

Designing for Impact to Improve Health Equity

Best of COPRH Con Abstract Symposium May 24, 2022





ADULT AND CHILD CONSORTIUM FOR HEALTH OUTCOMES RESEARCH AND DELIVERY SCIENCE

UNIVERSITY OF COLORADO | CHILDREN'S HOSPITAL COLORADO



ADAPTING NALOXONE DISTRIBUTION TO REACH YOUNG ADULTS

Nicole Wagner, PhD University of Colorado School of Medicine

Evidence Based Practice: Take Home Naloxone (THN)

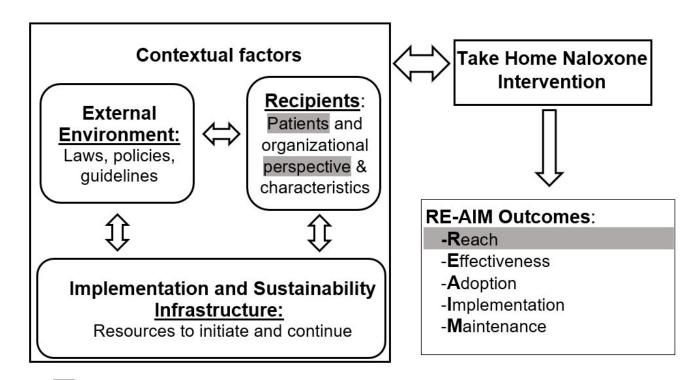
- ° Naloxone or "Narcan" can reverse an opioid overdose
- ° Strong safety profile
 - ° Adverse event=withdrawal
- ° Who are we missing?
 - ° Young adults (Less likely to use healthcare system and engage with harm reduction)
- Emerging AdaptationNaloxone vending machine distribution

Source: Strang J, McDonald R, Campbell G, et al. Take-Home Naloxone for the Emergency Interim Management of Opioid Overdose: The Public Health Application of an Emergency Medicine. *Drugs.* 2019;79(13):1395-1418; Substance Abuse and Mental Health Services Administration. *Key substance use and mental health indicators in the United States: Results from the 2019 National Survey on Drug Use and Health.* Rockville, MD: Center for Behavioral Statistics and Quality, Substance Abuse and Mental Health Services Administration;2020; Frank D, Mateu-Gelabert P, Guarino H, et al. High risk and little knowledge: Overdose experiences and knowledge among young adult nonmedical prescription opioid users. *International Journal of Drug Policy.* 2015;26(1):84-91

Study Aims

Explore perceived factors contributing to naloxone uptake under current, ideal and vending machine distribution strategies in young adults at risk of witnessing or experiencing an opioid overdose.

Methods: Practical Robust Implementation and Sustainability Model (PRISM)



Highlighted factors and outcomes indicate interview targets

Source: Glasgow RE, Harden SM, Gaglio B, et al. RE-AIM planning and evaluation framework... Frontiers in Public Health. 2019;7:64

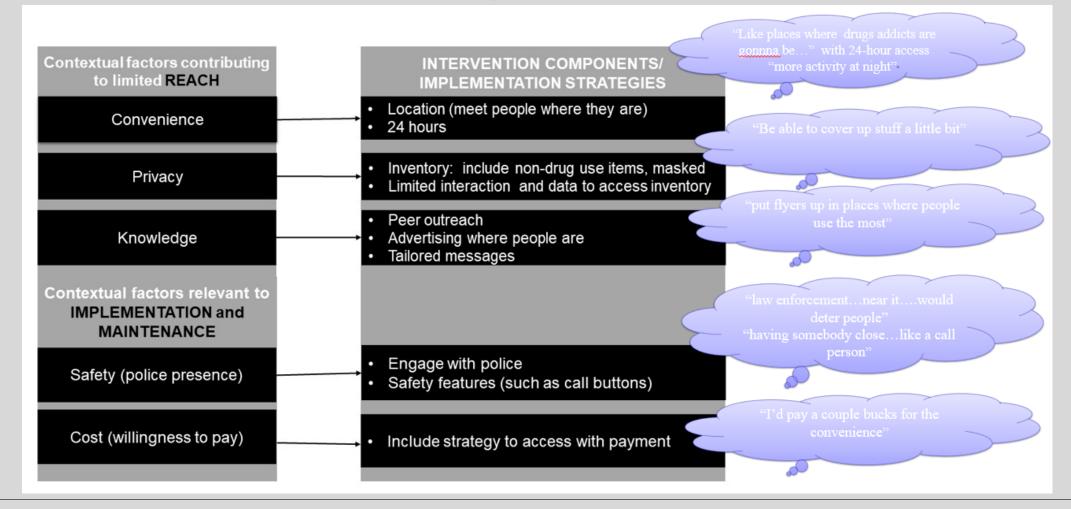
Methods

• Setting:

