; 6) Wider System: despite being a national program, autonomy at the local level yielded varied experiences with the ATS; and 7) Embedding and Adaptation Over Time: once using the ATS, providers recognized potential for use with other conditions.

This is among the first studies to explore implementation of VA's ATS and through the lens of the NASSS framework. The NASSS framework highlighted how the system can be better embedded into current practices, which patients might benefit most from its functionality, and which aspects of ATS messages are potentially most relevant to self-management. Mobile phone SMS texting is rapidly becoming an accepted means of asynchronous communication between healthcare systems and patients. Our findings reveal that VA's ATS has potential to expand the reach of VA care; however, providers require additional support to adopt, implement, and sustain ATS use.

References

ABSTRACTS

Poster Group - TECHNOLOGY

Beyond Journals – Using Visual Abstracts to Promote Wider Research Dissemination

Adam Hoffberg¹, Joe Huggins¹, Audrey Cobb¹, Jeri Forster¹,², & Nazanin Bahraini¹,²

¹Rocky Mountain MIRECC, ²University of Colorado

Background

Many academic and journal organizations disseminate research via social media to increase accessibility and reach a wider audience. With the widespread utilization of Twitter, more research is needed to study the extent to which social media strategies influence outcomes on awareness and readership of journal publications. “Visual Abstracts” have been adopted by some organizations as a novel approach to increase engagement with academic content. Visual Abstracts are a visual representation of key methods and findings found in a traditional written publication [1]. This study will help organizations understand the potential impact of adopting Visual Abstracts into their social media dissemination efforts. Potential pitfalls will also be discussed.

Materials and Methods

A prospective, case-control crossover design was utilized to randomize n=50 journal publications comparing Twitter posts with a Visual Abstract to those with simple screen grab of the PubMed abstract. We used native Twitter Analytics to track the outcomes of impressions, retweets, total engagements, and link clicks about 28 days post-Tweet, and Altmetric It to track additional alternative metric outcomes.

Results

As of this submission, n=47 out of n=50 articles have been randomized, with complete follow-up data available for n=33 publications. Preliminary analyses indicate that overall, Visual Abstract tweets on average have 432 more impressions, 2 additional retweets, 1 additional link click, 5 additional total engagements, and increase the Altmetric score by 3 compared with Text Tweets. Full results from the study will be analyzed and presented.

Conclusions

Conclusions are pending, but it is expected that in line with results from prior studies [2,3] we will find a significant association between the use of Visual Abstract tweets and increased dissemination on social media. These findings may provide further evidence that Twitter is an effective platform for research dissemination and highlight the importance of social media for suicide prevention researchers and other stakeholders to communicate findings. Future efforts will be discussed to implement Visual Abstracts at scale and refine processes to maximize engagement.

References

Using Web- and Mobile Technology to Track Implementation of Evidence-Based Mental Health Treatments in Schools

Elizabeth Koschmann¹, Emily Berregaard¹, Shawna Smith¹, Seoyoun Choi¹, Amy Rusch¹, & John Hess¹
¹University of Michigan

Background
Forty percent of youth experience mental illness [1], yet access to evidence-based treatments (EBTs) is limited by a shortage of trained providers, poor treatment fidelity, and low consumer help-seeking knowledge [2-3]. School-based delivery of EBTs can improve access [4] and research demonstrates that EBTs can be delivered effectively by school-based mental health professionals (SMHPs) [5]. Implementation strategies, such as consultation, coaching, and facilitation, promote adoption and sustainment of EBTs in schools [6-8], however, evaluation of implementation interventions requires collection of appropriate implementation metrics [9] that is hindered in schools by absence of a unified, acceptable reporting system.

Materials and Methods
TRAILS is a statewide implementation model designed to increase SMHP delivery of CBT, and incorporates didactic instruction, technical support, and in-person coaching. To enable program evaluation, TRAILS developed a web application, the TRAILS Dashboard, which allows SMHPs to easily record weekly delivery of treatment components, self-reported fidelity, and track student clinical outcomes. Self-report data are cross-validated with standardized assessments and observer (Coach) ratings to inform TRAILS implementation efforts.

Results
Development of the TRAILS Dashboard included concept design, wireframing, user testing, and build. Currently, the Dashboard is being utilized within a randomized implementation-effectiveness trial, ASIC, evaluating implementation strategies. All collection of implementation (SMHP-level) and clinical effectiveness (student-level) data occurs through the Dashboard, as does management of student suicide risk. A coach dashboard documents delivery of coaching elements as well as observational ratings of SMHP treatment fidelity. 169 SMHPs are actively using the Dashboard, recording their weekly CBT delivery since November 2018; and have identified 1,347 student participants for clinical outcomes data collection. Response rates for weekly data are consistently above 80% independent of implementation strategy treatment arm.

Conclusions
The TRAILS Dashboard presents a novel solution to a common problem in non-clinical implementation research—the lack of a unified system for tracking implementation outcomes. Deployment within the ASIC study allows testing of basic utility and ease of use, but ongoing initiatives are informing future functions to further tailor TRAILS implementation support, namely dynamic training targeting SMHP skill deficiencies, “nudges” to increase treatment frequency or fidelity, and prompts recommending specific treatment components for students based on clinical data.

References
ABSTRACTS


Poster Group - COST OR FINANCIAL

Formative Research Findings from the Metallic Improved Cooking Stove (ICS) Installation Project for Improving Respiratory Health in Manekharka, Nepal

Jayoung Park1, Prabin Raj Shakya1, Sugy Choi2, Jongho Heo3, & Woong-Han Kim1
1Seoul National University College of Medicine, 2Boston University, 3National Assembly Futures Institute

Background
In Nepal, the second highest ranking risk factor for death and disability combined is indoor air pollution (IAP) [1]. IAP is a risk factor for numerous diseases including pneumonia, stroke, ischemic heart disease, chronic obstructive pulmonary disease (COPD), and lung cancer [2]. Improved Cooking Stove (ICS) is known to reduce the exposure to IAP [3], but its implementation can have its challenges based on its context and setting. The JWLEE CGM and Dhulikhel Hospital collaborated to conduct formative research prior to the implementation of the project. This study presents the results of the baseline survey for phase 1 and qualitative results.

Materials and Methods
A pragmatic hybrid type 1 design with a step-wedged trial is used. The study is focused on ward 4 for Panchpokhari-Thanpalkot rural municipality, Sindupalchowk District in the north-eastern part of Nepal. Out of all 480 households, a total of 363 households and a total of 663 household individuals were surveyed for the baseline study and data were collected digitally through CommCare HQ. The household-level questions included the main cook’s fuel use, cooking dynamics, and health symptoms. The individual-level questions asked for fuel use of household members and their quality of life. To assess the implementation of facilitators and challenges, the planning team conducted focus groups of key stakeholders and community leaders to plan the intervention specifications. Data were analyzed qualitatively using NVivo.
Results
The baseline survey results showed that 211 (59.8%) were currently using three-stone fire and 219 (79.0%) were using wood for their primary cooking fuel. 343 (97.2%) participants used charcoal as their alternative option for cooking fuel. 226 (64.0%) of the participants preferred a cookstove design with less smoke. The qualitative analysis revealed that enhancing cultural sensitivity and cultural relevance for adoption, implementation, and maintenance are relevant to effectiveness. Perceptions of complexity can become a potential barrier in implementing ICS.

Conclusions
This baseline study shows that the ICS project can potentially have an impact on the targeted households. Ensuring the adoption of optimal and appropriate technologies by conducting formative research can lead to facilitation of the intervention and improvement in the quality of the overall project.

References

Poster Group - COST OR FINANCIAL
Using Cost Studies with Stakeholders to Improve Intervention Sustainability
Theresa Hoeft\(^1\), Stuart Henderson\(^2\), Ladson Hinton\(^2\), Katherine James\(^1\), Mindy Vredevoogd\(^1\), & Jurgen Unutzer\(^1\)
\(^1\)University of Washington, \(^2\)University of California Davis

Background
Sustaining successful social programs can improve health outcomes yet many successful programs are not sustained, leading to wasted opportunities and resources. We developed a longitudinal cost assessment protocol to improve sustainability and support program development as a part of an implementation of enhanced collaborative care for late-life depression. The cost assessment protocol developed in partnership with original sites in the project and two sites collecting follow-up cost data.

Materials and Methods
Case study of two sites participating in a larger implementation project. An intuitive spreadsheet approach was developed in consultation with sites. Spreadsheets collected qualitative and quantitative data on one-month cost of care and training costs for each site. Technical assistance was offered by researchers at the University of Washington. Study documents and procedures were piloted with sites as were the reporting strategies for sharing findings back with participants in a meaningful way.

Results
Site 1 costs of care per patient was initially $396.08 however they moved from a designated LCSW care manager to utilize 2 RN case managers + 1 patient navigator position. This site will collect data on their new workflow in April 2019. Site 2 did not collect cost of care data initially as they were shifting to a new community-based model of collaborative care at the time. Data collection procedures were refined with the site for the new program and will be collected in June 2019. Data will be summarized in June – July 2019 and shared back with the sites for sustainability planning. The mixed-methods findings in the cost activity spreadsheets deepened the researchers understanding of the interventions implementations and supported sustainability coaching with sites. Engagement
also facilitated more reliable data collection as sites questions were readily addressed.

Conclusions
An engagement strategy can facilitate data collection on costs as researchers can report back meaningful results to sites in a reasonable time frame. Mixed-methods data from the cost spreadsheets give a deeper understanding of program implementation and adaptations on the ground and time spent on intervention activities. Our findings suggest cross-sectional and longitudinal cost data collection can support development and refinement of sustainable programs.