° Waiting room of MAT in Integrated Safety Net Health System in Colorado

- ° Population: 16 Young Adults (age 18-30)
 - ° 14 experienced or witnessed an overdose (8 both)
 - ° 16 reported nonmedical prescription opioid use, 11 heroin use
 - ° 6 female, 6 <high school education, 15 below 200% poverty level, 50% nonwhite

Barriers to Naloxone Uptake in Young Adults who Misuse Opioids and Strategies to Adapt Distribution



Acknowledgements

It takes a Team

- ° Juliana Barnard
- Megan Morris
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- ° Allison Kempe
- ° Chelsi Cheatom
- ° Jessica Johnson
- ° Russell Glasgow

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Applying the EPIS Framework to Adapt and Implement a Meditation App for Justice-Involved Youth

ASHLEY KENDALL, MONTE STATON, RACHEL LIBRIZZI, NICOLE "NOVIE" THOMAS, MICHELLE LOZANO, BRENIKKI FLOYD, STEFF DU BOIS, & THE AIM YOUTH ADVISORY BOARD COPRH CON 2022



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Background

- Although arrest rates for youth in the U.S. have declined over recent years, the criminalization of young people continues at high rates due in large part to systemic race-based inequities (e.g., Abrams et al., 2021)
- Most interventions for justice-involved youth have focused on youth who have been placed in detention, but the large majority of youth are placed on probation (e.g., Murray et al., 2018; OJJPD, 2019; Simpson et al., 2018)

→ There is a need for successful implementation of evidence-based interventions with youth placed on probation

 The Exploration and Preparation phases of the EPIS (Exploration Preparation Implementation Sustainment) Framework provide guidelines for adapting and implementing interventions with specific groups and in new settings (Aarons et al., 2011)

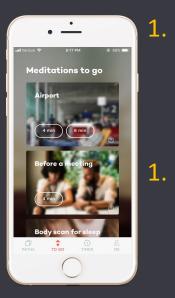




Method

Exploration Phase

We conducted a literature review and consulted stakeholders to identify:



- Key health needs among youth placed on probation in the areas of substance use, sexual activity, and aggression
- The Bodhi meditation app as a relevant intervention for delivering evidence-based mindfulness meditation techniques



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Preparation Phase

Barriers and facilitators to implementing the Bodhi app, and corresponding adaptation targets and implementation strategies, were identified via:

- Formal qualitative interviews with justiceinvolved youth (n = 10) 13-17 years old of all genders with access to Apple/Android phone
 - 1. Mean age = 16.20 years (*SD* = 1.03), 90% male, 10% female, 70% Black/African-American, 30% Latinx
- 2. Ongoing informal input from stakeholders: Youth Advisory Board, meditation experts, juvenile justice officers, community health workers, professional app programmers

Results

Summary of the Primary Determinants of Implementing the Bodhi App with Youth Placed on Probation and Corresponding Implementation Strategies and App Adaptation Targets

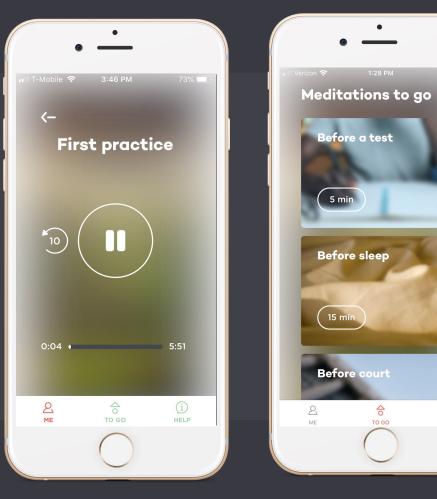
and corresponding implementation brategies and rep relaptation raigets						
Barrier (B) or Facilitator (F)	Implementation Strategy/App Adaptation Target					
Acceptability/Usability						
Youth found meditation examples unrelatable (B)	Re-write meditations to feature relevant examples (e.g., staying mindful at a party rather than an airport)					
Youth found meditation guide unrelatable (B)	Re-record meditations with a guide perceived as relatable and trustworthy (i.e., younger, Black, male)					
Meditation could be mentally "destabilizing" (B)	Add tips throughout app for managing any discomfort and a help page for additional support					
Youth concerned about data tracking via app (B)	Program app to limit data collection (e.g., no geolocation); emphasize these limits up front to youth					
Youth found Bodhi app highly usable (F)	Retain simplicity of layout when modifying and adding features					
Feasibility						
Youth often use multiple phones over time (B)	Develop procedures to easily re-download app across devices while retaining data integrity					
Youth may run out of phone data or battery (B)	Compensate for data usage; compress app files; set phone to go to sleep at conclusion of meditations					
Engagement likely to deteriorate over time (B)	Develop adaptive design to identify and engage non-users (e.g., via text/call) based on analytics data					
Appropriateness						
Youth enthusiastic about learning to meditate (F)	Include videos of people youth find inspiring describing benefits of meditation in their own lives					
	Adoption					
Probation officers want to be actively involved in	Develop system for officers to text app link to youth on their caseload while minimizing coercion; hold					
the implementation process (F)	meetings with officers throughout the development of the implementation plan and its execution					
	Sustainability					
Treatment gains may deteriorate over time (B)	Make app available after end of 30-day program; send monthly texts encouraging ongoing use					
enter for Dissemination and						

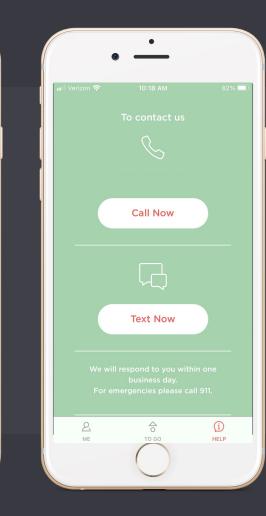


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Results







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(i)

HELP

Implications & Future Directions

- By collaborating with community stakeholders and applying the EPIS framework, this study generated considerations for adapting and implementing mHealth programs for youth who may commonly experience barriers to participating in these programs.
- Future directions include:
 - Running a randomized controlled trial of the efficacy of the adapted Bodhi app with young people who have been placed on probation
 - Adapting the Bodhi app for juvenile justice officers as a tool for officers to learn meditation themselves and support the youth within their caseloads in meditating





Engaging a Diverse Patient and Care Partner Council to Refine Dementia Care Digital Tools Jessica Cassidy LMSW¹, Mary Fisher MPH², Evelyn Romeo BS¹, Samantha Holden MD, MS³ Melanie Caffrey BA⁴, Donald Nease MD³, Hillary Lum MD PhD¹





digital health equity issues.

There is a need to reduce disparities in the

family care partners (i.e., dementia dyads).

The use of clinical digital tools may improve

communication but may also be limited by

stakeholders can help prioritize and refine

digital tools for testing in real-world studies.

To promote communication between dementia

implementing Participatory Action Research

dyads and clinical teams, we engaged

stakeholders to identify priorities and

We describe pragmatic methods for

Engagement with dementia dyads as

care of persons with dementia and their

¹Division of Geriatric Medicine, Department of Medicine; ²Department of Family Medicine; ³Department of Neurology; ⁴Community Partner

BACKGROUND

OBJECTIVE

(PAR) methods.

- Setting/Population: We convened 18 individuals of diverse background to form the "Memory Research Partners in Caring and Technology" including:
 - Three dementia dyads
- Two additional family care partners
- 10 community members with experience as patient partners.
- The council met six times over seven months (two in person, four virtually).

Recruitment:

- · Collaboration with an existing patient research council
- Clinicians from dementia clinical settings
- Community partners

Pragmatic Stakeholder Engagement Methods:

- · Presentations by and discussions with expert guest speakers
- Participatory methods such as a World Café
- Small group discussions using Google Jamboards at virtual meetings
- Mailing preparatory educational materials
- Phone contact with partners between meetings to gather additional input.
 Analysis:

We used rapid qualitative analysis methods to identify, share, and clarify findings from previous meetings.

METHODS

Fig 1. Memory Tech Council Members

Memory Research Partners Caring through Technology Council



CONCLUSIONS

-) The collaboration with research partners provided rich insight on user experiences with existing systems of care and digital tools.
- Findings will inform future aims of this project towards improving dementia care coordination using digital tools.

Funded by: NIA IMPACT Collaboratory (U54AG063546, Mor/Mittchell) Health Care Systems Scholars; NIA R35AG072310, Wolff

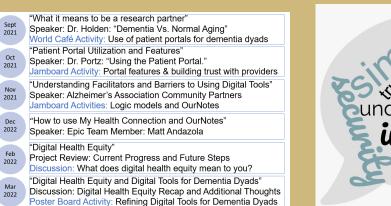


RESULTS

Fig 1. Calendar of Events

refinements to digital tools.