Poster Group - COST OR FINANCIAL

Ontario Neurotrauma Foundation’s Journey: From Traditional Funder to Impact Driven Funding

Helene Gagne¹ & Judith Gargaro¹

¹Ontario Neurotrauma Foundation

Increasingly it is important to align funding priorities with practice and system realities. It is necessary to ground research and knowledge generation activities in real-world settings and engage broad stakeholders with interest in the research results in program and system planning, delivery and implementation. As a funder we still aim to identify knowledge gaps and share the results with key stakeholders, but we recognize that knowledge translation/mobilization although necessary cannot be enough to bring evidence-based findings into practice.

Our approach has moved to funding fewer projects addressing practice gaps and priorities in healthcare with a view to implementing results and innovations, using an implementation science framework. The funding approach has further evolved from funding only individual projects to now funding collaborative and system-level initiatives. Evidence exists that implementation processes rooted in implementation science can be effective, but there are issues of sustainability if the implementation is not embedded at the system level. It is necessary to foster partnerships and involve broad stakeholders in all phases of implementation.

The key pillars of our integrative approach are knowledge generation, knowledge mobilisation and effective implementation approaches. As a funder this approach works well as we can specify the type of services that we provide and can be nimble to respond to real-world challenges. Sometimes it is not possible to apply the full spectrum of implementation science activities from beginning to end; action must occur where it is needed to increase capacity of implementing organisations within the system they work in. All our efforts are designed with a view for scalability and sustainability.

Within our three streams of activity (injury prevention, acquired brain injury and spinal cord injury) we have amassed a wealth of knowledge around implementation at the local and system levels and have developed an implementation support service resource to coordinate our implementation efforts in an explicit and consistent way. Examples will be discussed that illustrate our systematic approach across the three streams and the lessons learned in moving from traditional funding to impact funding.

References
New Directions for Implementation Strategy Design: Applying Behavioral Economic Insights to Design EBP Implementation Strategies in Community Mental Health Settings

Vivian Byeon\textsuperscript{1}, Rebecca Stewart\textsuperscript{1}, Rinad Beidas\textsuperscript{1}, Briana Last\textsuperscript{1}, Katelin Hoskins\textsuperscript{1}, Nathaniel Williams\textsuperscript{2}, & Alison Buttenheim\textsuperscript{1}

\textsuperscript{1}University of Pennsylvania, \textsuperscript{2}Boise State University

Background
The field of behavioral economics provides robust explanations for why individuals choose and behave as they do \cite{1}, yet little work has applied these insights to the development of implementation strategies that influence community mental health clinicians’ choices and behavior with regard to evidence-based practice. In this study, a team of behavioral scientists and frontline mental health clinicians in the city of Philadelphia used a systematic approach to the identification of behavioral barriers to EBP use in order to develop novel implementation strategies for community mental health settings. This poster describes our approach and results.

Materials and Methods
We followed a four-step process to 1) define our target problem; 2) map the relevant decisions and actions underlying the behavior; 3) brainstorm hypothesized behavioral barriers using previously-collected contextual inquiry data (implementation strategy ideas that therapists generated during an innovation tournament) \cite{2-3}, linked to specific behavioral science constructs; and 4) conduct rapid validation of hypothesized barriers through expert consultation, literature review, and a clinician focus group.

Results
Drawing on the crowdsourcing data from clinicians, the investigative team generated 156 hypotheses of behavioral barriers to EBP use. Two investigators then de-duplicated and synthesized hypotheses down to a list of 21. We are currently in the last stages of the rapid validation process with community clinicians and will present the final hypotheses to support implementation strategy design in our poster session.

Conclusions
To our knowledge, this is the first study incorporating principles of behavioral economics and participatory design to the development of implementation strategies. This systematic, rigorous, and innovative process will allow us to develop candidate implementation strategies from the insights of clinicians. Results from this participatory and behavioral process will drive the design of tailored implementation strategies that will explicitly address and overcome the identified behavioral barriers.

References
ABSTRACTS

Poster Group - COST OR FINANCIAL

Initial Evaluation of the Agency Financial Status Scale: A Measure of Perceived Financial Status and Financial Climate in Publicly-Funded Community Mental Health Agencies

Colleen Maxwell¹, Mark Ehrhart², Nathaniel Williams³, & Rinad Beidas⁴
¹Temple University, ²University of Central Florida, ³Boise State University, ⁴University of Pennsylvania

Background

Funding has been identified as a critical barrier to the implementation of evidence-based practices (EBP) in publicly-funded service systems [1]. Agency leadership decisions regarding EBP implementation are largely driven by financial concerns [2], yet, the extent to which financial limitations affect agency decision-making likely varies and requires further explication. We identified three possible finance-related constructs that may be relevant for implementation success and developed a measure of clinicians’ perceptions of the level of these constructs in their agencies: perceived financial status, financial climate, and finance-related EBP attitudes. In this study we test the reliability, structural validity, and construct validity of these measures.

Materials and Methods

Items were developed to measure employee perceptions of their agency’s financial status (i.e., overall financial distress), climate for financial health (defined as shared perceptions of an agency’s strategic financial goals), and attitudes about the relationship between EBPs and finances. 14 Administrators, 40 clinical directors, and 239 clinicians from 20 agencies completed the survey items. On average, clinicians were 37.18 (SD=11.06) years old and female (83%), with a master’s degree (83%), and 7.89 (SD=7.04) years of clinical experience. Participants also completed the Organizational Social Context scale [3] and the Implementation Leadership Scale [4].

Results

We will use exploratory factor analysis to identify latent constructs relating to agency finances. Inter-rater agreement among employees within agencies will be computed to assess the extent to which financial status perceptions are shared within an agency. Correlations will be conducted at individual and agency levels to examine how the scale(s) relate to constructs of interest.

Conclusions

Understanding the effects of financial constraints on agency practices is critical to the advancement of implementation research as it carries implications for selecting appropriate implementation strategies and informing funding policy decisions. Establishing valid measures of these variables will advance research on the role of finances in implementation efforts and outcomes.

References

Examining How Different Engagement Procedures in Facilitated Interprofessional Collaborative Processes Optimize Type-2 Diabetes Prevention in Routine Primary Care

Alvaro Sanchez1, Gonzalo Grandes2, Susana Pablo2, & Arturo García-Álvarez2

1Osakidetza-Basque Health System, 2BioCruces Bizkaia Health Research Institute, Osakidetza

Background
Most efficient procedure to engage and guide healthcare professionals in collaborative processes that seek to optimize practice is unknown [1]. The PREDIAPS project aims to assess the effectiveness and feasibility of different engagement procedures to perform a facilitated interprofessional collaborative process to optimize type-2 diabetes prevention in routine Primary Care [2].

Materials and Methods
Randomized cluster implementation trial conducted in nine PHC centers from the Basque Health Service. All centers received training on effective healthy lifestyles promotion. Headed by a local leader and an external facilitator, centers conducted a collaborative structured process to adapt the intervention and its implementation to their specific context [3]. One of the groups was allocated to apply this strategy globally, promoting the cooperation of all health professionals from the beginning. The other performed it sequentially, centered first on nurses, who lately seek the pragmatic cooperation of physicians. All patients without diabetes aged ≥30 years old with a known CVD risk factor and an abnormal glucose level (≥110-125 mg/dl) who attended centers during the study period were eligible for program inclusion. Main outcome measures focus on changes in T2D prevention practice indicators after 12 months.

Results
Exposition rate of professionals to the implementation strategy actions were similar in both groups but higher in nurses (86%) than in physicians (75%). After 12 months, 2916 eligible at risk patients attended at least once to their family physician, of which 401 (13.8%) have been addressed by assessing their healthy lifestyles in both comparison groups. The proportion of attending patients at risk of T2D receiving a personalized prescription of a healthy lifestyle change (N=214; 7.3%) was slightly higher in the Sequential (7.8%; range 5.5%-10.8%) than in the Global group (6.3%; range 5.8%-6.7%). The proportion of patients receiving a lifestyle prescription from those assessed is also higher in the Sequential than in the Global group (55% vs. 50%).

Conclusions
Preliminary results showed that the reach of the implanted intervention programs derived by the PREDIAPS implementation strategy is acceptable but slightly higher in the Sequential group. Center’s organizational context has determined implementation results (professional commitment, work overload, multiple corporative initiatives, staff turn-over, etc.).

References
ABSTRACTS

Poster Group - CHRONIC DISEASES

An Approach to Align Barriers and Implementation Strategies to Accelerate Adoption of Evidence-Based Practice: CVD Risk Calculator Adoption in Primary Care

Laura-Mae Baldwin1, Leah Tuzzio2, Allison Cole1, Erika Holden2, Jennifer Powell3, & Michael Parchman2

1University of Washington, 2Kaiser Permanente Washington Health Research Institute, 3Powell & Associates

Background
Healthy Hearts Northwest (H2N), one of seven AHRQ-funded EvidenceNOW cooperatives, is a pragmatic clinical trial to test different strategies for implementing evidence-based interventions to improve heart health in primary care practice [1]. One intervention was a virtual educational outreach visit (EOV) to increase use of cardiovascular disease (CVD) risk calculation to inform statin use for prevention of CVD [2]. Five physician educators conducted 30-minute EOVs in 44 H2N practices, and elicited 13 barriers to implementing CVD risk calculation.

Materials and Methods
To compare the implementation strategies that implementation scientists and primary care clinicians chose as most likely to overcome barriers to implementing a CVD risk calculator in practice.