Fig 2. Research Partner Description Communication Needs





Resources (What Do I Need?"		vities Do I Do?" Supportive Features	\Rightarrow	Goals "What Will Be Accomplished?"
Communication with the care partner Or communication with the patient needs to be separate Need control, clarity and consistency of how responses will happen (text, email, phone - with accurate phone number) and who is involved Need to know what resources for caregiving are available	Payment barriers or respite Need for aducation/ nformation about what is paid for related to elder care information isn't uniform from site or visit. Patient might not remember their full medical or medicine history.	Healthcare system should know about the Alzheimer's Association Community Resource Finder. MA or other that can confirm info that is already within the system instead of share the same information before each visit.		Ability to share knowledge with friends/family in need; would a take pressure off of the caregin Easier to begin visits and share reliable and updated informatior Time saver for each visit. Not duplicating efforts. Enter info once and have it available to anyone within the U system. Could in the end provide safety security for the person with dementia and their caregiver.

Memory Research Partners Caring through Technology Council

Purpose:

To promote communication between dementia dyads and clinical teams, we convened the "Memory Tech" council to identify priorities and refinements to digital tools.

Recruitment:

- Collaboration with an existing patient research council
- Clinicians from dementia clinical settings
- Community partners

Memory Tech Council:

- 18 Research Partners
- Three dementia dyads
- Two additional family care partners
- 10 community members with experience as patient partners.

Memory Research Partners Caring through Technology Council



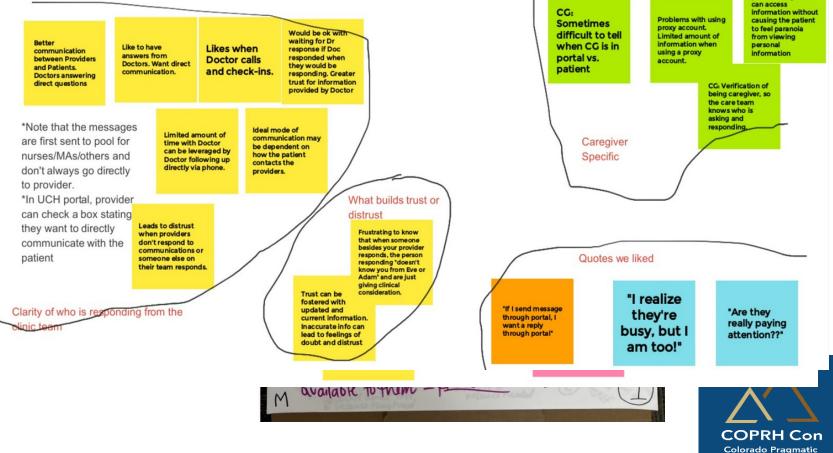


Engagement Activities

Group 2: We heard that communication between patients, caregivers, and their health care team could be improved through greater trust in their providers.

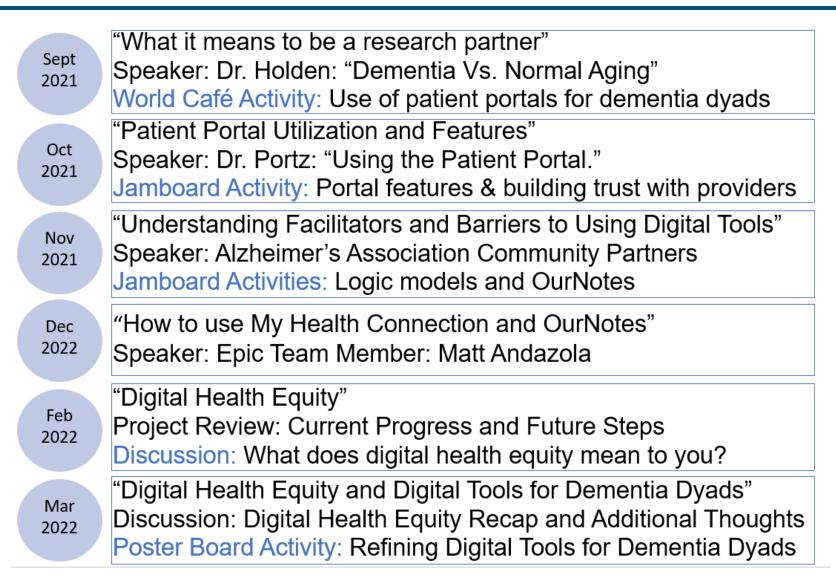
- World Café activities
- Google Jamboards activities
- Mailed educational preparatory materials
- Group identity activities
 - $\circ\,$ Created and shared Look-Book
 - Rapport building with intentional ice breakers
 - Invited participant input
 - One on one and small group video calls check-in's between meetings
- Expert speakers

Are there current parts of a patient portal that build trust between you and health providers?
 What parts of the portal could promote trust and lead to better communication dependence of the portal could promote trust and lead to better communication dependence of the portal could promote trust and lead to better communication dependence of the portal could promote trust and lead to better communication dependence of the portal could promote trust and lead to better communication dependence of the portal could promote trust and lead to better communication dependence of the portal could promote trust and lead to be the portal could



Research in Health Conference

Memory Tech Meeting Timeline





Key Feedback Related to Patient Portals

Issues with patient portals can limit utilization:

- Impersonal; frequently changing; repetitive questions; inaccurate information.
- Proxy accounts can introduce challenges (with potential for helpful)

Refined portal functions can increase utilization:

 Goal: Simple systems with accurate information that is updated in timely manner; should be relevant to the patient's health needs.