Modified nominal group exercise involving implementation scientists and primary care clinicians, with synthesis of the exercise results Participants: 5 implementation scientists and 26 clinicians from primary care clinics in the WWAMI region Practice and Research Network.
Every implementation scientist and clinician chose their top 5 implementation strategies from a list of the 73 evidence-based, published strategies from the Expert Recommendations for Implementing Change (ERIC) study [3] for the 13 barriers. For each barrier, we examined the degree of agreement among ≥30% of clinicians, ≥30% of scientists, or ≥30% of both on chosen strategies.

Results
≥ 30% of clinicians and/or scientists chose 39/73 top implementation strategies they felt were the most important to address barriers to CVD risk calculation. Implementation scientists chose 34 of these 39 top strategies; clinicians chose 21. Scientists and clinicians agreed on the choice of 14 of the top implementation strategies. On average, a total of 7 top implementation strategies were chosen by either scientists or clinicians for each barrier; however, scientists and clinicians agreed on only 1 of these top strategies.

Conclusions
Implementation scientists and clinicians generally choose different implementation strategies to overcome barriers to implementing a CVD risk calculator in practice. Collaboration between these stakeholders could guide the choice of a broader range of strategies to overcome barriers to evidence-based practice.

References
Poster Group - CHRONIC DISEASES

Learning by Doing: Implementing the VA Cardiovascular Toolkit and Learning to Fail Better

Bevanne Bean-Mayberry¹, Erin Finley², Alison Hamilton¹,³, Tannaz Moin¹,³, & Melissa Farmer¹,³

¹VA Greater Los Angeles, ²STVHCS/UTHSA, ³University of California, Los Angeles

Background
Cardiovascular (CV) disease is the main cause of death in American women and CV risk factors are often less controlled in women compared to men. To address CV risk among women Veterans, we developed a CV toolkit comprised of a patient screener, an electronic health record template, and a health education group tailored for women to target CV goal-setting. We describe how iterative cycles of adaptation during implementation allows us to improve fit with local context, address barriers, and increase engagement with CV toolkit components.

Materials and Methods
Guided by Replicating Effective Programs (REP) enhanced with complexity theory, we are conducting an 18-month CV Toolkit study in four sites to increase engagement in CV risk reduction services. During implementation, we monitor staff/provider use of the template and track patient engagement in VA services. Periodic reflections are used to review monthly progress and document multilevel stakeholder engagement and sense-making.

Results
Despite early and frequent engagement, there was limited utilization of the patient screener and template over a one-year period at the first site, with staff and providers reporting difficulty remembering to use these tools. While providers made frequent referrals to health education group, participation was low, and remained low even after employing several strategies to increase participation, including audio-care calls and secure messaging. Implementation at later sites indicated that scheduling patients for group classes increased participation and clinical reminders helped care teams incorporate CV toolkit into routine workflow; these suggestions were then incorporated at the first site. Stakeholder (patient, provider and operational partners) feedback led us to develop a telephone facilitated group to increase engagement.

Conclusions
The emphasis on nonlinear cycles of tailoring and adaptation in REP gave our team a structured process by which to proactively learn from early failures, engaging stakeholders consistently in identifying pragmatic solutions that aligned with routine workflow. These solutions became real-time modifications to the implementation process to mold tools to the local context, observe uptake and document outcomes.
Longitudinal Assessment of Expert Recommendations for Implementing Change (ERIC) Strategies in the Uptake of Evidence-Based Practices for Hepatitis C Treatment in the Veterans Administration

Vera Yakovchenko1, Rachel Gonzalez1, Angela Park1, Timothy Morgan1, Maggie Chartier1, David Ross1, Matthew Chinman2, & Shari Rogal1

1Department of Veterans Affairs, 2RAND

To increase access to evidence-based treatments for hepatitis C (HCV), the Department of Veterans Affairs (VA) established a national collaborative composed of regional teams of providers, leaders, and staff tasked with conducting local implementation strategies to increase HCV treatment initiations. The aim of this longitudinal evaluation was to assess how site-level implementation strategies were associated with HCV treatment initiation.

A representative from each VA site (N=130) was asked in four consecutive fiscal years (FYs) to complete an online survey examining use of 73 implementation strategies organized into nine clusters as described by the Expert Recommendations for Implementing Change (ERIC) study. The number of Veterans initiating treatment for HCV, or “treatment starts”, at each site was captured using administrative data. Descriptive, nonparametric, and multivariate analyses were conducted on the respondents in FY15 (N=80), FY16 (N=105), FY17 (N=109), and FY18 (N=88).

Of 130 sites, 127 (98%) responded at least once and 54 (42%) responded across all four years. A mean of 25±14 strategies were endorsed in FY15, 28±14, 26±15, and 35±26 in FY16, FY17, and FY18, respectively. While the number of strategies increased over time, the correlation between number of strategies and HCV treatment decreased over time. The most commonly endorsed strategies across all years were: data warehousing techniques, tailoring strategies to deliver HCV care, and intervening with patients to promote uptake and adherence to HCV treatment. One strategy (“make efforts to identify early adopters to learn from their experiences”) was significantly associated with treatment starts in all four years. In FY15, strategies were focused on developing interrelationships, FY16 focused on using evaluative and iterative strategies, FY17 focused on training and educating stakeholders, and FY18 focused on providing interactive assistance. The important strategies in each year were then mapped to Exploration, Preparation, Implementation, Sustainment framework stages.

This evaluation represents the first large-scale four-year assessment of implementation strategies nationwide. Surveying providers about ERIC strategies is a feasible way to understand the associations between strategies and clinical outcomes over time. These results add to our understanding of the implementation strategies used over time and across stages of planning, implementation, and sustainability.

References
Poster Group - CANCER

Implementing Pharmacy-Located HPV Vaccination: Findings from Pilot Projects in Five U.S. States

William Calo\textsuperscript{1}, Parth Shah\textsuperscript{2}, Melissa Gilkey\textsuperscript{3}, Robin Vanderpool\textsuperscript{4}, Sarah Barden\textsuperscript{5}, William Doucette\textsuperscript{6}, & Noel Brewer\textsuperscript{3}

\textsuperscript{1}Penn State, \textsuperscript{2}Fred Hutchinson Cancer Research Center, \textsuperscript{3}University of North Carolina \textsuperscript{4}University of Kentucky, \textsuperscript{5}Michigan Pharmacists Association, \textsuperscript{6}University of Iowa

Background
Up-to-date human papillomavirus (HPV) vaccination in the US has increased since the vaccine’s introduction over a decade ago to 49% of adolescents ages 13-17 in 2017 [1]. However, vaccination coverage remains far below the Healthy People 2020 goal of 80% for adolescents ages 13-15 [1]. As a strategy to improve uptake, the President’s Cancer Panel [2] and the National Vaccine Advisory Committee [3] have recommended expanding HPV vaccine provision in pharmacies. Pharmacies are promising alternative settings for HPV vaccination because of their population reach, convenience, and existing infrastructure for vaccine delivery. As a result, pilot projects conducted in five states aimed to demonstrate the utility of pharmacy-located HPV vaccination services for adolescents. To date, no study we are aware of has documented the experiences of implementing HPV vaccination programs in real-world pharmacy settings. We sought to document challenges and opportunities of implementing pharmacy-located HPV vaccination services in five US states.

Materials and Methods
We evaluated the success of the pilot projects by mapping reported results to key implementation science constructs: service penetration, acceptability, appropriateness, feasibility, fidelity, adoption, and sustainability [4,5]. Pilot projects were planned in North Carolina (k=2 pharmacies), Michigan (k=10), Iowa (k=2), Kentucky (k=1), and Oregon (no pharmacy recruited) with varying procedures and recruitment strategies. Sites had open enrollment for a combined 12 months.

Results
Despite substantial efforts in these states, only 13 HPV vaccine doses were administered to adolescents and three doses to age-eligible young adults. We identified two major reasons for these underperforming results. First, poor outcomes on service penetration and appropriateness pointed to engagement barriers: low parent demand and engagement among pharmacy staff. Second, poor outcomes on feasibility, adoption, and sustainability appeared to result from administrative hurdles: lacking third party reimbursement (i.e., billing commercial payers, participation in Vaccines for Children program) and limited integration into primary care systems.

Conclusions
In summary, pilot projects in five states all struggled to administer HPV vaccines. Opportunities for making pharmacies a successful setting for adolescent HPV vaccination include expanding third party reimbursement to cover all vaccines administered by pharmacists, increasing public awareness of pharmacists’ immunization training, and improving care coordination with primary care providers.

References
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Poster Group - CANCER

Identifying Facilitators and Barriers for the Implementation of a Complex Intervention for Patients with Metastatic Lung Cancer

Anja Siegle¹, Corinna Jung¹, Nicole Deis², Jasmin Bossert¹, Katja Krug¹, Michel Wensing¹, Jana Jünger², Michael Thomas³, & Matthias Villalobos¹

¹Heidelberg University Hospital, Germany; ²The German National Institute for State Examinations in Medicine, Pharmacy and Psychotherapy

Background

The German National Cancer Plan and the American Society of Clinical Oncology (ASCO) [1] recommend early integration of palliative care and advance care planning for patients with metastatic lung cancer. To address these recommendations, the Heidelberg Milestone communication approach (MCA) has been developed [2]. MCA is a complex intervention involving tandems of physicians and nurses. It aims at providing coherent care along the disease trajectory and integrates palliative care early. The MCA has been implemented in a theory-led way [3] in the in- and out-patient departments of a comprehensive cancer center (hospital setting). While the degree of the implementation success is still under scrutiny, the importance of identifying barriers and facilitators of the MCA is already apparent. The aim of this study is to identify barriers and facilitators of the MCA implementation.