Patient portals can potentially offer support to dementia dyads:

 Access to resources and supports, disease education, medication management tools, strategies for behavior management, and improved communication with providers can reduce stress.







Disseminating, Scaling, and Sustaining Pragmatic Research Improving Health in Diverse Settings May 23-25, 2022 | 10am-3pm MT

The STS4HIV Project's Dissemination, Implementation, effectiveness, Sustainment, Economics, and Level-of-scaling (DIeSEL) hybrid trial design



Bryan R. Garner, PhD

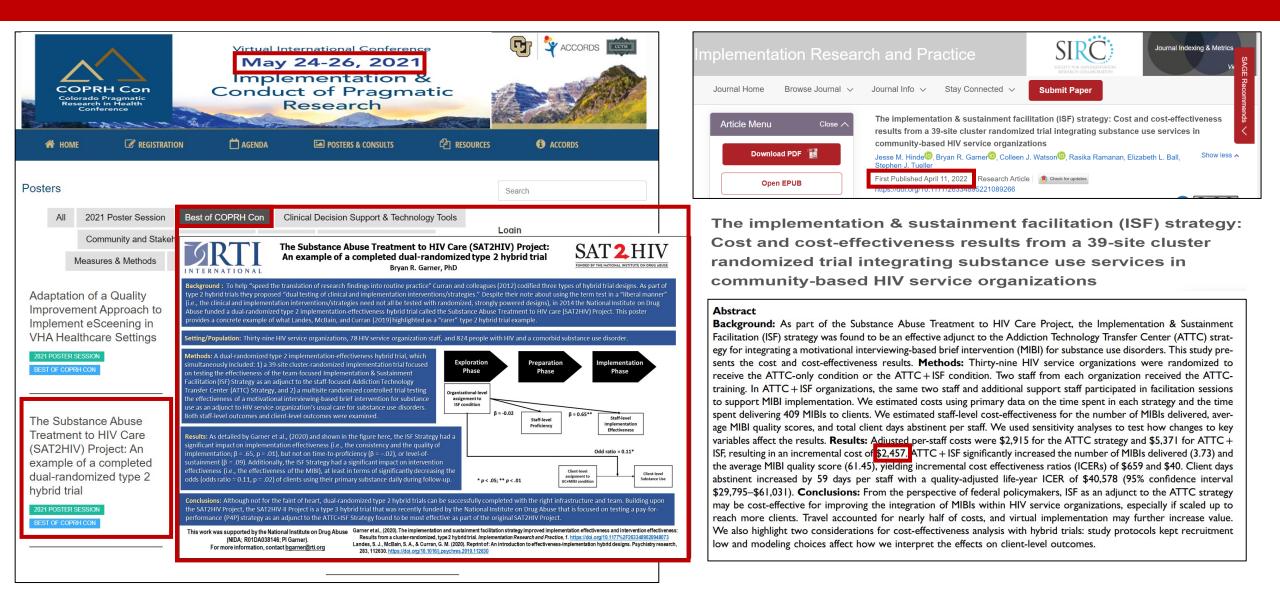
Professor and Director of Dissemination & Implementation Science at the Ohio State University College of Medicine and the Center for the Advancement of Team Science, Analytics, and Systems Thinking in Health Services and Implementation Science Research (CATALYST)