Materials and Method

A qualitative content analysis 4 of written minutes (n= 47) of implementation meetings with nurses, doctors and hospital managers is conducted. The data analysis comprises open coding, development of main categories, identification of sub categories and application of these categories. As a theoretical framework for implementation evaluation of the MCA, the Consolidated Framework for Implementation research (CFIR)5 is used. MAXQDA is used to organize the collected data.

Results

Preliminary results will be presented on aspects facilitating or hindering implementation in the following dimensions: characteristics of the intervention (e.g. adaption, fit), inner (e.g. communications, climate, readiness) and outer (e.g. economic, political, social context) settings, individuals involved (e.g. interaction between individuals, influence of individual or organizational behavior) and implementation process (and sub-processes).

Conclusions

Knowing facilitators and barriers of the MCA supports future implementation processes in this hospital. Understanding this implementation process helps to identify determinants for successful implementation processes of the MCA in other organizations.
Using Mixed Methods to Adapt and Evaluate the Implementation of a Comprehensive Tobacco-Free Workplace Program within Behavioral Health Care Facilities in Texas

Isabel Martinez Leal¹, Kathy Le¹, Daniel O’Connor¹, Bryce Kyburz², Virmarie Corrrea-Fernández¹, Teresa Williams², & Lorraine Reitzel¹

¹University of Houston, ²Integral Care

Background
Despite the highest rates of tobacco use and tobacco-related morbidity and mortality, smokers with behavioral health disorders rarely receive tobacco dependence treatment within behavioral health care settings. Taking Texas Tobacco Free (TTTF) has successfully targeted this disparity by delivering a multi-component, tobacco-free workplace program providing policy implementation and enforcement, education, provider training in tobacco screenings and treatments, and nicotine replacement therapies to behavioral health clinics across Texas [1-3]. Via a mixed methods [4,5] approach we used a formative evaluation process to adapt implementation strategies to local contexts and evaluated program outcomes and characterized processes influencing implementation in two local mental health authorities serving 17 clinics.

Materials and Methods
Varied data collection included pre and post-implementation leader, provider, and staff surveys; and pre, mid, and post-implementation provider, staff and consumer focus groups. During implementation, data were collected via various logs (tobacco screenings, nicotine replacement therapy delivery) to monitor program content delivery.

Results
All clinics adopted a 100% tobacco-free workplace policy, integrated tobacco screenings into routine practice, delivered evidence-based interventions, dispensed nicotine replacement therapies to consumers and staff, and recorded significant increases in provider knowledge on how to address tobacco dependence. Pre, mid, and post-implementation qualitative findings served to: 1) develop program strategies (educational tools, videos) and materials (brochures, posters) adapted to local contexts and populations and address barriers; 2) adjust delivery systems of key components to enhance implementation; 3) understand reasons for success or failure to implement specific practices, respectively; and 4) reveal program integration into clinic culture, enhancing sustainability.
Conclusions
TTTF has proven successful in integrating tobacco cessation interventions into regular clinical practice to address tobacco use within behavioral health clinics. Mixing methods involved program adopters and recipients as collaborators who directly impacted implementation by shaping the intervention to their individual context and needs. Collaboration of such key stakeholders was vital to increasing program fit, ownership, adoption and sustainability; closing the gap between research and practice. These findings contribute to the development of flexible strategies and tailored interventions responsive to real-world conditions in diverse settings which better address implementation barriers thus enhancing the effectiveness and sustainability of a tobacco-free workplace program.

References

Poster Group - CANCER

Building Practitioner Competency in Implementation Science to Drive Comprehensive Cancer Control Planning

Margaret Farrell1
1National Cancer Institute

Background
A greater understanding and uptake of implementation science frameworks and measures can help both cancer control practitioners and researchers leverage crucial insights into how to best deliver research-based initiatives in the complex communities where they are crucially needed. In April, the National Cancer Institute (NCI) released Implementation Science at a Glance, a workbook to introduce practitioners and policymakers to the building blocks of implementation science. This resource is a natural extension of our experiences funding [1] and training researchers in implementation science as well as perspectives NCI gained through this work [2].

Materials and Methods
A preliminary draft of the resource was reviewed by fifty-eight cancer control researchers and practitioners for clarity and concept. The final version reflected advances both in our understanding of implementation science and how to communicate it to support and inform the work of cancer control practitioners.

Results
Case studies illustrate implementation science in practice, provide lessons learned in the field, and brief
practitioners about the components of IS including evidence-based interventions, fidelity, adaptations, stakeholder engagements, theories, models, and frameworks, strategies, evaluation, and sustainability.

Conclusions
This presentation will outline how Implementation Science at a Glance illustrates implementation science frameworks, models and measures to help drive community and organizational transformation and, in turn, develop broader disparities-reducing implementation strategies. By providing insights supporting greater uptake of Implementation science research designs, the resource offers rigorous methods that could accelerate the pace at which equity is achieved in real-world practice.

References

PharmFIT: Assessing the Feasibility of a Pharmacy-Based Fecal Immunochemical Test Kit Distribution Program to Increase Colorectal Cancer Screening Access
Mary Wangen¹, Catherine Rohweder¹, Rachel Ceballos², Renee Ferrari¹, Rachel Issaka², Dan Reuland¹, Jennifer Richmond¹, Sara Rubio Correa¹, Parth Shah², Stephanie Wheeler¹, & Alison Brenner¹
¹The University of North Carolina at Chapel Hill, ²Fred Hutchinson Cancer Research Center

Background
Rural populations have lower rates of colorectal cancer (CRC) screening [1-3] and sub-optimal access to preventive care services [4]. In North Carolina, geospatial analyses have revealed that sub-optimal access to health services in rural regions significantly related to higher rates of CRC mortality in rural “hotspots” [4]. As such, identifying alternative health care settings in rural areas that could deliver CRC screenings may be one way to alleviating this health inequity. Pharmacies may be an opportune setting to distribute fecal immunochemical test (FIT) kits for CRC screening in rural areas as one way to improve access to CRC screening in communities with poorer access to traditional care delivery settings. FIT kits are a guideline-recommended screening test that patients can complete at home [5-7]. This formative work will assess the feasibility and acceptability of delivering FIT kits for CRC screening in pharmacy settings (PharmFIT).

Materials and Methods
We are conducting semi-structured interviews with key informants to elicit: 1) knowledge, attitudes, and perceptions of a PharmFIT intervention; 2) barriers and facilitators to implementing PharmFIT; and 3) recommendations for implementation strategies that would support successful delivery of a PharmFIT intervention. We are interviewing 12 primary care providers (PCP), 12 pharmacists and pharmacy technicians, and 12 patients (n=36). PCP and pharmacy staff interviews are focused on care coordination and follow-up processes and procedures, whereas patient interviews are focused on the acceptability and relative advantage of receiving FIT kits from pharmacies. Interviews are audio-recorded, transcribed and independently coded by two team members using a directed content analysis approach [8, 9] PRISM [10] and Diffusion of Innovations Theory (11) guide analysis and organization of themes.
Results
Pharmacies are well-positioned to increase access to preventive health services such as colorectal cancer screening [12-15]. Patients, pharmacists, and primary care providers have voiced support for an extended role for pharmacists in delivering FIT kits for colorectal cancer screening [16-19].

Conclusions
Results from this study can be used to elucidate key care coordination and follow-up issues for primary care providers and pharmacy staff and to identify implementation strategies [20] needed to target identified barriers (e.g., training pharmacists) to test intervention implementation and effectiveness.

References

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ABSTRACTS

Poster Group - Neglected Tropical Diseases

Developing and Validating a Theory of Change for Scaling-Up Neglected Tropical Disease Elimination Programs

Arianna Means¹, Amy Roll¹, Mira Emmanuel-Fabula¹, Marie-Claire Gwayi-Chore¹, Jayaprakash Muliyil², Gagandeep Kang³, Kumudha Aruldas², & Sitara Swarna Rao Ajjampur⁴

¹University of Washington, ²Christian Medical College Vellore

Background
Soil-transmitted helminthiasis (STH) is a neglected tropical disease (NTD) that affects an estimated 2 billion people globally. Current WHO policy is to control STH through annual deworming of school-age children [1]. Recent evidence suggests that it may be possible to interrupt STH transmission through community-wide deworming targeting all age groups [2]. The process of leveraging research to rapidly inform NTD policy at scale is not well documented. This project is a collaboration between India’s Ministry of Health and Family Welfare and academic researchers to narrow the research-to-policy gap through purposeful design of a Theory of Change (ToC) that could be used to guide the rollout of a new STH elimination program at scale.

Materials and Methods
ToC development and validation involved a three-stage process. First, we searched and abstracted data from peer-reviewed and grey literature to document experiences translating research into policy and, ultimately, public health practice. The review focused on community-based public health programs in India specifically. Second, the aggregated evidence was used to inform the design of a ToC, and supplemental constructs were drawn from the Consolidated Framework for Implementation Research (CFIR) to address gaps in the evidence base [3]. Last, the ToC will be presented to public health officials in three Indian States and qualitatively and quantitatively evaluated for completeness, representativeness, and actionability.

Results
Sixteen studies were identified in the literature review. Abstracted data were used to inform the ToC design and six constructs were drawn from the CFIR to fill notable gaps in the literature. Fifteen discrete factors were included in the ToC, divided into categories including: characteristics of evidence, external factors, and internal factors. Sub-categories of internal factors include community engagement, communication, capacity, and governance willingness and readiness. For each factor included in the ToC, an action is also included to maximize the utility of the ToC in guiding research-to-policy translation. Data collection is currently underway in three Indian States to assess key indicators of ToC validity and revise the ToC accordingly.