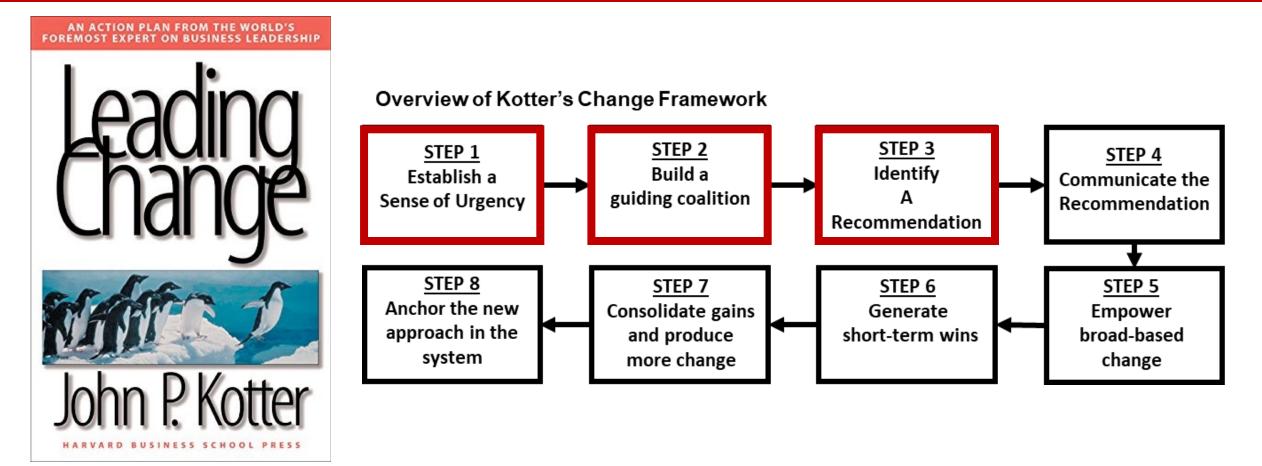


Funding provided by the National Institute on Drug Abuse (NIDA; R01-DA044051; PI: Garner) For more information email bryan.garner@osumc.edu

Thanks for another invite & update since COPRH Con 2021

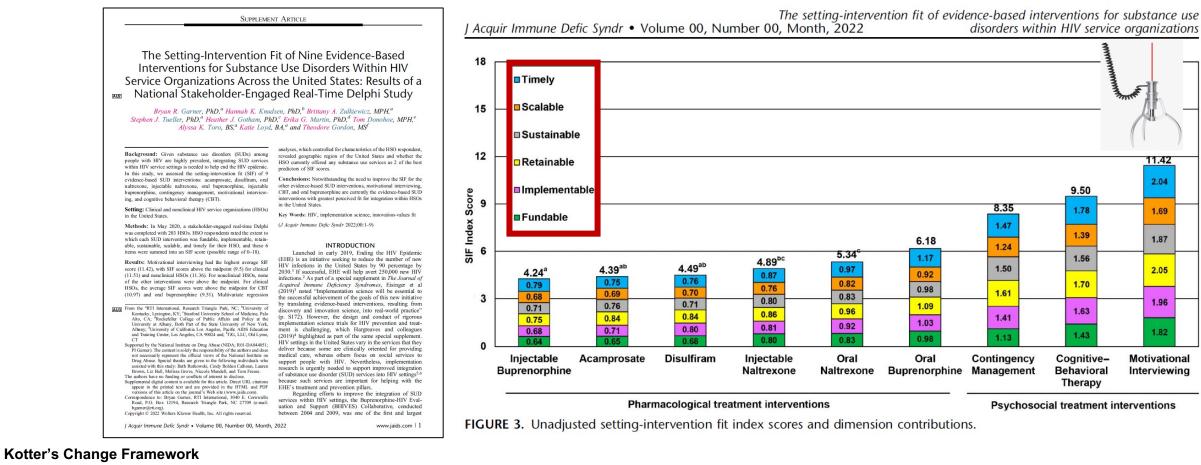


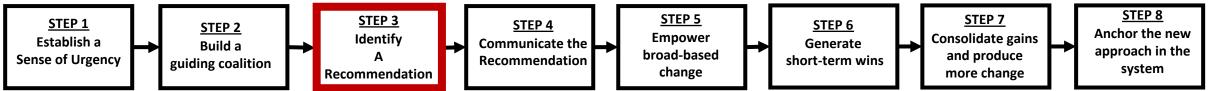
The Substance Treatment Strategies for HIV Care (STS4HIV) Project's guiding framework



Kotter JP. *Leading change.* Boston, MA: Harvard Business School Press; 1996.

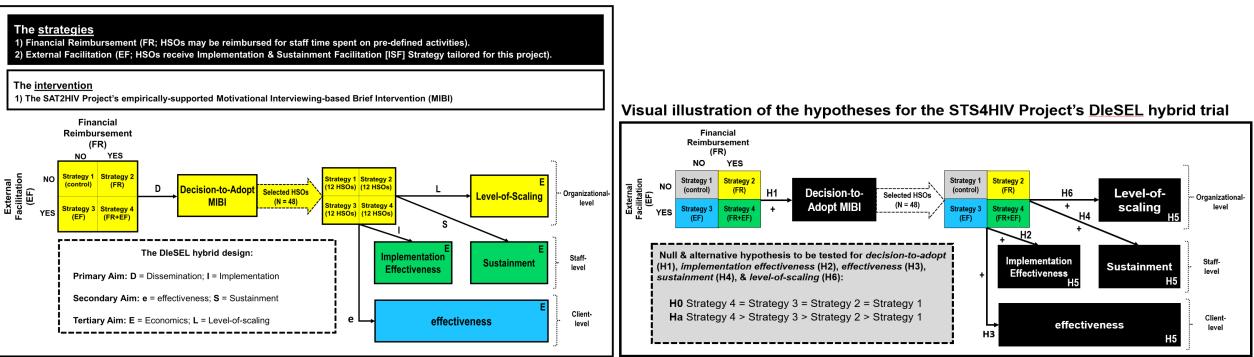
The Substance Treatment Strategies for HIV Care (STS4HIV) Project's recommendations



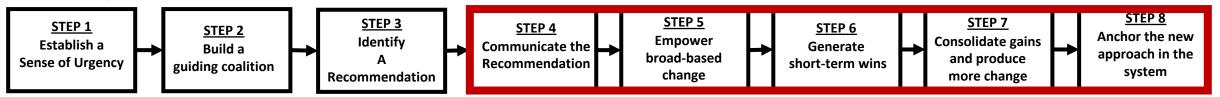


The Substance Treatment Strategies for HIV Care (STS4HIV) Project's DIeSEL hybrid trial design

Visual illustration of the specific aims for the STS4HIV Project's DIeSEL hybrid trial



Kotter's Change Framework



Engaging Regional Stakeholders to Identify Priority Outcomes of Success for a School-based Asthma Management Program

Color Color

Andrea Jimenez-Zambrano, PhD, MPH

Colorado Pragmatic Research in Health Conference

May 24th, 2022



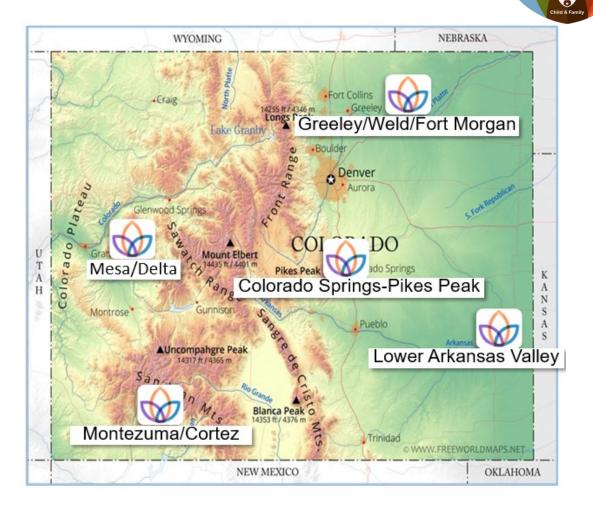
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University of Colorado Anschutz Medical Campus