Conclusions
We have designed a collaborative approach to engage with a Ministry of Health and proactively plan for rapid translation of new NTD evidence into policy.

References
ABSTRACTS

Poster Group - FOOD

A Systematic Review of the Barriers and Enablers to Implementation of Menu Labelling Interventions from a Food Service Industry Perspective

Claire Kerins¹, Sheena McSharry¹, Jennifer McSharry¹, Catherine Hayes³, Caitlin M. Reardon¹, Fiona Geaney², Ivan J. Perry², Suzanne Seery⁵, & Colette Kelly¹

¹National University of Ireland Galway, ²University College Cork, ³Trinity College Dublin, ⁴Ann Arbor VA Center for Clinical Management Research, ⁵National Institute for Prevention and Cardiovascular Health

Background
Menu labelling has gathered growing public and legislative support in response to the increased consumption of foods outside the home and the associated risks of overweight and obesity. A recent systematic review has shown menu labelling effects consumer food choice and the food industry behaviour [1]. Several countries have introduced menu labelling policies on a voluntary or mandatory basis; however, challenges to implementation have arisen (e.g. poor uptake, inaccurate nutritional information). The aim of this systematic review was to synthesise the evidence on the barriers and enablers to menu labelling implementation from the food industry perspective.

Materials and Methods
The review adopted the ‘best fit’ framework synthesis approach, designed for policy urgent questions [2]. No restrictions applied to publication type, study design, data collection method, language or publication year. At least two independent reviewers performed study selection, data extraction and quality appraisal. A combination of deductive coding, using the Consolidated Framework for Implementation Research [3] as the a priori framework, and inductive analysis, using secondary thematic analysis were undertaken.

Results
The overall process led to the construction of an adapted version of the CFIR. Of the 2,806 articles identified, 17 studies met the eligibility criteria. Most frequently cited barriers were coded to the CFIR constructs ‘Consumer Needs & Resources’ (e.g. lack of customer demand and understanding) and ‘Compatibility’ (e.g. lack of standardised recipes, limited space on menus). Commonly cited facilitators were coded to the CFIR constructs ‘Relative Advantage’ (e.g. improved business image/reputation) and ‘Consumer Needs & Resources’ (e.g. customer demand, enabling healthier food choices). Relationships between constructs (across and within domains) were also evident. The revised framework, based on the final list of constructs from the deductive and inductive coding, maintained many of the essential elements of the CFIR but a number of (sub)constructs with no supporting data were removed and newly developed constructs incorporated.

Conclusions
Findings from this review provide a foundation for selecting and tailoring implementation strategies to improve adoption, implementation, sustainment, and scale-up of menu labelling interventions. Moreover, in refining the CFIR, this review provides a theoretical contribution to help advance the field of implementation science.

References
Poster Group - FOOD

**Multiple Stakeholders’ Perspectives on Screening Older Adults for Malnutrition and Food Insecurity in an Emergency Department Setting**

Jessa Engelberg¹, Andrea Morris¹, Aileen Aylward², Rayad Shams², & Tim Platts-Mills²

¹West Health Institute, ²University of North Carolina

**Background**

Malnutrition is common among older adults and contributes to poor health and premature death [1-3]. Malnutrition is a complex condition with medical and social risk factors [4-6], including food insecurity. We are developing and implementing a two-phase screening study to identify older patients at-risk for malnutrition and food insecurity in the emergency department (ED) and connect them to a community-based organization (CBO) to address social needs.

**Materials and Methods**

During Phase 1, multiple stakeholder perspectives (i.e., ED, patient, CBO) were collected on how best to implement a sustainable ED-based screening process that considers the complexities and rapid pace of the ED. ED stakeholders included registered nurses (RNs), nursing assistants (NAs), social workers (SWs). To understand ED perspectives, research staff conducted semi-structured interviews (SSIs) with interview guides developed using the Consolidated Framework for Implementation Research (CFIR) [7] Guides included constructs from four CFIR domains (i.e., intervention characteristics, inner setting, characteristics of individuals, process). SSIs were transcribed and analyzed using framework-guided rapid analysis [8-9]. To understand the patient perspective, research staff tested screening questions with 75 older patients to identify how many are at-risk, and gauge receptivity to screening and referrals within the ED. Research staff worked with a CBO to understand their perspective on data sharing, referral pathways and “closing-the-loop.”

**Results**

Nine SSIs (n=3 RNs, n=2 NAs, n=4 SWs) were analyzed. Common themes related to constructs from CFIR domains were identified, including building the screener into the EHR, comparing to existing screening processes, and educating ED staff. A critical finding was that NAs, not RNs, should screen patients. From the sample of patients screened, approximately 35% were positive for malnutrition, 18% for food insecurity and 8% for both. Patients were receptive to being screened in the ED and indicated they would be willing to receive help connecting to CBOs. The CBO informed the development of referral workflows, particularly bidirectional communication and datapoints to facilitate data sharing.

**Conclusions**

The stakeholders’ perspectives informed the workflows that will be implemented and evaluated in Phase 2, including NAs screening, SWs connecting patients to the CBO, and the CBO sharing updates on the status of services provided to patients.

**References**

ABSTRACTS


Poster Group - SUBSTANCE USE

Effective Implementation Strategies for Male Engagement in a Program for Zambian Couples Experiencing IPV and Substance Mis-Use.

Laura Eise1, Stephanie Skavenski van Wyk2, Jeremy C. Kane3, Kristina Metz2, & Laura K. Murray2
1University of Washington, 2Johns Hopkins University

The link between violence and substance use is well established. However, the violence literature has largely evaluated prevention programs, or those focused on women only. The need to include male counterparts is recognized, yet challenging. Evidence indicates that males disconnect from health-care services at high rates and, furthermore, information specific to low- and middle-income countries (LMIC) is scarce. In order to offer effective care, we must better understand how to engage men in these situations, which may include economic barriers, pervasive societal attitudes, and self-stigma to access available services.

We recently completed a randomized controlled trial (RCT) of a transdiagnostic psychotherapy (the Common Elements Treatment Approach; CETA) delivered to Zambian couples who indicated recent intimate partner violence (IPV), as well as male substance misuse. In order to recruit participants within a concentrated period (i.e., 12 weeks), we worked closely with a local partner that had successfully engaged men in an alcohol mis-use program. The partner utilized a multi-tiered process of community word-of-mouth and engagement by respected peers, with an emphasis on a non-stigmatizing process of screening.

Throughout the study, there were high rates of male engagement and significant treatment effects both for the reduction of violence and alcohol use. To gain a more in-depth understanding of the RCT findings, including the male engagement and retention, we qualitatively explored mechanisms of behavior change related to male perpetration of IPV. We sampled adult men and women from the 123 couples randomized to the intervention arm. We conducted 30 first round interviews (16 women; 14 men) and then re-interviewed 20 participants (13 women; 7 men). In addition, we conducted 4 focus groups (2 women; 2 men). We also analyzed an implementation log maintained by study staff documenting engagement and retention strategies, challenges, and successes throughout the study.

Based on the results of this data collection and analysis, our poster will highlight the successful implementation
strategies used in this RCT on IPV and substance use, present the data documenting the engagement and retention of male participants, and summarize the qualitative responses from men themselves that highlight key facilitators and barriers to engagement.

Poster Group - SUBSTANCE USE

Changing Policy and Practice in Substance Use Treatment Clinics through the Implementation of a Tailored, Comprehensive Tobacco Free Workplace Program

Lorraine Reitzel¹, Bryce Kyburz², Isabel Leal¹, Kathy Le¹, Virmarie Correa-Fernandez¹, Teresa Williams², Daniel O’Connor¹, Ezemenari Obasi¹, & Kathleen Casey²

¹University of Houston, ²Integral Care

Background
Despite elevated tobacco use rates among individuals in treatment for substance use disorders in Texas, only 70.2% of treatment clinics screen consumers for tobacco use, 55.4% provide cessation counseling, 24% offer nicotine replacement therapies, and 34.3% have a tobacco-free workplace policy [1]. Comprehensive tobacco-free workplace programs that include all of these evidence-based strategies are known to be effective in reducing tobacco use among this vulnerable population [1]. Taking Texas Tobacco Free is one such tobacco-free workplace program that has been successfully implemented within hundreds of behavioral health clinics in Texas (www.takingtexastobaccofree.com) [2-5]. In 2017, we were funded to expand the program to dedicated substance use treatment centers.

Materials and Methods
Taking Texas Tobacco Free implementation includes a tobacco-free workplace policy along with the provision of education and specialized provider training to enable the institution of regular tobacco-use assessments and treatment provision or referral for tobacco dependence. A mixed-methods, formative evaluation process is used to understand clinic-specific facilitators and potential barriers, which guides the implementation strategies within diverse contexts. Consultation, practical guidance, and treatment resources are provided and mechanisms for program sustainability are emphasized.

Results
Enrolled clinics (N=8) serve ~70,000 unique consumers annually, including some special groups (e.g., sexual minorities, women with children). Thus far, Taking Texas Tobacco Free has educated 1,119 professionals through 61 discrete sessions and reached 92,521 individuals through passive material dissemination. Each clinic has adopted a 100% tobacco-free workplace policy, integrated tobacco-use assessments into routine practice, delivered evidence-based interventions, and dispensed nicotine replacement therapies to consumers and staff. Recruitment is ongoing.