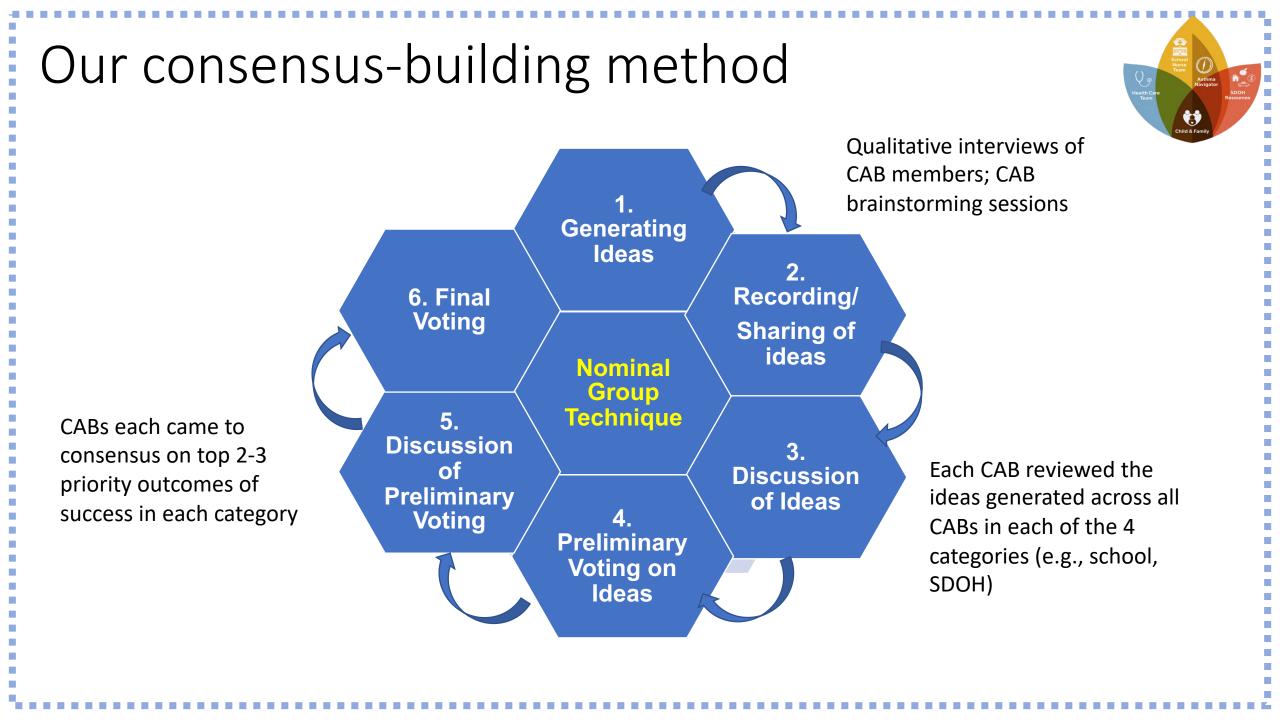
Background

- Asthma is a common chronic disease for children that disproportionately impacts low-income families.
- Over the past 2 decades, our team has sought to address pediatric asthma disparities:
 - Developed a school-based asthma program in partnership with urban, low-income schools and communities
 - Active care management of asthma and social determinants of health (SDOH)
 - Our program has reduced health care utilization and school absences
- In 2020, we received NHLBI DECIPHeR funding to promote health equity by scaling out this program across 5 regions of Colorado



Key Objective in Planning Phase

- Engage regional Community Advisory Boards (CABs) to come to consensus on priority outcomes of success of this project
 - $_{\odot}$ Ranked priority outcomes of success within 4 distinct categories
 - Schools
 - Social Determinants of Health
 - Child/Family
 - Health Care Providers



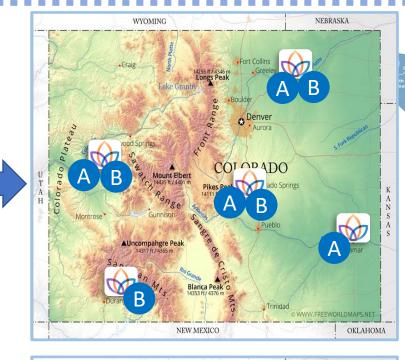
Results

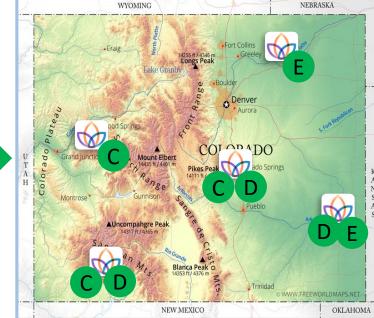
Schools:

Increased school asthma care plan on-file for students early in school year (4 out of 5 regions)
 Increased connection between schools and health care providers (4 out of 5 regions)

Community/SDOH Agencies:

Address health literacy needs for parents/family (3 out of 5 regions)
Transportation resources (3 out of 5 regions)
Availability of fun, low-literacy, educational resources (e.g., how-to-use inhaler resources for children) (2 out of 5 regions)





Discussion/Conclusions

- Our Nominal Group Technique approach engaged CAB members to ensure diverse community perspectives on what constitutes "success" were heard.
- More regional consensus about school outcomes than SDOH outcomes implications for tailoring to regions.
- Using this process to prioritize outcomes of success has informed:
 - $\circ\,$ Implementation strategy selection
 - $_{\odot}$ Study outcomes we will track/report back to CABs
- This process may be replicated for other studies.

Acknowledgements

- Colorado DECIPHeR Community and State Advisory Boards
- Colorado DECIPHeR study team, with particular credit to co-authors: Anowara Begum, MPH³, Nicole Wagner, PhD⁴, Lisa Cicutto, PhD, RN^{5,6}, Lisa DeCamp, MD, MPH^{1,2,6}, Arthur McFarlane II, MS⁶, Melanie Gleason, PA, MSc^{2,6}, Holly Coleman, PhD⁷, Sarah Brewer, PhD^{1,3}, Michaela Brtnikova, PhD, MPH^{1,2}, Stanley Szefler, MD^{2,6}, Amy Huebschmann, MD, MSc, FACP^{1,4}

• Mentors:

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- \circ Lisa DeCamp, MD, MPH
- $_{\odot}$ Amy Huebschmann, MD, MSc, FACP
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