Conclusions
Taking Texas Tobacco Free is an effective comprehensive tobacco control program that has proven successful in implementing tobacco-free workplace policies, training providers in tobacco cessation interventions and in integrating those interventions into regular clinical practice within substance use treatment clinics. This presentation will describe the program, participating clinics, data-based strategies used to tailor implementation within each setting, accomplishments to date (e.g., knowledge gained by staff and clinicians, tobacco-use assessments provided, pre- versus post-implementation changes in clinician behavior), and lessons learned during the implementation process that can guide program dissemination in other settings and states.
References

Poster Group - SUBSTANCE USE

Conducting a Process Evaluation of a Statewide Opioid Prescribing Policy: Applying the Consolidated Framework for Implementation Research across all Phases of Data Collection and Analysis

Natalie Blackburn1, Elizabeth Joniak-Grant2, Maryalice Nocera3, Jada Walker3, & Shabbar Ranapurwala3

1UNC-Chapel Hill, 2National Coalition of Independent Scholars, 3UNC Injury Prevention Research Center

Background
Opioid dependence and overdose are serious public health concerns in the United States [1]. States have sought to identify and implement policy interventions to address these growing public health problems. One policy intervention identified has been to set prescribing limits such that physicians prescribe no more than five days supply for post-surgical acute pain in an effort to reduce patient misuse and overdose [2]. As such in 2017 North Carolina passed the Strengthen Opioid Misuse Prevention (STOP) act which limits prescriptions to three to five-day supplies of opioids for acute post-surgical pain. The purpose of this study is to understand the barriers and facilitators in the passage and implementation of the STOP act in North Carolina.

Materials and Methods
Three groups were identified as key figures in the passage and implementation of the STOP act: government officials, hospital administrators, and opioid prescribers. Using the Consolidated Framework for Implementation Science (CFIR) [3] we developed three separate interview guides to be administered in one-on-one interviews. Two researchers developed the guides by reviewing all constructs within the CFIR and identifying construct-derived questions that would be most salient for each interview group. Questions were adapted to fit a policy context as well as fitting the role of the individual in policy implementation.
Results
This research project is currently in the data collection stage. Interviews will be conducted from March to May 2019; analysis will begin in June 2019. In addition to using the CFIR to design the interview guides, the CFIR will inform our coding of interview data and the development of analytical themes. Interviews will be analyzed across groups in order to summarize the perspectives and identify unifying or diverging ideas that may inform how the law is being implemented in the state.

Conclusions
Few studies have used the CFIR throughout the data collection process from development of interview guides to development of qualitative codebooks and conducting analysis. Given the growing number of States proposing laws to limit opioid prescribing, understanding the experience of North Carolina in implementing the STOP act will inform how states might support their key partners for more effective policy implementation.

References

Poster Group - SUBSTANCE USE
Development and Psychometric Testing of the Capacity to Treat Co-Occurring Chronic Pain and Opioid Use Disorder (CAP-POD) Questionnaire
Allyson Varley¹, Stefan Kertesz¹, Andrea Cherrington¹, Aerin deRussy², April Hoge², Kevin Riggs¹, & Peter Hendricks¹

¹University of Alabama at Birmingham, ²Birmingham VA Medical Center

Background
Patients with the combination of chronic pain and opioid use disorder have unique needs and may present a challenge for clinicians and health care systems. Primary care providers' (PCPs) capacity to deliver high quality, evidence-based care for this important subpopulation is unknown. This study’s objective was to develop and test a survey of PCP capacity to treat co-occurring chronic pain and OUD.

Materials and Methods
Capacity to Treat Co-Occurring Chronic Pain and Opioid Use Disorder (CAP-POD questionnaire items were developed over a 2-year process including literature review, semi-structured interviews, expert panel review, and pilot testing. A national sample of PCPs (MD, DO, NP, PA) were recruited via email to complete an online survey that included the 44-item CAP-POD questionnaire. Response options ranged from 1 (strongly disagree) to 7 (strongly agree). CAP-POD items were analyzed for dimensionality and inter-item reliability. We compared mean scores across provider characteristics (education, setting, years’ experience) to identify potential gaps in capacity.
Results
509 PCPs from across the US completed the questionnaire. Principal component analysis resulted in a 22-item questionnaire. Twelve more items were removed because of their influence on coefficient alphas, resulting in a 10-item questionnaire with 4 domains: 1) Motivation to Treat patients with chronic pain and OUD (α =.87, M=3.49, SD=1.48); 2) Trust in Evidence (α =.87, M=5.67, SD=1.03); 3) Assessing Risk (α =.82, M=5.45, SD=1.19); and 4) Patient Access to therapies (α =.79; M=3.06, SD=1.47). Mean scores across the four scales differed significantly (p<.001).

Conclusions
We developed a short, 10-item questionnaire that assesses the capacity of PCPs to implement best practice recommendations for the treatment of co-occurring chronic pain and OUD. The questionnaire and scales demonstrated adequate validity and good inter-item reliability. PCPs reported moderate trust in evidence of treatments for co-occurring chronic pain and OUD, and in their ability to identify patients at risk. Conversely, they had low desire to treat these patients, and see their patients’ access to relevant services as suboptimum. These data imply a service shortfall that will likely require fixing with additional training, service design, and incentives. The questionnaire provides a brief, validated evaluation tool for such interventions.

References

Poster Group - SUBSTANCE USE
Tailoring Practice Facilitation to Optimize Alcohol-Related Care in Hepatology Clinics: Barriers and Facilitators and Feedback on an Implementation Intervention
Ann Marie Roepke1,2, Madeline Frost1, George Ioannou1,2, Judith Tsui2,3, Jennifer Edelman4, Bryan Weiner2, Amy Edmonds1,2, & Emily Williams1,2,5
1 VA Puget Sound Health Care System, 2 University of Washington, 3 Harborview Medical Center, 4 Yale University, 5 Seattle-Denver COIN

Background
Unhealthy alcohol use exacerbates and complicates treatment of chronic liver disease [1]. Yet, evidence-based alcohol-related care is inconsistently delivered in hepatology clinics [2]. Informed by research supporting practice facilitation as an effective implementation strategy in primary care, we aim to tailor practice facilitation to implement evidence-based alcohol-related care in four Veterans Affairs (VA) hepatology clinics [3]. Here we describe barriers and facilitators garnered from qualitative interviews with key stakeholders at 2 of 4 clinics to inform intervention tailoring.
Materials and Methods
We recruited key stakeholders (n=23) including clinicians (MD, NP), clinical staff (RN, LPN, MSW), and administrators responsible for caring for Veterans with liver conditions. Semi-structured qualitative interviews were developed using the Consolidated Framework on Implementation Research (CFIR) and specifically focused on understanding outer and inner setting and individual domains.[4] We elicited stakeholders’: (1) context for, experiences with, and perspectives about providing care to Veterans with liver conditions and unhealthy alcohol use; and (2) feedback regarding a practice facilitation intervention. Rapid content analysis was used to extract relevant themes.

Results and Conclusions
Qualitative interviews highlighted barriers to and facilitators of providing alcohol-related care and tailoring practice facilitation. Barriers included lack of systematic alcohol screening procedures; variability in clinicians’ knowledge, comfort, and interest in providing evidence-based treatments (e.g., medications for alcohol use disorder); perceived inadequate linkage with specialty addiction treatment and/or behavioral health; and challenges related to staffing time/availability. Facilitators included system- and clinic-level leadership support, histories of successful quality improvement efforts, staff who are well-prepared to serve as clinical champions, consensus regarding the importance of addressing alcohol use, enthusiasm for several planned practice facilitation elements, and cohesive teams. Consistent with the CFIR, findings from 23 liver clinic staff suggest that a practice facilitation intervention can capitalize and build on existing setting and individual characteristics. Specifically, the intervention should build on existing leadership support, enthusiasm, team cohesiveness, and successful past quality improvement efforts and include: (1) assistance integrating standardized alcohol screening into clinic flow; (2) training and ongoing support regarding evidence-based care for unhealthy alcohol use; and (3) linkages with or internal capacity building for behavioral health or specialty addictions treatment.

References
Implementation Science and Entrepreneurship: Harnessing Synergy for Discovery Uptake

Enola Proctor¹, Emre Toker², Rachel Tabak¹, Cole Hooley³, & Virginia McKay¹

¹Washington University in St. Louis, ²Arizona State University, ³Washington University

Background
Implementation science and social entrepreneurship share the goal of accelerating the uptake of medical discoveries for widespread use in clinical and community healthcare. This paper reports infrastructure and activities within a CTSA program to advance synergy between these two fields. This work is based on the assumptions that implementation science can benefit from entrepreneurship’s emphasis on market demand, while entrepreneurship can benefit from implementation science’s emphasis on data, models, and context—particularly the policy, social, and organizational context of healthcare.

Materials and Methods
Our CTSA conducted activities to identify challenges and areas of complementarity between implementation researchers and entrepreneurs. First, we held a series of meetings between implementation researchers and entrepreneurs, the purpose of which was to identify and map shared and distinctive approaches regarding criteria for roll-out readiness, metrics for assessing return on investment, roll-out processes, risk tolerance, and priority products. Second, we convened an IdeaBounce@ experience, an event in which implementation researchers “pitched” their innovations to an audience of entrepreneurs and received feedback. A qualitative researcher observed both activities, taking notes and synthesizing observations.

Results
This work revealed that implementation researchers and entrepreneurs had different perspectives on: criteria for rollout readiness, return on investment, risk tolerance, and product goals. Implementation researchers focus on empirical evidence of innovation benefit, minimizing risk and unanticipated consequences, and carefully sequenced steps in implementation. Entrepreneurs focused on market demand, innovation cost, numbers expected to benefit from the innovation, and infrastructure and payment required for sustainment.

Conclusions
Harnessing the synergy between these disciplines can advance full realization of the benefits of biomedical research health care and population health. Both fields face the reality that the number of discoveries needing translational support greatly exceeds available funding and absorptive capacity. Innovative approaches, infrastructure development, and training are required to leverage the yet-untapped synergy between these fields. We identify a number of mechanisms for advancing synergy between these two fields—an exemplar of team science.

References
ABSTRACTS

Poster Group - MISCELLANEOUS

Implementing Across an Integrated Health Care System and a State Criminal Justice System – Lessons from a Peer Support Intervention for Veterans Leaving Incarceration

Donald McInnes¹, Justeen Hyde¹,², Thomas Byrne¹, Beth Ann Petrakis¹, & Vera Yakovchenko¹

¹Department of Veterans Affairs, ²Center for Healthcare Organization and Implementation Research, ³Boston University

Background
Veterans just released from incarceration ("reentry veterans") experience barriers to housing and health services, which heightens risk for homelessness, recidivism, morbidity and mortality. The Veterans Health Administration (VHA) employs peer support specialists, but does not have dedicated peers supporting the multi-faceted needs of reentry veterans. We developed and implemented the VHA's first peer-support initiative for reentry veterans, the Post-Incarceration Engagement (PIE) program.

Materials and Methods
We used a Facilitation strategy to implement PIE in Massachusetts. External facilitation included developing an intervention manual, worksheets, training curriculum, and hiring veteran peers. Peers met weekly with reentry veterans to address life priorities, and support community reintegration in 3 areas: linkage to services, skill building, and social support. External facilitation also involved stakeholder engagement with Massachusetts’ Department of Correction (DOC), Mental Health, and Veterans Services; network development with community-based service providers; and marketing presentations to VHA regional homelessness programs and to veteran inmates in DOC facilities. Internal facilitation, led by a social worker champion, involved educating service line chiefs at Massachusetts’ VHA medical centers about the benefits of the PIE program.

Results
High levels of collaboration were achieved between with the Department of Veterans affairs central office justice programs and a coalition of state agencies and community organizations. PIE served 30 reentry veterans released from 6 DOC prisons and 3 county jails. Peers had over 200 encounters with these veterans. PIE reentry veterans had a higher likelihood than comparison veterans of linkage to substance use treatment (80% versus 19%, respectively, P<0.001) and mental health care (87% versus 64%, respectively, borderline significant). They were more likely than comparison veterans to access VHA homelessness services, such as the domiciliary inpatient program (53.3% versus 2.7%, respectively, P<0.001) and short-term emergency beds (26.7% versus 5.4%, respectively, P=0.05). Though not statistically significant, trends suggested reentry veterans had greater access, than comparison veterans, to transitional grant and per diem housing (26.7% versus 25.4%, respectively) and to federal housing vouchers (6.7% versus 3.7%, respectively).

Conclusions
In summary, a facilitation strategy contributed to the implementation of a reentry veteran peer support program which shows promise in improving access to housing and health services.

References
Implementation of Evidence-based Mental Health Interventions in Rural Settings: A Scoping Literature Review

Christopher Weatherly¹ & Meagan Pilar¹

¹Washington University in St. Louis

Background
Bridging the gap between rural and urban mental health services requires developing creative solutions to complex challenges that are unique to rural areas. Previous research has documented numerous mental health disparities in rural settings, including higher rates of depression and suicide [1-2], and limited resources and barriers to care restrict access to mental health services for rural residents [3-4]. Despite the demonstrated need for intervention, there are significant challenges associated with implementing evidence-based interventions in rural community settings [5]. However, little is known about the current state of mental health implementation in rural settings. This scoping review thus aims to address this gap by providing a systematic overview of how evidence-based mental health interventions are being implemented within rural community settings.

Materials and Methods
The scoping review is structured according to Peters et al.'s framework for conducting scoping studies. We searched the following databases: PubMed, CINAHL, PsychINFO, EMBASE, SCOPUS, Web of Science, ClinicalTrials.gov, and the Cochrane Library. The three search strings used for this review included variations of “mental health,” “implementation,” and “rural.” Inclusion criteria: 1) empirical study involving the implementation of a mental health intervention in a rural setting; 2) English language; and 3) peer-reviewed journal publication. No restrictions were placed on year of publication, sample size, or research design. Screening and review of articles will be carried out by two reviewers. A third reviewer will be involved as needed for consensus. We will assess and review findings through both tabular and thematic analyses.

Results
We are currently in the process of screening abstracts. In April-May 2019, we will review and extract full texts. We will present the yields, characteristics of included articles, and a description of evidence-based mental health interventions being implemented and tailored to the unique rural context. We will also describe the implementation strategies, adaptation methods, and outcomes associated with these studies.

Conclusions
This project is intended to provide an overview of the current state of mental health implementation research in rural settings to identify gaps in previous research and identify areas for future work.

References
Implementation and Dissemination of a VHA Gold Status Practice: Advance Care Planning via Group Visits

Kimberly Garner1, Monica Matthieu2, JoAnn Kirchner1, & National ACP-GV Implementation and Evaluation Team1
1Department of Veteran Affairs

Background
The Department of Veteran Affairs (VA) is integrating a Gold Status Practice, Advance Care Planning (ACP) via Group Visits (ACP-GV), into the VHA’s Medical Centers and Community-Based Outpatient Clinics (CBOCs). As an emerging best practice model for the delivery of ACP discussions to Veterans in a group format, ACP-GV has garnered acclaim as a “Promising Practice” with great potential to increase access to comprehensive ACP discussions. In the ACP-GV program, Veterans, their families, and trained clinical staff with expertise in ACP meet in a group setting to have discussions about the benefits to Veterans and their trusted others of engaging in ACP and documenting preferences in an Advance Directive (AD). These discussions can potentially decrease the risk of Veterans receiving care that is different than what they would prefer or receiving unwanted interventions that could lead to increased suffering and higher health care costs.

Materials and Methods
Quantitative and qualitative methods were used to evaluate the impact of implementation strategies, primarily the Consolidated Framework for Implementation Research (CFIR) deployed by the ACP-GV National Program. There are three main sources for this implementation data: (1) the VHA Support Services Center (VSSC) data base, (2) ACP-GV Implementation Team reports, and (3) qualitative interviews which collected data on challenges, successes, and satisfaction with ACP-GV implementation.

Results
We found and addressed numerous implementation challenges in disseminating and implementing this national roll-out to 30 VHA medical centers, over 52 group facilitators, and more than 15,000 Veteran attendees, namely: utilizing existing group visit infrastructure; creating new, stand-alone group visits, recognizing biases and barriers to engaging and discussing ACP; and developing sustainable methods. We will report reach, adoption, implementation and maintenance outcome measures. In addition, the clinical effectiveness and factors that may be associated with participation and completion of ACP in group visits.

Conclusions
This program nurtures the growing attitude that advance care planning is a behavioral process and these discussions can be successfully initiated through group visits and result in an increase in number and quality of advance directives.

References

Poster Group - MISCELLANEOUS

Identifying Determinants of Implementation of the Cornerstone Intervention to Develop a User-Centered Implementation Manual

Danielle Adams¹, Andrea Cole², Michelle Munson³, Curtis McMillen¹, & Victoria Stanhope³
¹University of Chicago, ²New York State Psychiatric Institute, ³New York University

Background
Transition-age youth have elevated rates of mental disorders, and often do not receive services. Few mental health interventions have been developed for older youth in transition, and even fewer have been found to be effective over the transition to adulthood. Cornerstone, a theoretically-guided intervention has shown promise for addressing the mental health needs of this group as they emerge into adulthood [1]. Cornerstone provides case management, trauma-focused cognitive behavioral therapy, mentoring/peer support, and community-based in-vivo practice to address stigma and mental health symptoms, and practical skill development to improve the transition to independence among TAY with mental health conditions [2]. Using the Consolidated Framework for Implementation Research (CFIR) [3], this study examined determinants of implementation of Cornerstone with the goal of creating an implementation manual to guide real-world effectiveness trials and scalability efforts.

Materials and Methods
Within a Hybrid Type 2 trial, investigators developed a semi-structured interview protocol using implementation strategy domains as a framework [4]. Face-to-face interviews were conducted with clinic staff (n = 8) and state-level leadership (n = 3), and research staff (n = 1) on determinants of implementation for Cornerstone, such as planning, training, and supervision. Using grounded theory with sensitizing concepts, multiple coders analyzed the data using constant comparison. Iterative discussion(s) occurred over six months until saturation was met.

Results
Using the CFIR [3], we created a comprehensive review of implementation determinants of the Cornerstone intervention, as well as a review of contextual information (e.g., state policy reforms) from state-level stakeholders which may impact future scalability and sustainability of the intervention. Outer setting themes converged around the external policy context and incentives, with respondents discussing value-based payment and the importance of tracking non-billable tasks of mentors. Process themes pointed to important areas of planning: integration of mentors within the clinic, regular team check-ins, and the increased use of technology by mentors. Participants qualitatively reported high acceptability and feasibility for the cornerstone intervention and its components. Results will be combined with user-centered design approaches, such as the simplification principle [5], to develop a Cornerstone Implementation Manual that will assist us in moving toward testing effectiveness of a much-needed intervention for TAY.

References

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Understanding the Critical Elements of an Integrated Scaling up Approach (ISA)

Marianne Farkas¹, Sigal Vax¹, Vasudha Gidugu¹, Kim Mueser¹, Chitra Khare¹, & Philippe Bloch¹
¹Boston University

To reduce the gap between research and practice in community mental health services, there is a critical need to develop new methods for scaling up evidence-based practices [1]. To increase widespread access to effective practices, we are in the process of developing an Integrated Scaling Approach (ISA) for the efficient large-scale implementation of empirically based interventions for people with psychiatric disabilities. We conducted a scoping review of the literature across various fields, including mental health, our own field of practice, as well as public health, business, and education, fields in which large-scale implementation efforts are common. We then focused on examples of the implementation of employment initiatives, which have become an important focal point for change in practice and policies in mental health agencies and systems interested in the recovery of people with psychiatric disabilities [2-3]. While interventions have proven effective in supporting employment for this population, the number of people benefiting from them remains limited [4-6]. The scoping review included interviews of a range of stakeholders, with experiences in implementing such employment initiatives in their state or region (whether successful or unsuccessful) and expertise in program leadership, employment services, mental health and vocational rehabilitation services administration and policy. Both literature and interviews were analyzed to identify recurring themes and critical components of large-scale implementation in community mental health services. Analyses currently in process will identify characteristics of these critical components drawn from the cross-field scoping review. A pilot test of the ISA and a final evaluation will be conducted in two states in 2020-2021. The analyses of the scoping review and the results of the pilot and evaluation studies will be used to create a handbook for intervention researchers, system and program administrators and knowledge translation specialists to use, when scaling up new interventions in mental health. In this presentation, we will share the data collection, analysis process, and preliminary characteristics of the ISA as identified through the comprehensive scoping review.

References

**Poster Group - MISCELLANEOUS**

**The Site Implementation Progress Report (SIPREP): A Dynamic “Navigation System” For Implementation**

Edward Miech¹, Nicholas Rattray¹, & Teresa Damush¹

¹VA QUERI/HSR&D

**Background**

In 2017-18, implementation scientists at the VA PRIS-M QUERI in Indianapolis conducted an implementation evaluation of a new national pilot program, the VHA Tele-Stroke Robotic Rehabilitation Program. To evaluate implementation progress over time across four different sites, the implementation evaluation team developed a new tool called the Site Implementation Progress Report (SIPREP).

**Materials and Methods**

Inspired by several approaches already in use for assessing implementation progress [1-3], the SIPREP is built around a set of “milestones,” significant implementation achievements that occurred in a chronological order. In the SIPREP, “stages” indicated how to get from one milestone to the next; for example, Stage 2 represented “Getting from Kickoff” to “Enrolling 1st Patient.” Each stage had a dedicated “grid” that maps out the activities that needed to be completed by whom for that stage, and in what order. As a facility completed more and more activities, the cells changed colors, providing a “navigation system” for implementation both within and across sites.

**Results**

Similar to how a “navigation system” works in a moving vehicle, the SIPREP was dynamic, telescoping (can zoom in or out), capable of being big-picture or ultra-granular, located users as to current position, showed what loomed ahead, and provided detailed options for how to get to the next destination. The SIPREP addressed different needs of different audiences, both described and explained how to implement the program, made ample use of visualizations, and revealed both what was happening and not happening within and across sites.

**Conclusions**

The SIPREP has already been applied by other VA HSRD/QUERI centers to national VA initiatives; in FY19 it will be integrated into the national deployment of the VA PREVENT program for Veterans with TIA as well as the national VA Headache Centers of Excellence initiative. The SIPREP can provide a needed bridge for scaling up projects in the VA from pilot to national rollout: it takes detailed implementation-related information learned during the pilot phase and then makes it available to new facilities during national deployment in the form of a new “navigation system” that is organized, visual and pragmatic.

**References**


Poster Group - MISCELLANEOUS

Applying Implementation Science for Real World Impact: Operationalized Core Practice Components, Feasibility Testing, and Next Steps

William Aldridge¹, Rebecca Roppolo¹, Julie Austen¹, & Robin Jenkins¹
¹University of North Carolina at Chapel Hill

Background
Implementation science is at risk to suffer from the same challenge it was designed to address: a lack of translation into real world application. Complicating this challenge is that robust application of implementation science requires supporting behavior change at each of individual, organizational, and system levels. “Technical assistance,” “facilitation,” and “implementation support” are terms often used to describe the concept of “implementation practice.” Regardless of these labels, what drives the effective application of implementation science within real world environments?

Materials and Methods
Drawing from a review of relevant literature and our experience facilitating the real-world application of implementation science, members of The Impact Center at FPG organized ten theoretically- and empirically-informed core practice components to strengthen implementation support processes. These ten proposed core practice components underwent initial feasibility testing within two projects involving implementation support for communities scaling an evidence-based system of parenting interventions. For more than two years, implementation specialists have tracked their utilization of the practice components across interactions with community sites. Implementation specialists working to build the capacity of intermediary partners also tracked their use of practice components. All community and intermediary sites received monthly surveys to report process and short-term outcomes. Intended long-term outcomes of implementation support (capacity to support implementation best practices at community and intermediary levels) were assessed every six months.

Results
Initial results suggest that the ten proposed practice components are an effective way to organize the work of implementation support. Supported sites reported favorable process outcomes, such as acceptability, feasibility, and appropriateness. Short-term outcomes, such as working alliance, have been useful markers for early successes or challenges. Long-term capacity outcomes have demonstrated improvement over time. Notwithstanding these strengths, Center implementation specialists voiced a need for greater clarity about operational activities related to the practice components. This recently led members of Center to re-operationalize the components to better support consistent application.

Conclusions
Next steps include the development of a complete practice profile, stronger training and fidelity assessment materials, and formative evaluation methods to test statistical associations between the components and intended short- and long-term outcomes.
ABSTRACTS

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If You Want More Research Based Practice, You Need More Practice Based and Early Stage D&I Trained Researchers (Borrowed and Slightly Changed from Larry Green)

Rodger Kessler¹, Cady Berkel¹, Matthew Buman¹, Stephanie Brenhofern¹, & Scott Leischow¹
¹Arizona State University

Background
While training programs in D&I research have emerged over the last few years, they have generally been limited to single institutions or individuals traveling to national training sites. This has limited reach of training and opportunities for multi-institutional development of broad D&I capacity. In addition, investigators must effectively engage with other partners, from clinical trials centers to community partners and policymakers. Such engagement skills need to be embedded in the core D&I training. This includes assisting earlier stage translational scientists’ participation in next stage activities, with designing for dissemination at the forefront.

Materials and Methods
We designed a yearlong D&I training program for Arizona State University faculty and other researchers across the state, borrowing from the TIDIRH curriculum. Implementation began in February 2019. Participant expectations include: on-site attendance at presentations by local and national D&I scholars, completion of readings between sessions, and regularly working with an assigned mentor to generate a project to move their D&I effort ahead.

Results
We started the program recruiting the capacity of 25 trainees. After our kickoff event, seven participants withdrew (n=3 perceived relevance, n=2 distance/time, n=1 moved, n=1 unknown). We invited two trainees from the waitlist and now have 20 trainees who span the translational spectrum: Basic research (n=5); Pre-clinical (n=4); Efficacy/Adaptation (n=9); Implementation in clinical and community settings (n=12); Studying health outcomes at the population level (n=7) and career stage [graduate student/postdoc (n=4); assistant professor (n=9); associate professor (n=5); clinical professor (n=1); and adjunct professor (n=1)]. Total n is greater than 20 because we allowed trainees to select multiple areas. Each trainee was paired with one of nine mentors.

Conclusions
We generated a multi institutional D&I training program. Recruitment was easily accomplished. Loss of participants due to absence of distance learning needs attention and lack of fit to earlier stage translational scientists suggests we need to refine the material presented at the first event to better include those individuals. Little D&I training has been developed for the basic end of the translational spectrum; we are attempting to fill that gap. We will report further on evaluation data and the projects that trainees generate.

References
Poster Group - MISCELLANEOUS

Integrating Implementation Science and Public Policy Research: Two Examples

Beth McGinty¹, Lainie Rutkow¹, & Gail Daumit¹

¹Johns Hopkins University

Public policy plays a key role in supporting (or impeding) implementation of evidence-based practices, and a policy’s effects on outcomes depend upon how the policy is implemented [1-2]. This presentation will provide a high-level overview of the methods and results of two mixed-methods studies designed to integrate implementation science and public policy research.

Study 1: A NIMH-funded study of the implementation and outcomes of Maryland’s (ACA) Affordable Care Act Medicaid Health Home Waiver for people with serious mental illness. First, we conducted qualitative interviews with 72 key leaders and surveys with 699 leaders and front-line implementers to characterize implementation strategies, barriers, and facilitators [3]. Second, we used marginal structural models to examine how implementation strategies, barriers, and facilitators influenced receipt of evidence-based somatic and behavioral healthcare services among 3,143 health home participants and 7,559 control participants with serious mental illness. Key findings include: Maryland’s adoption of the ACA health home waiver was associated with reduced emergency department visits and improvements in receipt of preventive health services. Sites with greater access to consumer health data; co-located behavioral and physical health services; comprehensive care plans; and multidisciplinary care teams saw greater improvements in outcomes.

Study 2: A NIDA-funded study of the implementation and outcomes of four types of state laws designed to curb high-risk opioid prescribing: mandatory prescription drug monitoring program (PDMP) enrollment laws; mandatory PDMP query laws; pill mill laws; and prescribing cap laws [4]. We conducted qualitative interviews with 103 state law implementation leaders in 18 states that implemented an opioid prescribing law from 2010-2017. Interviews and supporting documents were used to create a detailed characterization of the implementation and enforcement each state law of interest (e.g., implementation delays; noncompliance penalties). This information supported interpretation of the results of synthetic control analyses examining the effects of the state laws on high-risk opioid prescribing practices. We found that mandatory query PDMP and pill mill laws with strong implementation and enforcement were associated with reductions in high-risk opioid prescribing.

The presentation will include a brief summary of how each of these studies has been used by key on-the-ground partners.

References


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